COMMENT LETTERS AND RESPONSES TO ENVIRONMENTAL IMPACT REPORT

TOWN & COUNTRY PROJECT
CITY OF SAN DIEGO, CALIFORNIA

Project No. 424475
SCH No. 2015121066

Prepared for:

City of San Diego
Development Services Department
1222 First Avenue
San Diego, California 92101

May 2017

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TOWN & COUNTRY PROJECT
ENVIRONMENTAL IMPACT REPORT
COMMENT LETTERS AND RESPONSES

Comment letters on the Draft Environmental Impact Report (Draft EIR) were received from the following agencies, organizations and individuals (Table 1). Several comment letters received during the Draft EIR public review period contained requests for revisions that resulted in minor changes and text clarifications to the Draft EIR text. These changes to the text are indicated by ~~strikeout~~ (deleted) and underline (inserted) markings. Many comments did not pertain to the adequacy of analysis in the Draft EIR or to other aspects pertinent to the potential effects of the proposed Town & Country project on the environment pursuant to CEQA. Responses are provided to these comments. Each comment letter is reproduced alongside the corresponding responses to individual comments.

Table 1
List of Commenting Agencies and Organizations

Letter/ Attachment	Agency/ Organization
Letter A Attachment 1 Attachment 2 Attachment 3 Attachment 4	Altshuler Berzon, LLP SWAPE Technical Consultation Terrell Watt Planning Consultants MRO Engineers Scott Cashen
Letter B	U.S. Fish and Wildlife Services & California Department of Fish and Wildlife
Letter C	San Diego County Archaeological Society
Letter D	Mark Polinsky
Letter E	State of California Governor's Office of Planning and Research, State Clearinghouse Unit (State Clearinghouse)

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COMMENT LETTER A

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October 17, 2016

VIA E-MAIL AND OVERNIGHT MAIL

Kerry M. Santoro, Deputy Director
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City of San Diego Development Services Center
1222 First Avenue, MS 501
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Re: Town & Country (Project No. 424475)
Draft Environmental Impact Report (State Clearinghouse No. 2015121066)

Dear Ms. Santoro and Ms. Shearer-Nguyen:

Along with co-counsel Gideon Kracov, this office represents UNITE HERE Local 30 ("*Local 30*") in matters associated with the above-referenced project. On behalf of Local 30, as well as Cleveland National Forest Foundation ("*CNFF*") and Sergio Gonzalez (collectively "*Commenters*"), we respectfully provide these comments to the City of San Diego Development Services Center ("*City*" or "*Lead Agency*") on the draft environmental impact report ("*DEIR*") for the above-referenced Town & Country Project ("*Project*").

A-1

Commenters and their members are concerned about the environmental impacts that massive projects like Town & Country can cause, the serious impacts to natural biological resources, and the strain they place on public infrastructure, utilities, and services. Commenters and their members are also concerned that incomes for workers in non-union hotels and restaurants like Town & Country are insufficient for them to be able to afford to live in San Diego, thus forcing them to make long commutes or causing overcrowding in housing units near their jobs. They therefore value this opportunity to provide these comments, and look forward to working with the City, the developer Loews Hotels ("*Loews*," "*Applicant*," or "*Project Proponent*"), and all stakeholders to require that the Project's impacts are fully

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM UNITE HERE LOCAL 30 (LETTER A)

A-1 Comment noted. The comment provides introductory statements. The comment does not address the adequacy of the Draft Environmental Impact Report (EIR). No further response is required.

analyzed and mitigated to ensure an equitable and sustainable future for residents ar
in the City.

Commenters therefore write to comment on the adequacy of the DEIR's analysis and mitigation of the Project's environmental impacts as required by the California Environmental Quality Act, Pub. Res. Code §21000 *et seq* ("*CEQA*") in areas including: Project description, environmental baseline, land use, traffic and circulation, biological resources, air quality, hydrology, noise, greenhouse gases ("*GHG*"), public utilities, cumulative impacts, alternatives and the required statement of overriding considerations. Additional, CEQA-compliant analysis and enforceable mitigation is required on these topics, and the DEIR should be recirculated. A-1

This Project is discretionary, not by right. The developer Loews seeks numerous discretionary approvals. The City should ensure the Project's environmental impacts are adequately characterized and feasibly mitigated and that the Project actually benefits the City and persons who live and work there like the members of Local 30 and CNFF.

Commenters have prepared these comments with the assistance of four experts, including environmental scientist Matt Hagemann, P.G., C.Hg., QSD, QSP; urban planner Terrell Watt, AICP; traffic engineer Neal Liddicoat, P.E., and Scott Cashen, M.S. Their comments are attached hereto as Attachments 1, 2, 3 and 4, respectively, and are incorporated herein in their entirety.

I. BRIEF DESCRIPTION OF THE PROJECT

The Project at an approximately 40-acre site proposes the demolition of 254 hotel rooms and more than 75,000 square feet ("*SF*")of convention center and hotel-serving businesses, renovation of portions of the remaining hotel and convention facilities, including 700 hotel guest rooms and 177,137 SF of convention center space; the construction of a new multi-family residential neighborhood that includes the construction of 840 multi-dwelling units within four, six, and seven-story structures with associated parking structures; the construction of a stormwater management area and drainage channel; extensive work activities along the San Diego River; and the construction of a 3.84-acre public park and development of a 14-foot-wide river pathway. A-2

The Project site is located in the City of San Diego community of Mission Valley within the County of San Diego, approximately 4 miles north of downtown San Diego and 5 miles east of the Pacific Ocean. Regional vehicular access to the site is provided by Interstate 8 (I-8) and State Route 163 (SR-163) via the ramps at Hotel Circle North and Hotel Circle South.

According to the DEIR, the Project will be constructed in two phases. Phase I of construction includes the demolition of the following structures: 254 hotel rooms, 35,625 SF of convention space, 14,298 SF of spa building, 25,652 SF of food and beverage buildings, and 271 existing surface parking spaces (DEIR, Table 3-2, p. 3-15). Phase I also includes the renovation

A-2 Comment noted. The comment provides a description of the project at the time the document was distributed for public review; see Chapter 3.0 for the updated Project Description. The comment does not address the adequacy of the Draft EIR. No further response is required.

of the remaining hotel rooms and convention center space, and the construction of 435 residential units, 430 parking spaces, a new lobby, restaurant, cafe, hotel parking structure, park, and river pathway:

Table 3-2
Summary of Demolition, Construction and Renovation for Phase I

Building	Hotel Units	Parking Spaces	Square Footage/Acres
Demolition			
Hotel Rooms	254		
Convention Space			35,625
Spa Building			14,298
Food and Beverage Buildings			25,652
		456 spaces reduced to 185 spaces	
Demolition Total	**254 Rooms**		**75,575**
Renovation			
Convention Center	177,137		
Hotel Rooms	700		
Construction			
Lobby			11,400
Restaurant			11,500
Café			1,300
Hotel Parking Structure		430	145,600
Public Park			3.84 ac.
San Diego River Pathway and River Restoration			
Construction Total	-	**430**	**169,800**

Source: City of San Diego 2016

A-2

Phase 2 of construction includes the demolition of 63,500 SF of parking structures and 46,500 SF of existing structures (DEIR, Table 3-4, p. 3-16). New construction in Phase II would include 405 residential units and 620 parking spaces.

Table 3-4
Summary of Demolition and Construction Activities for Phase 2

Building	Residential Units	Parking Spaces	Square Footage
Demolition			
Parking Structure			63,500
Existing Structures			46,500
Demolition Total			110,000
New Construction			
Residential Parcel 3	255		204,000
Residential Parcel 4	150		120,000
Parking Structure (Residential Parcel 3)		410	162,500
Parking Structure (Residential Parcel 4)		210	63,500
Construction Total	405	620	550,000

Source: City of San Diego 2016

Required discretionary approvals from the City for the Project include: a Master Planned Development Permit for the Town & Country Master Plan; an amendment to the General Plan and Mission Valley Community Plan to remove the project from the Atlas Specific Plan and to update the community plan; to rezone from Mission Valley Planned District Ordinance Multiple Use Zone/Specific Plan (MVPD-M/SP) to MVPDO Multiple Use (MVPD-M-V), which require the project to develop in accordance with both MVPDO Residential Zone (MVR- 5) and Commercial Visitor (MV-CV) zone; a Site Development Permit for development on a premise with environmentally sensitive lands; deviations from the San Diego River Park Master Plan (SDRPMP) and deviations from the San Diego Municipal Code; amendment to Conditional Use Permit (CUP) 88-0585 (convention center and exhibit hall); and the removal of conditions of approval pertaining to the Atlas Specific Plan, and Vesting Tentative Map to create the new legal parcels and supporting infrastructure.

A-2

II. STANDING OF COMMENTERS

Local 30 is a member-driven hotel and hospitality workers' union representing 4,500 hotel, gaming, and food service workers throughout San Diego County. Local 30 seeks to raise standards in the hospitality and tourism industry in San Diego, and to transform San Diego service jobs into good middle class jobs. Local 30 also has an interest in protecting the environment and environmental health in and around the workplace.

Local 30's members have an interest in, and are directly impacted by, both the disposition of this hotel and convention center, as well as the specific impacts associated with the Project — including traffic, air quality, climate change, biological resources, hydrology, public utilities, land use, and other impacts. Local 30 therefore is a stakeholder in this Project, and worker and labor organizations have a long history of engaging in the CEQA process to secure safe working conditions, reduce environmental impacts, and maximize community benefits. The courts have held that "unions have standing to litigate environmental claims." *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1198. So too, individual members such as Commenter Sergio Gonzalez have standing under CEQA. *Id.* at 1199 ("[o]ne of BCLC's members is a homeowner residing near Gosford and he spoke in opposition to the projects . . . This is sufficient to satisfy CEQA's liberal standing requirement).

A-3

The CNFF transit campaign, Transit San Diego, is committed to transforming the cities of our region into flourishing biking, pedestrian and transit based communities. Why would an organization dedicated to protecting the forest become involved in city transportation? Quite simply, we cannot save our forests until we save our city. Urban sprawl, which is destroying our farms, our wilderness and our watershed, is a direct result of dysfunctional cities. Creating a functional mass transit system will result in improving greenhouse gas emissions, air pollution, energy consumption, quality of life, and land use decisions.

A-3 Comment noted. The comment provides background on Local 30 and their interest in the project. The comment does not address the adequacy of the Draft EIR. No further response is required.

This comment letter is made to exhaust remedies under Public Resources Code §21177 concerning the Project, and incorporates by this reference all written and oral comments submitted on the Project by any commenting party or agency. It is well-established that any party that participates in the administrative process can assert all factual and legal issues raised by any commenting party or agency. *Citizens for Open Gov't v. City of Lodi* (2006) 144 Cal.App.4th 865, 875. A-3

III. BRIEF BACKGROUND ON CEQA AND DRAFT EIRS

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report. *See, e.g.*, Pub. Res. Code §21100; *Cmtys. for a Better Env't v. S. Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310. The Environmental Impact Report ("*EIR*") is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Cmtys. for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("*CEQA Guidelines*" or "*Guidelines*") §15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564. The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return." *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354; *Cnty. of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810. A-4

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring implementation of "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines §15002(a)(2) and (3); *See also, Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." Pub. Res. Code §21081; CEQA Guidelines §15092(b)(2)(A) and (B). Mitigation measures should be capable of "avoiding the impact altogether," "minimizing impacts," "rectifying the impact," or "reducing the impact." CEQA Guidelines §15370. Importantly, mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." *Fed'n of Hillside & Canyon Ass'ns v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261.

A-4 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

Although the courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th at 1355 (quoting *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 409 n. 12 (1988)).

A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722]; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946. A-4

Substantial evidence in the record must support any foundational assumptions used for the impacts analyses in the EIR. *Citizens of Goleta Valley*, 52 Cal.3d at 568 (EIR must contain facts and analysis, not just bare conclusions); *Laurel Heights*, 47 Cal.3d at 392-93 (agency's conclusions must be supported with substantial evidence).

CEQA's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, equally important, that the public is assured those consequences have been taken into account. *Laurel Heights*, 47 Cal.3d at 392-93. Indeed, the fundamental goals of environmental review under CEQA are information, participation, mitigation, and accountability. *Lincoln Place Tenants Ass'n. v. City of Los Angeles* (2007) 155 Cal.App.4th 425, 443-44.

IV. THE DEIR WAS NOT CIRCULATED FOR THE REQUIRED 45 DAYS

A DEIR submitted to the State Clearinghouse, as here, must be circulated under CEQA for public review for a minimum of 45 days. Pub. Res. Code § 21091(a); Guidelines § 15105(a). This review period does not begin to run until the lead agency provides the public with "complete" copies of the draft EIR documents. *Ultramar, Inc. v. S. Coast Air Quality Mgm't Dist.* (1993) 17 Cal.App.4th 689; Pub. Res. Code § 21092(b)(1) (notice shall specify where "all documents referenced in the draft [EIR] ... are available for review"). Technical data and specialized analyses cited in a draft EIR must be made available to the public. *See* Kotska & Zischke, *Practice Under the California Environmental Quality Act* (2d ed. 2016) § 9.18. Failure to circulate a draft EIR for the full required time period is an abuse of discretion. *Gilroy Citizens for Responsible Planning v. City of Gilroy* (2006) 140 Cal.App.4th 911, 922. A-5a

The Lead Agency City has violated this rule here. The DEIR is subject to the 45-day public review period – the Lead Agency City made the DEIR available August 18, 2016, and required comments to be submitted by October 3, 2016. But, the City failed timely to make available part or all of many of the nineteen (19) DEIR appendices and other documents that purportedly support the DEIR. Much of this material was not made available until weeks or a A-5b

A-5a Comment noted. The comment provides general guidance regarding CEQA regarding public review circulation. No further response is required.

A-5b During the public review period, appendices to the Air Quality, Greenhouse Gas emission, and Traffic studies as well as a copy of the Town & Country Master Plan were requested. The City of San Diego provided the CALEEMod Outputs for Air Quality and Greenhouse Gas (GHG) emissions to the commenter on August 31, 2016; the traffic appendices were provided on September 8, 2016; and the Master Plan and Sewer System Analysis were provided on September 16, 2016. These additional materials are part of the public record.

On September 14, 2016 an email request was made to extend the public review period for another 30 days, ending November 2, 2016. The Land Development Code, Section 128.0307 (Requests for Additional Public Review Time on the Draft Environmental Document), allows the Planning Director to provide formally recognized community planning groups an additional 14-day extension to comment on the draft environmental document. Although the request was not made by a recognized community planning group, City staff took into consideration the request. An additional 14-day extension was granted until the close of business on October 17, 2016. Additionally, a Public Notice for Extension of the Public Review Period was posted on the City's Web at http://www.sandiego.gov/city-clerk/officialdocs/notices/index.shtml under the "California Environmental Quality Act (CEQA) Notices & Documents" section. All of the technical appendices were available for review at the Development Services Department located at 1222 First Avenue, San Diego, CA 92101 during the entire public review period.

Additionally, at the conclusion of the extended public review period for the Draft EIR, it was identified that although the Water System Analysis (Appendix K) was available for review, a computer hydraulic analysis appendix to Appendix K was not included in the distribution of the Draft EIR. Therefore, on December 9, 2016, the City of San Diego, as the Lead Agency circulated a Courtesy Public Notice, through the State Clearinghouse, for an additional 30-day public review period for the Water System Analysis, including the "computer hydraulic analysis" (the actual Appendix K). The Draft EIR Utilities section inadvertently referred to the Sewer System Analysis as an Appendix K. Draft EIR Appendix K however was the Water System Analysis, and not the Sewer System Analysis. The reference to the Sewer System Analysis being Appendix K was a typographical error, which has been corrected in the Final EIR. The Public Notice and associated documents were also placed on the City of San Diego web-site at http://www.sandiego.gov/city-clerk/officialdocs/notices/index.shtml under the "California Environmental Quality Act (CEQA)

month after the review period began. For example, with regard to DEIR Appendix F, the "Air Quality Technical Report and Greenhouse Gas Analysis," the backup "CalEEMod Data" and "Health Risk Assessment" were not received by Commenters until September 13, 2016 – nearly a month after the DEIR was released. So too, the backup traffic analysis for the DEIR Appendix C "Transportation Impact Analysis" was not provided until September 8, 2016. The "sewer system analysis" cited in the DEIR as located in Appendix K "Water System Analysis" was not provided until September 16, 2016, and the Draft Town and Country Master Plan and proposed amended Atlas Specific Plan were not received until September 20, 2016 – despite Commenters' repeated requests. Further, as explained in section XIV.C, the computer hydraulic analysis, which purportedly forms the foundation of much of the water system analysis in Appendix K to the DEIR, is still not available, even though Appendix K to the DEIR states that it is appended.

A-5b

Commenters requested in writing on September 14, 2016 to the Lead Agency City a thirty day extension of the DEIR comment period to November 3, 2016 – to allow the full 45 day comment period required by CEQA for all DEIR documents. The City denied this request, instead only giving an additional fourteen days. Thus, although the comment period on the DEIR was extended two weeks to October 17, 2016, this did not provide the required 45 days.

A-5c

Delay in receiving these materials prevents Commenters, their experts and the public from fully evaluating the adequacy of the DEIR's evaluation of the Project's environmental impacts on topics including air quality, greenhouse gas emissions, public utilities, land use consistency, biological resources, and traffic. This is an abuse of discretion that violates the DEIR's 45-day public review requirements and the public participation mandates of CEQA. Pub. Res. Code §21091(a); CEQA Guidelines §§15105(a), 15201.

A-5d

V. THE DEIR IMPROPERLY CALCULATES THE BASELINE FOR THE PROJECT

An EIR must include an accurate description of the physical environmental conditions in and around the project, from both a local and regional perspective, at the time the Notice of Preparation ("NOP") is filed. Cal. Code Regs. tit. 14 §15125(a). This description "will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." *Id.* A skewed baseline is a basis to invalidate the EIR. *See, e.g., Cmtys. for a Better Env't*, 48 Cal.4th at 320-23. For instance, where an EIR uses the maximum allowable capacity of an existing facility as the baseline rather than data reflecting the actual existing level of use of that facility, the baseline generates "illusory comparisons" and "can only mislead the public as to the reality of the impacts and subvert full consideration of the actual environmental impacts." *Id.* at 322.

A-6

A. The DEIR Improperly Describes the Existing Condition of the Project Wetlands as Low Quality

The DEIR improperly classifies the existing wetlands as "low biological quality," DEIR 3-18 & Table 3.6, thus artificially and impermissibly reducing the Project's impacts to wetlands and inflating the benefit of the proposed restoration and enhancement activities. The DEIR and

A-7

Notices & Documents" section. Furthermore, the Notice was also distributed to the Central Library as well as the Mission Valley Branch Library. No additional comments were received at the close of the 30-day courtesy public review period.

A-5c As summarized in Response A-5b above, the City of San Diego granted a two week public review extension for the Draft EIR. All technical appendices were available for review at the Development Services Department located as 1222 Frist Avenue, San Diego, CA 92101. No additional comments were received during these periods.

A-5d Comment noted. See Responses A-5b and A-5c.

A-6 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

A-7 The Draft EIR and Biological Technical Report (BTR) include detailed descriptions of the site conditions and habitat present that establish the baseline conditions within the Biological Study Area (BSA). For example, Figure 4.4-1 of the Draft EIR illustrate that the entire hotel "site" is mapped as Urban/Developed. As such, the vegetation mapping effort that identified 76 plant species was limited to the Habitat Area, and did not take into account ornamental or other plant species that occur in the rest of the Biological Study Area. Section 4.4.1.2 of the Draft EIR states, "Seventy-six plant species were identified within the Biological Study Area during biological surveys. Of these, approximately 72 percent (i.e., 55 of 76) were nonnative". However, the 72 percent nonnative species applies to the Habitat Area, and is also an indication of the condition of the waters and wetlands that occur in the Biological Study Area. A boundary was added to Figure 4.4-1 of the Draft EIR to define the Habitat Area in which the plant species compendium was recorded. *Habitat Area* consists of the area north of existing site development. Also, See Responses A-8 and A-9.

Biological Technical Report ("*BTR*") provide little basis for the low-quality conclusion. The Biological Resources section claims that the existing wetlands are "relatively low quality due to the dominance (approximately 72 percent site-wide) of nonnative species" and that there are substantial edge effects. DEIR 4.4-66. The DEIR's conclusion that non-native species are dominant is vague and unsupported.

First, the description of the baseline is insufficient because it is vague what "site-wide" means in the DEIR's statement that there are "approximate[ly] 72 percent (non-native species) site-wide." Elsewhere in the DEIR, the term "site" refers to the entire 39.7-acre Project site. Similarly, the BTR specifies that the term "site" refers to the "Town & Country Hotel and Convention Center." BTR Exec. Summary v. It would be indefensible, however, to measure the quality of wetlands that exist solely along the San Diego River in the northern third of the Project site by counting non-native species throughout the entire Project area, most of which is *not* wetlands. Even assuming the DEIR and BTR are referring to an area associated with the wetland, it is unclear whether "site-wide" refers to the biological study area ("*BSA*"), jurisdictional wetland, existing wetland, emergent wetland, the Multi-Habitat Planning Area ("*MHPA*"), some combination of these, or something else entirely. A-7

Second, there is not support in the DEIR or BTR for the statement that there is a "dominance" of nonnative species. The BTR states that 55 out of 76 plant species recorded on-site are non-native. But, as Biological Resources Expert Scott Cashen, M.S., explains in his comments, this is not an appropriate measure of "dominance." Attachment 4, section II.B. The 72-percent figure is merely a count and comparison of the *different species* that biologists identified. It does not address how the *total number* of non-native plants compares to native plants. To provide a hypothetical example, if there is just one plant of each non-native species on site, but thousands of plants of the various native species, there could be no dispute that there is a "dominance" of native species, not non-native species. Further, the 72-percent figure is not a measurement, as the DEIR asserts, of "[n]ative species diversity and abundance." DEIR 4.4-66. Discussing the work of the Project Proponent's consultant, AECOM, Mr. Cashen explains, A-8

> In ecological applications, *diversity* is a measure of species richness (i.e., number of species) and species evenness (i.e., relative abundance among species). These measurements are then entered into a formula to calculate the diversity index, which is expressed as a numerical value (not a percentage). AECOM's biologists did not calculate diversity, or even measure abundance (quantity). The fact that 72% of the plant species recorded on-site are nonnative is a proportion—not the diversity or abundance.

Attachment 4, section II.B. The DEIR's and BTR's simplistic species comparison is not an appropriate measure of dominance or wetlands quality.

Third, and related, the BTR does include some measurements of dominance, as that term is properly defined. But, as Mr. Cashen describes in his letter, the data collected at A-9

A-8 The referenced language has been removed from the EIR because the project has been modified to avoid wetland impacts. The project therefore no longer requires deviations from the Environmentally Sensitive Lands Regulations or a determination of "low quality". Also, see Responses A-7 and A-9.

A-9 The data collected at various sampling points (i.e., the jurisdictional delineation) shows that nonnative species are dominant. At the sampling points described in Mr. Cashen's letter, the species with dominant percent cover included Brazilian pepper tree (*Schinus terebinthifolius*), fennel (*Foeniculum vulgare*), rice grass (*Piptatherum miliaceum*), ripgut brome (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Ludwigia (*Ludwigia hexapetala*), eucalyptus (*Eucalyptus camaldulensis*), variable flatsedge (*Cyperus difformis*). The jurisdictional datasheets also include high percentages of bare ground cover which further suggest a low percentage of native plants in the sampling areas.

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October 17, 2016
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various sampling points actually shows that *native species* are dominant, not non-native species. *Id.* Indeed, AECOM's results show that native species were dominant in the understory and/or overstory at six out of the ten sampling points. *Id.* The DEIR ignores this data, however, and instead asserts that non-native species are dominant based on an illegitimate measurement of dominance.

A-9

Fourth, the City of San Diego's Land Development Manual – Biology Guidelines ("*Biology Guidelines*"), which sets forth the regulatory method for determining wetlands quality, states that "characterizations of flora and fauna must be accomplished during the proper season, and surveys must be done at the most appropriate time to characterize the resident and migratory species." Biology Guidelines p. 26 (Apr. 23, 2012).[1] The sole field survey for this Project was conducted on a single day in September which, as Mr. Cashen explains, is an inappropriate time to measure species diversity and abundance,

> September is a poor time of year to detect sensitive biological resources. Many special-status plants, including ones that have the potential to occur at the Project site, are only evident and identifiable during the spring.[2] In addition, most North American bird species complete their breeding activities by August (or earlier). As a result, they are less active and vocal, and consequently, much more difficult to detect in September.[3] The western spadefoot (i.e., the only special-status amphibian that AECOM concluded could occur at the site) occurs below ground during September (i.e., in aestivation: a state of torpor).[4] As a result, the AECOM biologists would have been incapable of detecting this species even if they conducted their survey at night (the species is nocturnal).

A-10

Attachment 4, section II.A.1.

An accurate and well-supported determination of wetlands quality for this Project is critical both to the validity of CEQA review and to the process for securing necessary permits. As the DEIR recognizes, the Project requires deviations from the Environmentally Sensitive Lands ("*ESL*") wetlands regulations. *See, e.g.*, DEIR pp. 3-17 – 3-18 & Table 3.6; San Diego

A-11

[1] Available online at: <https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/landdevmanual/ldmbio.pdf>.
[2] CNPS, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org>.
[3] CJ Ralph and JM Scott, editors. 1981. Estimating numbers of terrestrial birds. Studies in Avian Biology 6.
[4] California Department of Fish and Game, California Interagency Wildlife Task Group. 2000 [update]. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.

A-10 he biological surveys conducted for the project include a reconnaissance survey, a jurisdictional delineation and focused/protocol least Bell's vireo surveys. All required surveys were conducted during the appropriate time of year, as described below.

As stated in Section 4.4 of the Draft EIR, the reconnaissance survey was conducted on September 11, 2014, by AECOM biologists Lance Woolley and James McMorran to map existing vegetation, identify potential for rare plant occurrences, and assess wildlife habitat. The reconnaissance survey focused on areas of the Biological Study Area with potential to support natural and potentially sensitive biological resources. Due to the general nature of this survey type and the absence of an official and regulated temporal requirement for the survey, the reconnaissance survey can be conducted any time of year. Vegetation communities, such as those riparian and woodland communities comprising the San Diego River corridor, can be classified using perennial species that are identifiable throughout the year (e.g., willows, cottonwoods, mulefat, etc.). A full inventory of common plants and wildlife that utilize the site throughout the entire year is not necessary to provide an accurate baseline for analysis under CEQA.

This reconnaissance survey was not the sole survey that established the baseline conditions. Rather, the reconnaissance survey allowed the biologists to determine which further studies would be required to ensure that a solid baseline for the existing conditions was established in preparation for analysis under the City's CEQA thresholds. Based on the presence or absence of appropriate habitat conditions, the Draft EIR provides an analysis of the probability of occurrence for special-status species. Focused surveys were conducted for those species whose habitat requirements occurred onsite *and* could be impacted by project activities (e.g., least Bell's vireo).

As described in Section 4.4 the Draft EIR, where appropriate habitat for potentially occurring species exists on-site but would not be affected by the project, focused surveys were not conducted for those species. Compliance with City permit conditions for the project would also ensure avoidance of these species.

Focused surveys for least Bell's vireo were conducted throughout the spring of 2016 (March 15 – May 26) in accordance with the U.S. Fish and Wildlife Service protocol and guidance. During these surveys, a wildlife species compendium was taken which accurately captures a sufficient sample of the wildlife that utilizes the San Diego River corridor onsite. Thus, in addition to the resident and migratory species detected in the fall (September) the BTR also

Municipal Code ("*SDMC*") §1514.0302(c)(1)(D); *see also id.* §143.0141(a)(4)-(7), (b). To secure permits that deviate from the ESL regulations, numerous findings must be made, including that the "[w]etland resources that would be impacted by the project . . . [are] of low biological quality." SDMC §143.0150(d)(3)(B); *see also id.* §126.0504(b)-(c); Biology Guidelines 26. A-11

The Biology Guidelines require that the City's Wetlands Advisory Board "review information provided by the Applicant and provide an opinion" as to whether a project's wetland should be designated as low quality. Biological Guidelines 29. The City's Wetlands Advisory Board consists of wetlands experts and scientists with specified knowledge regarding wetlands habitat. SDMC §§26.1001, *et seq*. The members are appointed by the Mayor of San Diego to review project proposals and issue recommendations to the City. *Id.* A-12a

On September 22, 2016, the Project Proponent and AECOM's Lead Biologist made a presentation to the Wetlands Advisory Board reflecting the information in the DEIR and the BTR, and requested that the Wetlands Advisory Board recommend designation of the wetlands as low quality. Tellingly, the Wetlands Advisory Board rejected the Project Proponent's request and passed a motion to "issue an opinion of high quality." Attachment 5 (e-mail from Elizabeth Shearer-Nguyen, Senior Planner, City of San Diego, to Rick Bates, UNITE HERE Local 30 (Sept. 28, 2016)). The Wetlands Advisory Board's conclusion was correct and reflects the actual existing conditions in the wetlands area of the Project site. Attachment 4, section II.C. A-12b

B. The DEIR's Baseline Relies Upon Insufficient and Incomplete Surveys of Special-Status Animal Species

The potential for special-status animal species to occur at a project site is a critical component of the environmental baseline for any project. As Expert Cashen explains,

> The City's *Biology Guidelines* establish that focused surveys are required for listed species.[5] Focused surveys are also required for "non-listed" sensitive species if there is a reasonable likelihood the species could occur at the site. The case-by-case determination on whether focused surveys are required is made, in part, through discussion with the California Department of Fish and Wildlife ("CDFW") and U.S. Fish and Wildlife Service ("USFWS").

Attachment 4, section II.A.1. A-13

In this case, CDFW submitted written comments in response to the City's Notice of Preparation issued on December 18, 2015. CDFW explained to the City in its comments that the EIR should include:

[5] City of San Diego. 2012 [amended]. San Diego Municipal Code: Land Development Code, Biology Guidelines. Table 1.

includes a list of resident and migratory species detected in the spring (March - May). Appendix A of the BTR includes the 45-Day Focused Survey Report for least Bell's vireo (*Vireo bellii pusillus*).

Thus, the Draft EIR does adequately characterize biological resources on-site, identifies species with the potential to occur on-site even if not identified during surveys, determines impacts, and recommends mitigation to ensure the preservation of native species and sensitive biological resources consistent with the Biology Guidelines.

A-11 The biofiltration basin adjacent to the habitat area has been modified to avoid wetland impacts and therefore does not require deviations from the Environmentally Sensitive Lands (ESL) Regulations for wetland impacts. Refer to Chapter 3.0, Project Description, of the Final EIR for further details of the modified project components. Furthermore, appropriate sections of the Final EIR have been amended to reflect the revised project.

A-12a Comment noted. The comment accurately represents the requirements of the City's Biology Guidelines and the role of the Wetlands Advisory Board. No further response is required.

A-12b See Responses A-7 through A-9 for information on low quality habitat and nonnative species. However, the project avoids wetland impacts and therefore no longer requires deviations from the Environmentally Sensitive Lands (ESL) Regulations. Refer to Chapter 3.0, Project Description, of the Final EIR for further details of the project. Furthermore, with the removal of the wetland impacts, recommendations made by the Wetlands Advisory Board would no longer be applicable to the project. However, on January 19, 2017, a second presentation was made to the Wetlands Advisory Board to present the project's modification, which avoids wetland impacts. At this meeting, the Wetlands Advisory Board concurred with the findings of no wetland impacts.

A-13 The California Department of Fish and Wildlife's requests and consultations with the U.S. Fish and Wildlife Service were taken into account when performing surveys and analyzing the project impacts within the Draft EIR. Appendices B (Plant Species Detected within the Biological Survey Area), C (Wildlife Species Detected within the Biological Survey Area), and F (2016 Proposed Town & Country Project Least Bell's Vireo Survey 45-Day Report) of the BTR (Appendix E of the EIR) list a complete inventory of the plant and wildlife species detected within the Biological Study Area during the various surveys. Survey results included incidental observations of special-status species, such as yellow warbler (*Setophaga petechia brewsteri*). Focused

1. "A thorough, recent floristic-based assessment of special status plants and natural communities following the Department's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities."
2. "A current inventory [i.e., complete count] of the biological resources associated with each habitat type on site and within the area of potential effect."
3. "An inventory of rare, threatened, endangered and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, §15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variation in use of the project area should also be addressed."

A-13

DEIR, App. A. California Dep't of Fish and Wildlife, *Comments on the Notice of Preparation of a Draft Environmental Impact Report for Town and Country, City of San Diego, San Diego County, California* 9-10 (Jan. 16, 2015).

Importantly, CDFW's letter clarified that:

Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, ***are required***. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service."

A-14

Id. at 10 (emphasis added).

As Mr. Cashen explains, the DEIR failed to meet the standards set forth in CDFW's comments:

AECOM[] subsequently conducted protocol-level surveys for the least Bell's vireo ("LBV") during the 2016 breeding season. However, it failed to conduct any of the other surveys specified in CDFW's comment letter. Specifically, AECOM did not: (1) conduct a floristic-based assessment of special-status plants; (2) conduct a current inventory of biological resources associated with each habitat type; (3) conduct a current inventory of sensitive species on the site and within the area of potential effect; (4) address seasonal variation in use of the Project area by fish and wildlife; (5) conduct focused, species-specific surveys (except for LBV); or (6) develop species-specific survey procedures in consultation with the CDFW and USFWS. Indeed, AECOM's survey efforts were limited to a single site visit in September 2014, which the BTR described as the following:

A-15

> A field reconnaissance survey was conducted on September 11, 2014, by AECOM biologists Lance Woolley and James McMorran to map existing vegetation, identify potential for rare plant occurrences, and assess wildlife habitat. The field reconnaissance survey was conducted within the [Biological Study Area ("BSA")] by walking accessible portions of the BSA. The reconnaissance survey focused on areas of the BSA with potential to support natural and potentially sensitive biological resources (i.e., the San Diego River

surveys are not required for special-status species whose habitat does not exist on-site.

Response A-10 addresses surveys conducted on-site and consideration given to sensitive species with potential to occur on-site and how special-status species (including plants and animals) are analyzed onsite.

A-14 See Responses A-13 and A-10.

A-15 See Responses A-13 and A-10.

bisecting the northern portion of the BSA). All plant and wildlife species detected were reco[r]ded; Appendix B and Appendix C provide a complete list of plant and wildlife species, respectively, observed during the field reconnaissance survey.[6] A-15

This description is insufficient to assess the value of the information gained during the reconnaissance survey. The DEIR fails to identify the level of effort (i.e., total man-hours) devoted to the survey and the time of day the survey was conducted. In addition, the DEIR does not provide a map or other information identifying the specific areas that were surveyed, versus the areas that could not be surveyed because they were not "accessible." The DEIR indicates the survey focused on areas within the BSA that the biologists believed had the potential to support sensitive biological resources. However, it does not identify those areas as being anything beyond "the San Diego River," which is too vague a description to ascertain the extent to which the biologists also examined the surrounding uplands for sensitive biological resources. A-16

September is a poor time of year to detect sensitive biological resources. Many special-status plants, including ones that have the potential to occur at the Project site, are only evident and identifiable during the spring.[7] In addition, most North American bird species complete their breeding activities by August (or earlier). As a result, they are less active and vocal, and consequently, much more difficult to detect in September.[8] The western spadefoot (i.e., the only special-status amphibian that AECOM concluded could occur at the site) occurs below ground during September (i.e., in aestivation: a state of torpor).[9] As a result, the AECOM biologists would have been incapable of detecting this species even if they conducted their survey at night (the species is nocturnal). A-17

AECOM's failure to conduct focused surveys has three principal implications on the Project. First, data from focused surveys is required for the public, decision makers, and resource agencies to have a thorough understanding of existing conditions. Second, without a complete understanding of existing conditions, the A-18

[6] BTR, p. 21.

[7] CNPS, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org>.

[8] CJ Ralph and JM Scott, editors. 1981. Estimating numbers of terrestrial birds. Studies in Avian Biology 6.

[9] California Department of Fish and Game, California Interagency Wildlife Task Group. 2000 [update]. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.

A-16 See Response A-10. As discussed in Section 4.4 of the Draft EIR, a reconnaissance survey was conducted in the Biological Survey Area, to evaluate the existing flora and fauna onsite, and the potential for special-status species. The reconnaissance survey was conducted between the hours of 0730 and 1100 which allows sufficient time to map vegetation communities across an approximately 39-acre site, especially considering that most of the site is developed, and accurately assess the wildlife species' potential to utilize the site (e.g., bird activity is high during early morning hours). The Biological Survey Area was mapped for biological resources, and produced Figure 4.4-1 in the BTR. As discussed in Response A-7, Figure 4.4-1 has been updated to illustrate the boundary of the "Habitat Area". This figure illustrates that the river corridor is highly constrained by development, and therefore "the reconnaissance survey focused on vegetated areas of the Biological Survey Area with potential to support natural and potentially sensitive biological resources (i.e., the San Diego River bisecting the northern portion of the Biological Study Area)." (Section 3.1 of the BTR). These surveys were useful because they provided a comprehensive list of species in anticipated impact areas.

A-17 Section 4.4.1 of the Draft EIR identifies the western spadefoot toad as having a moderate potential to occur within the project area. As the project design has been modified to avoid impacts to wetlands, the project is not expected to impact western spadefoot toad. See Responses A-10 and A-13 regarding surveys and avoidance of this species.

A-18 See Response A-10. The commenter is correct in stating that no focused surveys were conducted for western spadefoot toad, western pond turtle, two-striped garter snake, south coast garter snake, white-tailed kite, Vaux's swift, Clark's marsh wren, yellow warbler, yellow-breasted chat and western red bat. Therefore, consistent with the City's Biology Guidelines, presence was assumed because no focused surveys were conducted. As described in Section 3.0 Project Description of the Final EIR, the project avoids all direct impacts to the suitable habitat for these species. Indirect impacts to sensitive species would be avoided through project compliance with MHPA Land Use Adjacency Guidelines and City permit conditions.

City does not have the information needed to perform an accurate impact assessment, and consequently, to formulate appropriate mitigation. Third, focused surveys are required to comply with the City's Land Development Code (*Biology Guidelines*). This is particularly important because the *Biology Guidelines* state the following with regard to species that are not covered under the MSCP: "[i]f surveys are not done at the appropriate time of year, and the potential for occurrence is moderate to high (based on historical knowledge, site records, determination by the biologist, etc.), then it will be concluded that their presence exists on the property."[10] Therefore, at a minimum, the City must assume presence of the following special-status animal species:[11]

- Western spadefoot
- Two-striped gartersnake
- South coast gartersnake
- White-tailed kite
- Vaux's swift
- Clark's marsh wren
- Yellow warbler[12]
- Yellow-breasted chat
- Western red bat

A-18

Attachment 4, section II.A.1.

Additionally, the DEIR failed to conduct surveys for the Southwestern Pond Turtle, as required for this Project site. As Mr. Cashen explains,

> The distribution and abundance of southwestern pond turtles in the Project area is unknown because AECOM did not conduct focused surveys for the species. This has implications on the Project's compliance with the City's MSCP Subarea Plan, which requires the Applicant to "[m]aintain and manage a 1,500-foot area around known locations within preserve lands for the species."[13]
>
> Western pond turtles use terrestrial habitat for refuge, nesting, and resting. Rathbun et al. (2002) reported mean maximum distances of 49.7 m, 93.7 m, and 12.0 m from the nearest water for these three types of terrestrial habitat use,

A-19

[10] City of San Diego. 2012 [amended]. San Diego Municipal Code: Land Development Code, Biology Guidelines. p. 18.

[11] BTR, Appendix E.

[12] Presence already confirmed at Project site.

[13] DEIR, p. 4.4-64.

A-19 See Responses A-10 and A-18 regarding focused surveys for western pond turtle. It is highly unlikely that western pond turtles occur within the San Diego River corridor onsite due to the abundance of nonnative turtles (e.g., red-eared sliders) currently utilizing the resources (e.g., basking spots, nesting/foraging areas, food, etc.). The presence and abundance of these nonnative turtles indicate that native species were outcompeted. Nonetheless, as discussed in Response A-18, because surveys were not conducted, the Draft EIR assumed presence per the City's Biology Guidelines. The project does not impact native vegetation communities that would support western pond turtle.

Compliance with MSCP conditions of coverage for this species is not possible due to the proximity of existing development. If a western pond turtle were to be found, the applicant would be unable to "[m]aintain and manage a 1,500-foot area around 'known' locations within preserve lands for the species" as the commenter suggests because the suitable habitat is surrounded by existing development (e.g., Town and Country hotel, Fashion Valley Mall, etc.). All suitable habitats within the boundaries of the project would be avoided (see mitigation measures listed in Response A-18) and conserved in perpetuity under easement such that no impacts to western pond turtle are expected to occur.

respectively.[14] However, travel distances appear to be a function of site-specific factors, and females have been reported ranging as far as 500 meters from a watercourse to find suitable nesting habitat.[15]

A-19

Attachment 4, section IV.D.

For the reasons specified in Mr. Cashen's comments, the DEIR does not provide an accurate, sufficiently detailed, or scientifically sound baseline because the necessary and required surveys were not conducted or were not conducted using acceptable methodology. Guidelines §15125(a); *Laurel Heights*, 47 Cal.3d at 405. The public and decision-makers therefore lack the foundational information they need to evaluate the impacts of this project. Further, given the insufficient surveys, the DEIR's failed to assume the presence of *nine* special-status animal species, as is required by the City's Biology Guidelines. The DEIR and its supporting analysis must address impacts to these species.

A-20

C. The DEIR's Baseline Relies Upon Insufficient and Incomplete Surveys of Special-Status Plant Species

As with special-status animal species, the DEIR fails to establish an accurate and sufficiently detailed baseline of the existing special-status plant species that have the potential to occur at the Project site. As Expert Cashen explains:

Special-status plant species have the potential to occur on the Project site.[16] These include San Diego ambrosia (*Ambrosia pumila*), San Diego marsh-elder (*Iva hayesiana*), San Diego sagewort (*Artemisia palmeri*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*).[17] San Diego ambrosia is a federally listed endangered species. San Diego marsh-elder has a California Rare Plant Rank of 2B, which means it meets the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380. Incidental take of San Diego marsh-elder, San Diego sagewort, and southwestern spiny rush is not authorized under the City's Multiple Species Conservation Program ("MSCP").[18]

A-21

AECOM did not conduct focused (protocol-level) surveys for special-status plants that could be affected by the Project. CDFW survey guidelines indicate focused botanical surveys should be conducted *whenever natural or naturalized vegetation occurs on a project site* and the project has the potential for direct or

[14] Rathbun GB, NJ Scott Jr, TJ Murphey. 2002. Terrestrial Habitat Use by Pacific Pond Turtles in a Mediterranean Climate. Southwestern Naturalist 47(2):225-235.

[15] Reese DA, HH Welsh Jr. 1998. Habitat use by western pond turtles in the Trinity River, California. Journal of Wildlife Management 62(3):842-853.

[16] BTR, Appendix E.

[17] BTR, Appendix E.

[18] BTR, Appendix E.

A-20 As described in Responses A-10 through A-19, the Draft EIR provides adequate information, analysis, and mitigation consistent with the City's Biology Guidelines.

A-21 To detect the plant species listed in this comment, fruit or flowers would not have been necessary to identify the species if present in the Biological Survey Area. Had they been present, an experienced biologist would have been able to detect San Diego ambrosia, San Diego marsh-elder, San Diego sagewort, and southwestern spiny rush outside of their blooming seasons. Therefore, the reconnaissance survey provides a sufficient baseline for the special-status plants with potential to occur onsite, especially given that no impacts to native vegetation are anticipated from the project. See Responses A-10 through A-19 for responses related to surveys for special status animal species.

indirect effects on vegetation.[19] Natural and naturalized vegetation occur on and adjacent to the Project site, and the Project will have direct and indirect impacts on that vegetation.[20] Therefore, to establish existing conditions and comply with CDFW guidelines, the Applicant needs to conduct appropriately timed botanical surveys throughout all portions of the Project area and buffer zone containing natural or naturalized vegetation. Data from those surveys are required to fully assess existing conditions, analyze Project impacts, and formulate appropriate mitigation for impacts to sensitive botanical resources.

A-21

San Diego Ambrosia

McGlaughlin and Friar (2007) described the primary habitat for San Diego ambrosia as: "upper terraces of rivers and drainages in areas that have been heavily impacted by anthropogenic disturbances and changing flood regimes."[21] The USFWS provided a somewhat broader description when it listed the species as Endangered in 2002. It stated: "*Ambrosia pumila* primarily occurs on upper terraces of rivers and drainages as well as in open grasslands, openings in coastal sage scrub, and occasionally in areas adjacent to vernal pools.[22] The species may also be found in disturbed sites such as fire fuel breaks and edges of dirt roadways."[23] Based on these descriptions, in conjunction with the geographic range of the species, potentially suitable habitat for San Diego ambrosia occurs within the Project area.

A-22

AECOM concluded there was a low potential for San Diego ambrosia to occur at the Project site because: "potential habitat occurs adjacent to the San Diego River but is only marginally suitable."[24] The BTR does not explain why the potential habitat is only "marginally suitable." According to the Atlas Specific Plan (2016, proposed amended): San Diego ambrosia "could reasonably be expected" to occur

[19] CDFG. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Available at: http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Plants.

[20] DEIR, Figure 4.4-1.

[21] McGlaughlin ME, EA Friar. 2007. Clonality in the Endangered *Ambrosia pumila* (Asteraceae) Inferred from RAPD Markers; Implications for Conservation and Management. Conservation Genetics 8(2):319-330. Abstract available at: <http://link.springer.com/article/10.1007/s10592-006-9171-4>.

[22] U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) From Southern California; final rule. Federal Register, volume 67, number 127, pages 44372–44382.

[23] *Ibid.*

[24] BTR, Appendix E.

A-22 The habitat onsite for San Diego ambrosia is marginally suitable because the heavily impacted river terraces are indeed present, but are limited in extent due to existing development and encroachment of nonnative species. The City of San Diego does not "rule out the potential that San Diego ambrosia occurs at the Project site" as the commenter suggests, rather, as stated in the BTR and Draft EIR,` the City of San Diego states that there is a *low* potential for occurrence based on the aforementioned reasoning. Nonetheless, the commenter is correct in stating that no surveys were conducted, therefore, consistent with the City's Biology Guidelines, the Draft EIR and BTR assumes presence. As stated in Response A-18, habitat would be avoided and conserved in perpetuity under easement. Project compliance with MHPA Land Use Adjacency Guidelines and City permit conditions would avoid or reduce indirect impacts to the species, if indeed present. No impacts to native vegetation are anticipated as a result of the proposed project.

in the lower San Diego River floodplain.[25] There are documented records of San Diego ambrosia occurring along the San Diego River floodplain approximately two miles upstream of the Project site.[26]

A-22

The City cannot rule out the potential that San Diego ambrosia occurs at the Project site until the Applicant conducts focused surveys that adhere to USFWS guidelines.[27] AECOM's failure to detect the species during the September 2014 site visit is not evidence of absence because the species occurs underground, and its aerial stems may not be present from late summer to early spring.[28]

Attachment 4, section II.A.2.

Mr. Cashen also notes that the DEIR concluded without justification that other plant species, including Dean's Milk Vetch, may occur on the site, and that AECOM did not provide a sufficient basis for concluding that "[s]uitable habitat for this species does not occur within the study area." *Id.*

A-23

For the reasons specified in Mr. Cashen's comments, the DEIR does not provide an accurate, sufficiently detailed, or scientifically sound baseline for special-status plants. Guidelines 14 §15125(a); *Laurel Heights*, 47 Cal.3d at 405.

D. The DEIR Skews the Baseline By Treating an Illegal Parking Lot as Part of the Environmental Baseline

The DEIR impermissibly treats the illegal 112-space parking lot northeast of the Royal Palms Tower as part of the environmental baseline for the Project.[29] As the DEIR recognizes, this parking lot was paved without a permit in 2005. DEIR p. 3-20. The illegal construction of the parking lot caused significant impacts to the adjacent wetlands. *See* Attachment 6 (*People of the State of Cal. v. Town and Country Hotel LLC*, Stipulation in Full Settlement for Final Judgment of Permanent Injunction; Judgment Thereon, Case No. GIC880884 (Mar. 19, 2007)).

A-24a

[25] Amended Atlas Specific Plan, p. IV-20.

[26] Data provided by the participants of the Consortium of California Herbaria. Available at: <http://ucjeps.berkeley.edu/consortium/>. (Accessed 2016 Oct 8).

[27] U.S. Fish and Wildlife Service. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. p. 1.

[28] U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) From Southern California; final rule. Federal Register, volume 67, number 127, pages 44372–44382.

[29] Site Development Permit No. 400602 states that the illegal parking lot "is legally described as all that portion of Lot 2 of Mission Valley Ball Park, Map No. 3755; portions of Lot 4 of Partition of Pueblo Lot 1105, Referee's Map No. 1029; Lot 1 of Town and Country Hotel, Map No. 6274; and Lots 1 and 2 of Seven Inns Subdivision, Map No. 5671."

A-23 Appendix E to the BTR states that Dean's Milk Vetch is not expected to occur within the Biological Study Area. Sources such as Consortium of California Herbaria suggest that the Mission Valley area is outside of the expected range for this species. Also, see A-21 and A-22 for responses regarding plant species baseline.

A-24a CEQA Guidelines §15125, states that an "EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The Draft EIR appropriately described the existing baseline conditions.

The City filed a lawsuit alleging that "grading operations were performed negligently, improperly and without appropriate authorizations, causing, among other things, physical injury to adjacent property and physical injury to or destruction of vegetation, trees and other tangible property. . . [and that] concrete, asphalt, dirt, rocks and other debris" were pushed onto the wetlands adjacent to the parking lot. *Id.* ¶11. The City and Town and Country LLP entered into a stipulated judgment in March 2007 that allowed the parking lot to remain or be developed so long as Town and Country LLP or its successors obtained a site development permit, repaired the damage to sensitive biological resources, and met other conditions. *Id.* ¶18. A-24b

On February 20, 2013, Town and Country LLP sought, and the City approved, a Site Development Permit providing for the post-hoc permitting of the illegal parking lot. *See* DEIR p. 3-20; Report to the Hearing Officer, Town and Country Parking Lot PTS Project Number 118318 (Feb. 20, 2013) ("HO Report")[30]; *see also* Attachment 7 (RECON, *Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project San Diego, California Project No. 118318* (June 13, 2012). The Site Development Permit was granted *subject to the requirement* that the Town and Country grant "a covenant of easement for MHPA land," and that restoration and enhancement activities specified in the permit be carried out. *See* HO Report, Att. 9. Specifically, the Site Development Permit required that "within 180 days from the date of approval of this permit after all appeal rights have been exhausted," the easement must be granted, and that "installation of the improvements, including restoration and planting" must be complete "within one year after the recordation of the recreation easement." *Id.* at 5 ¶¶18-19. The deadline for satisfying these pre-conditions for the post-hoc approval of the parking lot have long since passed.[31] Further, the Site Development Permit is null and void because it was not "utilized within thirty-six (36) months after the date on which all rights of appeal have expired." *Id.* at 2 ¶1. A-24c

Given that the preconditions for the Site Development Permit were not timely satisfied, and the permit is null and void, the 112-space parking lot remains an illegal and unpermitted parking lot that is currently in violation of the law. The proper baseline condition, therefore, is the project site without the inclusion of the illegal parking lot, and without the disturbance or removal of the vegetation that occurred because of the construction of the parking lot and subsequent failure to mitigate its impacts. Indeed, in the City's preliminary review of the Project, City staff explained that A-24d

> [i]mpacts should be assessed according to what vegetation should be there, not the disturbed vegetation that still exists because the code violation was not addressed. This applies to the analysis of indirect impacts as well. The proposed

[30] Available online at: < https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/hearingofficer/reports/2013/HO-13-013townandcountry.pdf>.
[31] Appeal rights exhaust ten days after the date of the Hearing Officer's decision. SDMC §112.0506(b).

A-24b Comment noted. The comment provides a description of previous site history and does not address the adequacy of the Draft EIR. No further response is required.

A-24c The commenter states that the Site Development Permit #400602 (approved in 2013) previously issued for the existing parking lot has not been utilized in accordance with the San Diego Municipal Code. Compliance with the Site Development Permit does not affect the existing physical conditions on the site at the time of the notice of preparation. Even if a condition may be the result of prior illegal activity, the existing condition of the site is the proper baseline. *Banning Ranch Conservancy v. City of Newport Beach*, 211 Cal. App. 4th 1209 (2012); *Riverwatch v. County of San Diego*, 76 Cal. App. 4th 1428 (1999); *Eureka Citizens for Responsible Gov't v. City of Eureka*, 147 Cal. App. 4th 357 (2007).

A-24d As is described in Response A-121, Section 4.4 Biological Resources of the Draft EIR, the project is not impacting the Site Development Permit area, and the project would implement the restoration requirements of the stipulated judgment as well as the Mitigation Monitoring and Reporting Program identified within the associated previously certified Mitigated Negative Declaration. These requirements will be made conditions of approval of the project's entitlements.

project impacts (direct and indirect) should be evaluated against the habitat that would exist had the restoration occurred for the code violation.

A-24d

Attachment 14 p.3 (Town & Country MIR Review (Cycle 9) (undated).

In spite of City staff's comment, the DEIR assumes the parking lot and disturbed vegetation in its baseline. The DEIR credits the Project for the removal and replacement of the parking lot with open space when calculating the impacts to hydrology, water quality, and biological resources, as well as other resources. *See, e.g.*, DEIR p. 4.1-48 ("[T]he conversion of approximately 3.22 acres of impervious area (i.e., parking lot) adjacent to the MHPA to pervious area (i.e., combination of habitat and park space) would provide added filtration of runoff prior to entering the San Diego River."); *id.* p. 4.6-20 ("The project involves renovation and infill development of the existing site that would reduce impervious characteristics compared to the existing development."); DEIR p. 4.6-21 ("The extent of 100-year flood events would not likely be exacerbated by implementation of the project because the project would slightly decrease impervious surface area."). The DEIR's baseline is therefore artificially suppressed, and conceals the true impacts of the Project while exaggerating its benefits. To put it plainly, the DEIR misleads the public and decision-makers by placing the Project in a positive light for removing a parking lot that should never have been constructed in the first place and for which, more than *ten years* after its illegal construction, mitigation has not yet been completed.

A-24e

E. The DEIR's Traffic Model Overestimates the Baseline Traffic from the Existing Hotel, Which Makes the Project's Traffic Impacts Appear Less Significant

The DEIR substantially overestimates the baseline traffic caused by occupancy at the existing hotel at the site, thus artificially making the Project's new traffic seem insignificant. As explained by Commenters' traffic experts in Attachment 3:

In determining the number of trips to be eliminated as a result of demolition of 254 hotel rooms, the DEIR traffic analysis improperly assumed that the current 954 rooms are fully occupied. This is unrealistic and inconsistent with other information presented in the DEIR. Specifically, footnote 4 in DEIR Table 4.13-1 (p. 4.13-11) says:

A-25

Based on research done for the Hotel calculations [of water usage] the occupancy rate is 80% for San Diego (City Data)

Applying the 80 percent occupancy factor referenced here indicates that only 763 rooms would typically be occupied at Town & Country. Thus, implementation of the proposed 700-room hotel project would only eliminate the trips associated with 63 rooms, not 254 rooms. Table 1 summarizes the trip generation differences associated with this baseline error for each pertinent time period.

A-24e See Responses A-24a through A-24d.

A-25 The existing Town and Country Resort includes 954 hotel rooms and the project proposes to demolish 254 rooms, resulting in 700 rooms remaining. The trip generation calculations were conducted per City of San Diego practices and guidelines, which is based on the trip difference between the proposed use and the existing uses to calculate "net new" traffic.

The proposed project assumes 100% occupancy of the hotel even though there could be occurrences when the hotel is not 100% occupied. For traffic studies conducted in the City of San Diego, standard procedure includes assuming full (100%) occupancy of the site in both the proposed and existing conditions.

For the purposes of determining the Existing baseline conditions pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15125, trips attributable to current development were included since the hotel rooms, convention space and food/beverage establishments are in operation and open for business. A full occupancy assumption is consistent with SANDAG's regional traffic modeling methodology, which assumes full occupancy of all entitled square footage and development as a part of the forecast model trip generation. It is also consistent with the City's practice for baseline assumptions used in trip generation calculations given that occupancy fluctuates and could always be increased by doing Tenant Improvements (TI) and other marketing efforts at any time without any discretionary action. The nature of the hotel business is that during summer months and conference events, the hotel is 100% occupied while during the off-season, occupancies are expected to decrease. Based on coordination with the hotel operators, the hotel was at or close to full occupancy within the past three (3) years on several occasions. For these reasons, using occupancies that are constantly changing as a part of project trip generation calculations would be misleading and illusory. While it is difficult to predict the future hotel occupancy, the proposed hotel expects occupancy trends similar to existing conditions.

In addition, the project trip generation calculations were conducted using conservative assumptions. The demolition of Bella Tosca Spa and its associated credit was assumed at 50% to account for trips by non-hotel guests. The 2015 and 2016 data from the Spa shows that the average utilization of the spa by the non-hotel guests was approximately 65%. Secondly, the only credit assumed for the demolition of on-site food and beverage establishments (totaling 25,652 SF) was the Kelly's restaurant (4,608 SF), and that too 50% (2,304) of square footage was included. If these assumptions were adjusted, then the trip credits could have been higher than those shown in the traffic study.

Table 1
Hotel Trip Generation Comparison

Hotel Room Reduction	Daily		AM Peak Hour		PM Peak Hour	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
254 Rooms[1]	10.0/Room	2,540	6% of Daily	152	8% of Daily	203
63 Rooms[2]		630		38		50
Difference		1,910		114		153

Notes:
[1] At 100 percent occupancy, per DEIR traffic analysis.
[2] At 80 percent occupancy, per City data.

A-26

By incorrectly including a baseline assumption that the hotel is fully occupied, the DEIR traffic analysis overstates the volume of daily traffic to be eliminated by over 1,900 trips. In the AM peak hour, the DEIR traffic analysis eliminated 114 too many trips, and in the PM peak hour, the reduction was 153 trips too high. Consequently, the net trip generation associated with the proposed project was underestimated by these amounts, potentially leading to understatement of the project traffic impacts.

We would also note that the 80 percent occupancy factor referenced in DEIR Table 4.13-1 is apparently a City-wide average. If the actual average occupancy factor at Town & Country is lower than this, than the trip generation discrepancy is even greater. In fact, if the actual occupancy factor is 73 percent or less, then fewer than 700 rooms would be occupied at Town & Country on a typical night, and no trip generation reduction would be appropriate.

A-27

Having established the hotel baseline at 763 rooms based on documented City of San Diego occupancy data, it is then appropriate to assume 100 percent occupancy of the renovated 700-room hotel, rather than applying the 80 percent occupancy factor. Given that current demand at Town & Country is for 763 rooms, the DEIR presents no evidence to suggest that the renovated hotel will generate lower demand. If anything, the upgraded facilities should result in even greater demand. Moreover, this methodology is consistent with the conservative approach to development of project-related trip generation estimates typically employed in a CEQA traffic impact analysis.

F. The GHG Baseline Is Artificially Overestimated, Making the Project's New GHG Emissions Seem Insignificant

A-28

In concluding that the Project's GHG emissions are purportedly insignificant versus the

Therefore, given that the trip generation calculations were conducted using standard City practice using conservative assumptions, no changes are required to the traffic analysis or the Draft EIR in regard to trip generation.

A-26 See Response A-25.

A-27 Comment noted.

A-28 The City of San Diego, on July 12, 2016, adopted the Climate Action Plan (CAP) Consistency Checklist, which requires all projects subject to discretionary review to demonstrate consistency with the Climate Action Plan. Therefore, a CAP Consistency Checklist was prepared for the Town & Country project. The City has changed the analysis from the 900 MT approach to an evaluation of compliance with the City's Climate Action Plan and CAP Consistency Checklist. Based on the analysis, the project was determined to be consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified greenhouse gas reduction targets, and impacts from greenhouse gas emissions are considered less than significant. Therefore, the project is compliant with the CAP checklist, and neither analysis would result in a significant impact that would require mitigation.

In response to public comments, an updated quantitative greenhouse gas analysis with corrected building square footages for consistency throughout the Final EIR was conducted, and included as Appendix F-2 Climate Action Plan Checklist and Greenhouse Gas Analysis in the Final EIR. Similar to the discussion in the Draft EIR, the analysis in the Final EIR demonstrates that the project's incremental contribution to cumulative greenhouse gas emissions would be less than significant.

existing conditions, the DEIR substantially overestimated the existing baseline GHG emissions, thus artificially making the Project's GHG seem insignificant. As explained by Commenters' air quality experts in Attachment 1:

> the emission estimates relied upon to come to this significance determination were taken from CalEEMod models that utilize incorrect input parameters. Specifically, we found that the CalEEMod model for the existing baseline land uses overestimate the building square footage of the existing buildings . . . As a result, the net increase in emissions that the Project would result in is artificially reduced . . . the DEIR's CalEEMod model overestimates the existing baseline land uses by 37,197 SF . . . This discrepancy between the CalEEMod model's inputs and the information provided in the DEIR presents a significant issue. The land use types and size features are used throughout CalEEMod in determining default variables and emission factors that go into the model's calculations. By overestimating the existing baseline land uses' total square footage . . . the net increase in emissions that the Project will result in is greatly underestimated . . . In an effort to determine the net increase in GHG emissions that the Project will result in, we prepared two updated models using the most recent CalEEMod version, CalEEMod.2013.2.2. Our first model estimates emissions from the existing land uses using the correct building square footages provided in the DEIR . . . When the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses is correctly modeled, we find that the Project's net increase in GHG emissions would exceed the 900 MT CO2E screening threshold.

A-28

VI. THE DEIR'S PROJECT DESCRIPTION IS INCOMPLETE AND INCONSISTENT

The purpose of CEQA, in large part, is to provide the public and decision-makers with adequate information to enable a comprehensive and accurate evaluation of a project's environmental impacts before decisions about the project are made. *Western Placer Citizens for an Agr. and Rural Env't v. Cnty. of Placer* (2006) 144 Cal.App.4th 890, 898. An accurate and complete project description is foundational to fulfilling CEQA's purpose. As one court explained, "only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative), and weigh other alternatives in the balance." *Citizens for a Sustainable Treasure Island v. City & Cnty. of San Francisco* (2014) 227 Cal.App.4th 1036, 1052. "An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR," but a "curtailed, enigmatic or unstable project description draws a red herring across the path of public input." *San Joaquin Raptor Rescue Ctr. v. Cnty. of Merced* (2007) 149 Cal.App.4th 645, 654-55; *Cnty. of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199–200.

A-29

A-29 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

A. The DEIR's Project Description is Insufficient Because It Does Not Identify the Size or Number of Bedrooms in the 840 Planned Dwelling Units

The DEIR does not specify the quantity of bedrooms in the residential component of the Project. In response to a recommendation from the City of San Diego Planning Commission that the Project "incorporate a range of 1 bedroom, 2 bedroom, and 3 bedroom unit types to provide for a variety of household sizes and household incomes," the Project Proponent stated that the residential district will "provide a range of unit types to serve a variety of household sizes." Attachment 8 p.11 (Submittal Response to Planning Commission Resolution Recommendations (Oct. 2015)). There is nothing, however, in the DEIR identifying what the actual breakdown of household sizes will be.

The failure in the DEIR to specify the quantity of the bedrooms in the units undermines the validity of the impacts analysis throughout the DEIR. It is not possible to quantify the pressure that the 840 residential units will place on environmental resources, public infrastructure, public utilities, and public services without clarity as to the number of people that the units will be designed to accommodate. The Project Proponent's vague statement to the Planning Commission that there will be "a range" of one-bedroom, two-bedroom, and three-bedroom units illustrates the point. If almost all the units are one-bedroom units, there could be fewer than 1,000 bedrooms included in the project. On the other hand, if almost all the units are three-bedroom units, there could be more than 2,400 bedrooms included in the project.

A-30

The size of this discrepancy demonstrates that there is not sufficient detail in the Project Description to "allow an adequate evaluation and review of the environmental report." *San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654. Indeed, City staff identified this issue in a preliminary review of the Project when, after reviewing a draft of the Sewer System Analysis, staff directed the Project Proponent to correlate the Sewer System Analysis with the "actual number of units, including number of bedrooms [and] fixture units." *See* Attachment 9 p. 49 (Cycle 16 Issues Report (Nov. 13, 2015)). The DEIR's Sewer System Analysis does not, however, include any data, reference, or discussion regarding the number of bedrooms per unit, per residential lot, or on a project-wide basis. Nor is there any data, reference, or discussion regarding the number of bathrooms or fixtures that would be included in the residential portion of the Project. As such, the correlation that City staff requested could not have occurred for the Sewer System Analysis.[32]

Further, the DEIR does not identify any assumptions regarding the number of bedrooms in the Project. The DEIR could have stated that the 840 units will include a range of one-, two-,

[32] The only information or assumption pertaining to unit size is in an appendix to the DEIR analyzing parking sufficiency. That study assumes that all units will be studios, one-bedroom, and two-bedroom units. But, this is not reflected anywhere in the DEIR and appears to contradict statements made by the Project Proponent. *See* DEIR, App. C p. 107-08, Table 13-3.

A-30 Consistent with CEQA Section 15124, the Project Description as described in Chapter 3.0 of the Draft EIR contains the required information including the precise location and boundaries; statement of objectives; general description of the project's characteristics and a description of the intended uses of the EIR.

The project's impacts were analyzed based on all of the project components. Agencies typically use number of dwelling units as a way to determine the expected impacts and service demands of a proposed project. Different departments and agencies have differing methods for assessing required service impacts and demand based on standard dwelling unit and square footage assumptions. These standard methods and models used by various agencies and departments use dwelling units and nonresidential intensity inputs to estimate the environmental consequences of each project. There are no inputs relating to unit occupancy, population, or employment generation within the SANDAG Series 12 traffic model used for the project. Instead, trip generation within the model is based on number of dwelling units, square feet of nonresidential development, and/or acreage of uses. Specifically, the SANDAG transportation modeling effort for the project included land use and/or network customizations using the Series 12 model platform. In the Series 12 platform, the primary land use inputs are dwelling units and acres or square feet of nonresidential development. The occupancy, population, and employment factors suggested by the commenter as necessary to evaluate impacts are not used within the SANDAG Series 12 model.

The planning criteria used in the sewer study is based on the City of San Diego Water and Sewer Planning and Design Guide (February 2013), which determines demand based on per capita use estimates based on project density. As shown in Table 1 City of San Diego Sewer Design Guide Density Conversions, density is determined by proposed dwelling units per acre, not some other factor such as bedrooms per unit. Therefore, the Project Description in the Draft EIR provided a consistent and stable expected number of dwelling units per residential parcel (acre) for use in the Sewer Study. Finally, the Project Description establishes the residential development to be a maximum of 840 dwelling units within the project site, and also establishes expected dwelling units based on the MVPD-MV-M zone. Also see Response to Comment A-31.

and three-bedroom units, and for purposes of analysis, assumed that there would be three bedrooms per unit. In this manner, any later decision to construct a range of units with three *or fewer* bedrooms would have been adequately analyzed. *See Citizens for Sustainable Treasure Island v. City & Cnty. of San Francisco* (2014) 227 Cal.App.4th 1036, 1053-54 & n.7 (explaining that an EIR may analyze maximum impacts based on a maximum development scenario if the specifics of the design development are not known). The DEIR, however, makes no statement whatsoever regarding the assumptions about the quantity of bedrooms in the units, thus creating a fundamental gap in the underlying analysis and the public's ability to assess whether that analysis is accurate.

The DEIR does not even reflect the Project Proponent's prior statement regarding the range of bedrooms per unit that will be included in the Project. There is no statement in the DEIR's Project Description that there will be between one and three bedrooms per unit. Given the complete lack of specificity in the Project Description, the Project could include units of four or even more bedrooms.[33] Thus, there is no maximum development scenario that confines the scope of the Project. As such, the DEIR is flawed because there is no "finite project description" that provides a basis for the analysis therein. *San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654. The DEIR's failure to draw any parameters around the number of bedrooms in the units would allow for "a narrow project as the launching pad for a vastly wider proposal," which would "frustrate[] CEQA's public information aims." *Cnty. of Inyo*, 71 Cal.App.3d at 199-200.

A-30

B. The DEIR's Project Description is Insufficient and Inconsistent with Respect to Residential Population

The DEIR is flawed because it relies on insufficient and inconsistent statements and assumptions regarding the Project's residential population. First, the section of the DEIR entitled Project Description contains no data, reference, or discussion regarding residential population. The Project Description section is therefore insufficient because it does not provide an adequate basis for conducting an informed analysis of the impacts.

A-31

Second, the DEIR and its supporting studies include the following inconsistent statements and assumptions regarding the Project's residential population:

- The Public Utilities Section of the DEIR assumes a residential population of **2.2 residents per unit**, for a total population of **1,848 residents**. *See* DEIR, Table 4.13-1, n.2.

[33] The Draft Town and Country Master Plan appears to suggest that the Project may include four-bedroom units. *See* Attachment 10 (Draft Town and Country Master Plan p. 76 (Aug. 2016)).
Section 5.3.10 states that "[p]arking for all residential parcels will be provided on-site" at a ratio of "2.0 [spaces] per 3 or 4 bedroom [dwelling unit]." *See id.*

A-31 As explained in Response A-30, based on the number of dwelling units proposed, the City of San Diego and agencies that would serve the project may use a variety of projection factors to estimate the demand that is expected to result from the number of dwelling units proposed. The factors used within the Draft EIR are all based on adopted and/or typical standards used by the relevant agencies to reach their own determinations regarding the potential infrastructure and service demands. These numbers are not used to estimate population per se, but rather service factors, which can and do differ.

Table 4.13-1 of the Draft EIR does not establish a general population factor for the Draft EIR; this table is specifically related to the water demand factors assumed in the Water Supply Assessment only. As described below, the City departments and agencies contacted during development of the technical studies and Draft EIR used their discretion in applying their own established factors in estimating the expected service and infrastructure demands on the project based on the number and type of dwelling units proposed, as follows:

- The Water Supply Assessment Report, prepared by the City of San Diego Public Utilities Department (2016) assumed 840 dwelling units and a residential occupancy factor of 2.2 persons per household. The maximum number of units that can be developed on-site is 840 dwelling units. The occupancy factor is based on an average 2.2 persons per household estimate used by the City and based on SANDAG estimates of 1.92 persons per household for the zip code in which the project is located and a Citywide factor of 2.6 persons per household (average of 2.6 and 1.92 = 2.2). This provides a conservative estimate of persons per household given the zip code is largely multifamily residential uses like the proposed project rather than the citywide usage numbers, which includes a much greater percentage of single family homes. Further, the 80 gallon per day usage factor is based average 2001-2009 pre-drought (higher) consumption data Citywide, which also provides a conservative estimate of the project use since water consumption has dropped during the drought conditions. The 88 gallons a day referenced by the commenter is from an inactive "fun facts" webpage for children that does not establish the consumption factors used by the City in determining water demand.
- The City's Parks and Recreation Department determines the expected park area requirement by using the following population estimate factors: vacancy rate of 6.3% (SANDAG Current Estimates for Multi-Family Vacancy Rate), and population density factor of 1.5 persons per multifamily household (SANDAG's 2012 American Community Survey) for a total expected 1,181 residents at any one time. This projection resulted in the sizing, provision,

- The Sewer System Analysis assumes **1.8 residents per unit** in three of the four residential buildings (Parcel 1, 2, and 4), and **1.5 residents per unit** in the remaining residential building (Parcel 3), for a total population of **1,435.5 residents**. *See* Sewer System Analysis at 3-4 (Jan. 29, 2016).

- The Parks and Recreational Facilities section in the DEIR states that the residential population of the Project will be **2,394 residents**, or **2.85 residents per unit.**

These radically inconsistent descriptions of the Project's residential population impair the analysis in the DEIR. The DEIR relies on different population assumptions for different analyses, thus calling into question the consistency of the analysis throughout the DEIR. Additionally, the DEIR fails to provide any basis for the discrepancies, or even to acknowledge that the inconsistencies exist.

A-31

Perhaps most egregious, none of the varying descriptions of the Project's residential population in the DEIR correspond with the Project Proponent's description to the City in its application for a Site Development Permit, or the City's description in the Town & Country Master Plan. In September 2015, the Project Proponent submitted its "Draft Findings for Site Development Permit Approval" to the City. The Project Proponent stated that the Project would house "approximately **1,562 permanent residents** based on a maximum 840 residential multi-family dwelling units or an average occupancy of **1.86 people per residence**." *See* Attachment 11 (Draft Findings for Site Development Approval p. 9 (Sept. 28, 2015)) (emphasis added). The Site Development Permit is part of the Project, and therefore the subject of the DEIR's analysis. Findings are required for a Site Development Permit to establish, *inter alia*, that the site is suitable for the development's design and siting, that the development will result in minimum disturbance to environmentally sensitive lands, and that the mitigation required is reasonably related to, and calculated to alleviate, negative impacts created by the development. SDMC §126.0504(b). The residential population of the Project is relevant to each of these (and other) required findings, and essential to the completeness and accuracy of the DEIR's analysis of the Site Development Permit. The DEIR, however, neither reflects nor analyzes the Project as described in the Findings for the Site Development Permit.

In yet another variation of the Project description, the proposed Town and Country Master Plan, which the City itself drafted, assumes that there are **1.5 residents per unit**, and a 6.3% vacancy rate, for a total **1,181 residents.** *See* Attachment 10 p. 56 (Table 4-2)). Like the Site Development Permit, the Project includes a Master Planned Development Permit for the Town and Country Master Plan. These documents are therefore part of the Project that is the subject of the DEIR's analysis. To approve a Master Planned Development Permit, decision-makers must make findings, including that the proposed Master Plan is consistent with the applicable Community Plan and the General Plan and that the project provides the required public facilities, is compatible with adjacent open areas, and meets other provisions of the

and irretrievable commitment of 3.31 acres of land as park use within the project site. This park use would be developed within Phase 1 of the project, prior to any actual residential commitment or occupancy of the project. The direct and indirect environmental effects of this park have been analyzed throughout the Draft EIR.

- As reviewed and approved by the City's Public Utilities Department – Water and Sewer, the project's Sewer System Analysis does not use the number of bedrooms to estimate sewage flows from new developments, but instead uses factors based on the residential density of the residential parcels. Consistent with the City's Schedule for Sewer and Water Fees, the factor used for the sewer analysis is a very conservative assumption of 20 fixtures per dwelling unit. The sizing and placement of the sewer facilities were determined by this analysis, and the direct and indirect environmental effects of these facilities have been analyzed throughout the Draft EIR. As stated in the Draft EIR, the project would not result in a need for new off-site sewer systems or require substantial alterations to existing sewer utilities such that physical impacts would occur. Any minor fluctuations of demand that may occur as specific residential development projects come forward would not affect the impact analyses or conclusions for any issue area within the Draft EIR.

- Consistent with the Parks and Recreation Department estimate of residential population, the Master Plan assumed approximately 1,181 residents would occur within the project site.

The Project Description and Master Plan include a stable and consistent description of the number of residential units (840) expected to be developed on the project site.

municipal code. SDMC §1514.0201(d)(3). The residential population of the Project is relevant to each of these (and other) required findings, and essential to the completeness and accuracy of the DEIR's analysis of the Master Plan. The DEIR, however, does not reflect or analyze the Project as described in the Master Plan.

In short, the description of the Project in the DEIR and in the Project documents that the DEIR purports to evaluate are mismatched and uncorrelated. The DEIR includes three different descriptions of residents per unit and residential population, none of which match the descriptions in the Findings for the Site Development Permit or the Master Plan, which are themselves misaligned.

The DEIR's inconsistent description of the Project population is an archetypal example of a "curtailed, enigmatic or unstable project description [that] draws a red herring across the path of public input." *San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654-55. It is "curtailed" because the Project Description section of the DEIR does not include any data or reference regarding population; it is "enigmatic" because the DEIR varies in its description of the Project population without providing any basis for doing so, apparently making assumptions based on unknown data to which the public does not have access; and it is unstable because it varies widely within the DEIR and does not correlate with the actual Project documents that are the subject of the DEIR. A-31

C. The DEIR's Project Description is Inconsistent and Insufficient Because It Provides Varying Descriptions of the Wetlands Area to Be Restored and Enhanced

The DEIR is flawed because it makes, and relies upon, inconsistent descriptions of the size of the habitat area that will be restored or enhanced. The DEIR makes the following statements:

- The Project includes "**7 acres of restored riverine open space habitat.**" DEIR p. 3-3, Table 3-1 (emphasis added). A-32
- "The project protects and restores the San Diego River area by enhancing approximately **8 acres of MHPA area with riparian habitat."** DEIR p. 4.1-24 (emphasis added).
- The Project includes "[r]estoration and enhancement of approximately **7.5 acres of native habitat,** including **6.98 acres within the MHPA.**" DEIR p. 3-7 (emphasis added).
- The project "restores and enhances **7.4 acres of the San Diego River area (6.98 acres are located within the MHPA).**" DEIR pp. 4.1-33 – 34 (emphasis added).

A-32 A total of 8.11 acres would be restored/enhanced as open space, 6.98 acres of which are located within the MHPA. Revisions have been made to the Final EIR to reflect these accurate numbers. These were minor numerical errors that do not change the analysis or conclusions within the Final EIR.

- "The project orients development toward the River, enhances and restores **6.98 acres of MHPA area surrounding the River (7.4 acres of restoration total)**." DEIR p. 4.1-36 (emphasis added).

- "The project restores and enhances **approximately 8 acres of the San Diego River and MHPA** areas on the project site." DEIR p. 4.1-30 (emphasis added).

A-32

These inconsistent descriptions of the size of the area that will be restored and enhanced undermine the validity of the DEIR. The descriptions of the total area to be restored or enhanced include 7 acres, 7.4 acres, 7.5 acres, 8 acres, and approximately 8 acres. Notably, none of these descriptions match the description that the Project Proponent provided to the City in response to Planning Commission recommendations. There, the Project Proponent stated that "**Riverine habitat, totaling 7.71 acres**, will be restored and/or enhanced." *See* Attachment 8 p. 2 (emphasis added).

A-33

Additionally, there are two separate descriptions of the size of the MHPA to be restored or enhanced, including 6.98 acres and 8 acres. Neither of the descriptions in the DEIR of the MHPA area to be restored matches the description in the Project Description section of the NOP, which states that the Project will include restoration of **"approximately 4.42 acres" of MHPA area**. NOP p. 2 (Dec. 18, 2015). Nor do the descriptions in the DEIR of the MHPA area to be restored match the Project Proponent's representations to the City in the Draft Site Development Permit Findings, which state that **"approximately 4.04 acres" of MHPA area** would be restored. Attachment 11. Thus, there are at least five separate and distinct descriptions of the total area to be restored or enhanced, and at least four separate and distinct descriptions of the total MHPA area to be restored or enhanced. None of the DEIR's descriptions of the total MHPA area to be restored or enhanced match the description in the Draft Site Development Permit Findings. Indeed, the DEIR overstates the total MHPA area to be restored or enhanced by several acres, when compared to the representations the Project Proponent has made to the City in the Draft Site Development Permit Findings.

A-34

It is impossible for the public and decision-makers to identify which of these descriptions, if any, is an accurate description. Further, the DEIR does not explain the discrepancies in the description. Thus, the DEIR is invalid because it is based on a "curtailed, enigmatic or unstable project description." *San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654.

D. The DEIR Incorrectly Identifies the San Diego River as Part of the Restoration and Enhancement Area

A-35

The DEIR is flawed because it includes the San Diego River in the area to be restored or enhanced, even though there is nothing in the DEIR stating that any restoration or

A-33 See Response A-32.

A-34 See Response A-32.

A-35 Although restoration and enhancement activities are not proposed directly in open water areas, improvements to adjacent habitat are expected to enhance the open water through this section of the San Diego River. The proposed addition of native vegetation will improve filtration of sediment and chemicals. Replacement of solid surfaced areas like parking lots with porous surfaces associated with park space and native habitat will increase groundwater recharge through additional infiltration opportunities. Lastly, trash and debris removal along this section of the San Diego River would enhance flow and relieve stagnant water. Therefore, the riparian system, as depicted in Figure 4.4-6 in the Draft EIR accurately depicts the reach of enhancement activities.

enhancement activity will take place in the river itself. The map in the DEIR at p. 4.4-67 (Fig. 4.4-5) depicting the specific areas to be restored and enhanced illustrates the problem. The map key states that there will be 3.53 acres of "Southern Cottonwood-Willow Riparian Forest (Enhancement)," and indicates that this area is shown on the map in green. *Id.* The green area on the map, however, includes the entirety of the San Diego River section flowing through the Project Area. Although Southern Cottonwoods and Willows are well-placed as riparian habitat *along the river*, these trees cannot, and will not, be planted *in the river*. There is certainly nothing in the DEIR or the Project documents indicating otherwise. Nor is there information in the DEIR or the Project documents stating that any actions will be done to restore or enhance the river itself. *See* Attachment 4, section IV.F. A-35

The DEIR is invalid because it improperly describes the San Diego River itself as part of the restoration and enhancement area and thereby artificially inflates the size of the area that will be restored and enhanced. In short, the DEIR's flawed project description misleads the public and the decision-makers, and fails to provide "an accurate view of the project" such that "affected outsiders and public decision-makers [may] balance the proposal's benefit against its environmental cost" and consider mitigation measures and alternatives in an informed manner. *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052. A-36

E. The DEIR Impermissibly Fails to Describe or Analyze the Royal Palm Towers as Part of the Project

The proposed Town and Country Master Plan describes renovations and improvements to the Royal Palm Towers as part of the Project and explains that the Royal Palm Towers is a "key component of the Master Plan." App. 10 pp. 57, 84. The DEIR, however, does not include the Royal Palm Towers in its description of the Project, nor does it analyze the associated impacts. A-37-a

The Master Plan states that the design guidelines for the Hotel District of the Project are "an integral component of the Master Plan." *Id.* at p. 82. These design guidelines include "updates to the exterior visual appearance" of the Royal Palm Towers. *Id.* Specifically, the Royal Palm Towers' porte cochere will be renovated and the 10-story building facade will be "painted with graphic design colors and patterns to increase its visual interest and perceived depth." *Id.* at p. 84. The Master Plan explains that "[t]his treatment will break up the monolithic visual mass of the existing building and provide an updated appearance that echoes the new overall design theme of the Hotel District." *Id.* Further, the DEIR states that the Project includes renovation of all 700 remaining hotel rooms, including those in the Royal Palm Towers. DEIR p. 3-15 (table 3-2). Although the Master Plan touts the renovated Royal Palm Towers as part of the Project, the DEIR does the opposite. For instance, the DEIR's Biological Resources section acknowledges that the Royal Palm Towers poses the "greatest risk for avian collisions on-site," but states that it is an "existing condition that is not a result of the project," and therefore does not analyze the impact of avian collision at the Royal Palm Towers nor propose any associated mitigation measures. DEIR p. 4.4-26. A-37-b

A-36 See Response A-35.

A-37a The Royal Palm Tower is described in Chapter 3.0, Project Description of the Draft EIR. More specifically, the Royal Palm Tower is described in the following areas: Section 2.4 Existing Conditions, Table 3-1 Summary of Project Components, under the Hotel District which states "Consolidation and upgrade of Town & Country Hotel and Convention Center"; Section 3.2, Project Characteristics when describing, in part, the "renovated hotel", Table 3-2 Summary of Demolition, Construction and Renovation for Phase 1, Section 3.3 Phasing, Demolition, and Construction, under Phase 1 improvements; and Figure 3-3 Site Plan as part of the project that would be renovated.

As noted by commenter, Chapter 6, Hotel District, of the Master Plan provides a description of the minor exterior improvements of the Royal Palm Tower to update the visual exterior of the building. To further clarify the minor interior and exterior renovations to the Royal Palm Tower that was described in the Master Plan, the following text has been added to Section 3.2.1.2, Hotel District, of the EIR:

> "The Royal Palm Tower is undergoing minor interior and exterior renovations to update the building. The exterior improvements include painting the 10-story building façade with a graphic design of colors and patterns to increase its visual interest and perceived depth. This treatment would break up the monolithic visual mass of the existing building and provide an updated appearance that echoes the new overall design theme of the Hotel District. In addition, the porte cochere at the building's main entrance facing the park and river open space would be renovated and directly connect to a landscaped corridor in the River Park District leading to the pedestrian bridge over the San Diego River." Furthermore, the project would not result in any changes to Royal Palm Tower that would result in increased potential for avian collision.

A-37b See Responses to A-37a and A-37c.

The DEIR's description of the Royal Palm Towers is invalid for two reasons. First, it fails to describe or analyze the construction activity and renovations to the Royal Palm Towers that are identified as part of the Project in the Master Plan and DEIR. Second, and related, the DEIR treats the Royal Palm Towers only as "an existing condition," even though it is undergoing renovation and improvement, and is a "key component" of the Project. *Id.*; Attachment 10 p. 57. The proper approach is to: (1) describe the Royal Palm Towers as it exists prior to the Project as an existing condition; (2) describe renovations and improvements as part of the Project description; and (3) analyze the impacts that the renovated and improved Royal Palm Towers will have in the context of the entire Project. For instance, the Project includes a substantial amount of wetlands restoration and enhancement that the DEIR claims will improve avian habitat. This improved habitat will increase the population of birds on the Project site which will, in turn, raise the risk of avian collision at the Royal Palm Towers. But the DEIR fails to analyze the Royal Palm Towers, as renovated and improved, in the context of the biological restoration and enhancement that is part of the overall Project.

A-37-c

F. The DEIR Does Not Adequately Describe the Stormwater Management Area and Drainage Channel

The DEIR states that the Project will include installation of a stormwater management area and drainage channel that travels from the stormwater management area through the MHPA to the San Diego River. *See* DEIR pp. 4.4-36 – 37 & Fig. 4.4-3 (showing drainage channel in MHPA). The DEIR and BTR provide insufficient and contradictory information about these two infrastructural features. The DEIR states that the drainage channel would connect to the San Diego River through a "new outlet, which would have adequate improvements, i.e., new culvert headwall, riprap energy dissipaters) to reduce storm runoff to nonerosive velocities." *Id.* p. 4.6-21. As Expert Cashen points out, this description is inconsistent with the BTR's description, which states that the drainage channel will be "naturally vegetated with a combination of coastal sage scrub and riparian species with an emphasis on low growing species." Attachment 4, section I.A (quoting DEIR p. 4.6-21). Plant species, including coastal sage scrub, cannot grow in riprap, which is composed of rock or concrete. Attachment 4, section I.A.

A-38

There is nothing in the DEIR or BTR to suggest that part of the drainage channel will be riprap and part will be naturally vegetated. Even if there was, however, the description would be flawed for two reasons. First, as Mr. Cashen explains, "[t]he DEIR does not describe or map the extent of the riprap energy dissipaters and other 'improvements' associated with the new outlet and drainage channel. As a result, it is impossible to evaluate the Project's compliance with the City's MSCP Subarea Plan, which prohibits riprap, concrete, and other unnatural materials in the MHPA." *Id.* This is critical to the validity of the DEIR and Project because the Subarea Plan for San Diego's MSCP prohibits riprap, concrete, and other unnatural materials in the MHPA. City of San Diego MSCP Subarea Plan p. 47 (Mar. 1997). Because neither the DEIR nor the BTR provides any map, delineation, or description of where the riprap in the drainage

A-39

A-37c See Response A-37a regarding the description of the Royal Palm Tower to further clarify the minor interior and exterior renovations that were described in the Master Plan, and the additional text that has been added to Section 3.2.1.2, Hotel District, of the Final EIR. Section 2.4 Existing Site Conditions of the Draft EIR includes a valid description of the existing condition of the Royal Palm Tower. Section 4.4.3.2 of the Draft EIR discusses construction-phase indirect impacts, which includes proposed renovation of the Royal Palm Tower and mitigation measures for indirect impacts.

Section 4.4.3.2 of the Draft EIR discusses impacts to bird collisions from other components of the proposed project, and was clarified in the Final EIR to state the following:

> *The structures would not be designed with a predominantly reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials selected for the project and the American Bird Conservancy Bird-Friendly Building Design recommendations to the extent practicable (ABC 2016). Therefore, direct impacts to potentially occurring special-status bird species from collisions with the project components would be less than significant.*

Additionally, the Draft EIR does not state that enhancement to the River would "increase bird populations" (and therefore increase their risk for collisions with the Royal Palm Tower). The intent of the proposed habitat restoration is to 1) comply with previous permit requirements (Site Development Permit No. 400602), and 2) improve the functionality of the San Diego River as a wildlife corridor, in keeping with the goals and policies of the MSCP. The stated biological goal of the MSCP is to "maintain ecosystem functions and persistence of extant populations of covered species," and the MSCP was "designed to conserve specific species at levels that meet the take authorization issuance standards of the federal and state Endangered Species Acts and the NCCP Act." The MSCP establishes the value of the River as habitat and a movement corridor for sensitive species by designating it as a Habitat Linkage in the plan. Building on the Preserve Design Guidelines in the MSCP, the City of San Diego MSCP Subarea Plan articulates a specific guideline (B15) requiring that "Native vegetation shall be restored as a condition of future development proposals along this portion of the San Diego River corridor." This planning framework creates a clearly-established goal to preserve and enhance the quality of the San Diego River corridor for wildlife, and implicitly establishes that a restored corridor would be considered a benefit to wildlife within its urbanized context and would not be considered a population sink.

The comment does not provide evidence that this project would significantly increase the number of avian fatalities, but rather cites general information about birds and then speculates about potential impacts. However, given the prior existence of the River and adjacent buildings on site, and considering the proposed project structures, and the particular birds in question, it is anticipated that the project would not result in a significant increase in avian fatalities from building collisions. Bird collisions are not expected to increase significantly for the following reasons:

The proposed habitat enhancement and restoration improves an existing habitat/corridor; the project does not create a new corridor where one does not exist. Similarly, the Royal Palm Tower is an existing building. The project is not changing the spatial relationship between the two existing features.

Special status riparian species are generally tightly associated with native riparian habitats and do not use urbanized areas, provided the natural habitats are of sufficient quality to provide for their needs. An increase in quality of the riparian habitats is expected to increase the likelihood that any special status bird species in the area would remain within that habitat. Thus, an increase in the sensitive species bird collisions at the Royal Palm Towers is not anticipated.

Non-special status species (i.e. urban-adapted species) are not expected to benefit substantially from proposed habitat restoration and enhancement; and therefore, populations of these species are not expected to increase as the direct result of project implementation. Urban adapted species may make occasional and incidental use of riparian habitats, but are well adapted to living within the urbanized environment of the project. Because non-special status species spend the majority of their time in an urban context, they are currently more prone to bird collision impacts than non-urban adapted species. Significance of impacts to species is measured not by impacts to individuals, but rather by the overall project effect on the population. Because restoration is not expected to increase the local population size or increase the frequency of building collisions by non-special status birds the project would not result in a significant impact to these species.

A-38 The drainage channel is no longer a part of the project design. The current design would direct the runoff to an existing outfall located east of the pedestrian bridge. The connection to the existing outfall would take place at an existing inlet located outside of the MHPA area and would not impact any sensitive biological resources. The new system would include underground detention and a proposed pump in order to meet the existing outfall discharge rate (Q) and elevation. The Hydrology and Hydraulics Study (Appendix H of the

channel would occur, it is impossible to determine whether the Project is consistent with the MSCP Subarea Plan. A-39

Second, coastal sage scrub species do not survive in drainage channels or floodplains. Attachment 4, section I.A. As the MSCP Subarea Plan explains, "[r]iver, stream, and channel banks shall be natural, and stabilized where necessary with willows and other appropriate native plantings." MSCP Subarea Plan 47. Coastal sage scrub is not an "appropriate native planting" in a floodplain or drainage channel, and it cannot serve to "naturally vegetate[]" the channel if it will not survive in the channel. Attachment 4, section I.A. A-40

The DEIR is flawed because it does not provide an "accurate, stable and finite" description of the stormwater management area and drainage channel, but instead provides a "curtailed, enigmatic [and] unstable" description that is contradicted by its own supporting studies and basic science. *See San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654-55. The DEIR fails to provide the public and decision-makers with the necessary information to make an informed evaluation of the project. *See Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052. A-41

G. The DEIR Does Not Adequately Describe Employment at the Project

The number of employees that will work at the Project, the types of jobs that will be available, and the salaries or wages that will be paid, are important factors in the DEIR's analysis. This data will impact the analysis of impacts associated with issues such as land use consistency, traffic, air quality, and GHG. Further, as explained below in section XVII, what types of jobs that the Project will make available is critical to the viability of a statement of overriding considerations, which the DEIR acknowledges is necessary to proceed with this Project.

As Expert Watt explains,
The Project could have impacts on the employment numbers, job classifications and salary ranges when compared to the existing complex. Without detailed information in the DEIR however, it is impossible to evaluate the potential impacts of such changes. A-42

The amount of staff engaged in a hotel activity largely depends on the status of hotel. Luxury hotels that have a greater range of services tend to have high ratios of employees per room, with employees per room ranging from 1 per room to well above 2 employees per room.[34] The number of full and part-time employees and salary ranges also factor into an adequate analysis of impacts. For example, depending on the number of employees, impacts to transportation, housing and growth inducement, may be greater than under the existing condition. The lack

[34] Source: Hotel Industry standards, Urban Land Institute.

Draft EIR) and Tentative Map as well as relevant Final EIR sections have been revised to incorporate the new system and facilities.

A-39 See Response A-11. The drainage channel noted in the comment is no longer a part of the project design.

A-40 See Response A-11. The drainage channel noted in the comment is no longer a part of the project design.

A-41 The Draft EIR provided an adequate description of the proposed storm water management plan. Impacts to resource areas within the Draft EIR were based on the stormwater management plan described. However, since circulation of the Draft EIR, the project's storm drain system has been modified to connect to an existing outfall, eliminating any improvements and thus any impacts within the San Diego River or to wetlands. Refer to Chapter 3.0, Project Description, and Section 4.6, Hydrology and Water Quality for further detail.

A-42 Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. It is unclear from the comment which specific physical land use, traffic, housing, air quality, growth inducing, and greenhouse gas impacts would occur related to jobs and wages. Employment and wage factors are not used within the analyses of impacts in an EIR. The Draft EIR identified significant impacts to transportation/circulation. Construction-related health risk impacts were identified and mitigation measures would be implemented to reduce impacts to below a level of significance. However, the Draft EIR identified a less than significant air quality impact for daily criteria pollutant emissions during construction and operations. Housing, growth inducing and greenhouse gas impacts were also determined to be less than significant. Detailed technical studies located in the appendices of the Final EIR include the Climate Action Plan Checklist and Greenhouse Gas Analysis (Appendix F-2).

of any information about Project employees precludes adequate analysis of impacts and creates a high degree of uncertainty about the conclusions reached in the DEIR concerning the severity of impacts. A-42

Attachment 2, section I.A.1.a.

The failure to provide employment data for the Project stifles the ability of the public and decision-makers to weigh the benefits of the Project against its impacts to the environment, public facilities, and public services. The EIR must include this information. A-43

VII. THE DEIR DOES NOT ADEQUATELY ANALYZE AND MITIGATE IMPACTS ASSOCIATED WITH INCONSISTENCIES BETWEEN THE PROJECT AND APPLICABLE LAND USE PLANS

An EIR must identify and fully analyze any inconsistencies between a proposed project and the general, specific, regional, and other plans that are applicable to the project. Guidelines 14, §15125(d); *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1566. There does not need to be a direct conflict to trigger this requirement; even if a project is "incompatible" with the "goals and policies" of a land use plan, the EIR must assess the divergence between the project and the plan, and mitigate any adverse effects of the inconsistencies. *Napa Citizens for Honest Gov't*, 91 Cal.App.4th at 378-79. A-44

As the City noted in its preliminary review, the Project includes "significant inconsistencies from the policies identified in" the General Plan, San Diego River Park Master Plan, and Transit Oriented Development Guide. Attachment 9 p.32; *see also* Attachment 10 p. 10, 14 (claiming that conformance with the River Park Master Plan's regulations is not feasible). The DEIR is flawed because it does not adequately address the Project's inconsistencies with these and other applicable plans. These inconsistencies are summarized in the following table, and several are discussed in further detail in sections VII.A-F. A-45

Goal, Plan, Policy, or Provision	Project Inconsistency
San Diego General Plan Policy ME-C.2: "Provide adequate capacity and reduce congestion for all modes of transportation on the streets and freeway system." A-45.a	Several intersections are already operating at Level of Service ("LOS") E or worse (*See* DEIR, p. 4.2-3) and Project will create long-term impacts of LOS E or F in year 2035 at Riverwalk Drive at Avenida del Rio (*see* DEIR, pp. 4.2-25-26). In addition, the DEIR substantially overestimates the baseline traffic caused by occupancy at the existing hotel at the site, thus artificially making the Project's new traffic seem insignificant. *See* Liddicoat Comment, Attachment 3. The trip generation estimates developed with respect to the proposed Town and Country Master Plan project are flawed.

A-43 Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. It is unclear from the comment which specific physical environmental, public facilities, and public services impacts would occur related to jobs and wages. Draft EIR identified a less than significant impacts to public services and facilities. See Response A-171 regarding the project's benefits as it relates to the Statement of Overriding Considerations.

A-44 The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

A-45 CEQA Guidelines §15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision makers should address. A project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment. Generally, a project need not be in perfect conformity with each and every general plan policy.

Furthermore, per the City Significance Determination Thresholds, an inconsistency with a land use plan is not by itself a significant environmental impact; the inconsistency would need to relate to a secondary physical environmental issue to be considered significant under CEQA. As discussed in Section 4.1, Land Use, subsection 4.1.3, Impact Analysis, the project would generally not conflict with the environmental goals, objectives, or guidelines of a General Plan or Community Plan or other applicable land use plans. The project was assessed against the relevant goals and guidelines from the City of San Diego General Plan, Mission Valley Community Plan, and the San Diego River Park Master Plan. As further identified in Section 4.1 of the Draft EIR, land use impacts were determined to be less than significant.

Individual responses to the commenters' remarks in the table comparing the project to a goal, plan, policy or provision are identified in Responses 45a through 54oo.

A-45a The project, as designed, does not add daily trips to the circulation system. The project identifies impacts and feasible mitigation measures for all impacts with the exception of the Riverwalk Drive segment east of Avenida Del Rio, which the Draft EIR identified as significant and unavoidable. Based on a review of the existing conditions, designs plans for the Hazard Center extension and discussions with the various City departments, this impact was determined to be significant and unavoidable as identified in the Section 4.2.4.4 of the Draft EIR.

See Responses A-25 through A-27 and A-70 regarding hotel trip generation See Response A-75 on convention space trip generation. See Response A-80

	The trip generation rates for the hotel and convention space are based on old and limited data, the spa trip generation assumptions are questionable and unsubstantiated, the trip generation reduction for transit usage is excessive and inappropriate. In addition, the DEIR provides a misleading description of the magnitude of the transit/mixed-use reductions. Correcting these errors will result in higher trip generation estimates for the proposed project, which likely will result in greater project-related traffic impacts. *See* Liddicoat Comment, Attachment 3.
General Plan Policies: City conditionally allows multi-unit residential in areas already affected by traffic noise above 70 dBA but "must include noise attenuation measures to ensure an interior noise level of 45 dBA CNEL and be located in an area where a community plan allows multiple unit and mixed-use residential uses." Suggested mitigation policies include "require noise reducing site design ... to ensure that the mitigated levels meet acceptable [levels]" (NE-B.3); utilizing seatbacks, landscaping, wall barriers, and other design features (NE-B.7). *See* p. NE-10. A-45.b	Residential units are highly exposed to noise due to proximity to I-8. The DEIR's loudest measurements were 71.7 and 68.1 dBA (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq," which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the Mitigation Monitoring and Reporting Program ("*MRMP*"). As a result, the measures from DEIR pp. 4.7-16 – 17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
General Plan Policy LU-H.1: "Promote development of balanced communities that	Project does not restrict any of the new residential units as affordable, and does not

regarding City of San Diego mixed-use and transit credits that were applied in the trip generation calculations.

A-45b As detailed in the Draft EIR the proposed residential units in proximity to baseline noise levels above 70 dBA would feature noise attenuation measures consistent with the City of San Diego General Plan Noise Element and California Building Code standards through permit conditions. Such measures include building shell assemblies, with or without closed glazing elements, designed and implemented to achieve an exterior-to-interior noise reduction that would yield an interior sound level of 45 dBA CNEL for occupied spaces. Table 4.1-2 from the Draft EIR, for the "25-30 dBA" noise level reduction category, offers a cumulative set of typical noise attenuation methods that are uniformly applied development policies that would avoid any noise compatibility impact. As stated Section 4.1.5.2, project design features aiming to reduce interior noise levels based on the City's required attenuation measures (City of San Diego 2015a) would be incorporated into a Conditions of Approval document to ensure that steps are taken toward meeting General Plan and CBC noise insulation standards.

With respect to construction noise, the Draft EIR assumed 80 dBA hourly L_{eq} at a distance of fifty (50) feet from the geographic center of the general construction area based on typical equipment use and attenuation factors. Per the Noise Technical Report, the acoustical center-point which represents the aggregate of noise sources of operating construction equipment/vehicles, could expect to have a noise level of 78-79 dBA L_{eq} as close as 63 feet to the facades of the newly built and occupied proposed residential Parcel 1 and 2 buildings. Although the hourly L_{eq} would exceed 75 dBA L_{eq} at the residential locations as acknowledged in the Draft EIR noise section, it could occur for as many as five (5) hours out of an allowable 12-hour construction shift (i.e., 7 a.m. to 7 p.m. as allowed by the City of San Diego) and still yield a 12-hour energy-averaged L_{eq} that meets the City's 75 dBA construction noise limit so long as the remaining construction activities (i.e., for the remaining seven hours of the allowable work shift) are positioned at the geographic center of the construction area, which for proposed residential Parcel 3 would be approximately 185 feet from the northern façade of the Parcel 1 and 2 buildings. At a distance of 185 feet, the expected hourly L_{eq} would only be 69 dBA. These values are based on accepted acoustical principles and can be predicted with the following expression:

$$\text{Predicted } L_{eq1h} = L_{ref} - 20*\text{LOG}(D_{rcvr}/D_{ref})$$

By way of illustration, the 1-hour L_{eq} at 63 feet, the closest distance between the construction activity and residential Parcel 1 and 2 facades, when reference L_{eq} is 80 dBA (L_{ref}) at 50 feet (D_{ref}) would be as follows:

L_{t1} = 78 dBA L_{eq1h} = 80-20*LOG(63/50)

When the activity is at the geographic center of the construction zone, meaning D_{rcvr} becomes 185 feet, the expression would be as follows:

L_{t2} = 69 dBA L_{eq1h} = 80-20*LOG(185/50)

To arrive at a predicted L_{eq} for a twelve-hour period (t_{total}) the resulting logarithmic combination of up to five (5) hours (t_1) at 78 dBA L_{eq1hr} and seven (7) remaining hours (t_2) at 69 dBA L_{eq1hr} is calculated as follows:

12-hour L_{eq} = 10*LOG((t_1*10^(L_{t1}/10)+ t_2*10^(L_{t2}/10))/t_{total}); which yields:
75 dBA L_{eq} = 10*LOG((5*10^(78/10)+7*10^(69/10))/12)

The project would comply with the City of San Diego Noise Ordinance SDMC Section 59.5.0404 as identified Draft EIR Section 4.7 which requires all projects to comply with construction noise limits, hours and days. In addition, as a condition of approval, construction equipment operation times would be planned and monitored by the construction contractor to ensure that noise levels remain below the City of San Diego construction noise threshold of 75 dBA 12-hour L_{eq}. The Draft EIR concluded that noise from construction would be less than significant. Also see Response A-42.

take into account community-wide involvement, participation, and needs." A-45.c	address the incompatibility between poverty- and near-poverty level, non-union wages at hotel and market-rate housing units. *See* section VII.A.2.a for more detail.
A-45.d **General Plan Policy LU-H.4:** "Encourage local employment within new developments and provide entrepreneurial opportunities for local residents."	Project does not address employment *losses* associated with the downsizing of the hotel and convention center. *See* section VII.A.2.b for more detail.
A-45.e **General Plan Policy LU-A.3:** Residential development should take place in "areas that are not subject to major development limitations due to topographic, environmental or other physical constraints."	Project site is subject to severe hydrological constraints, and straddles environmentally sensitive habitat for sensitive plant and animal species. *See* section VII.A.2.c for more detail.
General Plan Policy LU-A.4: Locate village sites where they can be served by existing or planned public facilities and services, including transit services. A-45.f	The DEIR fails to disclose and analyze the cumulative impacts of the Project's proposed residential units in combination with thousands of additional units that are planned, in development, or recently developed in Mission Valley. Although the DEIR concludes that there is adequate public school capacity to accommodate new students generated by the residential development in the Project, the DEIR does not identify or discuss the San Diego Unified School District's comments that "in combination with the other noted projects, the cumulative potential increase in students could impact district schools to the point of reaching or exceeding their current capacity. This scenario would require additional planning for sufficient facilities." Attachment 12 p. 4 (Letter from Sarah Hudson, Demographer, San Diego Unified School District, to Meghan Haggblade, AECOM (Sept. 2, 2015)). The impacts associated with this increase are not addressed in the DEIR. *See* Watt Comment, Attachment 2.

A-45c Pursuant to CEQA Guidelines §15064(e) and 15131, the EIR need not address economic or social changes unless the change would result in a significant physical environmental impact Consistent with the referenced General Plan Policy LU-H.1, the project is a mixed use development that is consistent with the intent to provide a balanced community. Additionally, the project would be required to comply with Land Development Code § 142.1304, Inclusionary Affordable Housing Fee, which requires all development projects, with the exception of condominium conversion developments, to pay an inclusionary affordable housing fee on or before the issuance of the first residential building permit as a condition of the permit. As further identified in Section 4.1 of the Draft EIR, land use impacts were determined to be less than significant.

The Final EIR, Table 4.1-3 City of San Diego General Plan Consistency Analysis, has been amended to add reference to Land Development Code § 142.1304, Inclusionary Affordable Housing Fee as illustrated below.

LU-H.1. Promote development of balanced communities that take into account community-wide involvement, participation, and needs. a. Plan village development with the involvement of a broad range of neighborhood, business, and recognized community planning groups and consideration of the needs of individual neighborhoods, available resources, and willing partners. b. Invest strategically in public infrastructure and offer development incentives that are consistent with the neighborhood's vision. c. Recognize the important role that schools play in neighborhood life and look for opportunities to form closer partnerships among local schools, residents, neighborhood groups, and the City with the goal of improving public education. d. Ensure that neighborhood development and redevelopment addresses the needs of older people, particularly those disadvantaged by age, disability, or poverty. e. Provide affordable housing opportunities within the community to help offset the displacement of the existing population. f. Provide a full range of senior housing from active adult to convalescent care in an environment conducive to the specific needs of the senior population.	Consistent – The project advocates for community needs by incorporating the Mission Valley Community Plan Update summaries and reports and coordinating with the Mission Valley Community Planning Group. The project specifically creates improved recreation opportunities for the community, introduces public park infrastructure, and provides educational learning programs for the San Diego River. Additionally, the project would be required to comply with Land Development Code § 142.1304, Inclusionary Affordable Housing Fee.

A-45d See Responses A-48 and A-42.

A-45e The project is the redevelopment of an existing developed site that contains some topographical constraints, such as Federal Emergency Management Act (FEMA) floodway/floodplain and sensitive habitat within and adjacent to the project site. Even when a site has such environmental or topographical constraints, the San Diego Municipal Code allows developments to move forward consistent with standard uniform development policies. Consistent with this, the project has analyzed and mitigated topographic, environmental, or other physical constraints to allow the project to be developed as analyzed in the Draft EIR. Specifically, as identified in Sections 4.1 Land Use, 4.4 Biological Resources and 4.6 Hydrology and Water Quality, the proposed developed would be constructed in compliance with FEMA and City of San Diego regulations and requirements for hydrological and biological resources. The extent of 100-year flood events would not be exacerbated by implementation of the project because the project would slightly decrease impervious surface area, which would be expected to reduce local flooding impacts. The entire site is currently mapped within the FEMA floodplain designated as Zone AE. As such, floodplain management would be required to comply with the City of San Diego Floodplain Management Requirements and FEMA regulations. Portions of the site would be raised several feet above the base flood elevation, including all proposed new residential buildings built within the Special Flood Hazard Area of the San Diego River would be constructed with the lowest floor elevated a minimum of two feet above the base flood elevation at that location. Further, as discussed in Section 4.6, Hydrology and Water Quality, a conditional letter of map revision (CLOMR) was submitted and approved by FEMA on March 15, 2017. Upon construction completion and submittal of final hydraulic analysis and new Base Flood Elevation (BFEs), FEMA would issue a LOMR. In consultation with FEMA, the project would be required to be designed per City of San Diego requirements to avoid impedance or redirection of flood flows to the maximum extent practicable. In addition, water surface elevations in the San Diego River under proposed conditions would either be maintained at existing levels or lowered during 100-year storm events. Therefore, the potential for downstream flooding impacts to occur would not be increased over existing conditions (page 4.6-21). As identified in Section 4.4 hydrology and water quality impacts of the Draft EIR were determined to be less than significant with mitigation measures. As described in Section 4.4 of the Draft EIR, the constraints posed by biological resources on site were thoroughly analyzed and were determined to be less than significant with mitigation measures.

A-45f In accordance with General Plan Policy LU-A.4, the project is located in an area that can be served by existing and planned public facilities and services, including transit services. The project site is within walking distance

General Plan Goal: Mixed-use villages located throughout the City and connected by high-quality transit. General Plan p. LU-6. A-45.g	The Project does not meet the City's requirements for a mixed-use transit-oriented development. As explained by Expert Watt, he Project does not include the mix of land uses necessary to meet the objectives of transit-oriented development. *See* Watt Comment, Attachment 2. Neighborhood-serving uses and convenience shopping, and other important services are not present at or near the Project site. The limited commercial uses (spa and restaurant) that are included in the Project are oriented to the hotel and convention center portion of the Project. These uses are not neighborhood-serving uses that meet the daily needs of residents. *See id.*
General Plan Policy CE-F.4: Preserve planted trees and vegetation_ to absorb carbon dioxide and other pollutants. *See* p. CE-33. A-45.h	Development on north portion of the Project site encroaches into River corridor area and removes substantial vegetation without properly mitigating impacts from "restoration" and "enhancement" activities. *See* Cashen Comment, Attachment 4.
General Plan Goal: Reduce City's overall carbon dioxide footprint by improving energy efficiency, increasing use of alternative modes of transportation … [t]o be prepared for, and able to adapt to adverse climate change impacts … become a city that is an international model of sustainable development and conservation." *See* p. CE-7. A-45.i	In concluding that the Project's GHG emissions are purportedly insignificant versus the existing conditions, the DEIR substantially overestimated the existing baseline GHG emissions, thus artificially making the Project's GHG seem insignificant. When the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses is correctly modeled, the Project's net increase in GHG emissions would exceed the 900 MT CO2E screening threshold. Additional mitigation measures must be identified and incorporated in an updated DEIR to reduce these emissions to a less-than-significant level. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which reduces GHG emissions released during Project operation. An updated DEIR

(approximately 1,200 feet) to the MTS Fashion Valley Transit Center. Section 4.1.3, Table 4.1-3, contains an analysis of General Plan LU-A.4 (and other General Plan policies) and determined the project was consistent with this policy. Section 4.12, Public Services and Facilities, of the Draft EIR analyzed the project's ability to be served by existing and planned public services and facilities. See Response A-165 regarding public school capacity.

A-45g As stated in Chapter 3.0 of the Draft EIR, the project is providing a mix of uses including residential, commercial (hotel, convention center, restaurants and spa) and open space uses on site including a new 3.31 acre public population based park. This mix of uses would serve as a recreational, employment, and shopping amenity to both residents and the neighboring community. As further described in Section 4.1 Land Use, the project is a mixed use, transit oriented development that is adjacent to the existing MTS Fashion Valley Transit Center (a bus hub and Green Line San Diego Trolley station); and the entire project site is within a 1,200-foot walking distance of the transit center and the Fashion Valley Mall (approximately 1,200 feet) which provides regional retail and commercial services. Additionally, Section 4.1.3, Table 4.1-3, contains an analysis of the General Plan Goal referenced within this comment and determined the project would be consistent with the policy. As further identified in Section 4.1 of the Draft EIR, land use impacts were determined to be less than significant.

Additionally, as stated in Section 2.9 Planning Context and Section 4.2.2, the project meets the definition of a TOD as defined by the City of San Diego TOD Design Guidelines—specifically an "Urban TOD" being a "Redevelopable Site". The project has been designed to encourage pedestrian travel and connectivity as identified in Figure 3-16, Pedestrian Circulation, of the Town & Country Master Plan. The site provides pedestrian travel throughout the site, to the San Diego River Pathway, the new public park, the Fashion Valley Transit Center and Fashion Valley mall. In addition, the existing pedestrian bridge over the San Diego River would be replaced with a multi-use bridge with expanded use to provide pedestrian and bicycle access to Fashion Valley Mall and to the Fashion Valley Transit Center; further facilitating new multi-modal options from the site to these adjacent facilities, fulfilling the definition of an "Urban TOD".

A-45h As described in Section 4.2 and of the Draft EIR, the project would not grade or remove native vegetation as restoration and enhancement activities do not include grading or removal of native vegetation. Additionally, Section 4.1.3, Table 4.1-3, contains an analysis of General Plan policy CE-F-4 and determined the project would be consistent with the policy as the project is introducing riparian habitat along the San Diego River, restoring habitat areas, planting trees, landscaping, and parkways which would create shade and increase carbon dioxide and pollutant absorption throughout the project.

A-45i See Responses A-25 and A-28.

A-45j See Response A-28.

A-45.i cont.	must be prepared to include additional mitigation measures, as well as include an updated GHG analysis to ensure that the necessary mitigation measures are implemented to reduce operational emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment Attachment 1.
General Plan Policies: CE-A.4 pursue development of clean and green sector industries; CE-A.5 employ green building techniques such as "maximize energy efficiency," "achieve overall net zero energy consumption by 2020 for new residential buildings and 2030 for new commercial buildings," "achieve greater energy efficiency with current available technology by designing better mechanical and electrical systems"; use better site-design to take advantage of solar and wind tech; CE-A.9 encourage use of recycled materials into new construction and using life-cycle cost analyzing; and CE-A.11 utilizing sustainable landscape design such as encouraging composting efforts, incorporating existing mature trees and native vegetation. *See* pp. CE-10 – 11. A-45.j	The DEIR almost completely fails to reference or analyze the Project's consistency with the City's Climate Action Plan ("*CAP*"). Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP. Additional mitigation measures must be identified and incorporated in an updated DEIR in order to reduce these emissions to a less-than-significant level. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment, Attachment 1. In addition, development into river corridor is contrary to CE-A.11 (utilizing existing vegetation). *See* Attachment 4.
General Plan: Noise and Land Use Compatibility: City shall "consider existing and future noise levels when making land use planning decision to minimize people's exposure to excessive noise." *See* p. NE-6.	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurements were 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes

A-45.k	that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
General Plan Policy NE-A.1: "Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses." *See* p. NE-6. A-45.l	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurements were 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.

A-45k See Response A-45b.

A-45l See Response A-45b.

General Plan Policy NE-A.3: Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise." *See* p. NE-7. A-45.m	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurements were 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
General Plan Policy NE-A.4: Requires additional mitigation when possible to 45 dBA CNEL levels for exterior noise exposure for multi-dwelling units. *See* p. NE-7. A-45.n	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurements were 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of

A-45m See Response A-45b.

A-45n See Response to Comment A-45b.

A-45. n cont.	noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
General Plan Goal: Motor Vehicle Traffic Noise: Minimize "excessive motor vehicle traffic noise on residential and other noise-sensitive land uses." *See* p. NE-9. A-45.o	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurement was 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise in fact will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
A-45.p **Mission Valley Community Plan:** Project developed pursuant to a Planned Development Permit ("*PDP*") must not exceed 73 dwelling units per acre. *See* Mission Valley Community Plan ("*MVCP*") pp. 39, 47 (amended May 2013).	Project would exceed 100 units per acre on two residential parcels, and 84 units gross density per residential acre. *See* section VII.B for more detail.
A-45.q **Mission Valley Community Plan:** Stating objective "[t]o facilitate transportation into, throughout and out of the Valley while seeking to establish and maintain a	Several intersections are already operating at LOS E or worse (*See* DEIR, p. 4.2-3) and Project will create long-term impacts of LOS E or F in year 2035 at Riverwalk Drive at Avenida del Rio

A-45o See Response A-45b.

A-45p The San Diego Municipal Code General Development Regulations for Planned Development Permits Section 143.0410(b)(1) states "the number of dwelling units or total gross floor area to be built on the premises shall not exceed that set forth by the applicable zone and the applicable land use plan except as permitted by 143.0410(a)(3)(D), and shall be based on the area of the entire premises. The dwelling units or gross floor area may be distributed without regard to the proposed lot boundaries."

To accurately determine this equivalent density factor for a Planned Development Permit mixed-use project, the gross square footage of non-residential uses and the number of dwelling units of residential land uses together must be converted to a common unit of measure for overall density. The City of San Diego has determined this common unit of measure to be the Equivalent Dwelling Unit (EDU).

Pursuant to the Mission Valley Community Plan, Appendix A, Table A-1 Mission Valley Equivalent Dwelling Unit (EDU) Factors, the proposed Town & Country hotel consists of 700 EDU's (1 hotel room = 1 EDU) and the proposed multi-family residential (30 or more du/acre) consists of 504 EDU's (1 multi-family residential du = 0.6 EDU). The Appendix A, Table A-1, of the Mission Valley Community Plan does not include a specific EDU factor for a convention center use. However the Town & Country Transportation Impact Analysis (TIA) does establish that 4051 Average Daily Trips (ADTs) would be generated by the proposed 177,131 sq. ft. convention center. Per San Diego Municipal Code 1514.0301(d)(3)(B) Table 1514-03B, each EDU (multi-family [30 or more du/ac]) is equivalent to 6 ADT generated by the convention center use. Thus, 4,051 ADT divided by 6 ADT per EDU = 675 EDU. Thus, when measuring for consistency with underlying equivalent density regulations, the total for the three uses (hotel, residential, and convention center) is 1,879 EDU.

Pursuant to San Diego Municipal Code 143.0410(b), the public park and open space in the Park District (11.57 acres) would not be included in the density/intensity calculation as that area is not dedicated to the City of San Diego. The dedicated public ROW (1.13 acres) would also not be included in the density calculation. The Private Drives (which are driveways, not Streets per San Diego Municipal Code 113.0103) are included in this calculation. The density calculation is therefore based on only the 27.02-acre MVPD-MV-M zone which includes the Hotel District 16.89 acres plus the Residential District 10.13 acres.

balanced transportation system." MVCP p. 76. A-45-q. cont.	(*See* DEIR, pp. 4.2-25 – 26). In addition, the DEIR substantially overestimates the baseline traffic caused by occupancy at the existing hotel at the site, thus artificially making the Project's new traffic seem insignificant. *See* Liddicoat Comment, Attachment 3. The trip generation estimates developed with respect to the proposed Town and Country Master Plan project are flawed. The trip generation rates for the hotel and convention space are based on old and limited data, the spa trip generation assumptions are questionable and unsubstantiated, the trip generation reduction for transit usage is excessive and inappropriate. In addition, the DEIR provides a misleading description of the magnitude of the transit/mixed-use reductions. Correcting these errors will result in higher trip generation estimates for the proposed project, which likely will result in greater project-related traffic impacts. *See* Liddicoat Comment, Attachment 3.
Mission Valley Community Plan: Stating objective to "[e]ncourage the use of public transit … reduce dependency on the automobile … [p]rovide mitigation for traffic generation impacts through the provision and/or financing of public transportation facilities on a project-by-project basis." MVCP p. 90. A-45.r	Mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." *Fed'n of Hillside & Canyon Ass'ns,* 83 Cal.App.4th at 1252. The DEIR runs afoul of this rule, as numerous traffic mitigations identified in the DEIR {pp. 4.2.10-12} appear nowhere as formal mitigation measures to be included in the MRMP. There are numerous other measures, all of which must be included as ***enforceable*** mitigation in the MRMP. The same is true for the DEIR's purported Transit Demand Management ("*TDM*") program. It is not in the MRMP and contains a host of vague, indefinite commitments that violate CEQA's requirement for definite performance standards and prohibition on deferred

Therefore, the project density, including non-residential uses, is 1,879 EDU divided by 27.02 acres = 69.54 EDU/acre, which is less than the maximum 73 du/ac allowed per the Mission Valley Community Plan and the maximum 70 du/ac allowed per San Diego Municipal Code 1514.0304(c). This factor was only used to determine consistency of the project with the Mission Valley Community Plan and not used for analysis purposes.

A-45q See Responses A-25 through A-27 and A-70 regarding hotel trip generation. See Response A-75 on convention space trip generation. See Response A-80 regarding mixed-use and transit credits that were applied in the trip generation calculations.

A-45r The identified mitigation measures TRANS-1 and TRANS-2 are enforceable via the Mitigation, Monitoring and Report Program (MMRP, Section 11.0 of the Final EIR). The language of the mitigation measures in Section 11 of the Final EIR has been revised to standard permit condition format such that the mitigation measures shall be assured by permit and bond satisfactory to the City Engineer prior to issuance of the first building permit and improvements shall be constructed and accepted by the Engineer prior to the issuance of the first residential occupancy approval. These conditions would also be included in the project's Site Development Permit/Planned Development Permit conditions.

The improvements listed in Section 4.2.4.1 along with the Transportation Demand Management (TDM) measures are project features. The project features would be enforced via the conditions of approval, which shall require their construction prior to issuance of any building permits. The Conditions of Approval for the project would require implementation of the proposed TDM program prior to the issuance of occupancy permits for the residential units.

A-45.r cont	mitigation. The entire TDM program should be included in the MRMP, with enforceable, definite performance standards developed now.
Mission Valley Community Plan: Objectives: "Protect and enhance the quality of Mission Valley's air ...." *See* MVCP p. 161. A-45.s	As set forth in the Hagemann expert comment letter in Attachment 1, the DEIR's modeling greatly underestimates the air quality emissions of PM, NOx, ROG and CO from diesel off road vehicles used for the Project's extensive construction activities. The DEIR's modeling also greatly underestimates the air quality impacts from the Project's extensive demolition activities. When the Phase I operational emissions are combined with the construction emissions provided in Table 4.5-5 of the DEIR, the Project's combined emissions during 2019 and 2020 would have a potentially significant air quality impact. *See* Attachment 1. In light of the potentially significant air quality impacts, the DEIR must analyze and incorporate additional air quality mitigation, as discussed in Attachment 1.
Mission Valley Community Plan: Development Guidelines: improve air quality by reducing car trips by various measures including bus linking, locating light rail train ("LRT") stations at "most central location," develop bicycle and pedestrian connection, and "[e]ncouraging employer subsidization of public transit passes for employees." *See* MVCP p. 162. A-45.t	Numerous traffic mitigations identified in the DEIR (pp. 4.2-10 – 12) appear nowhere as formal mitigation measures to be included in the MRMP. The TDM program to reduce vehicle miles travelled is not in the MRMP and contains a host of vague, indefinite commitments that violate CEQA's requirement for definite performance standards and prohibition on deferred mitigation. The entire TDM program should be included in the MRMP, with enforceable, definite performance standards developed now. In addition, in light of the potentially significant air quality impacts, the DEIR must analyze and incorporate additional air quality mitigation, as discussed in Attachment 1.

A-45s The Final EIR has been updated with correct building square footages that would be demolished in Phase 1. The square footages have been corrected in both the project description and emissions estimates to ensure consistency throughout the document. As discussed in Section 4.5 of the Draft EIR, the analysis evaluated the net change in operational emissions from the existing hotel to the project. The Draft EIR identified a less than significant air quality impact for daily criteria pollutant emissions during construction and operations. An updated model was conducted to reflect the accurate square footages during construction and demolition with results summarized in Tables 4.5-5 and 4.5-6 of the Final EIR. Table 4.5-6 of the Final EIR has been updated to reflect that operation of the project results in a net decrease in some criteria pollutant emissions, and therefore the combined construction and operational emissions for those pollutants would not result in additional emissions above those shown in the Draft EIR. The addition of the Maximum Daily Construction Emissions (pounds/day) in Table 4.5-5 for any pollutant and the resultant Net Change (pounds/day) in operations identified in Table 4.5-6 shows that overlap would not result in significant impact with regards to the emission thresholds presented in the Final EIR. Additionally, Attachment 1 of the comment letter utilizes total operational emissions for Phase 1 (as estimated by the commenter's consultant) instead of the calculated net change (the difference between the existing land uses and the project emissions) to add to the overlapping construction phase.

A-45t As discussed in Response to Comment A-45r, the Transportation Demand Management (TDM) measures would be enforceable and included in the project conditions of approval and would be tracked with definite performance standards. The performance standards would include requirement for a monitoring program. Section 4.2.8.4 of the Final EIR has been revised to include additional information on the TDM performance standards.

Mission Valley Community Plan: Proposals: "Conserve energy by utilizing alternative energy sources and energy-efficient building and site design principles." *See* MVCP p. 161. A-45.u	The Draft EIR almost completely fails to reference or analyze the Project's consistency with the City's CAP. Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP. Additional mitigation measures must be identified and incorporated in an updated DEIR in order to reduce these emissions to a less-than-significant level. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces GHG emissions released during Project operation. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment, Attachment 1.
Mission Valley Community Plan: Development Guidelines: encourage best use of available energy through various measures including (1) clustering buildings to use common heating/cooling sources, (2) use N-S orientation to encourage solar energy, (3) design using flow-through ventilation in lieu of mechanical, (4) use insulator/conductor building materials, and (5) use architectural design to promote better heating/cooling and orient buildings/roofs to encourage solar retrofitting. *See* MVCP p. 163. A-45.v	The DEIR almost completely fails to reference or analyze the Project's consistency with the City's CAP. Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP. Additional mitigation measures must be identified and incorporated in an updated DEIR to reduce these emissions to a less-than-significant level. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces GHG emissions released during Project operation. Furthermore, the

A-45u See Response A-28. Additionally, per CEQA Statute and Guidelines Section 15097, Mitigation Monitoring or Reporting, (a) states "the public agency should adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." As discussed in the Final EIR, the project would not result in a significant impact to Greenhouse Gas emissions. Therefore, mitigation measures would not be required. As such, Greenhouse Gas mitigation measures are not required to be included in the MMRP. In addition, the CAP Consistency Checklist would be included as a condition of approval.

A-45v See Response A-28.

A-45 v cont	Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment, Attachment 1.
Mission Valley Community Plan: Design Guidelines for Solar Access: commercial buildings should incorporate natural lighting to reduce energy impacts, all buildings should be design to not depend solely on mechanical ventilation; and installation of active solar hot water and solar heating systems. *See* MVCP p. 197. A-45.w	The DEIR almost completely fails to reference or analyze the Project's consistency with the City's CAP. Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP. Additional mitigation measures must be identified and incorporated in an updated DEIR to reduce these emissions to a less-than-significant level. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment, Attachment 1.
Mission Valley Community Plan: States noise generated by I-15 (e.g. I-163) is 76 dBs at 50 ft. based on 57,800 daily traffic count. *See* MVCP p. 160. A-45.x	Residential units are highly exposed to noise due to proximity to I-8. Project DEIR's loudest measurements were 71.7 and 68.1 (during 24-hour period at two test sites nearest to I-8). *See* DEIR, p. 4.7-8. Further, the DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq, "which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is

A-45w See Response A-28.

A-45x See Response A-45b.

A-45.x cont.	unsupported by substantial evidence as required by CEQA. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP. As a result, the measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague.
Mission Valley Community Plan: Development Guidelines: recommends (1) "[s]creening freeways and other heavily traveled roads[;]" (2) orienting structures and windows away from roads and other noise sources; (3) utilize noise absorbing building materials, using energy efficient mechanical ventilation systems rather than air conditioning; and (4) buffering residential developments from sources by using setbacks, different elevations, open space, and other types of paths. *See* MVCP p. 162. A-45.y	Project incorporates HVAC rather than mechanical ventilation, two of four residential buildings are located next to major roadway and I-8 freeway, and there is no indication that park/bike/pedestrian path is being utilized as buffer, nor is it confirmed that screening or elevation changes are being utilized. Project also seeks deviations to reduce usable open area per dwelling unit (from 156 to 100 sq.ft./unit) which would reduce potential buffering effect from noise and air impacts from Hotel Circle and I-8 fwy. *See* DEIR, p. 3-19. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP.
Mission Valley Community Plan: "Provide low- and moderate-income housing." *See* MVCP p. 46. A-45.z	The Project does not restrict any of its 840 residential units as affordable to low- or moderate-income families. As explained by Expert Terrell Watt, "Housing affordability to the local workforce is a critical element of a mixed use and balanced community. Unless evidence and analysis is forthcoming in a revised DEIR, it appears the Project is inconsistent with applicable policies requiring affordable housing." *See* Attachment 2.
Mission Valley Planned Development Ordinance: Guidelines for Discretionary Review: Avoid noise impacts by separating development from freeways and busy roads; using walls and/or landscaped berms; incorporate wall design, landscaping	Project incorporates HVAC rather than mechanical ventilation, two of four residential buildings are located next to major roadway and I-8 freeway, and there is no indication that park/bike/pedestrian path is being utilized as buffer, nor is it confirmed that screening or

A-45y The referenced Mission Valley Community Plan recommendations assume that the proposed development is "incompatible with the annual CNEL according to General Plan standards…" As stated in Draft EIR Section 4.1 Land Use, the City of San Diego conditionally allows future multiple-unit residential land uses in areas above 70 dBA CNEL if affected primarily by traffic noise, as long as the development achieves interior noise levels of 45 dBA CNEL. This interior noise level is required by the project in order to meet CBC standards and standard permit conditions. As described in 4.1.5.2, as a condition of approval, the project would implement a variety of attenuation measures to meet this condition of approval and standard permit condition. These measures ensure the noise impact would be less than significant. In addition Section 4.7 of the Draft EIR includes mitigation measure NOI-1 to reduce the significant operational impacts associated with noise to below a level of significant. See Response A-45b.

A-45z The Mission Valley Community Plan does not mandate that every project in Mission Valley comply with all of the development guidelines (as listed on page 46 of the plan), but rather lists a variety of development guidelines, of which providing low and moderate cost housing is only one of many options. Although the project is proposing market rate housing, the project would be required to comply with San Diego Municipal Code § 142.1304, Inclusionary Affordable Housing Fee, which requires all development projects, with the exception of condominium conversion developments, to pay an inclusionary affordable housing fee be paid on or before the issuance of the first residential building permit as a condition of the permit. Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. See Response A-45.

materials, and sculptural forms; and buffer residential development from noise with setbacks or elevation differences. SDMC §1514.0408 (o)(1), (2). A-45.aa	elevation changes are being utilized. Project also seeks deviations to reduce usable open area per dwelling unit (from 156 to 100 sq.ft./unit) which would reduce potential buffering effect from noise and air impacts from Hotel Circle and I-8 fwy. *See* DEIR, p. 3-19. The DEIR identifies a host of noise mitigation, but again none of this is made enforceable or included in the MRMP.
Mission Valley Community Planned District Ordinance: Purpose and Intent: "It is the purpose of these regulations to ensure that development and redevelopment in Mission Valley will be accomplished in a manner that enhances and preserves sensitive resource areas; improves the vehicular, bicycle, pedestrian and public transit circulation network; provides reasonable use of property; and contributes to the aesthetic and functional well-being of the community. These regulations link development intensity to the traffic levels allowed under the adopted community plan, and respond to the unique topography and biology of Mission Valley through land use and design criteria. Flexibility in land use and site design is permitted within established parameters." SDMC § 1514.0101(a) A-45.bb	Several intersections are already operating at LOS E or worse (*see* DEIR, p. 4.2-3) and Project will create long-term impacts of LOS E or F in year 2035 at Riverwalk Drive at Avenida del Rio (*see* DEIR, p. 4.2-25-26). In addition, the DEIR substantially overestimates the baseline traffic caused by occupancy at the existing hotel at the site, thus artificially making the Project's new traffic seem insignificant. *See* Liddicoat Comment, Attachment 3. The trip generation estimates developed with respect to the proposed Town and Country Master Plan project are flawed. The trip generation rates for the hotel and convention space are based on old and limited data, the spa trip generation assumptions are questionable and unsubstantiated, the trip generation reduction for transit usage is excessive and inappropriate. In addition, the DEIR provides a misleading description of the magnitude of the transit/mixed-use reductions. Correcting these errors will result in higher trip generation estimates for the proposed project, which likely will result in greater project-related traffic impacts. *See* Liddicoat Comment, Attachment 3.
Mission Valley Community Planned District Ordinance: Guidelines for Discretionary Review: "Implement transportation demand management techniques such as employer subsidization	The TDM program is not in the MRMP and contains a host of vague, indefinite commitments that violate CEQA's requirement for definite performance standards and prohibition on deferred mitigation. The entire

A-45aa See Response A45y.

A-45bb See Response A-45a regarding the Riverwalk Drive segment impact. See Responses A-25 through A-27 and A-70 regarding hotel trip generation. See Response A-75 on convention space trip generation. See Response A-80 regarding mixed-use and transit credits that were applied in the trip generation calculations.

of transit passes and van pools, employee flex-time, and preferential parking for car pools to reduce reliance on the single occupant motor vehicle." SDMC §1514.0408 (i)(5). A-45.cc	TDM program should be included in the MRMP, with enforceable, definite performance standards developed now.
Mission Valley Community Planned District Ordinance: Guidelines for Discretionary Review: cluster buildings to encourage common heating/cooling sources; allow for flow-through ventilation; use appropriate building materials to serve as insulators or conductors; use design to reduce energy use and maximize solar. SDMC §1514.0408(q). A-45.dd	The DEIR almost completely fails to reference or analyze the Project's consistency with the City's CAP. Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP. Additional mitigation measures must be identified and incorporated in an updated DEIR to reduce these emissions to a less-than-significant level. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible. *See* Hagemann Comment, Attachment 1.
A-45.ee **San Diego River Park Master Plan ("*SDRPMP*") 4.4.2.1**: Maximum structural development coverage of a parcel within 115 feet of the River Corridor Area is 65%.	Residential Lot 4 is within 115 feet of the River Corridor Area and allows 85 percent lot coverage for development. *See* section VII.C.1 for more detail.
A-45.ff **SDRPMP 4.4.2.2:** Buildings must be set back at least ten feet from the River Corridor.	Northern part of building on Residential Lot 4 is *within* the River Corridor area. *See* section VII.C.1 for more detail.
A-45.gg **SDRPMP 4.4.2.2**: The height limit for buildings between 10 and 20 feet from the River Corridor is 35 feet, a 20-foot setback is required for heights between 35 and 45 feet, a 30-foot setback is required for heights between 45 and 70 feet, and buildings outside of the 70-foot setback	Building on Residential Lot 4 reaches 56 feet in height *within* the River Corridor, and reaches 76 feet at approximately 60 feet from the River Corridor. *See* section VII.C.1 for more detail.

A-45cc See Response A-45t.

A-45dd See Response A-28.

A-45ee The San Diego River Park Master Plan is a policy document; applicable development regulations for the San Diego River are contained in San Diego Municipal Code §1514.0302. As identified and analyzed in Section 4.1 Land Use, subsection 4.1.4, Impact Analysis, the project is requesting a deviation to the San Diego River Park Master Plan and San Diego Municipal Code §1514.0302(d)(1) River Influence Area Lot Coverage for Residential Parcel 4 from a maximum lot coverage of 65% to allow a maximum of 85%. Specific deviations from San Diego Municipal Code regulations, consistent with the intent of the Mission Valley Community Plan base zone or other overall City goals, are permissible. As stated in the San Diego Municipal Code Section 143.0410(a)(2), "deviations from the applicable base zone development regulations may be requested in order to provide flexibility in achieving a zone-equivalent project design that would be consistent with the intent of the base zone." The Project Description, Section 3 and Section 4.1, identify all requested deviations. Deviations were included as part of the analysis for the project and it was concluded that no additional impacts related to biological resources, land use, neighborhood character/visual effects would occur as a result of the project's deviations, including this coverage deviation. The deviations would allow the project to be developed as an Urban TOD, which implements the goals, policies and visions of the Mission Valley Community Plan and San Diego General Plan.

A-45ff As identified and analyzed in Section 4.1 Land Use, subsection 4.1.4, Impact Analysis and Section 4.11 Visual Effects and Neighborhood Character, the project is requesting a deviation to the San Diego River Park Master Plan and San Diego Municipal Code §1514.0302 pertaining to the River Influence Area setback and massing requirements. As stated in Table 4.1-6 and Section 4.11, deviations to these development regulations would allow setbacks and massing requirements to be measured from the edge of the floodway and not the River Corridor Area. See Table 4.1-6 for additional setback deviations that are identified and analyzed in subsection 4.1.4.2.

Specific deviations from San Diego Municipal Code regulations (Section 143.0410(a)(2)), consistent with the intent of the Mission Valley Community Plan base zone, "deviations from the applicable base zone development regulations may be requested in order to provide flexibility in achieving a zone-equivalent project design that would be consistent with the intent of the base zone." Deviations were included as part of the analysis for the project and it was

concluded that no secondary physical additional impacts would occur as a result of the deviations. The deviations would allow the project to be developed as an Urban TOD which implement to goals, policies and visions of the Mission Valley Community Plan and San Diego General Plan. Potential physical impacts are analyzed elsewhere in the Draft EIR. As further identified in sections 4.1 Land Use, 4.2 Biological Resources, and 4.11 Visual Effects and Neighborhood Character impacts were determined to be less than significant. Section 4.2 concluded that impacts to biological resources would be less than significant with mitigation measures.

A-45gg As identified and analyzed in Section 4.1 Land Use, subsection 4.1.4, Impact Analysis and Section 4.11 Visual Effects and Neighborhood Character, the project is requesting deviations to the height regulations and for Residential Parcel 4 to the San Diego River Park Master Plan and San Diego Municipal Code §1514.0302(d)(2), pertaining to River Influence Area height, setbacks and massing regulations. All other proposed structures would comply with the height regulation of the proposed zoning in the San Diego Municipal Code. As stated in Chapter 3.0, Project Description Table 3-6, and in Table 4.1-6 and Section 4.11, deviations to these San Diego Municipal Code sections development regulations would allow setbacks and minimum distance building step backs to be measured from the edge of the floodway and not the River Corridor Area as identified in Section 4.1 and as illustrated in Figure 5-2 of the Town & Country Master Plan. Proposed deviations would allow the building height of Residential Parcel 4 to increase to 80’ above finished grade instead of 70’ as currently allowed by §1514.0301, Table 1514-03C, River Influence Area Setback, Height and Massing.

Specific deviations from San Diego Municipal Code regulations, consistent with the intent of the Mission Valley Community Plan base zone or other overall City goals, are permissible. As stated in the City San Diego Municipal Code Section 143.0410(a)(2), “deviations from the applicable base zone development regulations may be requested in order to provide flexibility in achieving a zone-equivalent project design that would be consistent with the intent of the base zone.” Deviations were included as part of the analysis for the project and it was concluded that secondary physical impacts would not occur as a result of the project’s deviations. The deviations would allow the project to be developed as an Urban TOD which implement to goals, policies and visions of the Mission Valley Community Plan and San Diego General Plan. As further identified in sections 4.1 Land Use, 4.2 Biological Resources, and 4.11 Visual Effects and Neighborhood Character impacts were determined to be less than significant. Section 4.2 concluded that impacts to biological resources would be less than significant with mitigation measures.

may not exceed one foot of height per one foot of setback.	
SDRPMP 4.4.2.3: Loading areas must be "a minimum of 100 feet from the River Corridor Area."	Loading area will be constructed or substantial improved within 100 feet of the River Corridor Area. *See* section VII.C.2 for more detail.
Atlas Specific Plan V.B.5: Development within 150 feet of the River Corridor must not exceed 42 feet in height.	Building on Residential Lot 4 reaches 56 feet in height *within* the River Corridor. *See* section VII.D for more detail.
Atlas Specific Plan: Circulation System Concept and Criteria: Light Rail Public Transit: light rail transit system station "should be located immediately north of the Town and Country site and the river[,]" connected to Town and Country by a "pedestrian/bicycle bridge extending ... across the river ...elevated above the 100-year flood elevation [.]" *See* p. 81.	Numerous traffic mitigations identified in the DEIR (pp. 4.2-10 – 12) appear nowhere as formal mitigation measures to be included in the MRMP. The TDM program is not in the MRMP and contains a host of vague, indefinite commitments that violate CEQA's requirement for definite performance standards and prohibition on deferred mitigation. The entire TDM program should be included in the MRMP, with enforceable, definite performance standards developed now.
Transit Area Overly Zone: To "provide supplemental parking regulations for areas receiving a high level of transit service ... identify areas with reduced parking demand and to lower off-street parking requirements accordingly." SDMC §132.1001. Multi-dwelling unit developments must comply with §142.0525 (see Table 142-05 (c)) and nonresidential development comply with §142.0530. SDMC §132.1002, Table 132-10A.	Even considering the 856-space net parking demand presented in the DEIR, a deficit of 28 spaces is projected relative to the 829-space effective supply. And if the 10 percent transit/mixed-use reduction in demand fails to occur, the DEIR's 951-space parking demand will result in a deficit of 122 spaces. *See* Liddicoat Comment, Attachment 3.
Residential Tandem Parking Overlay Zone: "The purpose of the Residential Tandem Parking Overlay Zone is to identify the conditions under which tandem parking may be counted as two parking spaces in the calculation of required parking." SDMC §132.0901. Restrictions on the tandem	Even considering the 856-space net parking demand presented in the DEIR, a deficit of 28 spaces is projected relative to the 829-space effective supply. And if the 10 percent transit/mixed-use reduction in demand fails to occur, the DEIR's 951-space parking demand

A-45.hh
A-45.ii
A-45.jj
A-45.kk
A-45.ll

A-45hh The existing loading area north of the Gold Pacific Ballroom within the River Corridor Area has been relocated outside of the River Corridor area. The proposed loading area is to the south side of Grand Exhibit Ballroom as depicted in Figure 3-3 Site Plan. Therefore, Chapter 3.0 and Section 4.1 of the Final EIR have been revised to reflect that this deviation is no longer requested.

A-45ii As described in Chapter 3.0 and Section 4.1, the project is requesting a Community Plan Amendment that would remove the Town and Country site from the Atlas Specific Plan (ASP) therefore the project would no longer be subject to the requirements of the Atlas Specific Plan, including height limits. See Response 45gg regarding the height regulations applied to the project.

A-45jj See Response A-45r and A-45t.

A-45kk See Response A-82 through A-90.

A-45ll See Response A-82 through A-90.

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parking "shall be enforced, by the owner of the premises or the owner's assigned representative." SDMC §132.0905 (d).	will result in a deficit of 122 spaces. *See* Liddicoat Comment, Attachment 3.
Cal. Air Resource Board's Air Quality & Land Use Handbook: Recommends 500-foot setbacks between sensitive receptors and high-volume roadways (e.g. highways). *See* DEIR, p. 4.5-24. A-45.mm	As set forth in Attachment 1, the DEIR's modeling greatly underestimates the air quality emissions of particulate matter ("*PM*"), smog forming oxides of nitrogen ("*NOx*") and reactive organic gasses ("*ROG*") and carbon monoxide ("*CO*") from diesel off road vehicles used for the Project's extensive construction activities. In addition, the DEIR's modeling greatly underestimates the air quality impacts from the Project's extensive demolition activities. When the Phase I operational emissions are combined with the construction emissions provided in Table 4.5-5 of the DEIR, the Project's combined emissions during 2019 and 2020 would have a potentially significant air quality impact. *See* Hagemann Comment in Attachment 1. In light of the potentially significant air quality impacts, the DEIR must analyze and incorporate additional air quality mitigation, as discussed in Attachment 1. Also, residential lots 1 and 2 are 150 feet from I-8 and 1,000 ft. from SR-163. *See* DEIR, p. 4.5-24.
Multi-Species Conservation Program ("MSCP") Subarea Plan 1.4.2: Lighting in the MHPA where wildlife occurs should be low-sodium or similar lighting, and should be "designed to avoid intrusion into the MHPA." A-45.nn	Project does not require low-sodium or similar lighting, and is not designed to avoid light intrusion into MHPA. *See* section VII.E.1 for more detail.
MSCP Subarea Plan: Monitoring and control of the brown-headed cowbird population is required if there is new development adjacent to Least Bell's Vireo preserve areas that creates conditions attractive to brown-headed cowbirds. *See* p. 165. A-45.oo	Although required, Project and DEIR do not require monitoring and control of the brown-headed cowbird population. *See* section VII.E.2 for more detail.

A-45mm See Response A-45s. As stated in the Draft EIR, the "handbook is not a law or adopted policy, but offers advisory recommendations for the siting of sensitive receptors near uses associated with toxic air contaminants." The Draft EIR analyzed the health risks associated with vehicle emissions from I-8 and SR-163. Section 4.5 of the Draft EIR concluded that with implementation of project design features, which would be made conditions of the permit, health risk impacts from vehicle emissions would be less than significant.

A-45nn Consistent with the City's Land Use Adjacency Guidelines:

All lighting within 100 feet of the MHPA will be shielded and directed away from the MHPA. The conversion of 3.31 acres of existing parking lot adjacent to the MHPA to habitat and park space will also reduce the amount of light entering sensitive habitats within the MHPA compared to existing conditions. In addition, given that parking is mostly oriented north-south within the parking lot nearest the MHPA (see Figure 3), landscaping within the parking lot and park space will be strategically planned to help shield light from vehicles.

The project would be required to comply with the City of San Diego Municipal Code. Pursuant to San Diego Municipal Code §142.0740, "Outdoor lighting used for security purposes or to illuminate walkways, roadways, equipment yards, and parking lots may remain lighted after 11:00 p.m. only when low-pressure sodium outdoor lighting fixtures are used." Additionally, it states, "On properties which are adjacent to or contain sensitive biological resources, any exterior lighting shall be limited to low-level lights and shields to minimize the amount of light entering any identified sensitive biological resource areas." Furthermore, as described in Section 4.1.6.1, lighting near the MHPA will be shielded and directed away from sensitive habitats and the MHPA.

A-45oo As described in Section 4.4.1 of the Draft EIR, least Bell's vireo has not been detected adjacent to San Diego River since 1998, nor was it detected in the most recent set of protocol surveys (spring 2016). Therefore, the proposed project is not adjacent to occupied least Bell's vireo habitat. The Subarea Plan policy that the comment refers to specifically requires the monitoring and control of brown-headed cowbirds for "new developments adjacent to least Bell's vireo preserve areas that create conditions attractive to brown-headed cowbirds." (Subarea plan page 165). This requirement is logical in relation to cowbird biology, in that expansion of cowbird populations typically occurs when undeveloped natural open space is converted to either agriculture or urban development. The proposed project is not new development in that sense; it is redevelopment of an existing urbanized area within the generally urbanized context of Mission Valley. Therefore, this condition does not apply to the project area.

A. The DEIR Does Not Adequately Address the Project's Inconsistencies with the City of San Diego's General Plan[35]

1. The DEIR does not address the Project's inconsistencies with the General Plan resulting from the Project's significant traffic impacts

As noted in the immediately preceding land use inconsistency chart, the DEIR acknowledges that the Project will have significant and unmitigated traffic impacts at Riverwalk Drive, east of Avenida Del Rio. DEIR p. 4.2-79. Riverwalk Drive is a collector road that runs along the north side of the Project site, adjacent to Fashion Valley Mall. It is one of the principal roadways in the study area of the traffic impact analysis. *Id.* p. 4.2-1. Riverwalk Drive east of Avenida Del Rio would operate at Level of Service ("*LOS*") F in the Year 2035. *Id.* p. 4.2-25.[36] As explained in the DEIR, "a 4-lane Collector capacity is required and only a 2-lane roadway is physically feasible." *Id.*; *see also id.* p. 7-10. As such, the Project would generate a level of traffic that would create significant congestion impacts. A-46a

The "Goals" in the mobility element of the City's General Plan include "Vehicle congestion relief." City of San Diego General Plan ("*General Plan*") ME-20 (Mar. 2008). One of the implementing "Policies" for this Goal is to "[p]rovide adequate capacity and reduce congestion for all modes of transportation on the streets and freeway system." *Id.* ME-22 (Policy ME-C.2). Although the DEIR identifies and analyzes traffic levels generated by the Project, and concludes that the impacts at Riverwalk Drive east of Avenida Del Rio are "significant and unmitigated," *id.* p. 4.2-79; *see also id.* pp. 4.2-29 – 30, 7-10, 9-1, there is no discussion whatsoever in the DEIR regarding the resulting inconsistency of the Project with the General Plan. A municipality "cannot state a policy of reducing traffic congestion, recognize that an increase in traffic will cause unacceptable congestion and at the same time approve a project that will increase traffic congestion without taking affirmative steps to handle that increase." *Napa Citizens for Honest Gov't*, 91 Cal.App.4th at 380. That is precisely the situation here. A-46b

The DEIR suggests that the San Diego City Council can approve the Project in spite of the conceded significant and unmitigated impact that the Project will have on Riverwalk Drive east of Avenida Del Rio. *See, e.g.*, DEIR p. ES.6. Even if that were true, CEQA requires a full analysis of significant impacts, including inconsistencies between a proposed project and the General Plan. *See Pfeiffer*, 200 Cal.App.4th at 1566 ("While there is no requirement that an EIR itself be consistent with the relevant general plan, it must identify and discuss any *inconsistencies* A-46c

[35] The following sections discuss in more detail several of the inconsistencies identified in the above table.

[36] The City's Traffic Impact Study Manual states that "[t]he acceptable level of service standard for roadways and intersections in San Diego is LOS D." City of San Diego Traffic Impact Study Manual 17-18 (July 1998). Lower LOS of E and F are not deemed acceptable by the City. *Id.* LOS F is the most impacted LOS category. *Id.*

A-46a Comment noted.

A-46b The project is consistent with the goals and policies set forth in the General Plan as shown in the analysis per Table 4.1-3 of the Draft EIR. The project is consistent with the General Plan goal to "provid[e] adequate capacity and reduce congestion" on all impacted facilities such as Hotel Circle North (widening to 4-lanes with bike lanes) and Camino De La Reina (widening to 4-lanes with bike lanes) where improvements are considered feasible. The traffic impact on Riverwalk Drive has been identified as significant and unmitigated as only a 2-lane roadway is determined to be physically feasible as discussed in Section 4.2.4.4 of the Draft EIR. To that effect, Findings and a Statement of Overriding Considerations would be required in accordance with CEQA Guidelines Sections 15091 and 15093 for the consideration of the decision making body (City Council) and left to its discretion to determine whether to approve or deny the project or any of the alternatives, or combination thereof.

A-46c See Responses A-46a and A46-b.

between a proposed project and the governing general plan.") (internal alterations and quotations omitted). The DEIR's complete failure to discuss the inconsistency with the General Plan renders it invalid. A-46c

2. The DEIR does not address the Project's inconsistencies with the General Plan's land use policies

The DEIR is flawed because it makes conclusory statements regarding the Project's consistency with the General Plan's Land Use element that do not have any basis in fact and are often contradicted by information in the DEIR itself. First, the DEIR falsely claims that the Project promotes the development of balanced communities without addressing the vast gap between the market-rate housing in the residential section of the Project and the non-union, poverty-level wages in the hotel sector. Second, the DEIR asserts that the Project will generate employment, even though the DEIR itself recognizes that the Project would downsize the employment-generating hotel. Third, the DEIR falsely claims that there are not topographic, environmental, or physical limitations to development, even though there is extensive discussion in the DEIR regarding these very limitations. The DEIR's failure to recognize and analyze the impacts associated with these inconsistencies renders it invalid. *See Pfeiffer*, 200 Cal.App.4th at 1566. A-47

a. Inconsistency with "balanced communities" policy

The DEIR claims that the Project is consistent with the General Plan Policy LU-H.1 to "[p]romote development of balanced communities that take into account community-wide involvement, participation, and needs." DEIR p. 4.1-22 (citing General Plan LU-39). But that Policy and others in the Land Use Element call for the development of affordable housing. *See, e.g., id.* at p. LU-40 ("Provide a variety of housing types and sizes with varying levels of affordability in residential and village developments."). The DEIR does not discuss the affordability of the housing within the Project, and there is nothing in the Project documents that addresses the issue. There is no commitment in the DEIR or Project documents to restrict any of the 840 residential units as affordable housing. A-48

The lack of affordable housing is particularly problematic in this Project because the non-union Town and Country Hotel pays its employees poverty- or near-poverty wages, with virtually no benefits. The employees at the Town and Country Hotel cannot afford the market-rate housing proposed in the Project, thus undermining a core goal of mixed-use land development to allow people to work and live in a single location. The DEIR must, but does not, analyze the impacts associated with these inconsistencies. *See Pfeiffer*, 200 Cal.App.4th at 156.

b. Inconsistency with local employment policy

The DEIR falsely states that the Project is consistent with General Plan Policy LU-H.4 because "it encourages local employment as part of the project." DEIR p. 4.1-23, Table 4.1-3. The Project actually proposes to *downsize* the employment-generating hotel from 954 rooms to A-49

A-47 This is an introductory statement to comments A-48 through A-50 that follow.

A-48 See Response A-45c.

A-49 See Response A-42.

700 rooms, thereby eliminating 254 rooms and dozens of jobs that would service those rooms. Further, this site was designated under the Atlas Specific Plan for 2,300 hotel rooms, or 1,346 more rooms than currently exist at the Project site. Atlas Specific Plan p. 3-2, Table 1. The Project's proposal to instead decrease the quantity of hotel rooms to 700 results in a net reduction of 1,600 hotel rooms. The Project therefore does not "encourage[] local employment as part of the project," but rather substantially decreases current and prospective employment at the Project site. There is nothing in the DEIR to indicate that the Project will generate employment that would offset the loss in actual and potential employment.

A-49

The DEIR's inaccurate claim that the Project encourages local employment, its failure to identify the inconsistency with the General Plan, and its complete lack of analysis or mitigation of the associated impacts undermine the project description, as well as the DEIR's impact analysis. *See Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052; *Pfeiffer*, 200 Cal.App.4th at 1566.

c. Inconsistency with development limitations

Policy LU-A.3 in the Land Use Element of the San Diego General Plan states that residential development should take place in "areas that are not subject to major development limitations due to topographic, environmental or other physical constraints." General Plan p. LU-10, Policy LU-1. The DEIR's conclusory statement that there are "no topographic, environmental, or other physical limitations to development" at the Project site is contradicted by the DEIR and documents referenced in the DEIR. DEIR p. 4.1-21, Table 4.1-3. For instance, although the DEIR acknowledges that "flooding of the San Diego River has become a major problem in Mission Valley," DEIR p. 4.6-3, the Project proposes new construction and improvements of permanent structures within the Floodway. DEIR p. 4.1-38, Table 4.1-6. *See also* Atlas Specific Plan p. 2-1 ("Flood control has been a major problem in Mission Valley for many years and is of particular concern in the Hotel Circle area [including the] Town and Country Hotel."). The new construction and improvement in the Floodway contravenes San Diego Municipal Code section 143.0145(e)(2)(A), which provides that permanent structures attached to a foundation shall not be located within the Floodway so that they can be moved in case of a flood. Even though the DEIR recognizes the inconsistency with the General Plan, it does not adequately analyze, or mitigate, the impacts associated with placing new construction and improvements within the Floodway. This deficiency in the DEIR is compounded due to the proximity of the Floodway to environmentally sensitive habitat in the MHPA. There is no discussion in the DEIR that addresses how the construction and improvement of permanent structures in the Floodway impacts adjacent sensitive habitat.

A-50

In addition to the roughly one-third of the Project site that is located within the Floodway, the entirety of the site is located in the 100-year Floodplain. As discussed further in section XI.B, the DEIR makes vague statements regarding how the Project will address its susceptibility to flooding. For example, the DEIR states that all new residential buildings will be built two feet above base flood elevation, but says nothing about non-residential buildings.

A-50 The project is consistent with the referenced policies. See Response A-45e with regard to topographic and other constraints such as hydrology, flooding, and biological resources. As presented throughout the Draft EIR, the project analyzed and mitigated accordingly the topographic, environmental, and other physical constraints of the project site.

In addition, Section 4.1 Land Use, Table 4.1-3 City of San Diego General Plan Consistency Analysis, with respect to LU-A.3 has been revised as follows:

LU-A.3. Identify and evaluate potential village sites considering the following physical characteristics: • Shopping centers, districts, or corridors that could be enhanced or expanded; • Community or mixed-use centers that may have adjacent existing or planned residential neighborhoods; • Vacant or underutilized sites that are outside of open space or community-plan designated single-family residential areas; • Areas that have significant remaining development capacity based upon the adopted community plan; and • Areas that are not subject to major development limitations due to topographic, environmental, or other physical constraints.	Consistent – The project recaptures the underutilized capacity of the site to create a mixed-use center with commercial, residential, and open space land uses located within a 5-minute walk of Fashion Valley Mall (approximately 1,200 feet). The project has analyzed and addressed topographic, environmental, and or other physical constraints to allow the project to be developed as analyzed in the EIR.

Additionally, Section 4.6 Hydrology and Water Quality analysis was developed from the project specific technical reports including but not limited to, Storm Water Quality Management Plan, Hydrology and Hydraulics Study, Water System Analysis and BTR. Each report provided a thorough analysis, which fully acknowledged and analyzed the on-site specific topographic, environmental or other physical constraints and determined no mitigation was needed.

As discussed in Section 4.6, Hydrology and Water Quality portions of the site would be raised several feet above the base flood elevation to adhere to San Diego Municipal Code and FEMA floodplain requirements. Per San Diego Municipal Code 143.0146 (b)(2) the lowest floor, including basement, shall be certified to be two feet above the Base Flood Elevation (BFE). Based on the analysis by Chang Consultants the BFE's along the San Diego River were determined and depicted on the Tentative Map. The Tentative Map also identifies the Finish Floor elevations for each proposed residential structure

DEIR p. 4.6-21. Further, the DEIR claims that "the site would be raised several feet above the base flood elevation," but does not account for the massive grading and construction required to raise the 39.7-acre site "several feet" above sea level. *Id.*

Although these statements are vague and inconsistent, they uniformly recognize that there are hydrological obstacles that require major structural mitigation to execute the Project. There is no basis for the DEIR's unsupported conclusion that there are no topographic, environmental, or other physical constraints at issue. The DEIR is thus flawed both because it inadequately describes the project and fails to address inconsistencies with the general plan. *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052; *Pfeiffer*, 200 Cal.App.4th at 1566. A-50

B. The DEIR Does Not Adequately Address the Project's Inconsistencies with the Mission Valley Community Plan

The DEIR is flawed because it fails to identify and analyze inconsistencies between the draft Town and Country Master Plan, which is part of the Project that is the subject of the DEIR, and the MVCP. The MVCP establishes that, when a Project is developed pursuant to a PDP, as is proposed here, residential and commercial densities may not exceed 73 dwelling units per acre. MVCP pp. 39, 47 (amended May 2013). The DEIR, however, does not analyze consistency with density limits in the MSCP. Instead, reflecting the draft Master Plan, it analyzes development *intensity*, which is based on the amount of traffic that would be generated by the Project. *See, e.g.*, DEIR pp. 2-13, 3-16, 3-19 (Table 3-6).

Development intensity as measured in ADT is not adequate to determine consistency with the MVCP's allowable densities. As Expert Watt explains, "[b]ecause the Plan amendment does not provide clear, consistent and complete standards for density and intensity for the Project site in both the SDGP and MVCP, the Project remains inconsistent with the MVCP and the SDGP. In addition, the DEIR's approach to the consistency analysis with applicable plan densities and intensities is incomplete because it fails to fully consider the specific density requirements in the MVCP, including planned residential capacity and dwelling units, planned population and household size." Attachment 2, section I.B.1.a.ii. The net densities for the Project exceed 100 units per acre. For instance, the Project proposes 275 units on the 2.53-acre Residential Parcel 2, and 255 units on the 1.92-acre Residential Parcel 3, for net densities of 108 and 132 units per acre, respectively. The Project would allow gross densities of 84 units per acre. Beyond impacts to traffic, the DEIR fails to analyze the impacts of this increase in density on other resources. Further, because the DEIR's analysis of traffic impacts is flawed, so too is its analysis of the impacts of the appropriate development intensities. *See* section VIII. A-51

The DEIR's failure to analyze and mitigate inconsistencies with the Mission Valley Community Plan renders the analysis invalid. *Pfeiffer*, 200 Cal.App.4th at 1566.

based on the relative BFE. Note the proposed Lobby, Food and beverage and parking structure finish floor elevations are proposed two feet above the BFE however non-residential structures do not need to adhere to this requirement.

The project would implement various construction and post construction Best Management Practices per the Stormwater Pollution Prevention Plan to reduce impacts to receiving waters. Erosion and sediment controls would be used during construction activities to reduce the amount of soils disturbed, prevent erosion and sediment transport into receiving waters, and control/minimize pollutants in site runoff. Furthermore, existing and proposed flows would be routed to flow-through planter boxes and a bioretention basin to further reduce, infiltrate, and treat storm water runoff flows. The project would be designed in compliance with applicable regulations to help maintain existing hydrologic conditions, reduce runoff volumes, and improve water quality over existing conditions.

The project has been modified to avoid wetland impacts. The existing bridge would be removed using a crane staged on the existing parking lot to the south of the San Diego River and then the new bridge would be assembled and lowered into place using a crane within the existing parking lot. Additionally, the outfall structure associated with the water quality detention basin is no longer part of the design.

A-51 Section 4.1, Land Use, provides an analysis of the consistency between the Mission Valley Community Plan and the project (Table 4.1-4) and concluded the project would be consistent with the plan. The commenter is assessing density on a net acre, parcel-by-parcel analysis. As stated in Response A-45p, the San Diego Municipal Code "General Development Regulations for Planned Development Permits Section 143.0410(b)(1) states, "the number of dwelling units or total gross floor area to be built on the premises shall not exceed that set forth by the applicable zone and the applicable land use plan except as permitted by 143.0410(a)(3)(D), and shall be based on the area of the entire premises. The dwelling units or gross floor area may be distributed without regard to the proposed lot boundaries." See comment A-45p regarding equivalent density calculations for mixed uses per the San Diego Municipal Code and Mission Valley Community Plan. The project would be consistent with the Mission Valley Community Plan density limitations and would not require the density deviation identified in Table 3-6 of the Project Description. The Final EIR has been revised to remove reference to this deviation.

The project's impacts, including traffic, were analyzed based on all aspects of the project components, including the number of multi-family residential

C. The DEIR Does Not Adequately Address the Project's Inconsistencies with the San Diego River Park Master Plan

1. Inconsistency with minimum setback requirements, maximum lot coverage and height limitations

A-52

The SDRPMP, as codified in the Municipal Code, establishes that the maximum structural development coverage of a parcel within 115 feet of the River Corridor Area is 65%. SDRPMP 4.4.2.1, p. 127 (May 20, 2013); SDMC §1514.0302(d)(1). As shown in the DEIR, the 1.37-acre Residential Lot 4, which would include 150 dwelling units, is well within 115 feet of the River Corridor Area that runs along the San Diego River. The DEIR acknowledges that the Project would "[a]llow maximum of 85 percent lot coverage for development" on this lot. DEIR p. 3-18, Table 3-6.

A-53

The SDRPMP and Municipal Code also establish minimum setback requirements from the River Corridor and maximum heights of buildings situated in the River Influence Area. SDRPMP 128; SDMC §1514.0302(d)(2). Buildings must be set back at least ten feet from the River Corridor. SDRPMP 4.4.2.2, p. 129; SDMC §1514.0301 (Table 1514-03C n. 2). This set back provision is designed to protect the River Corridor's purpose of "enhanc[ing] wildlife habitat by providing a continuous movement corridor that varies in width and provides diversity of habitat and native vegetation. The river habitat area should be expanded where possible on a project by project basis." SDRPMP p. 92.

A-54

The SDRPMP's and Municipal Code's maximum building heights correlate to the set-back distance from the River Corridor Area. The height limit for buildings between 10 and 20 feet from the River Corridor is 35 feet, a 20-foot setback is required for heights between 35 and 45 feet, a 30-foot setback is required for heights between 45 and 70 feet, and buildings outside of the 70-foot setback may not exceed one foot of height per one foot of setback. SDRPMP 129; SDMC §1514.0301 (Table 1514-03C).

A-55

The DEIR does not provide adequate detail regarding the height of the building on Residential Lot 4 to evaluate whether it complies with the SDRPMP and the Municipal Code. The DEIR only states that the building "is terraced away from the River so it begins at two stories and increases to seven stories," DEIR p. 4.4-27, *see also id.* p. 3-10, and that the seven-story portion of the building would be "approximately 85 feet" in height. *Id.* p. 4.11-14. There are no maps or figures illustrating the heights in relationship to the River Corridor. The proposed Town and Country Master Plan, however, provides a detailed plan view of Residential Lot 4 showing the height of the building at different setback distances from the Floodway. Attachment 10 p. 77 (Fig. 5-2). The River Corridor is a 35-foot corridor running outside the Floodway boundary. *See* DEIR p. 3-6 (Fig. 3-3) (showing 35-foot River Corridor running between the Floodway and the River Influence Area). Thus, River Corridor setback requirements can be derived by subtracting 35 feet from the setback distances illustrated in Figure 5-2 of the Master Plan.

dwelling units proposed and the non-residential square footage. Development intensity (as measured in ADT) alone was not used as a factor to analyze or make any conclusions regarding project impacts within the Draft EIR. See Responses A-30 and A-31 for a description of the factors used in analyzing traffic and other impacts throughout the Draft EIR.

A-52 See Response A-45ee.

A-53 See Response A-45ff for setback deviation and Response A-45gg for building height deviation.

A-54 See Response A-45gg for building height step back deviation.

A-55 See Response A-45gg regarding the building height deviations to the San Diego River Park Master Plan for Residential Parcel 4. As stated in Chapter 3.0 Project Description and Section 4.1 Land Use, the project is requesting height and setback deviations from the San Diego River Park Master Plan and San Diego Municipal Code §1514.0302(d)(2) and §1514.0301 (Table 1514-03C River Influence Area Setback, Height and Massing and Diagram 1514-03) for Residential Parcel 4. The proposed deviations would allow the building setback on Parcel 4 to be measured from the edge of the floodway versus the edge of the River Corridor Area. The proposed minimum building distance setbacks, measured from the edge of the floodway and not the River Corridor Area would be 10', 20', 30', and 70' respectively, consistent with the intent of San Diego Municipal Code §1514.0301, Table 1514-03C. However, the proposed building height deviations would allow the building height of Residential Parcel 4 to increase to 80' above finished grade instead of 70' as illustrated in Master Plan Figure 5-2, River Influence Are Building Height Setback,

The Final EIR has been revised to graphically demonstrate by plan view the building heights and how the minimum building distance setbacks were applied as measured from the floodway edge (see new Figure 4.11-6). Furthermore, as identified in Section 4.1 Land Use, the project would be consistent with applicable plans and policies, as well as the underlying zone with allowable deviations. In addition, the Draft EIR concluded in sections 4.1 and 4.11, Land Use and Visual Effects and Neighborhood Character impacts were determined to be less than significant.

Figure 5-2 of the Master Plan shows that, contrary to the SDRPMP and the Municipal Code, Residential Lot 4 does not include any setback from the River Corridor. The entirety of the northern wall of the "roof terrace" portion of the building is situated *within* the River Corridor area. Given that there is no setback between Residential Lot 4 and the River Corridor, the Project is necessarily inconsistent with the height requirements in the SDRPMP and Municipal Code. Further, although the DEIR does not provide necessary information showing the height of the building, the proposed Master Plan illustrates the significant discrepancies between the SDRPMP and Municipal Code's requirements, on the one hand, and the Project's actual proposed height, on the other. Indeed, the building reaches 56 feet in height *within* the River Corridor, and reaches 76 feet at approximately 60 feet from the River Corridor. A-56

The DEIR fails to address the impacts of the inconsistencies between the Project and the SDRPMP's requirements on lot coverage, setback, and height. For instance, the DEIR does not analyze how the inconsistency would worsen the risk of avian collision. As explained in section IX.B of these comments, and in Expert Cashen's comments (Attachment 4, section III.C), the DEIR does not adequately analyze avian collision hazards, and does not properly mitigate the risk. The avian collision impacts associated with the Project are compounded by the excessive lot coverage and height on Residential Lot 4, which would be adjacent to wetlands habitat for birds. A-57

Nor does the DEIR include any analysis of how the deficient setback and excessive height on Lot 4 will increase impacts from edge effects in the wetlands area and MHPA. For example, the residential structures on Lot 4 are within the River Corridor and reach seven stories in height, thus creating a shade effect in the wetlands area that does not currently exist because the lot is now a parking lot with a small one-story structure. As explained in Mr. Cashen's comments, an increase in shade area "can affect phenology (e.g., timing of flowering and seed maturation), biomass, rate of growth, and survivorship.[37] It can also affect a plant's ability to respond to competition and defoliation (e.g., due to trampling or herbivory)." Attachment 4, section III.D.5. The DEIR includes a bald, unsupported statement that the terraced design of Lot 4 would "reduce the amount of shading." But the construction of the building within the River Corridor instead of outside the 10-foot buffer required by the SDRPMP and Municipal Code certainly does not achieve a net-reduction in shading when compared to the requirements of the SDRPMP and Municipal Code, nor does it reduce shading as compared to the currently existing parking lot. A-58

The DEIR fails to adequately describe the Project by omitting information that shows the height of the building on Residential Lot 4 in relation to the River Corridor. *Citizens for a* A-59

[37] For example, *see* Pierson EA, RN Mack, RA Black. 1990. The effect of shading on photosynthesis, growth, and regrowth following defoliation for *Bromus tectorum*. Oecologia 84(4):534-543. Abstract available at: <http://link.springer.com/article/10.1007/BF00328171>.

A-56 See Response A-45ee for setback and Response A-45gg for the discussion on height deviations.

A-57 Section 4.4.3.2 of Draft EIR discusses potential impacts to bird collisions from the proposed project. The inconsistency noted in the comment between the Project and the San Diego River Park Master Plan pertains to the Residential Lot 4 building being placed approximately 10 feet closer to the River than required by the San Diego River Park Master Plan. The inconsistency itself is a planning and land use issue.

It is important to note that the San Diego River Park Master Plan setback baseline is the edge of floodway, not the edge of riparian habitat. For the assessment of avian collision risk, however, distance to riparian habitat is a more relevant measure than distance from the project to the edge of the floodway. Regardless, the placement and step back pattern of the building would not significantly increase the risk of avian collisions for several reasons:

- The proposed buildings would be designed to reduce the risk of collisions, in accordance with the City's Lighting and Glare Regulations and the American Bird Conservancy Bird-Friendly Building Design recommendations to the extent practicable (see Responses A-37b and A-99).
- An existing three-story parking structure is present on Residential Lot 4. This structure presents an existing potential collision risk as a baseline condition.
- The proposed building is generally on plane with adjacent building facades, and does not jut out further toward habitat and thus create a barrier to east-west movement of birds (see EIR Figure 4.11-6, Building Height Setback). On the Town and Country property, the floodway edge is substantially further from the River than the edge of the riparian habitat. The east edge of the building itself is evenly aligned with the recently approved building on the Union Tribune property to the east and is approximately 140 feet away from riparian habitat (measured perpendicular to the River). The proposed building is angled so that it recedes further from the River until its west edge, which is approximately 195 feet away from riparian habitat. In contrast, the new Union Tribune building will be only 90-95 feet from riparian habitat because the floodway line is essentially the same as the edge of riparian habitat. The location of the proposed building leaves an ample buffer to protect from bird collisions.
- See Response A-37c for more information regarding the probability and significance of bird collisions.

Sustainable Treasure Island, 227 Cal.App.4th at 1052. CEQA does not permit a lead agency to place necessary information in separate documents. "[W]hatever is required to be considered in an EIR *must be in that formal report*; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report." *Envtl. Defense Fund, Inc. v. Coastside Cnty. Water Dist.* (1972) 27 Cal.App.3d 695, 706; *see also Save Our Peninsula Comm. v. Monterey Cnty. Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 130. Because the proposed Master Plan cannot provide "what is lacking in the report," the DEIR is deficient. *See id.* The DEIR does not provide the public or decision-makers with necessary information to evaluate the Project's compliance with an applicable land use plan. *Cnty. of Placer*, 144 Cal.App.4th at 898. A-59

Further, the DEIR is invalid because it fails to identify, analyze, or mitigate the inconsistency between the Project and the applicable land use plan. *Pfeiffer*, 200 Cal.App.4th at 1566. It is not sufficient for the DEIR to state the inconsistency between the Project and an applicable regional plan, yet fail to analyze the impacts of the inconsistency or propose any mitigation for resulting significant impacts. Guidelines §15125(d); *Pfeiffer*, 200 Cal.App.4th at 1566. The DEIR's failure to analyze and mitigate impacts associated with excessive lot coverage and building heights and deficient setbacks renders the DEIR invalid. A-60

2. Loading area inconsistency with River Corridor buffer

The DEIR and Town and Country Master Plan both state that the Project will violate the SDRPMP's requirement that loading areas must be "a minimum of 100 feet from the River Corridor Area." DEIR pp. 3-19, 4.1-39; Attachment 10 p. 102; SDRPMP 4.4.2.2, p. 130; SDMC §1514.0302(d)(8)(A). But neither the DEIR nor the Master Plan: (a) identifies the location of the loading area that will be constructed within 100 feet of the River Corridor; (b) states how far the loading area will be from the River Corridor, or whether it will be within or outside of the Corridor; (c) describes the loading area's size, function, or design; (d) provides any analysis of the impacts that the loading area would have due to its proximity to the River Corridor; (e) discusses the mitigation of any impacts; or (f) explains why it is necessary to locate the loading area in violation of the SDRPMP and the municipal code. A-61

The DEIR is therefore flawed because it does not adequately describe this aspect of the project or analyze the impacts of the inconsistency with the applicable regional plan. *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052; *Pfeiffer*, 200 Cal.App.4th at 1566.

D. The DEIR Does Not Adequately Address the Project's Inconsistencies with the Atlas Specific Plan

The DEIR is flawed because it does not identify, analyze, or mitigate the Project's inconsistency with the Atlas Specific Plan's requirement that development near the River Corridor must comply with the Design Sensitive Zone criteria. Both the existing and the proposed amended Atlas Specific Plan provide that development within 150 feet of the River Corridor must not exceed 42 feet in height. Atlas Specific Plan V.B.5, p. 5-44; Attachment 13 p. V-48 (proposed amended Atlas Specific Plan). Indeed, a stipulated judgment resolving the A-62

A-58 See Response A-55 regarding setback and height deviations for Residential Parcel 4. Per Table 1514-03C in Chapter 15 of the San Diego Municipal Code, setbacks are established from the River Corridor Area. Maximum 50 percent of a building's wall may be located at the setback measured from the River Corridor Area. At or above 70 feet in height above finished grade, a building's wall shall be at least 30 percent narrower than the width of the building wall on the ground floor within the River Influence Area. San Diego Municipal Code §1514.0302(d)(2) Allows the following setbacks: Maximum 50 percent of a building's wall may be located at the setback measured from the floodway. At or above 80 feet in height above finished grade, a building's wall shall be at least 30 percent narrower than the width of the building wall on the ground floor within the River Influence Area. As seen in Figure 5-2 of the Town & Country Master Plan, Residential Parcel 4 is designed consistent with the intent of the Municipal Code and the San Diego River Park Master Plan, whereas the buildings are terraced, in part, in order to have the building mass step back from the river, reducing the building shadows extending onto the river. Specifically as to potential biological impacts, see also Response A-113.

A-59 Section 4.11, Visual Effects and Neighborhood Character, Table 4.11-1 Proposed Structures and Heights provides the building heights for Residential Parcel 4 as well as all buildings on the project site. The visual simulations within the Section also presented accurate depictions of the proposed building heights from several points of view. Chapter 3.0 Project Description has been revised to include building height information presented in Table 4.11-1 of the Draft EIR.

A-60 Section 4.1 of the Draft EIR provides analysis of the project for consistency with the General Plan, Mission Valley Community Plan, San Diego River Park Master Plan, and other applicable land use plans. The Draft EIR concluded that land use impacts would be less than significant; therefore mitigation would not be required. See Responses A-45ee regarding lot coverage, A-45gg regarding building height, and A-45ff regarding setback. Furthermore, as identified in the Land Use Section, the project was found to be consistent with all applicable land use plans, as well as the underlying zone with allowable deviations. Impacts were determined to be less than significant.

A-61 See Response A-45hh.

A-62 See Response A-45ii regarding the Atlas Specific Plan. As to the previous violations, refer to Responses A-24a-c.

City's lawsuit against Town and Country LLP for the construction of an illegal parking lot specifies that "development, excluding repair work, must adhere to the design sensitive zone as identified in the Atlas Specific Plan." Attachment 6 ¶18. A-62

As with the SDRPMP (see section VII.C.1 of these comments), the DEIR does not provide adequate detail regarding the height of the building on Residential Lot 4 to evaluate whether it complies with the Atlas Specific Plan's 42-foot height limitation within 150 feet of the River Corridor. Again, it is only possible to evaluate the building height by looking at Figure 5-2 of the proposed Town and Country Master Plan, and subtracting 35 feet from the setback distances illustrated there. *See* Attachment 10. Figure 5-2 shows that the building on Residential Lot 4 reaches 56 feet at 30 feet from the Floodway (five feet within the River Corridor), and reaches 76 feet at approximately 100 feet from the Floodway (65 feet from the River Corridor). A-63

The building heights on Residential Lot 4 violate the existing and proposed amended Atlas Specific Plan, as well as the Stipulated Judgment that binds Town and Country LLP and its successors, including the Project Proponents. Attachment 6 ¶¶12, 18. The DEIR fails to adequately describe the Project by omitting information that shows the height of the building on Residential Lot 4 in relation to the River Corridor. *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052. The DEIR does not provide the public or decision-makers with necessary information to evaluate the Project's compliance with the applicable land use plan, *Cnty. of Placer*, 144 Cal.App.4th at 898, and it is not sufficient to include that information in the proposed Master Plan, *Envtl. Defense Fund*, 27 Cal.App.3d at 706. Further, the DEIR is invalid because it fails to identify, analyze, or mitigate a the inconsistency between the Project and the applicable land use plan. *Pfeiffer*, 200 Cal.App.4th at 1566. As discussed above in section VII.C.1, the height and proximity of this building may have significant impacts on numerous issues including, but not limited to, avian collision risk, shading, and light intrusion. A-64

E. The DEIR Does Not Adequately Address the Project's Inconsistencies with the Multi-Species Conservation Program Subarea Plan

1. Inconsistency with lighting standards

The MSCP Subarea Plan for the City of San Diego states that lighting in the MHPA where wildlife occurs should be low-sodium or similar lighting, and should be "designed to avoid intrusion into the MHPA." MSCP Subarea Plan 1.4.2, p. 45. As Expert Cashen explains in his attached letter, the DEIR discusses light shielding in and near the MHPA, but does not address multiple factors relevant to light intrusion and impacts in the MHPA. Attachment 4, section III.D.3 A-65

First, the Project does not limit the type of lighting that will be used near the MHPA to low-sodium or equivalent lighting. Thus, the hotel, businesses, and residential units are permitted to use lighting that violates the standards in the MSCP. Additionally, as discussed further below in section IX.D.2 of these comments, and in Expert Cashen's comments

A-63 See Response A-45ii regarding the Atlas Specific Plan and Response A-55 as it relates to height and the new Figure 4.11-6 to graphically demonstrate by plan view the building heights and how the minimum building distance setbacks were applied as measured from the floodway edge.

A-64 See Response A-45ii regarding the Atlas Specific Plan. Furthermore, as identified in Section 4.1 Land Use, the project was found to be consistent with all applicable land use plans, as well as the underlying zone with allowable deviations, and impacts associated with any deviations were determined to be less than significant.

A-65 See Response A-45nn. The project has been designed to implement the City's MHPA Land Use Adjacency Guidelines. Furthermore, the project is required to implement conditions of project approval including the MHPA Land Use Adjacency Guidelines, which are included within the Site Development Permit.

Section 4.1.6.1 of the Draft EIR discusses specific measures to comply with lighting guidelines such as: shielding and directing lighting away from the Multi-Habitat Planning Area; the conversion of parking lot areas to habitat and park space, reducing the amount of light entering the MHPA compared to existing conditions by directly removing a light source and providing a vegetated buffer; and strategically planning landscaping within the parking lot and park space to further help shield light from vehicles.

A-66 See Response A-45oo.

(Attachment 4, section III.D.3), because the DEIR does not provide any information regarding key factors when evaluating light pollution, including the height of light sources, light abundance, the location of the lighting, illumination (light incident per unit area), intensity (the number of photons per unit area), and spectral content (expressed by wavelength), the severity of the light-intrusion impacts from the Project is impossible to assess.

Second, although the DEIR states that lighting within 100 feet of the MHPA will be directed away from the MHPA, it says absolutely nothing about the light intrusion into the MHPA and wetlands areas that would result from residential and other lighting outside this buffer. For instance, the DEIR is silent as to the lighting impacts associated with the construction of the seven-story residential building on Lot 4 with 150 units in close proximity to the MHPA and wetlands. There are no restrictions on the types of lighting that residents in Lot 4 units will be permitted to use. Without such restrictions, residents will make varied lighting choices without regard to the impact on the adjacent wetlands and MHPA areas. Even if the Project included limitations on Lot 4 residential lighting, however, there is still a potentially significant impact associated with the cumulative lighting from this building. The issue is compounded because the building is oriented *towards* the river, thereby exposing the MHPA and wetlands to the units and the lighting therein. *See* DEIR p. 4.1-36 (Table 4.1-5). A-65

The DEIR's failure to identify, analyze, and mitigate the inconsistency between the Project's lighting and the MSCP's lighting standards renders the DEIR invalid. *See Pfeiffer*, 200 Cal.App.4th at 1566.

2. Inconsistency with cowbird monitoring requirement

As discussed further in section IX.D.3, the City's MSCP Subarea Plan requires monitoring and control of the brown-headed cowbird population if there is new development adjacent to Least Bell's Vireo preserve areas that creates conditions attractive to brown-headed cowbirds. Subarea Plan p. 165; *see also* San Diego County Biology Mitigation Ordinance §86.507(a)(2)(d) ("Conditions shall be developed for projects located adjacent to Least Bell's Vireo habitat to monitor and control the population of brown-headed cowbirds."). The DEIR inaccurately states that the Project "would not introduce any new uses that would result in significant increases to the existing brown-headed cowbird population (e.g., horse stables, golf courses)," and therefore concludes that that monitoring and control is not required. The DEIR, however, ignores the well-established fact that cowbird populations benefit from, and are attracted to residential development and the "bird feeders, parks, picnic areas, and internal and external edges created by development," all of which are included in the Project, or would be incidental to the Project. *See* Attachment 4, section III.D.4. A-66

The Project's introduction of areas that attract and support brown-headed cowbird populations triggers the requirement in the MSCP Subarea Plan that the Project monitor and control for cowbirds. The DEIR's failure to identify, analyze, and mitigate the Project's

inconsistency with the Subarea Plan undermines the DEIR. *See Pfeiffer*, 200 Cal.App.4th at 1566. A-66

F. The DEIR Does Not Adequately Address Inconsistency with the San Diego Climate Action Plan, SANDAG Urban Area Transit Strategy, and Statewide GHG/VMT Reduction Mandates

With regard to the transportation analysis and impacts of the Town and Country Proposed Project, there are three governing policies: The City of San Diego CAP,[38] the SANDAG Urban Area Transit Strategy[39] and the statewide mandates for GHG/VMT reductions outlined by SB 375, the Sustainable Community Strategy and Executive Order S-3-05. Because of the size and location of the Project, the transportation impacts must be measured by how they contribute to the three policy goals of increased transit mode share, GHG emissions reductions and VMT reduction. The Project is located in the Central Core of the Urban Area Transit Strategy, which plans a 25% transit mode share goal for the year 2050 (see map below). A-67

[38] "City of San Diego Climate Action Plan." The City of San Diego, December 15, 2015, available at: https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf
[39] "SANDAG Urban Area Transit Strategy." http://www.sandag.org/uploads/2050RTP/F2050RTPTA7.pdf

A-67 This is an introductory comment and no further response is required. However, while the Urban Area Transit Strategy includes a 25% transit mode share goal for the year 2050, this goal is neither a mandate nor a standard for projects in the area. Furthermore, the City of San Diego has not adopted a method or guidelines for evaluating the impacts on biking and walking. In efforts to meet the transit mode share goal, and as explained on page 4.2-38 of the Draft EIR, the project proposes a Transportation Demand Management program to reduce vehicular trips and promote alternative forms of transportation. In addition to the project being within a 5 minute walking distance of the transit center and Fashion Valley Mall, the project proposes transit subsidies for hotel and convention employees, preferred carpool/vanpools spaces, and biking and walking improvements, including a multi-use San Diego River Pathway serving pedestrians and bicyclists. Additionally, as listed on page 4.1-24 of the Draft EIR, the project proposes bike lanes along Hotel Circle North.

A-68 See Responses A-77, and A82 through A90.

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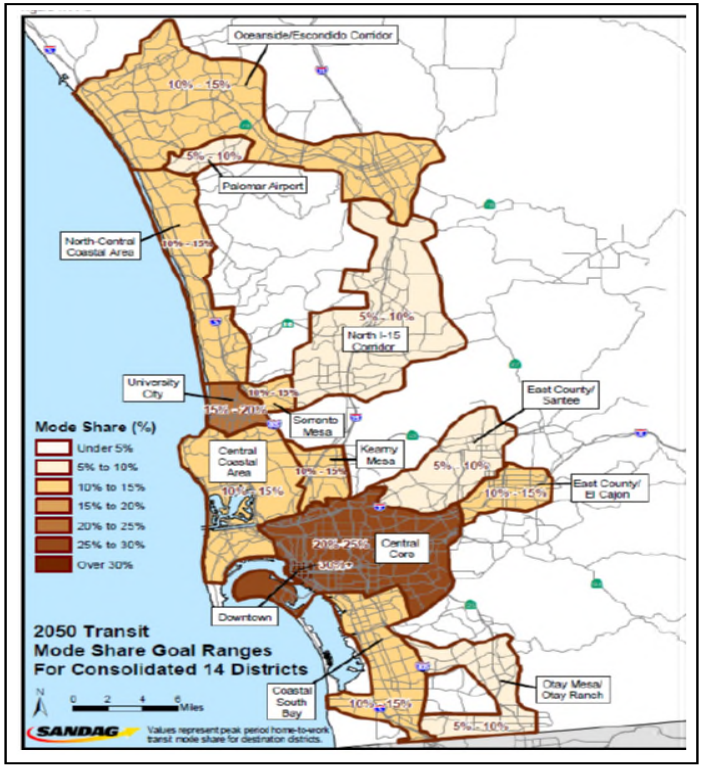

A-67

There is nothing in the **DEIR** establishing how the goals will be met by transit, bike, and walk mitigation. For example, Mr. Liddicoat's expert comments determine that trip reduction for transit use is excessive and that there is a deficit of parking spaces. *See* Attachment 3. The only way to solve this glaring deficiency, while also meeting the state policies outlined above, is improved and quantifiable transit, bike, and walk options. Simply adding more parking spaces will increase VMT and GHG emissions and send the project in the wrong direction. A more in-depth analysis of transit, bike, and walk options must be included in the **DEIR**.

A-68

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VIII. THE DEIR TRANSPORTATION/CIRCULATION ANALYSIS IS FLAWED

CEQA requires analysis of traffic impacts related to a project. *Kings Cnty.*, 221 Cal.App.3d at 692. It also requires that mitigation measures be enforceable. *Fed'n of Hillside & Canyon Ass'ns*, 83 Cal.App.4th at 1261.

A-69

Here, expert traffic engineer Neal Liddecoat P.E.'s review of the DEIR's transportation analysis in Attachment 3 reveals significant deficiencies that should be addressed prior to approval of the Project and its related environmental documentation. Moreover, a host of traffic improvements purportedly identified in the DEIR do not appear to be enforceable mitigations.

A. The DEIR's Transportation Models Use Flawed Methodology to Understate Project Impacts

In addition to overestimating the baseline traffic conditions to make the new Project's traffic impacts less significance discussed above in this letter Section V.E, Commenters experts in Attachment 3 raise many questions (with emphasis added) about flawed methodology throughout the DEIR's traffic models:

A-70

The trip generation estimates developed with respect to the proposed Town and Country Master Plan project are flawed. The trip generation rates for the hotel and convention space are based on old and limited data, the spa trip generation assumptions are questionable and unsubstantiated, the trip generation reduction for transit usage is excessive and inappropriate. In addition, the DEIR provides a misleading description of the magnitude of the transit/mixed-use reductions. Correcting these errors will result in higher trip generation estimates for the proposed project, which likely will result in greater project-related traffic impacts. The Town and Country traffic impact analysis must be modified to correct these significant errors, and the revised analysis must be incorporated into a new environmental document . . .

A-71

The Hotel Trip Generation Rate Is Based On Old and Limited Data . . .

[A] total of four 31-year-old data points represent the foundation for the analysis of one of the critical actions proposed in the Town & Country project, the demolition of 254 hotel rooms.

A-72

We note that the proposed project is located on a road called Hotel Circle, which is the home of at least 15 hotels. (Source: www.hotelcircle.net) Thus, abundant opportunities exist to perform targeted data collection that would provide up-to-date information with respect to the travel characteristics of hotel guests in the immediate vicinity of the proposed project.

A-69 See Response A-45r.

A-70 The trip generation rates for the hotel (10 trips per room) and spa (health club rate was used) are based on current City of San Diego Trip Generation Manual, May 2003. While the Institute of Transportation Engineers (ITE) trip generation rates are nationally accepted, City of San Diego includes its own trip generation rates (City of San Diego Trip Generation Manual, May 2003). Standard practice for traffic studies conducted in the City of San Diego is to use trip rates from this manual as it reflects the local setting and local traffic patterns. In addition, transit and mixed-use credits were used from City of San Diego Traffic Impact Study Manual without deviation.

A-71 See Response A-70.

A-72 See Response A-70.

For comparison, we note that the universally-accepted Institute of Transportation Engineers (ITE) Trip Generation Manual (Ninth Edition, 2012) documents a daily trip generation rate (8.92 trips/occupied room) that is more than 10 percent lower than the rate used in the LLG analysis. Similarly, the PM peak-hour trip rates in the ITE document are over 10 percent lower than the San Diego rates. A-73

Because the hotel rooms are to be demolished, the hotel trips are deducted from the existing traffic volumes. Thus, if the hotel trip estimate baseline is unrealistically high (as it would be if the San Diego trip rate is too high), that deduction will be excessive and the traffic impacts of the proposed project will be understated. The validity of the hotel trip generation rates used in the Traffic/Circulation analysis must be confirmed. A-74

The Convention Space Trip Generation Rate Is Based On Old Data

With regard to the trip generation rate employed for the project's convention space, the LLG report says (p. 45):

The City of San Diego Trip Generation Manual does not include a trip rate for convention space. Therefore, LLG derived the trip rate for the convention space from historical data at the T&C property. This data is included in the approved 1985 Atlas Specific Plan - Traffic Impact Study. A-75

Again, the analysis reaches far into the past to develop trip generation rates for the on-site convention space. No information is provided, however, to verify that the 31-year-old data that serves as the basis for this process remains valid in the year 2016. This conclusion is not supported by substantial evidence in the DEIR . . .

The Trip Reduction for Transit Use is Excessive

According to p. 46 of the LLG report:

Based on national research outlined in the ITE Trip Generation Handbook (Table B.3, 2nd Edition, included in Appendix G4), a minimum of 5% vehicle trip reduction is recommended for commercial uses within 0.25 mile of a light rail transit station. A-76

Three points are in order regarding this statement. First, nowhere does the Trip Generation Handbook indicate that these are "minimum" values, as suggested by the statement. Instead, they are simply described as the "estimated reduction in site vehicle trip generation." (ITE, p. 123)

Second, a highlighted area on p. 123 of the ITE Trip Generation Handbook A-77

A-73 See Response A-70.

A-74 The hotel trip rate of 10 daily trips per room was used per the current City of San Diego Trip Generation Manual. This rate was used for both the existing hotel rooms and the proposed hotel rooms for consistency.

A-75 Standard procedure for developing trip rates for land uses not included in the City of San Diego Trip Generation Manual is to derive the trip rate from available data. This procedure was followed and applied in the trip generation calculations. More information for the convention space trip generation can be found in Section 4.2.4.1 of the Draft EIR.

A-76 Trip reductions due to transit are estimated reductions. The word "minimum" was referring to the fact that the lowest reduction shown in the Institute of Transportation Engineers manual was 5%.

A-77 As explained on Section 4.2.4.1 of the Draft EIR, the 5% reduction used for the hotel and convention use is a combined "transit and mixed-use credit". Mixed-use credits were also included in the 5% reduction to account for synergies and attractions between the Fashion Valley regional mall and the project site. The commercial, retail and restaurant uses at the mall that are located within a walking distance are expected to attract residents, hotel guests and convention visitors and thereby reduce auto trips. The 5% combined reduction accounts for this synergy as well. See Response A-80 regarding % of credits assumed.

specifically states that:

Vehicle trip reduction factors are only for commute trips (not all trips generated by a site)

A-77

Despite this, the assumed 5 percent transit trip reduction factor has been applied across the board for the proposed project, for non-commute trips as well as commute trips. Consequently, the reduction associated with potential transit use has been overstated and the resulting net project trip generation has been understated.

Third, further examination of Table B.3 in the ITE Trip Generation Handbook reveals that application of the 5 percent transit trip reduction is also subject to the following additional condition:

A-78

Minimum FAR [Floor Area Ratio] of 1 per gross acre for commercial/industrial development.

According to DEIR p. 3-3, the total site has an area of 39.72 acres or 1,730,203 SF. Thus, in order to satisfy the FAR condition associated with application of the 5 percent transit reduction, the proposed development must total that same square footage; when the development area equals the land area, the FAR will be 1 per gross acre . . .

A-79

Clearly, the square footage of the proposed project is insufficient to reach a FAR value of 1 per gross acre, as required in order to apply the 5 percent transit reduction factor presented in the ITE Trip Generation Handbook. Therefore, the proposed project trip generation is underestimated in the Transportation/Circulation analysis, and the project impacts are understated.

<u>The DEIR Provides a Misleading Description of the Transit/Mixed-Use Reductions</u>

As noted above, the LLG traffic impact analysis incorporated adjustments to the trip generation estimation process, which were intended to account for the possibility that employees and visitors at the project site will use nearby transit service and to reflect the mixed-use nature of the project. Page 47 of the LLG report says:

A-80

. . . a 5% transit/mixed-use credit for the hotel and a 5% transit/mixed-use credit for the convention space were applied to account for their interaction with the [Fashion Valley] transit center and Mall.

For residential uses, per City standards, allowable community mixed-use (10%) and

A-78 See Response A-77.

A-79 The floor area ratio calculation was conducted for the commercial/retail portion of the project. The total building development includes 738,541 SF and the total hotel district site area includes 735,728 SF. Therefore, the floor area ratio (738,541/735,728 = 1.004) exceeds the 1/acre and hence the reduction is applicable.

A-80 The mixed-use and transit credits for the residential use are based on City of San Diego standards as shown in Tables 3 and 4 of City of San Diego Traffic Impact Study Manual, July 1998. The 10% and 5% which the commenter mentions are average daily trip reductions. The 9% AM and 6% PM peak hour reductions were taken and are shown in footnotes i and j shown of the Draft EIR (Table 4.2-15: Trip Generation) based on the City of San Diego trip reduction shown in the Traffic Impact Study Manual. To summarize, all credits were taken per City of San Diego standards without any deviation.

transit credits (5%) for the residential uses were taken.

However, careful review of the LLG trip generation estimate tables (Table 9-1 (pp. 49 - 50) for Phase I and Table 10-1 (pp. 69 – 70) for Phases I and II combined), reveals that the actual percentage reductions were often substantially higher than these values. Table 2 summarizes a comparison of the claimed transit/mixed-use reductions and the actual percentages employed.

Table 2
Transit/Mixed-Use Reduction Summary

Land Use		Transit/Mixed-Use Reductions[1]					
		Daily		AM Peak Hour		PM Peak Hour	
		Claimed	Actual	Claimed	Actual	Claimed	Actual
Hotel	Transit/Mixed-Use Combined	5%	5%	5%	9%	5%	6%
Convention Space	Transit/Mixed-Use Combined	5%	5%	5%	9%	5%	6%
Residential	Transit	5%	5%	5%	9%	5%	6%
	Mixed-Use	10%	10%	10%	8%	10%	10%

Notes:
[1] Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016, Table 9-1, pp. 49 – 50 and Table 10-1, pp. 69 – 70.

As shown, only the reductions associated with the daily traffic estimates conform to the claims made in the LLG report. In the AM peak hour, the reductions are generally 9 percent instead of the claimed 5 percent (although the mixed-use reduction for the residential uses is 8 percent instead of the claimed 10 percent). In the PM peak hour, the actual reductions are again higher than claimed, except for the residential mixed-use adjustment, which matches the claim.

A-80

Also, we note that, while a transit/mixed-use credit is applied to the "proposed" hotel and convention space in LLG Table 9-1 (p. 49), a similar adjustment is not applied to the "existing" versions of those land uses. This is an improper inconsistency, given the fact that the Fashion Valley Transit Center currently exists and is available for use by employees and visitors at those land uses. The failure

A-81

A-81 As explained in Section 4.2.8.2 of the Draft EIR, project proposes a Transportation Demand Management program to reduce vehicular trips and promote alternative forms of transportation. The project would provide transit subsidies up to 50% for 25% of the hotel and convention employees for a period of 3 years. These subsidies are currently not being offered and therefore, the 5% transit credit was applied only for the proposed use.

Secondly, as shown in Section 4.2.8.2 of the Draft EIR, while the transit center is existing, the existing pedestrian bridge over the San Diego River site is nonstandard (5' wide) and degraded, which hinders any pedestrian connection between the site and the transit center. Therefore, the project proposes to demolish and build a new 10-foot wide bridge that meets standards for a multi-use path serving pedestrians and bicyclists. This new bridge would provide a direct connection to the transit center and therefore the 5% transit credit was applied only for the proposed condition.

to account for existing transit usage overestimates the trip generation associated with those land uses and, therefore, results in excessive trip reductions in connection with the portions of those land uses to be demolished. As a result, the net trip generation of the proposed project is understated.

A-81

B. The DEIR's Parking Analysis Fails to Account for Circulation Impacts and Parking Deficits

Commenters' expert traffic engineer's careful review of the DEIR in Attachment 3 hereto also raises significant concerns about circulation impacts at the site and parking deficits, and faults in the DEIR's analysis of these issues:

the parking analysis provides an overly-optimistic view of the adequacy of the proposed number of parking spaces. One key modification to the parking demand analysis that would provide a more accurate, more realistic estimate of the number of parking spaces needed at the proposed project is described below.
Specifically, the analysis must incorporate a common convention in parking studies: a "safety factor" or "margin of error" must be applied to the derived peak demand figure. For example, assuming a commonly-accepted 10 percent safety factor, an estimated peak demand of 951 spaces would result in a recommended parking supply of 1,046 parking spaces (i.e., 951 * 1.10 = 1,046). Applying this same factor to the more realistic peak demand figure derived above (i.e., 986 spaces) would indicate a recommended parking supply of 1,085 spaces.
Another way of looking at this is to consider the "effective capacity" or "effective supply" of the parking facility to be 85 to 95 percent of the total supply, as described in the Institute of Transportation Engineers *Transportation Planning Handbook* (Third Edition, 2009, p. 812.) That document specifically states the following:

When determining the adequacy of an existing multi-facility parking system, a parking analyst will usually assign effective supply factors to each of the different facilities to determine the overall effective supply and then compare the effective supply with the design day parking generation. To provide the desired effective supply, the expected parking generation rate at the peak time on the design day is divided by the effective supply factor. For example, if 1,000 vehicles are expected to be parked at the peak hour in the design day with a 90-percent effective supply factor, 1000/0.90 = 1,111 spaces would be required for the system to work reasonably well in that hour. . .
The intent of the effective supply concept is that the system will work reasonably well on the design day, but there may be difficulty finding an available space in hours above the design hour. This is truly a practical need; for example, parking facilities with access

A-82

A-82 The project parking calculations were conducted using City of San Diego published parking standards per the Land Development Code. As shown in the Section 4.2.6.2 of the Draft EIR, the project is calculated with a surplus parking of 65 spaces for the hotel and convention space and a surplus of 58 spaces for the residential uses. Assumption of such a safety factor would lead to an over-design of parking and vehicular traffic and making it inconsistent with City of San Diego's Smart Growth policies.

> *and revenue controls are often closed before the parking facility becomes completely full, because it is just too difficult to find available space. . . . Users may perceive that there is a serious or even severe parking problem even though there may be spaces available somewhere in the system.*

A-82

With this approach, the proposed parking supply of 921 spaces represents an effective supply of about 829 spaces, assuming a 90 percent "effective supply factor" (i.e., 921 * 0.90 = 829). Compared to our modified peak demand estimate of 887 spaces (including the transit/mixed-use adjustment), this would indicate a deficiency of 58 parking spaces. With respect to our unadjusted demand figure of 986 spaces, a deficit of 157 spaces results.

A-83

Even considering the 856-space net parking demand presented in the DEIR, a deficit of 28 spaces is projected relative to the 829-space effective supply. And if the 10 percent transit/mixed-use reduction in demand fails to occur, the DEIR's 951-space parking demand will result in a deficit of 122 spaces.

A-84

Residential Parking

LLG Table 13-3 (p. 107 – 108) summarizes the derivation of the parking requirements for the proposed residential components of the project. (Again, no corresponding table is provided in the DEIR.) According to that table, the parking supply on Residential Parcels 1 and 4 will exactly match the City's parking requirement, while parking surpluses are expected on Residential Parcels 2 and 3. With the exception of studio units, the residential parking requirements were estimated using the City of San Diego parking ratios for "transit areas" in Table 142-05C of the Municipal Code (Chapter 14, Article 2, Division 5, p. 9 – 10); the studio units were evaluated using the parking ratio for "Basic" areas. Although the use of the Transit Area parking ratios is allowed under City code, several questions remain. For example, as with the hotel/convention space discussed above, we wonder what happens if the anticipated transit usage fails to occur? To provide an indication of the implications of this possibility, Table 4 shows a comparison of the residential parking requirements using the "Transit Area" ratios and the "Basic" ratios.

A-85

As shown, if the assumed reduction in parking demand associated with transit use and the mixed-use nature of the proposed project fails to materialize, parking deficits of 26 – 28 spaces will occur at Residential Parcels 1 and 4, and the estimated parking surplus at Residential Parcels 2 and 3 will be no more than 10 spaces.

A-86

Given the lack of a parking surplus at two of the parcels, what will happen when the residents own more vehicles than can be accommodated? And where will guests park? And service and delivery vehicles?

A-87

The failure to recognize the considerations presented here represents a substantial deficiency in the analysis of the proposed project's parking system. Unless the parking supply is increased or the magnitude of the project is reduced

A-88

A-83 See Response A-82.

A-84 See Response A-82.

A-85 The project parking calculations were using City of San Diego published parking standards per the San Diego Municipal Code San Diego Municipal Code that include the transit parking rate for hotel, convention and residential use. The commenter parking calculations (that calculate a deficit) are based on speculative assumptions (such as "what if" transit or mixed use credits do not materialize, or if there was higher vehicle ownership by residents) and possibilities of such implication etc.

Parking requirements in the City of San Diego are conducted using the minimum and maximum parking rates specified in the San Diego Municipal Code and compared against the provided supply to calculate a surplus or a deficit. Assumptions specified by the commenter are subjective and speculative and not per City of San Diego parking standards.

A-86 See Response A-85.

A-87 See Response A-85.

A-88 See Response A-85.

A-89 See Response A-85.

(resulting in lower parking demand), the project's parking supply will be inadequate, and a significant impact will result. A-88

Table 4
Residential Parking Comparison[1]

Unit Type	No. of Units	"Transit Area" Parking Requirement[2] Ratio	"Transit Area" Parking Requirement[2] No. of Spaces	"Basic" Parking Requirement[2] Ratio	"Basic" Parking Requirement[2] No. of Spaces
Residential Parcel 1					
Studio	48	1.25[3]	60	1.25	60
1 BR / 1 BA	64	1.25	80	1.5	96
2 BR / 2 BA	48	1.75	84	2.0	96
TOTAL	160		224		252
Proposed Parking Supply			224		224
Surplus (Deficit)			0		(28)
Residential Parcel 2					
Studio	83	1.25[3]	104	1.25	104
1 BR / 1 BA	110	1.25	137	1.5	165
2 BR / 2 BA	82	1.75	144	2.0	164
TOTAL	275		385		433
Proposed Parking Supply			443		443
Surplus (Deficit)			58		10
Residential Parcel 3					
Studio	77	1.25[3]	96	1.25	96
1 BR / 1 BA	102	1.25	127	1.5	153
2 BR / 2 BA	76	1.75	133	2.0	152
TOTAL	255		356		401
Proposed Parking Supply			410		410
Surplus (Deficit)			54		9
Residential Parcel 4					
Studio	45	1.25[4]	56	1.25	56
1 BR / 1 BA	60	1.25	75	1.5	90

A-89

2 BR / 2 BA	45	1.75	79	2.0	90
TOTAL	150		210		236
Proposed Parking Supply			210		210
Surplus (Deficit)			0		(26)

Notes:
Notes:
[1] Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016, Table 13-3, p. 107 - 108.
[2] Reference: City of San Diego, *San Diego Municipal Code*, Chapter 14, Article 2, Division 5, Table 142-05C, pp. 9 – 10.
[3] "Basic" parking ratio used for studio units.

A-89

. . . [T]he project's impacts have been understated, thereby requiring completion of a corrected traffic impact analysis, which will likely reveal significant impacts that were not documented in the DEIR. That modified traffic impact analysis should be incorporated into a revised environmental document, which must be circulated for further public review.

A-90

B. Numerous Purported Traffic Mitigations are Improperly Not Included In Any MRMP

As noted above, mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." *Fed'n of Hillside & Canyon Ass'ns*, 83 Cal.App.4th at 1252. The DEIR runs afoul of this rule, as numerous traffic mitigations identified in the DEIR (pp. 4.2.10-12) appear nowhere as formal mitigation measures to be included in the MRMP. Incredibly, for a Project of this size, only two traffic mitigation measures are required – for Hotel Circle North and Camino de la Reina. This is preposterous. There are numerous other measures, all of which must be included as ***enforceable*** mitigation in the MRMP, including:

A-91

- MTS bus stops along the frontage on Hotel Circle N. and Fashion Valley Road that would be retained.
- The proposed San Diego River Pathway on the north side of the River would be 14 feet wide and function as a multi-use trail for pedestrians and bicyclists.
- A south side San Diego River Pathway that transitions southerly at the pedestrian bridge over the San Diego River and travels east connecting to the adjacent former (Union Tribune) property.
- Trails for pedestrians would be 4 feet to 8 feet wide in the active park area.

A-90 See Response A-85.

A-91 See Response A-45r.

- Building Access Paths proposed at multiple locations to connect on-site hotel guests and convention visitors to the park and San Diego River Pathway.
- Public Access Pathways extending beyond the River Influence Area to connect the onsite residents and, more importantly, the greater community to the Park, San Diego River Pathway, and the transit center.
- A new 10-foot-wide bridge that meets standards for a multi-use path serving pedestrians and bicyclists connecting the site to the Fashion Valley Transit Center.
- Non-contiguous sidewalks provided along local streets and private drives.
- Intersection traffic calming proposed to complement the walkability of the street system by providing safe and inviting points of crossing through the use of pop-out/curb extensions.
- A shared bike path ("sharrow") on the easterly project boundary along Private Drive D.
- Improvements to Hotel Circle N. that would include widening Hotel Circle N. from Fashion Valley Road to Camino De La Reina to 4-lane Collector standards per the MVCP. This improvement would consist of an additional westbound and eastbound through lane with a two-way left-turn lane. The widening would also include Class II bike lanes on both sides. The parkway on the north side of Hotel Circle N. along the frontage would include an 8-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk.
- Improvements to Camino De La Reina that would include widening Camino De La Reina from Hotel Circle to Private Drive D to 4-lane Major standards per the MVCP. This would add an additional westbound and eastbound through lane and a raised median. This widening would also include Class II bike lanes on both sides. The parkway on the north side of Camino De La Reina along the project site frontage would include a 6-foot-wide sidewalk and an 8-foot-wide planting area between the curb and sidewalk; and
- Improvements to Fashion Valley Road. The project proposes to provide an Irrevocable Offer of Dedication (approximately 23 feet) toward half-width improvements for the widening of Fashion Valley Road between Hotel Circle N. and Riverwalk Drive to 4-lane Major standards per the MVCP.

A-91

The same is true for the DEIR's purported Transit Demand Management ("*TDM*") program. It is not in the MRMP and contains a host of vague, indefinite commitments that

A-92

A-92 See Response A-45t. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

violate CEQA's requirement for definite performance standards and prohibition on deferred mitigation. *Mount Shasta Bioregional Ecology Ctr. v. Cnty. of Siskiyou* (2012) 210 Cal.App.4th 184, 207 (performance standards required for CEQA mitigation); *Sundstrom v. Cnty. of Mendocino* (1988) 202 Cal.App.3d 296, 308-309 (CEQA disallows deferring the formulation of mitigation measures to post-approval studies). This requirement, violated here, helps "insure the integrity of the process of decisionmaking by precluding stubborn problems or serious criticism from being swept under the rug." *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agric. Ass'n* (1986) 42 Cal.3d 929, 935. Thus, the entire TDM program should be included in the MRMP, with enforceable, definite performance standards developed now, including but not limited to:

- Provide a charging station(s) for electric vehicles.
- The project would coordinate with local transit operators to provide input on how and when routes should be implemented to serve the area.
- To encourage the use of transit, the project would provide no less than 50 percent transit subsidy for 25 percent of the hotel employees for a period of 3 years.
- The project would provide flexible work schedules to stagger arrivals and departures of hotel employees; and
- The project would continue to provide shuttle services to and from SDIA for hotel guests.

A-92

IX. THE DEIR FAILS TO ADEQUATELY ANALYZE AND MITIGATE IMPACTS TO BIOLOGICAL RESOURCES

An EIR must analyze the potentially significant impacts that a Project may have on biological resources. *Cal. Oak Found. v. Regents of Univ. of Cal.* (2010) 188 Cal.App.4th 227, 280. An agency must find that a project has a significant impact if it has the potential to "substantially reduce the habitat of a fish or wildlife species," or "substantially reduce the number or restrict the range of an endangered, rare or threatened species." Guidelines §15065(a)(1).

A-93

A. The DEIR Does Not Adequately Analyze and Mitigate Impacts from the Proposed Restoration and Enhancement Activities on Special-Status Species

The DEIR discusses the proposed restoration and enhancement activities in and around the River Corridor, but fails to adequately analyze and mitigate the impacts that these activities will have on special-status species. Mr. Cashen explains the shortcomings in his comments:

A-94

> The DEIR fails to disclose and fully analyze the effects of the proposed restoration and enhancement activities on sensitive biological resources. Because plants

A-93 Comment noted. The comment makes general CEQA legal points. No further response is required.

A-94 The Draft EIR provides an analysis of restoration/enhancement effects on potentially occurring sensitive species given that the potential for special-status species to be present onsite is low, with only one (yellow warbler) identified during surveys. Based on current surveys, the site is not used by sensitive biological resources at this time. Despite temporary disturbance to the ecosystem while restoration/enhancement is implemented, restoration activities would result in an overall increase in habitat quality over present conditions. Grading is not proposed as part of the restoration and enhancement work. Hand-held machinery would be utilized. Although nonnative trees such as eucalyptus would be removed, stumps of these trees would be left in place to aid in soil stabilization. Best Management Practices would also be implemented to control erosion. Planting and seeding of native species will prevent soil erosion and bind soil long-term as plants establish. Seeding with local native species would also aid in the establishment of some ground cover, which would also prevent erosion and help bind the soil.

Additionally, project compliance with MHPA Land Use Adjacency Guidelines and City permit conditions would avoid and minimize indirect impacts to special-status species.

exhibit some redundancy in ecosystem function, exotic plant species can substitute in part for natives in performing a range of ecosystem functions, including wildlife support and soil binding. Consequently the removal of exotics can result in significant perturbations to ecosystem functions during the period of transition to native cover.[40]

A-94

Many special-status species occur at a locale because of specific biotic and abiotic conditions unrelated to the origin of the vegetation (e.g., native vs. exotic). For example, the occurrence of many special-status plant species is correlated with specific microhabitat conditions in the environment (e.g., soil type, moisture, and shade level among many others). If the special-status plant requires a specific shade level, removing all the exotic trees that provide the necessary shade could eliminate the plant. Similarly, many special-status bird species are limited to vegetation communities possessing specific structural components (e.g., nesting substrate, canopy cover, foliage volume).[41] For these species, the origin of the plants in the community is unimportant as long as structure requirements are met. The proposed restoration and enhancement activities would have substantial effects on the existing ecosystem. The DEIR fails to analyze those effects, including the effect vegetation removal would have on the specific microhabitat requirements associated with special-status species occurring, or potentially occurring, in the Project area.

A-95

The DEIR fails to provide adequate information on the abundance and distribution of the plants proposed for removal. It also fails to provide adequate information on the proposed removal methods; it simply states: "[e]xotic species will be removed by hand, mechanical weed cutters, or herbicide applications."[42] Based on the information provided in the DEIR, approximately 50% of the proposed restoration and enhancement area is comprised of eucalyptus woodland.[43] If this is accurate, it means the Applicant will be removing a lot of eucalyptus trees. This is important because the DEIR fails to establish how felled trees will be removed from the site without causing major soil disturbance and impacts to wetlands. Furthermore, the canopy and soil binding properties provided by trees prevents soil erosion. The DEIR fails to establish how the Applicant would control erosion in areas where the entire canopy will be removed (e.g., the eucalyptus woodland),

A-96

[40] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.

[41] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight.

[42] BTR, Appendix A, p. 7.

[43] BTR, Figure 7 and Table 1.

A-95 Although removal of nonnative vegetation would affect some microhabitats in the short term, the removal of nonnative species and replacement with native vegetation would result in a net gain of habitat quality in the ecosystem in the long term.

The comment makes several points related to potential impacts caused by the restoration work:

1. *Changes in microhabitat conditions caused by restoration could impact special status plants that occupy those specific microhabitats*: Surveys were conducted on site for rare and sensitive plant species. None were identified in the survey, and three species were considered as having moderate potential to occur. None of those species have microhabitat needs that would be negatively impacted by implementation of restoration. Furthermore, areas with high existing native riparian cover and structure would not require extensive removal of exotics, thus preserving microhabitat functions in those areas.

   Areas with high non-native cover primarily consist of eucalyptus groves. Eucalyptus trees are known to allelopathically limit other species from growing in the same areas they occur, which results in low structural diversity and microhabitat niches. Removal of eucalyptus trees and restoration with native habitat would diversify the area, enhance vertical stratification (i.e. herbaceous, shrub, and tree layers) and replace any lost ecosystem functions to a greater degree than currently found in eucalyptus dominated areas onsite. Other onsite areas proposed for revegetation are disturbed and developed areas which currently have little to no current habitat value to plants or wildlife.

2. *Restoration activities and removal of exotics would have a negative effect on special-status bird species that require specific structural components.* Special status species known to occur in or adjacent to the project area benefit from native habitat enhancement equally or more than exotic species. Therefore, the impact of restoration for special-status species would be positive once restored habitats mature.

   Although conditions could potentially be made temporarily less suitable for some species during restoration activities. exotics removal will affect only portions of available habitat and not the entire extent of native habitat in the project area. Wildlife will be able to utilize other portions of existing riparian habitat while new habitat establishes. The restoration area is occurring on ~1900 linear feet of the roughly 32,000 linear feet of riparian corridor within Mission Valley. Wildlife that may be temporarily influenced by the

and where heavy equipment presumably would be required to extricate felled trees. The only information provided in the Applicant's Restoration and Enhancement Plan is that: "[t]he Installation and Maintenance Contractor will install and maintain appropriate erosion control materials (e.g. straw wattles)."[44] Based on my experience as a forester, straw wattles would be incapable of preventing soil transfer into the San Diego River.

A-96

Attachment 4, section III.A.

Mr. Cashen's comments expose a major omission in the DEIR's analysis. Indeed, while the Project documents and DEIR rely on the restoration and enhancement activities that are proposed to occur as a means to reducing environmental impacts and improving the image of the project in the eyes of the public and decision-makers, they do not properly evaluate the severe impacts that these activities can have on the existing environment. The DEIR's discussion of the impacts to special-status species caused by restoration and enhancement activities does not "include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Laurel Heights*, 47 Cal.3d at 405; *see also Save Our Peninsula Comm.*, 87 Cal.App.4th at 130 ("An EIR is required to discuss the impacts of mitigation measures."). Further, the Project description associated with this issue is inadequate to support a full evaluation of the issue. *Citizens for a Sustainable Treasure Island*, 227 Cal.App.4th at 1052.

A-97

B. The DEIR Does Not Adequately Analyze and Mitigate the Risk of Avian Collisions

One of the major impacts created by the new residential and hotel-serving buildings, as well as the existing hotel buildings that are being renovated, is the increased risk of avian collision. That risk is increased both because the Project includes the construction of new buildings that are designed to be oriented towards the habitat in the River Corridor, and because the Project purports to restore and enhance the wetland habitat, thereby attracting more birds to the area and exposing an increased number of birds to collision hazards. The DEIR does not sufficiently address these issues. As provided in Expert Cashen's comments:

A-98

Riparian habitat within the San Diego River corridor supports a diverse and abundant assemblage of resident bird species.[45] In addition, it provides important "stopover" habitat for birds that migrate along the Pacific Flyway, and at finer spatial scales (e.g., locally and regionally).[46]

[44] BTR, Appendix A, p. 5.
[45] BTR, p. 44.
[46] BTR, pp. 43 through 45.

restoration could utilize adjacent habitat until restored native habitats establish. Removal of exotic vegetation would occur outside of the nesting season to further protect wildlife from direct impacts from this activity.

A-96 See Responses A-8 and A-95. The specific methods of vegetation removal are left to the restoration contractor in order to allow for competitive bidding on that phase of the project, but would be strictly limited to "removal by hand, mechanical weed cutters, or herbicide applications" as noted. Eucalyptus tree removal would not impact existing wetland habitat as it would take place outside of wetland areas in existing eucalyptus woodland habitat. Stumps of cut down eucalyptus trees would be left in place to provide soil stabilization and prevent erosion. Seeding associated with restoration in addition to the installation of Best Management Practices, which can include silt fencing and hay bales in addition to wattles and other materials, would be sufficient to prevent soil transfer into the San Diego River. See Appendix A of the BTR for details of the project revegetation plan.

A-97 See Responses A-94 through A-96.

A-98 See Responses A-57 and A-99.

One hundred million to 1 billion birds are killed annually by daytime window collisions at low-level structures in the U.S. alone.[47] The visual system of birds is simply not capable of perceiving glass as a physical obstacle.[48] The Project involves the construction of multiple new buildings designed to reorient development toward the river corridor. The DEIR acknowledges the Project poses a collision hazard to birds, and that buildings covered with a large percentage of windows or glass pose a greater threat.[49] Its analysis of the avian collision threat is then limited to the following:

The structures would not be designed with a predominantly reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials selected for the project. Therefore, direct impacts to potentially occurring special-status bird species from collisions with the project components would be less than significant.[50]

A-98

The DEIR's analysis is insufficient for several reasons:

First, the DEIR does not provide design standards for the amount (percentage) of windows or glass associated with the proposed buildings. As a result, it is impossible to infer what is meant by "structures would not be designed with a predominantly reflective material," and whether this includes windows coated with a "non-reflective" material. This is important because anti-reflective technology does not eliminate *all* light reflection; high reflectance can still occur.[51] Furthermore, according to the Town and Country Draft Master Plan: "[e]ntrances and windows, not garages, should be the dominant elements of the front façades. Window and door placement, size, material, and style should help define a building's architectural style."[52]

A-99

Second, the DEIR fails to provide evidence that compliance with the City's regulations for lighting and glare would reduce avian collisions to a less than significant level. Indeed, the City's Glare Regulations state: "[a] maximum of 50

A-100

[47] Evans Ogden LJ. 2002. Summary Report on the Bird Friendly Building Program: Effect of Light Reduction on Collision of Migratory Birds. Special Report for the Fatal Light Awareness Program (FLAP). Available at: http://www.flap.org/.

[48] Klem D Jr. 2009. Preventing Bird-Window Collisions. The Wilson Journal of Ornithology 121(2):314–321.

[49] DEIR, p. 4.4-27.

[50] *Ibid.*

[51] *See:* <http://www.suniva.com/documents/Suniva%20Reflection%20and%20Glare%20Report%20-%20Marketing%20-%20August%202012.pdf>.

[52] [Attachment 10] Town and Country Draft Master Plan, p. 72.

A-99 As stated in Biological Resources Section 4.4.3.2 Impact Analysis, the structures would be designed with a predominantly non-reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials selected for the project. This would effectively address concerns related to the building design materials and the Draft EIR need not identify additional design standards for the amount of glass or windows associated with the proposed buildings.

The Draft EIR also identifies the limits (percentage) of reflective materials in section 4.11.2 Regulatory Framework, Visual Effects and Neighborhood Character, which cites the City Glare Regulations of San Diego Municipal Code Section 142.0730. All projects, including the proposed project are subject to the following development regulations as listed in Section 4.11.2 and required project to comply with the following requirements:

- A maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light-reflectivity factor greater than 30 percent (Section 142.0730 (a)).
- Reflective building materials shall not be permitted where the City Manager determines that their use would contribute to potential traffic hazards, diminished quality of riparian habitat, or reduced enjoyment of public open space (Section 142.0730 (b)).

The project is required to comply with existing City of San Diego regulations regarding lighting and glare as noted above. Compliance with the above requirements of the City Glare Regulations would ensure less than 50 percent of the exteriors of all buildings associated with the project would contain reflective material greater than 30 percent. The Draft EIR concluded that impacts would be less than significant.

See Response A-37c for additional discussion of bird collision issues.

A-100 See Responses A-57 and A-99.

percent of the exterior of a building may be comprised of reflective material that has a light-reflectivity factor greater than 30 percent" unless the City Manager determines that their use would contribute to diminished quality of riparian habitat.[53] It is unclear whether the threat of avian collisions constitutes "diminished quality of riparian habitat." Nevertheless, because the DEIR does not provide the City Manager's determination, it is impossible to infer whether ≤ 50% of each building might be comprised of reflective material (as allowed under the City's Glare Regulations). A-100

Third, the DEIR fails to identify the mortality threshold that was used to determine avian collisions would be less than significant. The DEIR fails to establish how many deaths (due to collisions) are anticipated, and how many deaths it would take to constitute a significant impact. This is important because the population sizes of some special-status species are so low that they cannot sustain any additive mortality (i.e., the local population will go extinct).[54] This is especially true for species such as the least Bell's vireo, which rely on small remnant patches of habitat in urban areas.[55] The Project would have a significant impact on this species even if it killed only one or two vireos. A-101

Due to the issues described above, the City must analyze the avian collision hazard as a potentially significant impact, and it must provide adequate mitigation. A-102

Attachment 4, section III.C.

Additionally, even though the DEIR states that the 10-story Royal Palm Towers poses "the greatest risk of avian collision on-site," DEIR 4.4-26, the DEIR inappropriately excludes the Royal Palm Towers from its analysis on the basis that it is an existing condition and not part of the Project. But, as discussed in section VI.E, the proposed Town and Country Master Plan includes renovation of the Royal Palm Tower pursuant to design guidelines that are "an integral component of the Master Plan." Attachment 10 p. 82. Further, the every room in the Royal Palm Towers will be renovated as part of the Project. *See* DEIR p. 3-15 (table 3-2). The Royal Palm Towers cannot justifiably be excluded from the DEIR's impacts analysis when the Project purports to increase bird habitat, thereby increasing the population of birds on-site and, A-103

[53] DEIR, p. 4.11-10.

[54] Klem Jr., D. 1990. Collisions between birds and windows: mortality and prevention. Journal of Field Ornithology 61:120-128. *See also* Longcore T, C Rich, P. Mineau et al. 2012. An Estimate of Avian Mortality at Communication Towers in the United States and Canada. PLoS One 7(4):e34025.

[55] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

A-101 It is not possible to accurately predict a specific number of avian collisions anticipated to occur due to implementation of the project. As described in Section 4.4 of the Draft EIR, special-status avian species (except for one individual) are not expected in the project area due to the lack of sensitive-species observations in the immediate project vicinity and the location and design requirements of new buildings on-site. The project would take the proper precautions to minimize the potential for avian strikes to the maximum extent practical, using the most current guidance from the City of San Diego and Wildlife Agencies.

Mortality thresholds for special-status avian species depend on the species and their population size in the region. One individual special-status species (yellow warbler) was observed onsite. This species is rare, but regionally common. The potential impacts to this species observed onsite would not detrimentally affect the regional viability of the population as a whole or the population of the species as a whole. Least Bell's vireo was not observed onsite, nor has it been observed in the vicinity in a number of years. This species is rarer than the yellow warbler, but because it has not been observed in the project vicinity and given the precautions taken through design measures addressed in Responses A-37b, A-57, and A-99, avian collisions would not have a significant impact on potentially occurring special-status species.

A-102 Comment noted. See Responses A-98 through A-101.

A-103 See Responses A-37c and A-57.

logically, the potential for a higher number of collisions at a building that poses the "greatest risk of avian collision on-site." *See* DEIR p. 4.4.-26. The Project activities in the nearby wetlands, when considered in combination with the Royal Palm Towers, constitutes an archetypal example of a "habitat 'sink' by attracting birds to places where they will be susceptible to heightened mortality." Attachment 4, section III.B. A-103

The DEIR is flawed because its analysis of the impacts associated with avian collision hazards is not sufficiently detailed. *Laurel Heights*, 47 Cal.3d at 405. Further, the Project description associated with this issue is inadequate to support a full evaluation of the issue. *Citizens for a Sustainable Treasure island*, 227 Cal.App.4th at 1052. A-104

C. The DEIR Discussion of Least Bell's Vireo Fails to Adequately Address Project Impacts to the Species

As discussed in Mr. Cashen's comments, the DEIR's analysis of impacts to the least Bell's vireo ("LBV"), a federally endangered species, is flawed because, while it takes credit for supporting LBV habitat, and assumes that LBV are present, it does not address the Project's numerous impacts on the LBV. A-105

Although the least Bell's vireo ("LBV") was not detected or observed during protocol-level surveys, the BTR concludes that habitat within the Project area is "suitable and capable of supporting breeding LBV."[56] Moreover, the DEIR explicitly states that it assumes the LBV will be present on the site in the future due to Project-related restoration and enhancement of suitable nesting habitat.[57] The DEIR fails to justify why LBV habitat on the Project site needs to be restored and enhanced if it is currently suitable and capable of supporting breeding LBV. Furthermore, if presence of LBV at the site is an assumption (or goal) of the Project: (a) the DEIR needs to incorporate a LBV monitoring program to validate that assumption, and (b) LBV use of the site needs to be reflected in the success criteria proposed for the Restoration and Enhancement Plan.

According to the BTR: "the Proposed Project is designed in a manner that increases the likelihood for the Site to support nesting [LBV] pairs in the future."[58] This conclusion appears to be based on the fundamental assumption that restoring native vegetation communities would improve habitat conditions for the LBV. That assumption is not necessarily valid because it ignores the numerous other factors that affect habitat suitability (e.g., presence of cowbirds, corridor width, A-106

[56] BTR, Appendix F, p. 4.
[57] DEIR, p. 4.4-26 and BTR, p. 36.
[58] BTR, p. 36.

A-104 Comment noted. See Responses A-98 through A-103.

A-105 Focused surveys and historic evidence show that least Bell's vireo are not currently present onsite, nor have they been documented on site for many years. Nonetheless, the project proposes to enhance existing riparian vegetation on-site, including southern cottonwood willow riparian forest vegetation that has potential to support least Bell's vireo.

It is the goal of the MSCP to protect and improve the value of the San Diego River and habitat and a movement corridor, and the proposed project must be in compliance with the MSCP (see Response A-37c). Although suitable, this habitat has the potential for enhancement through removal of nonnative species and trash, as well as revegetation with native species. Least Bell's vireo prefer dense willow habitat, typical of younger stands of willow thickets over mature forest habitat, with larger trees. The majority of the habitat proposed for restoration consists of disturbed habitat (little to no existing vegetation) and eucalyptus woodland, neither of which currently provide least Bell's vireo habitat. Though enhancement of habitat is a project goal, occupation of restored habitats by the species is not a specific project goal or requirement. See also Response A-107.

The Draft EIR analysis assumes the potential presence of least Bell's vireo in the future because 1) suitable habitat within the historic range of this species is present on site and will be made more suitable through implementation of restoration, and 2) it is possible that an individual could disperse into this available habitat. It is therefore necessary to consider potential impacts of the proposed project on least Bell's vireo that may occupy the site after project completion. Assuming the potential for presence allows the project to incorporate avoidance measures that will successfully detect and protect least Bell's vireo should any individuals disperse onto the site. Restoration/enhancement of habitat is aimed at improving habitat quality over existing conditions, which should make the area more attractive to many bird species, but it does not guarantee least Bell's vireo would inhabit the site based solely on this action; therefore statements alluding to this claim have been removed. At a minimum, the project would not cause a significant, adverse impact to vireo.

A-106 Statements referring to an increased likelihood for future occurrence of LBV on-site have been removed from the Draft EIR.

Factors that affect habitat suitability for least Bell's vireo include presence of cowbirds (Draft EIR Section 4.1.6.1), amount and quality of suitable habitat (namely width of riparian corridor and presence of appropriate native

and intensity of edge effects).[59] Whereas the Project may restore and enhance habitat from a vegetation standpoint, it would simultaneously degrade habitat by increasing the severity of adverse edge effects (edge effects are discussed further below). This could render the habitat unsuitable to LBV even if vegetative conditions are ideal. More importantly, it could create a habitat "sink" by attracting birds to places where they will be susceptible to heightened mortality (e.g., due to human disturbance, domestic cats, and window strikes) or reduced reproductive success.[60]

A-106

Without an analysis of limiting factors, an adaptive management strategy to address factors adversely affecting LBV habitat once the Project is implemented, and performance standards specific to LBV habitat use, the record does not support the findings made in the DEIR.

A-107

Attachment 4, section III.B.

Given the Project's stated commitment to supporting LBV habitat, and its assumption that the species is present, it must also address the Project's impacts on the species. The DEIR is flawed because it fails to do so.

D. The DEIR Does Not Adequately Analyze and Mitigate Impacts from Edge Effects

Although the DEIR recognizes that the Project could have "edge effects" on biological resources, it concludes that these impacts would be less than significant because edge effects already exist with the current hotel and convention center, and because the Project would comply with the *Land Use Adjacency Guidelines*. DEIR pp. 4.4-27 – 30. As Expert Cashen explains, the DEIR's analysis of edge effects is deficient for two general reasons:

A-108

First, the DEIR acknowledges the Project could exacerbate adverse edge effects on biological resources.[61] However, it fails to provide any actual analysis of this issue; it simply concludes the Project's contribution to additional, or more severe, edge effects would be less than significant. As discussed in subsequent sections, this conclusion is not supported by evidence.

Second, compliance with the *Land Use Adjacency Guidelines* would reduce, but not eliminate, adverse edge effects. The DEIR cannot assume implementation of

[59] *Ibid.*

[60] A "sink" habitat is one in which reproduction is insufficient to balance local mortality. The population can persist in the habitat only by being a net importer of individuals, which then become subject to mortality.

[61] DEIR, p. 4.4-40.

vegetation), and intensity of edge effects on the available suitable habitat. Enhancement and restoration of suitable habitat combined with restoration of an upland buffer (i.e., increased riparian corridor width) from surrounding anthropogenic disturbances, and compliance with the City's Land Use Adjacency Guidelines would increase the quality of riparian habitat in general.

The proposed enhancement and restoration of habitat would widen the area of native vegetation, and therefore, the buffer available along the San Diego River. In addition, the function of the San Diego River as a wildlife movement corridor between larger habitat patches improves when the associated vegetation provides sufficient structure and cover for protection, as well as food sources, and resting/perching opportunities). Edge effects from surrounding anthropogenic disturbances have been reduced through compliance with the Land Use Adjacency Guidelines (Draft EIR Section 4.1.6). In particular, domestic cats would not be a significant source of mortality with the new residential structure as only a few units on the first floor have doors that open to the outside. See Response A-37c for more discussion of window strikes and restored habitat as a habitat sink.

Furthermore, the function of the San Diego River corridor in the preserve system is not solely to provide nesting, establishment of occupied territories, and similar relatively stationary functions. Its function as a wildlife movement corridor between larger habitat patches is equally, if not more important. Corridors are more attractive to wildlife and better able to protect wildlife from edge effects when the habitat within them is high quality (i.e. provides enough structure and cover for protection, as well as food sources, resting/perching opportunities, etc.). The proposed restoration would provide these improved conditions. The proposed project simultaneously incorporates measures to reduce edge effects and improves the probability that wildlife using the River as a movement corridor will do so successfully.

At a minimum, the project would not cause a significant, adverse impact to vireo.

A-107 Focused surveys were conducted in Spring 2016 to identify the presence of least Bell's vireo due to the presence of suitable habitat. The findings were negative. Although the site does not currently support least Bell's vireo, prior to construction of the project (if conducted during the breeding season), a preconstruction survey would be conducted to check for the species again. Compliance with MSCP Land Use Adjacency Guidelines and project permit conditions would avoid impacts to least Bell's vireo.

A-108 The project has been designed in accordance with the MHPA Land Use Adjacency Guidelines and has addressed the potential impacts to edge effects. A

the guidelines would reduce adverse edge effects to a less-than-significant level, especially without a monitoring program that verifies that assumption.

Attachment 4, section 3.D.

A-108

Although the DEIR is deficient in its analysis of all edge effects, there are five types of edge effects, in particular, that were not properly analyzed and will have a significant impact on biological resources, including: predation, night lighting, brown-headed cowbird, human presence, and shading.

1. Predation

The introduction of 840 residential units, may of which are adjacent to the wetlands habitat on the Project site, would create conditions that would exacerbate native and non-native predation of birds by animals such as raccoons, skunks, and domestic cats. As Expert Cashen explains:

A-109

> Implementation of the Project would enhance conditions favorable for native and non-native predators (e.g., raccoons, skunks, and domestic cats). These predators can decimate bird communities.[62] For example, small remnant patches of breeding bird habitat in urban areas may contain such low numbers of a particular species that small increases in predation rates can cause extirpation.[63] In such cases, increased densities of cats and other predators subsidized by the surrounding urban landscape can be sufficient to cause loss of the species.[64]
>
> The BTR acknowledges: "human presence can lead to increased presence of mesopredators (e.g., raccoons, coyotes) and domestic pets that can prey upon or harass special-status species."[65] Incredibly, the DEIR's analysis of this issue is limited to the statement that: "[h]uman commensal wildlife species *likely* already occupy the BSA, and are expected to continue to use the BSA following

[62] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

[63] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

[64] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

[65] BTR, p. 70.

monitoring program of edge effects is unnecessary given the measures currently proposed by the project to address such issues. The Draft EIR determined impacts to be less than significant.

Section 4.1.6.1 of the Draft EIR describes specific Land Use Adjacency Guideline compliance approaches such as no direct impacts to native habitats; designing an onsite biofiltration basin to capture and filter runoff and utilizing existing drainage systems to minimize drainage impacts; shielding and directing lighting away from native habitat to minimize lighting effects; installing required barriers and signage to protect sensitive areas; and replacing parking spaces with native and park habitat to create a buffer between the MPHA and developed areas which would minimize noise, lighting, drainage and invasive effects.

A-109 Existing habitat and additional restored habitat could be subject to predation pressure due to the location of this habitat in the middle of a densely populated urban area. The project would decrease the number of hotel rooms and increase long term residential units in the area which does increase human presence and may increase the number of domestic pets that would be free to roam and potentially predate on native species. While residents of the new residential units may potentially have bird feeders and outdoor cats, only ground level units would have direct access to the outdoors. Units without direct outdoor access would be accessed via elevators, which would prohibit the ability to have an outdoor cat as a pet in most units.

Mesopredators such as skunks and raccoons are native and would already prey upon other native species, sensitive or not. These species would increase in number if a new and additional food source was present. Creating more trash that is accessible to these animals could provide an additional food source; however, the project proponent would dispose of trash in secure containers on a regular schedule to deter wild animals from visiting their property and subsequently increase in population. If some of these creatures were increasing in numbers, the project proponent would also likely implement a control program.

implementation of the project."[66] This minimal level of analysis is insufficient. The City must analyze how Project features (e.g., proposed residences) and outcomes (e.g., overall increase in human presence in the river corridor) might benefit predator populations. It then must analyze the potential consequences of the augmented (or new) predator populations on biological resources occurring in the Project area. Because the DEIR does not incorporate mitigation, the City does not have the basis to conclude the Project would not have an additional, or more severe, impact on special-status species due to an increase in mesopredators and domestic pets.

Domestic cats and other non-native animals kill millions of birds every year.[67] To reduce the effects of non-native animals on native birds, the Riparian Habitat Joint Venture recommends the following:

1. Avoid establishing human habitat near riparian zones.
2. Do not feed or otherwise encourage populations of feral animals.
3. Keep cats indoors.
4. Do not put bird feeders in a yard where a cat might ambush feeding birds.
5. Humanely control non-native species when necessary.

Implementing mandatory measures of this kind is feasible and would substantially reduce the effects of the Project on native birds (including special-status species). As a result, they should be incorporated into the EIR as mandatory mitigation obligations.

A-109

Attachment 4, section III.D.2.

The DEIR is flawed because it does not establish an existing baseline for edge effects associated with predation; does not provide a sufficiently detailed analysis of the impacts; and does not adequately mitigate the significant impacts that would result from predation.

2. Night Lighting

The DEIR recognizes that lighting can cause impacts in the MHPA, and that it is important to shield and direct lighting away from the MHPA. The analysis in the DEIR is over-simplistic, however, and fails to address key aspects of the problems associated with an increase of 840 residential units, many of which are adjacent to wetland habitat, and associated recreational development. As Expert Cashen explains:

A-110

[66] DEIR, p. 4.4-28. [emphasis added].

[67] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 93.

A-110 See Response A-45nn. Furthermore, all lighting installed onsite would be consistent with MSCP Subarea Plan 1.4.2, and buildings would be designed to reduce light pollution in accordance with the City of San Diego Municipal Code §142.0740 (Draft EIR Section 4.1.6.3). Project compliance with MHPA Land Use Adjacency Guidelines and City permit conditions would avoid lighting impacts.

Artificial light that alters the natural patterns of light and dark in ecosystems is termed "ecological light pollution." This is different from the broad-scale phenomenon "astronomical light pollution," whereby stars and other celestial bodies are washed out by light that is either directed or reflected upward.[68] Ecological light pollution has demonstrable effects on the behavioral and population ecology of organisms, with serious implications on community ecology.[69] The DEIR acknowledges nighttime lighting can affect wildlife in myriad ways.[70] The DEIR further acknowledges reorienting development on-site toward the San Diego River (including construction of new park space adjacent to the River) will increase the amount of light sources adjacent to sensitive habitats.[71] The DEIR, however, concludes that implementation of mitigation measure BIO-7 would mitigate significant adverse effects associated with nighttime lighting to a level below significance.[72] Mitigation measure BIO-7 states:

> To avoid indirect lighting impacts on wildlife, all lighting adjacent to the MHPA shall be shielded, unidirectional, and directed away from preserve areas using appropriate placement and shields. If lighting adjacent to the MHPA is required for nighttime construction, it shall be directed away from sensitive habitats, using appropriate placement and shielding.[73]

The DEIR's conclusion that BIO-7 would mitigate nighttime lighting impacts on wildlife to a less-than-significant level is unjustified because BIO-7 addresses "astronomical light pollution"—not "ecological light pollution" (i.e., shielded lights can still cause ecological light pollution).[74]

A-110

The DEIR states: "[a]ll lighting within 100 feet of the MHPA would be shielded and directed away from the MHPA. The conversion of 3.22 acres of existing parking lot adjacent to the MHPA to habitat and park space would also reduce the amount of light entering sensitive habitats within the MHPA compared to existing conditions."[75] This statement cannot be substantiated because the DEIR does not

[68] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.

[69] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.

[70] DEIR, p. 4.4-29.

[71] DEIR, p. 4.4-29.

[72] DEIR, p. 4.4-35.

[73] DEIR, pp. 4.4-31 and -32.

[74] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.

[75] DEIR, p. 4.1-49.

A-111 See Response A-45oo.

identify the amount of lighting that would be installed within 100 feet of the MHPA, nor does it identify the amount of lighting that currently exists at the 3.22-acre parking lot. Indeed, the DEIR fails to provide any quantitative information pertaining to: (a) lights currently operating in the Project area, and (b) new lights that would be installed as a result of the Project.

The DEIR acknowledges the Project includes new night lighting. However, it fails to identify: (a) the height and abundance of new lights; (b) the types of lights that will be installed; (c) the luminosity of the bulbs; and (d) the location of light fixtures. This information is essential to evaluating Project impacts, because effects to wildlife due to night lighting are dependent on the *illumination* (light incident per unit area), *intensity* (the number of photons per unit area) and *spectral content* (expressed by wavelength). A-110

Attachment 4, section III.D.3.

The DEIR is flawed because it does not establish an existing baseline for edge effects associated with night lighting; does not adequately or accurately describe Project lighting, including its type, location, and features; does not provide a sufficiently detailed analysis of the impacts caused by night lighting; and, does not adequately mitigate the significant impacts that would result from improper and excessive lighting.

3. Brown-headed cowbird

4.

The brown-headed cowbird is a major cause of decline in native bird species, including endangered bird species such as the least Bell's vireo. The brown-headed cowbird lays its eggs in other birds' nests, causing the other birds to raise the cowbird offspring, often at the cost of their own offspring. Expert Cashen explains the issue in the context of impacts to least Bell's vireo: A-111

Historically, the least Bell's vireo was one of the most common breeding birds in riparian habitat in California.[76] Today, the least Bell's vireo remains absent from the bulk of its historical range and is restricted to eight southern counties, with the majority of birds occurring in San Diego County.[77]

[76] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 19.
[77] *Ibid.*

> Nest parasitism by the brown-headed cowbird (a species that is not indigenous to California) is one of the primary reasons for the decline of the least Bell's vireo.[78] Because a parasitized nest rarely fledges any vireo young, nest parasitism of least Bell's vireo results in drastically reduced nest success.[79] Cowbird trapping has been shown to decrease the incidence of cowbird nest parasitism.[80] Intensive programs to control brown-headed cowbirds (e.g., at Camp Pendleton) have virtually eliminated cowbird parasitism of least Bell's vireo nests and facilitated vireo population growth.[81]

Attachment 4, section III.D.4.

The DEIR improperly assumes that the Project will not introduce new uses that would result in significant increases in the existing brown-headed cowbird population. *See* DEIR p. 4.1-54. Mr. Cashen notes in his comments that brown-headed cowbirds have been observed on the Project site, and that there are numerous features in the Project design, or that would be introduced at private residents, that are known to attract the species and that are conducive to their proliferation:

A-111

> Cowbirds are frequently associated with anthropogenic features, including suburban areas with lawns, bird feeders, parks, picnic areas, and internal and external edges created by development.[82] The Project would result in the creation of park space (e.g., for picnicking) adjacent to the MHPA.[83] It also entails development of residential housing and a stormwater management area. These features could support and attract cowbirds.[84]

Attachment 4, section III.D.4.

[78] Lynn S, B Kus. 2011. Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California. 2011 Annual Data Summary. USGS Western Ecological Research Center, San Diego Field Station. 59 pp.
[79] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 19.
[80] Lynn S, B Kus. 2011. Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California. 2011 Annual Data Summary. USGS Western Ecological Research Center, San Diego Field Station. 59 pp.
[81] *Ibid.*
[82] U.S. Department of the Interior, Bureau of Reclamation. 2004. Brown-headed Cowbird Management Techniques Manual. p. 11.
[83] DEIR, p. 4.1-50.
[84] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 76.

A-112 See Responses B-5, B-33, B-41.

Mr. Cashen identifies two flaws in the DEIR's analysis – or lack thereof – of brown-headed cowbird impacts. First, the DEIR makes a bald statement that the Project will not "result in significant increases" in the brown-headed cowbird population without providing any definition of what would constitute a "significant increase." Without defining the threshold, the DEIR cannot meaningfully conclude that the threshold will not be surpassed. Second, as Mr. Cashen explains, "because the Project would not incorporate cowbird monitoring," as is required by the MSCP Subarea Plan, "the DEIR has no basis for the conclusion that the Project would not 'result in significant increases to the existing brown-headed cowbird population.'" Attachment 4, section III.D.4; MSCP Subarea Plan p. 165.

A-111

The DEIR is flawed because it does not adequately or accurately describe key features in the Project that are necessary to fully understand the impacts associated with the brown-headed cowbird; makes conclusory statements and does not provide a sufficiently detailed analysis of the impacts caused by the brown-headed cowbird; and does not adequately mitigate the significant impacts that would result from the increase in brown-headed cowbird associated with Project features that are described.

5. Human presence

The DEIR assumes that the introduction of residential and recreational uses will not have significant edge effects on biological resources, but does not provide an adequate basis for that conclusion. As Expert Cashen explains:

> Recreation, and human presence in general, can have negative impacts on ecosystems, plants, and wildlife. Impacts can be caused by trampling, soil compaction, erosion, disturbance (due to noise and motion), pollution, nutrient loading, and introduction of non-native invasive plant species. Some birds, such as raptors, tend to desert their nests if the birds are exposed to human activity during incubation.[85] Even shouting is enough to keep raptors away from their nests.[86] Absence from the nest can lead to missed feedings, predation on eggs or young, or to overheating, chilling, or desiccation of eggs and young.[87]
>
> The Project includes several features (e.g., new parks and trails), and management actions (e.g., elimination of transient encampments), that would promote increased recreational use of the San Diego River corridor ("corridor").[88] In

A-112

[85] Richardson CT, CK Miller. 1997. Recommendations for Protecting Raptors from Human Disturbance: A Review. Wildlife Society Bulletin 25(3):634-638.

[86] *Ibid.*

[87] *Ibid.*

[88] San Diego River Natural Resource Management Plan, p. 117.

addition, the Project includes the construction of up to 840 multi-family dwelling units in close proximity to the corridor (i.e., within ¼-mile of the river). Therefore, one of the reasonably foreseeable outcomes of the Project is a considerable increase in human activity within and along the corridor.

The DEIR's analysis of this issue is limited to the statement that the Project "has the *potential* to increase human presence in the vicinity of sensitive habitats."[89] It is not possible to assess potentially significant impacts to sensitive species and habitats without an estimate of how much the Project might increase human activity in the corridor. A-112

Attachment 4, section III.D.1.

The DEIR is flawed because it does not establish an existing baseline for edge effects associated with human presence. It would seem apparent that the current hotel and parking lot, neither of which is oriented towards the river, would generate very little human presence near the wetland habitat. The DEIR, however, fails to provide any description of the existing human presence. Instead, it vaguely concludes that the Project has the "potential" to increase human presence. DEIR p. 4.4-29. Given that the Project would replace a parking lot on the northeast portion of the Project site with a residential building that has 150 dwelling units oriented towards the River Corridor, and would put over three acres of public park space complete with picnic areas along the wetland habitat and MHPA, there is no other reasonable conclusion but that the Project would *increase* human presence that would cause significant edge effects. The DEIR avoids that conclusion by failing to establish a baseline and providing insufficient detail in its impacts analysis.

6. Shading

The DEIR fails to address the edge effects of shading caused by buildings near habitat areas. As explained above in section VII.C.1, and in Mr. Cashen's comments: A-113

The proposed Project includes a new seven-story residential building on the south side of the San Diego River corridor. The building would be approximately 85 feet tall.[90] The DEIR fails to analyze how shade from the building would affect vegetation (and habitat) within the river corridor. Shade can alter plants in numerous ways. For example, shade can affect phenology (e.g., timing of

[89] DEIR, p. 4.4-29. [emphasis added].
[90] DEIR, p. 4.11-14

A-113 Sections 4.4.4.2 and 4.11.6.2 of the Final EIR has been updated to include an analysis of shading effects on vegetation resulting from the project and is included below

Shading: The proposed project includes a new residential structure that has a potential to cast shade on biological habitat along the San Diego River within the project site. The northern edge of the proposed structure on Lot 4 within the Residential District would be located approximately 140 feet from the habitat area. However, the northeast corner of the proposed structure will be approximately 80 feet at the closest point from the delineated habitat area. The habitat area would be considered shade-sensitive because sunlight is important to plant growth and habitat function.

An analysis based on computer generated shade diagrams using a 3D digital model of the proposed improvements was prepared for the project as shown in Figure 4.4-4. Shading effects are dependent upon several factors, including the local topography, the height and bulk of a project's structural elements, the shade-sensitivity of the adjacent land use, the season and consequent length of shadows, and the duration of shadow projection. The study time period for evaluation utilized both the winter and summer solstice (9:00 AM to 3:00 PM and 9:00 AM to 5:00 PM respectively).

The shade study determined that the proposed project would not cast shade within the delineated habitat area for more than four hours between the hours of 9:00 AM and 5:00 PM Pacific Daylight Time (between early April and late October). The proposed project would cast a moving patch of shade on a portion of the habitat area for more than three hours between the hours of 9:00 AM and 3:00 PM Pacific Standard Time on approximately 50 days (between November 27 and January 15). The area of habitat shaded would average approximately 600 sq. feet at ground-level. The maximum ground area that would be shaded is approximately 1,200 sq. feet and would occur on the winter solstice for less than 15 minutes. These impacts are measured at ground-level. Riparian habitat is tall, with most shrub species being more than 2' tall and mature tree species ranging from 20-60' tall. The spatial extent of shading and the duration of shading would decrease with height, with the tops of tree canopies being entirely free of shading impacts year-round. As identified in Section 11.4.6, the impact of shading on the habitat area would be less than significant.

Also see Response A-58.

flowering and seed maturation), biomass, rate of growth, and survivorship.[91] It can also affect a plant's ability to respond to competition and defoliation (e.g., due to trampling or herbivory). These effects can have significant impacts on the ecological community. As a result, the City must analyze potentially significant impacts due to shading from the Project's buildings and structures.

A-113

Attachment 4, section III.D.5.

The DEIR is flawed because it does not adequately analyze or mitigate the edge effects of the excessively tall building on Lot 4.

E. The DEIR Fails to Adequately Mitigate Impacts to Biological Resources

The DEIR sets forth mitigation measures for various Project impacts. The DEIR fails, however, to substantiate the benefit, efficacy, or implementation of mitigation measures related to several issues and species. Further, the DEIR does not provide sufficient detail regarding several mitigation measures to evaluate their validity. Finally, several mitigation measures in the DEIR lack any standards that would provide a basis to determine success.

A-114

1. Nesting birds

The DEIR's proposed mitigation for nesting birds rests on unsubstantiated assumptions and a faulty implementation plan. As explained in Expert Cashen's comments:

Most nesting bird species are protected by the Migratory Bird Treaty Act ("MBTA"), and in some cases the State and federal government. The DEIR requires the Applicant to conduct a pre-construction survey for nesting birds "if grading or vegetation clearing/trimming is proposed in or adjacent to native habitat."[92] The DEIR does not justify limiting the surveys to "native habitat." Numerous bird species protected by the MBTA are known to construct nests in nonnative habitat.

A-115

The DEIR fails to provide evidence that a pre-construction survey would mitigate impacts to nesting birds to a less-than-significant level. First, the DEIR fails to establish minimum standards for the pre-construction nesting bird survey, including the acceptable survey techniques, level of effort, and extent to which the survey should extend into "adjacent" habitat. Second, nest finding is labor intensive and can be extremely difficult due to the tendency of many species to

[91] For example, *see* Pierson EA, RN Mack, RA Black. 1990. The effect of shading on photosynthesis, growth, and regrowth following defoliation for *Bromus tectorum*. Oecologia 84(4):534-543. Abstract available at: <http://link.springer.com/article/10.1007/BF00328171>.
[92] DEIR, p. 4.4-31.

A-114 Comment noted. See Responses A-115 through A-119.

A-115 Development activities would occur outside the bird breeding season. If working outside the breeding season is for any reason unavoidable, compliance with project permit conditions would ensure avoidance of impacts to migratory birds. Methods described in the project permit conditions are standard practice and are expected to allow for successful identification of nesting birds if present.

The U.S. Fish and Wildlife standards and methods included in the comment for conducting the pre-construction nest searches are subjective and depend on site conditions to implement; however, because these are standard practices, the qualified biologist/ornithologist selected for the task would implement similar methods (if not the same), and potentially others not listed, to identify nests to the greatest degree attainable.

construct well-concealed or camouflaged nests.[93] As a result, most studies that involve locating bird nests employ a variety of search techniques. These include watching parental behavior (e.g., carrying nest material or food), territory mapping, and systematically searching nesting substrates.[94] Based on the density and vertical complexity of vegetation in the Project area, it would be impossible for biologists to reliably locate all bird nests that could be affected by Project activities. Recognizing the inherent difficulty in locating bird nests, resource agencies recommend limiting activities that could impact nesting birds to the non-breeding season. USFWS guidelines state:

> If a proposed project or action includes the potential for take of migratory birds and/or the loss or degradation of migratory bird habitat and work cannot occur outside the migratory bird nesting season (either the primary or maximum nesting season), project proponents will need to provide the USFWS with an explanation for why work has to occur during the migratory bird nesting season. Further, in these cases, project proponents also need to demonstrate that all efforts to complete work outside the migratory bird nesting season were attempted, and that the reasons work needs to be completed during the nesting season were beyond the proponent's control.[95]

A-115

In addition, the City's Subarea Plan indicates exotic species removal activities should be avoided during the reproductive season.[96] If the Applicant will be allowed to conduct Project activities during the avian nesting season, the City must require the Applicant to provide justification for why those activities cannot occur outside the nesting season. In addition, the City must specify the techniques that should be applied to nest surveys, the expected level of effort (i.e., hours per unit area), the search area, the time of day surveys will be permitted, and the techniques that should be used to minimize human-induced disturbance.

Attachment 4, section IV.A.

The DEIR's mitigation of impacts to nesting birds is flawed because it does not provide adequate specificity regarding pre-construction surveys and removal of exotic species.

[93] DeSante DF, GR Geupel. 1987. Landbird productivity in central coastal California: the relationship to annual rainfall and a reproductive failure in 1986. Condor. 89:636-653.

[94] Martin TE, GR Geupel. 1993. Nest-Monitoring Plots: Methods for Locating Nests and Monitoring Success. J. Field Ornithol. 64(4):507-519.

[95] U.S. Fish and Wildlife Service, Migratory Bird Management. 2010. Suggested Priority of Migratory Bird Conservation Actions for Projects. p. 1.

[96] Subarea Plan, p. 54.

2. Western Red Bat

As with nesting birds, Mr. Cashen explains that the DEIR fails to provide adequate specificity regarding pre-construction surveys of the Western Red Bat:

> The DEIR requires the Applicant to conduct a pre-construction survey for the western red bat "if grading or vegetation clearing/trimming is proposed in or adjacent to native habitat during the typical bat breeding season defined by the City's MSCP Subarea Plan (i.e., March–September)."[97] The DEIR fails to establish minimum standards for the survey, including the timing of the survey in relation to disturbance activities, and the extent to which the survey should extend into "adjacent" habitat.
> Western red bat roosts are located primarily in the foliage of trees or shrubs.[98] Roosts are very difficult to locate and cannot be reliably detected through a standard "preconstruction" survey.[99] As a result, the mitigation measure proposed in the DEIR is insufficient to avoid and minimize potentially significant impacts to this species.

Attachment 4, section IV.B.

A-116

3. Southwestern Pond Turtle

As explained above in section V.B, no survey was conducted for the Southwestern Pond Turtle, and the DEIR therefore fails to establish the required baseline for this special status species. Given the complete lack of a baseline, it is not possible to evaluate the impacts of the Project on the species. But, the species could nest in terrestrial areas up to 93.7 meters from the River. *See* Attachment 4, section IV.D. As Mr. Cashen explains, "[t]he DEIR fails to incorporate mitigation to avoid and minimize impacts to pond turtles (including nests) that may occur in terrestrial habitat impacted by the Project."

A-117

4. Other Special-Status Species

The DEIR fails to evaluate impacts and mitigate impacts to special status species that must be assumed to occur at the Project site. As Mr. Cashen explains, the DEIR

> fails to require surveys, avoidance measures, or any other mitigation for potentially significant impacts to special-status plants and herptile species that

A-118

[97] DEIR, p. 4.4-31.

[98] Western Bat Working Group. 2005 (Update). Species Accounts: Western Red Bat. Available at: <http://www.wbwg.org/speciesinfo/species_accounts/allbats.pdf>.

[99] *Ibid.*

A-116 The western red bat only has potential to roost in large trees within and adjacent to the river corridor, along with scattered trees and large shrubs elsewhere in the Biological Study Area. Suitable foraging habitat within the Biological Study Area includes the vegetation communities and open water within the Biological Study Area. The project has been modified to avoid direct impacts to existing native vegetation, and therefore the project is not expected to cause a reduction in foraging habitat. Given the typical habitat of red bat, the required pre-construction surveys would be adequate to determine presence or absence and therefore to assess potential project impacts to this species. Compliance with project permit conditions Mitigation Measure BIO-5b would avoid and minimize impacts to roosting habitat. Furthermore, detection of this species in trees is best done from below as they tend to choose roosts in areas with a clear path below them, which would also make spotting them easier from below during a preconstruction survey, if necessary.

A-117 The southwestern pond turtle only has potential to occur in aquatic/wetland habitat within and immediately adjacent to the river channel corridor. The project has been modified to avoid impacts to wetlands, and therefore the project is not expected to impact this special-status species. The comment noted that the turtle may utilize terrestrial habitat up to 93.7 meters from the water. Their preferred terrestrial habitat consists of burrows in leaf litter or soils for overwintering purposes, with the majority of their time spent in water. If assumed present, the majority of the 1,500-foot area around the potential habitat (Habitat Area as defined in the BTR and Final EIR), is existing development, while the proposed development footprint is 100 percent developed with no potential for burrows.

A-118 The Draft EIR evaluates the probability of occurrence for special-status species, including those for which focused surveys were not conducted. These species are listed because they historically occur in an area much larger than the actual project development footprint. The project permit conditions include measures to protect special-status species that have/have not been detected in the Biological Study Area, but which have a moderate to high potential to occur. Land Use Adjacency Guidelines and project permit condition compliance avoid and minimize indirect impacts to special-status species related to drainage, toxics, noise, lighting, barriers, invasives, and grading/land development. The permit conditions also specifically state that a qualified Biological Monitor shall regularly monitor all phases of construction, including restoration work that would take place in areas that may potentially support these species.

It should be noted that all the species listed in this comment only have the potential to occur in aquatic/wetland habitat within and/or immediately adjacent

could be impacted by the Project. The City's Biology Guidelines direct the City to assume presence of special-status species that have a moderate to high potential for occurrence, *if* surveys are not done at the appropriate time of year. Therefore, the City must assume presence of:

- Western spadefoot
- Two-striped gartersnake
- South coast gartersnake
- San Diego marsh-elder
- San Diego sagewort
- Southwestern spiny rush

A-118

Because the DEIR does not incorporate mitigation for potentially significant impacts to these species specifically, it does not have the basis to conclude: "[d]irect and indirect impacts to special-status plant and wildlife species are mitigated to a level below significance with implementation of BIO-1 through BIO-12."[100] Indeed, mitigation measures BIO-1 through BIO-12 do not require any attempts to locate these species prior to implementation of the Project. As a result, impacts to the six species listed above would be potentially significant and unmitigated.

Attachment 4, section IV.E.

5. Fugitive Dust

The DEIR's mitigation measure addressing fugitive dust states,

To avoid indirect impacts to sensitive vegetation communities and special-status plant species, dust suppression measures shall be implemented during construction to minimize the creation of dust clouds. These measures include applying water at least once per day or as determined necessary by the biological monitor to prevent visible dust emissions from exceeding 100 feet in length in any direction.

A-119

DEIR 4.4-35.

Sensitive vegetation communities are located within 100 feet of construction areas, and special-status species may also be located in this area. *See* Attachment 4, section IV.C. Thus, a mitigation measure that allows dust emissions to extend 100 feet "would result in a potentially significant, unmitigated impact on sensitive botanical resources." *id.* The DEIR is flawed because it does not address impacts from dust within the proposed 100-foot perimeter.

[100] DEIR, p. 4.4-35.

to the River channel corridor. The project would not result in impacts to wetlands; therefore, impacts to the species listed in this comment would not result with project implementation.

A-119 As required by project permit conditions, dust suppression would occur over the majority of the construction site once per day or as determined by the biological monitor. This condition would still apply in construction areas within 100 feet of sensitive vegetation communities or special-status species as the biological monitor would require more frequent watering to prevent dust from impacting sensitive resources.

F. The Restoration Plan is Inadequate

The DEIR claims that there will be restoration and enhancement activities over a large portion of the wetlands area in the norther portion of the Project site. These activities are key features of the Project, both because they form the core of the proposed mitigation activities, and play a role in the public's and decision-makers' evaluation of the value of the Project. As discussed in Expert Cashen's comments, the "restoration" and "enhancement" activities do not employ basic scientific rigor and are dubious in value:

A-120

> A key component of the Project is the restoration and enhancement of habitat along the San Diego River corridor. However, the DEIR provides almost no discussion of what restoring and enhancing "habitat" actually means: for instance, it does not establish what constitutes habitat or define the essential components of habitat. This issue is confounded because the DEIR does not clearly define the goals of the Restoration and Enhancement Plan ("Plan"), and thus, it is unclear whether the purpose of the Plan is to restore (and enhance) habitat for plants, wildlife, or the entire suite of native species that historically occurred in the Project area.

A-121

> According to the BTR, the Project would restore and enhance degraded habitats on-site to generate *"a healthy, functioning river ecosystem."*[101] Therefore, although not explicitly stated, the BTR claims the Project would restore (and enhance) habitat for native vegetation, fish, and wildlife, as well as the ecosystem processes needed to sustain those organisms. Morrison (2002) provides a summary of the basic information needed for a successful wildlife restoration plan:
>
> > Much of restoration involves improving the conditions for native species of wildlife. To be ultimately successful, our restoration plans must be guided by the needs of the wildlife in the project area. We need information on species abundances, distribution, both current and historic. We need details on habitat requirements, including proper plant species composition and structure. We need to understand niche relationships, especially constraints on resource acquisition. We need to know food requirements and breeding locations. We need to understand the role that succession will play in species turnovers. We need to know the problems associated with exotic species of plants and animals, the problems of restoring small, isolated areas, and more... *Applying general prescriptions most often leads to*

[101] BTR, p. v. [emphasis added].

A-120 See Response A-11. As there are no impacts to wetlands, therefore no mitigation required. The project includes restoration/enhancement of 8.11 acres of the riparian corridor along the San Diego River. 2.76 acres of this restoration is a requirement of MND No. 118318, while the remaining 5.35 acres is additional restoration provided by the project. A Revegetation/Restoration Plan(s) and Specifications has prepared and reviewed by City staff. A final Revegetation/Restoration Plan(s) and Specifications would be required per project permit conditions. These plans would be prepared in accordance with the San Diego Land Development Code (LDC) Chapter 14, Article 2, Division 4, the LDC Landscape Standards submittal requirements, and Attachment "B" (General Outline for Revegetation/Restoration Plans) of the City of San Diego's LDC Biology Guidelines (July 2002). Page 65 of the Draft EIR describes the Habitat Enhancement/Restoration essential components.

A-121 See Response A-120. As described in Section 3.2.1.1 of the Draft EIR, the goals of the revegetation plan includes restoration and enhancement of approximately 8.11 acres of native habitat, including 6.98 acres located within the MHPA. This includes 2.53 acres of restoration and enhancement to riparian habitat and the addition of a 0.23 acre coastal sage scrub strip, as required by Mitigated Negative Declaration (MND) No. 118318 and Site Development Permit No. 400602. The remaining 5.35 acres includes the restoration and enhancement of riparian habitat, additional coastal sage scrub restoration, and the restoration of oak woodland habitat, beyond the requirements of Site Development Permit No. 400602. The Draft EIR also describes the Habitat Enhancement/Restoration essential components. The goals of the revegetation plan are set on establishing certain habitats. Restoration is not proposed at an ecosystem scale. The level of detail requested, such as food requirements and breeding locations, is not necessary in order to evaluate the project's potential impacts and mitigation requirements.

A-121

unpredictable results, some of which may cause more harm than good.[102]

The Applicant did not collect data on the abundances and distribution of native wildlife in the Project area. Similarly, the Applicant did not assess the factors affecting habitat use in the Project area, including constraints on reproduction and resource acquisition. Therefore, the Applicant did not acquire the site-specific information needed for a successful restoration plan.

A-122

Instead of collecting data and assessing ecological constraints, the Applicant simply assumed that replacing exotic plants with native ones would benefit native wildlife; that ecosystem functions and values would improve; and that habitat at the site would be "restored." These are not necessarily valid assumptions because habitat suitability is dictated by numerous biotic and abiotic factors besides vegetation. For example, because plants exhibit some redundancy in ecosystem function, exotic plant species can substitute in part for natives in performing a range of ecosystem functions, including wildlife support.[103] Indeed, in some cases native wildlife species preferentially select exotic plants over native ones, and the factor limiting habitat suitability is entirely independent of plant species composition.[104] Documents prepared by the Applicant have not demonstrated comprehension of these issues. Although I strongly support efforts to restore and enhance habitat within the San Diego River corridor, the Applicant should not attempt those efforts until it collects the data needed to gain a thorough understanding of existing habitat conditions and constraints.

A-123

1. Goals and Performance Standards

A-124

The Plan fails to articulate the specific goals of the Applicant's habitat restoration and enhancement efforts. This impairs the ability to evaluate the appropriateness of the performance standards proposed in the Plan.

A-125

The performance standards proposed in the Plan do not reflect success of a habitat restoration program. As Morrison (2002) and other have pointed out, the success of a habitat restoration project should be judged by how wildlife species

[102] Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). pp. 1 and 2. [emphasis added].
[103] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.
[104] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.

A-122 See Responses A-10 and A-121.

A-123 See Responses A-8 and A-121.

A-124 The goal of the revegetation plan is to restore and enhance the habitats that currently exist. Performance standards are incorporated into the Restoration and Enhancement Plan to help achieve this goal (See BTR Appendix A).

A-125 See Response A-121.

respond to it.[105] The Applicant's Plan does not incorporate any measures of, or performance standards for, wildlife response. Indeed, the performance standards proposed in the Plan are limited to container plant survival; and native plant cover, density, and diversity relative to reference sites.[106]

A-125

RECON (2012) prepared a mitigation plan to address the requirements of the stipulated judgment.[107] In February 2013, the City issued a Site Development Permit (SDP #400602) for the restoration and enhancement of the site. The DEIR proposes a new restoration and enhancement plan (prepared by AECOM) that would supersede RECON's 2012 plan.[108] The DEIR discloses that the Applicant has proposed modifying the previously required SDP Restoration/Enhancement Area. However, the DEIR fails to disclose that the performance standards proposed in AECOM's plan are much less rigorous than the ones in RECON's plan. Specifically, RECON's plan included performance goals pertaining to: (1) structural diversity, coverage, and spatial density of habitat; (2) percent of exotic and invasive vegetation present; (3) hydrologic regime of the riparian zone, hydrologic inputs, and saturation duration; (4) micro and macro topographic complexity; and (5) vegetation roughness and organic carbon.[109] The DEIR fails to justify why performance standards pertaining to many of these topics have been omitted from the currently proposed Plan.

A-126

2. Proposed Monitoring Methods

AECOM's Plan proposes qualitative and quantitative monitoring for five years following the initial restoration and enhancement efforts. The Plan states:

> Beginning in Year 2, permanent vegetation sampling stations will be established within the restoration area to measure year-to-year changes in shrub or tree cover, density, and diversity following the protocol of the California Native Plant Society (CNPS) Plant

A-127

[105] Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). p. 1. *See also* Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 142. *See also* USGS Western Ecological Research Center [webpage]. n.d. Bird Use of Restored Riparian Habitat. Available at: <http://www.werc.usgs.gov/Project.aspx?ProjectID=46>.

[106] BTR, Appendix A, pp. 10 and 11.

[107] RECON Environmental, Inc. 2012. Conceptual Mitigation Plan for the Town & Country Hotel Interim Parking Lot Expansion Project. Project No. 118313. June 13, 2012.

[108] BTR, Appendix A.

[109] RECON Environmental, Inc. 2012. Conceptual Mitigation Plan for the Town & Country Hotel Interim Parking Lot Expansion Project. Project No. 118313. June 13, 2012. p. 27.

A-126 The new restoration plan prepared for the project supersedes RECON's 2012 plan because 1) the project is now providing a comprehensive plan for the Site Development Permit *plus* the additional restoration and enhancement proposed by the project; and 2) the new plan includes minor updates to the targeted habitat types along the northern edge of the Union Tribune parking. Appropriate adjustments were made to ensure that native vegetation planted in this area establishes and self-sustains after the 5-year monitoring period. See also Response A-121. New success criteria were included to reflect the new target vegetation communities proposed in the restoration plan. new restoration plan prepared for the project supersedes RECON's 2012 plan because 1) the applicant is now providing a comprehensive plan for the Site Development Permit *plus* the additional restoration and enhancement proposed by the project; 2) the 2012 report includes outdated success standards and plant palettes for the targeted vegetation communities that are not currently implemented by many restoration practices; and 3) as discussed in Section 4.4.5.2 of the Draft EIR, flaws were identified in the areas marked for riparian restoration along the northern edge of the Union Tribune parking lot. Appropriate adjustments were made to ensure that native vegetation planted in this area establishes and self-sustains after the 5-year monitoring period. See also Response A-121.

A-127 Comment noted. This comment is an excerpt from the EIR describing proposed restoration monitoring methods.

> Communities Project sampling method based on a 50-meter point transect centered on a 5x50-meter plot…At least one plot per three acres will be established in each plant community of a specific restoration area to determine vegetation cover, plant community composition, vegetation density, and plant diversity of each area.[110]

A-127

The proposed sampling scheme needs to be clarified. It is unclear what AECOM means by a sampling method based on "a 50-meter point transect [line] centered on a 5x50-meter plot" (i.e., a point-line centered on a rectangle). The DEIR does not include a copy of the "CNPS Plant Communities Project sampling method," nor could I find anything with that name on CNPS's website (or anywhere online).

A-128

The sampling effort described in AECOM's Plan is not appropriate for the proposed Project. Establishing one plot per three acres in each plant community equates to one plot in the oak woodland, one plot in the coastal sage scrub, and two plots in the riparian forest. This is unlikely to result in a representative sample and cannot be used to demonstrate success throughout the entire restoration/enhancement area.

A-129

AECOM's Plan proposes performance standards for native plant diversity; however, it does not identify how diversity will be calculated. As discussed previously, *diversity* is expressed as an index that accounts for species richness and evenness. Species composition is not equivalent to diversity, as suggested in the Plan.[111]

A-130

3. Reference Sites

AECOM's Plan indicates: "[v]egetation sampling data will be compared to baseline data collected at reference sites in nearby native plant communities. Results will objectively demonstrate if the restoration areas approach the community characteristics of the reference habitat."[112] The Plan needs to identify the statistical techniques that will be used for this comparison.

A-131

The sampling methods proposed in AECOM's Plan fail to account for the vertical stratification associated with least Bell's vireo habitat. Kus (1998) used the "stacked cube" method to quantify vegetation structure at least Bell's vireo restoration sites. She then compared the data to a model of canopy architecture

A-132

[110] BTR, Appendix A, p. 9.
[111] BTR, Appendix A, p. 10.
[112] BTR, Appendix A, p. 9.

A-128 The process of estimating cover is identified in the Restoration Plan, Appendix A of the BTR (letters a through f under number 6). These methods follow those described in the California Native Plant Society Relevé Protocol (CNPS Vegetation Committee, October 20, 2000 (revised 8/23/2007). The text in the BTR has been revised as follows:

Beginning in Year 2, permanent vegetation sampling stations would be established within the restoration area to measure year-to-year changes in shrub or tree cover, density, and diversity following the California Native Plant Society Relevé Protocol (CNPS Vegetation Committee, October 20, 2000 (revised 8/23/2007), which uses a combination of both point-intercept transects (50-meter) and sampling plots (5 x 50 meters).

A-129 The Restoration Plan, which is provided for informational purposes in Appendix A of the BTR, states that success would be measured by sampling at least one plot per three acres in each target habitat community. Sampling is not limited to only one plot per three acres. The restoration ecologist may add additional sampling plots as necessary to adequately assess the condition of the restoration area in coordination with appropriate City staff.

A-130 See Response A-128.

A-131 Reference site monitoring would be conducted using the same methods as the quantitative monitoring. At least two 5 x 50 meter plots would be sampled in adjacent native habitat that corresponds to the targeted habitat communities in the revegetation plan. Reference site monitoring would be conducted concurrently with quantitative monitoring, starting in year two of the monitoring period and lasting till year five or whenever the site is signed off by appropriate City staff.

A-132 Restoration success criteria for this project are based on percent cover as noted in the Revegetation Plan (Appendix A of the BTR which is Appendix E of the Draft EIR). Restoration success is not based on wildlife occupancy.

derived from least Bell's vireo territories in natural habitat.[113] Whereas the proposal to compare sampling data from the Project site with data from reference sites is appropriate, the Plan needs to incorporate measurements of vertical stratification. To facilitate adaptive management, data collected at the Project site should be capable of being used in the habitat model developed by Kus (1998). A-132

4. Professional Experience

The Applicant proposes use of a Restoration Specialist that: "will have a minimum of two years of experience in upland and riparian habitat restoration, understand upland and riparian plant communities, and have expertise in upland and riparian plant and wildlife identification and ecology."[114] The proposed qualifications are vague and provide little assurance the Restoration Specialist would be capable of implementing a successful restoration program. A person with as little as two years of experience is insufficient, especially because previous restoration efforts have shown that experience with necessary restorative techniques is often inadequate.[115] Indeed, upland and riparian habitat restoration projects cannot even be completed in two years. This issue is exacerbated because the DEIR does not identify the party responsible for approving the qualifications of the Restoration Specialist. A-133

Attachment 4, section IV.G.

As described in Expert Cashen's comments, the restoration and enhancement plan is deficient in numerous respects. It fails as mitigation because there is insufficient detail; it does not provide adequate means for measuring and monitoring the progress or success; it utilizes improper metrics for success; it utilizes ineffective methods; and, there are not adequate resources provided for proper implementation. A-134

G. The Project's Restoration and Enhancement Cannot Qualify as Mitigation Because There is No Bond to Ensure Implementation

As detailed above in section V.D, the Project site is the subject of a long history of illegal conduct, unfulfilled promises, and failed implementation. A stipulated judgment in 2007 resolving a dispute over illegal conduct two years prior required that Town and Country LLP dedicate a 7.1 acre open space easement and complete several environmental projects, A-135

[113] Kus BE. 1998. Use of Restored Riparian Habitat by the Endangered Least Bell's Vireo (*Vireo belliipusillus)*. Restoration Ecology 6(1):75-82.

[114] BTR, Appendix A, p. 4.

[115] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.

A-133 Comment noted.

A-134 The proposed restoration would implement the requirements of Site Development Permit No. 400602 and provide an additional 5.35 acres of restoration enhancement. The project has been modified to avoid wetland impacts. See Responses A-126, A-128, and A-129 for discussion of the restoration plan metrics for success and adequacy of methods.

A-135 Comment noted.

including riparian enhancement activities. Attachment 6 ¶¶22-23. The stipulated judgment required that these environmental projects commence "[w]ithin 60 calendar days of the entry" of the stipulated judgment. *Id.* ¶22. The stipulated judgment was entered on March 22, 2007. More than *nine years later*, Town and Country LLP and its successor (a joint venture that includes the owner of Town and Country LLP) have failed to satisfy this requirement.

A-136

CEQA requires that there is a "binding commitment to implement the mitigation measures" that are incorporated in a project, or that are a condition of project approval, to ensure their implementation. *Fed'n of Hillside and Canyon Ass'ns.*, 83 Cal.App.4th at 1262. Where a project proposes restoration as mitigation, the City's Biology Guidelines require a surety bond "to assure implementation of all restoration efforts." Biology Guidelines 45. But, there is nothing in the DEIR stating that the Project Proponents will post a surety bond to assure implementation of the restoration. The DEIR is thus deficient because it does not satisfy a provision of the Biology Guidelines that is designed to ensure that there is a "binding commitment to implement the mitigation measures." *Fed'n of Hillside and Canyon Ass'n.*, 83 Cal.App.4th at 1262.

X. THE DEIR'S AIR QUALITY ANALYSIS IS FLAWED

A-137

Air quality impacts are a key component of the CEQA analysis. *Bakersfield Citizens*, 124 Cal.App.4th at 1220. If an impact is significant, the agency must impose all feasible mitigation measures, and may only declare the impacts to be unavoidable if it remains significant after imposition of all feasible mitigation measures. The DEIR fails this test when it comes to: construction air quality impacts, the air emissions from demolition, the significant air quality impacts of overlapping construction and Project operation and insufficient air quality mitigation.

A. The Project's Construction Air Quality Impacts Are Understated

A-138

As set forth in the Hagemann expert comment letter in Attachment 1, the DEIR's modeling greatly underestimates the air quality emissions of particulate matter ("*PM*"), smog forming oxides of nitrogen ("*NOx*") and reactive organic gasses ("*ROG*") and carbon monoxide ("*CO*") from diesel off road vehicles used for the Project's extensive construction activities:

> The DEIR also estimates the Project's emissions assuming that Tier 4 construction equipment would be utilized during all phases of construction. This assumption, however, is incorrect. As a result, the Project's construction emissions are greatly underestimated . . .
>
> [W]hile mitigation measure AQ-3 proposes the use of Tier 4 engines, this measure is only applicable to construction activities that "occur on the Project site after occupancy of any residential parcels" (p. 4.5-26). Therefore, the use of Tier 4 equipment is only required once tenants actually occupy the Project's proposed

A-136 The project avoids impacts to native vegetation and therefore does not require mitigation. However, the project would implement the outstanding requirements of Site Development Permit No. 400602 and MND No. 118318 to abate past code violations. Section 3.2.1.1 of the Draft EIR summarizes the restoration and enhancement activities that would take place concurrently with the project construction. Any outstanding conditions would be identified and incorporated as permit conditions as part of the entitlement condition. See Response A-11 for details.

A-137 The Draft EIR addressed air quality impacts. See Responses A-138 through A-141.

A-138 The construction-related emissions presented in the Section 4.5.4.2 of the Draft EIR and compared to the City's Significance Determination Thresholds do not include mitigation measures. Construction emissions did not exceed the emissions thresholds for any construction phases. As shown in Table 4.5-8 of the Draft EIR, construction mitigation is only required based on the results of the Health Risk Assessment during occupancy of Residential Parcels 1 and 2. Tier 4 engines (or Tier 3, if Tier 4 is not readily available) were nevertheless required for later phases only as available. Table 4.5-10 of the Draft EIR shows the mitigated construction health risks, which incorporates Mitigation Measure AQ-3 which would reduce impacts to below a level of significance.

The commenter provided construction emission estimates (Commenter's Attachment 1). However, those construction emissions estimates do not exceed the City's Significance Determination Thresholds.

residential units . . .

The DEIR explicitly states that construction of the residential parcels would not occur until all hotel construction and demolition activities are completed. Therefore, assuming that the units constructed on Residential Parcels 1 and 2 during Phase I are immediately occupied once construction is completed, only construction of Residential Parcels 3 and 4 would be required to utilize Tier 4 equipment, at a minimum. Therefore, Tier 4 mitigation should have only been applied to these construction activities. Review of the DEIR's CalEEMod output files, however, demonstrates that Tier 3 mitigation was applied to all phases of construction (Appendix F, CalEEMod Modeling Data, pp. 57 – 448). By applying Tier 4 mitigation to all phases of construction when this mitigation is not actually required for all phases, the Project's construction emissions are underestimated. For these reasons, we find the DEIR's air pollution model to be incorrect, and conclude that the model should not be relied upon to determine Project significance . . .

A-138

[F]or Phase I demolition activities, ROG emissions increase by approximately 15%, NOx emissions increase by approximately 18%, CO emissions increase by approximately 22%, PM10 exhaust emissions increase by approximately 157%, and PM2.5 exhaust emissions increase by approximately 52%. Similarly, for Phase II demolition activities, ROG emissions increase by approximately 3%, NOx emissions increase by approximately 3%, CO emissions increase by approximately 5%, PM10 exhaust emissions increase by approximately 28%, and PM2.5 exhaust emissions increase by approximately 8%. These updated emission estimates demonstrate that when the Project's construction emissions are estimated correctly, the Project would result in substantially more severe effects than what was previously examined in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's construction emissions, and additional mitigation measures should be incorporated, where necessary.

B. The Project's Demolition Air Quality Impacts Are Understated

As set forth in the Hagemann expert comment letter in Attachment 1, the DEIR's modeling greatly underestimates the air quality impacts from the Project's extensive demolition activities:

A-139

Unsubstantiated Input Parameters Used to Estimate Project Emissions . . .

When we reviewed the Project's CalEEMod output files, we found that several of the values inputted into the model were not consistent with information disclosed in the DEIR. When the Project's emissions are modeled using correct input

A-139 See Response A-45s for construction overlap discussion and correction to building square footages. As identified in Draft EIR Chapter 3.0 and Section 4.5, all demolition would occur in Phase 1 The Draft EIR identified a less than significant air quality impact for daily criteria pollutant emissions during construction and operations.

A-140 See Response A-45s.

parameters, we found that the Project will have a significant impact on regional air quality. An updated DEIR should be prepared to include an air quality analysis that adequately evaluates the impacts that the construction and operation of the Project will have . . .

the DEIR's CalEEMod model for Phase I of construction fails to account for the demolition of the existing parking spaces, convention space, and food and beverage buildings. The DEIR attempts to justify this omission by stating that the "hotel land uses include square footage for demolition of the convention space" (Appendix F, pp. 254). However, if this were the case, then the DEIR should have taken the square footage of the existing 254 rooms to be demolished and should have added an additional 35,625 square feet to this value. Review of the CalEEMod output files demonstrate that not only was this square footage not added to the total building area of the 254 hotel rooms, but that the CalEEMod default square footage of the hotel rooms was actually decreased, rather than increased, without any justification to explain why this default value was changed (Appendix F, pp. 254). This is a significant error that grossly underestimates the potential impacts of demolition. A-139

Similarly, the DEIR's CalEEMod model for Phase II of construction also fails to account for the demolition of the entire parking garage and the entire existing structures. As a result, the Project's construction emissions are even further underestimated . . .

Therefore, by failing to account for the demolition of all of the proposed existing structures, fugitive dust emissions, emissions from site removal, and exhaust emissions from hauling trucks traveling to and from the site are greatly underestimated. Due to these reasons, we find the DEIR's CalEEMod model to be inaccurate and it should not be relied upon to determine Project significance.

C. The DEIR Air Quality Analysis Fails to Account for Overlapping Operational and Construction Emissions Which Will Have Significant Impacts

As set forth in the Hagemann expert comment letter in Attachment 1, the DEIR's modeling also fails to account for overlapping construction and operational emissions for the Project:

Not only does the DEIR incorrectly estimate the Project's construction emissions, but it also fails to account for the overlap in emissions that would occur once Phase I of construction is complete and operational, and construction of Phase 2 begins. As a result, the Project's air quality impact is greatly underestimated. A-140

According to the DEIR, Project construction is anticipated to occur in two phases,

with Phase 2 starting immediately after Phase I is complete. Construction of Phase I would be completed by 2018 and would become fully operational once construction is complete (p. 4.5-15, Appendix C, p. i). Construction of Phase 2 would occur immediately after, and would be completed in 2020 (p. 4.2-19). Based off this information, from 2019 to 2020, operation of Phase I would overlap with construction of Phase 2. Due to this overlap, the DEIR should have evaluated the Project's air quality impact during these two years assuming that construction of Phase 2 and operation of Phase I would occur concurrently. Review of the DEIR, however, demonstrates that this is not the case . . .

When the Phase I operational emissions from our updated model are combined with the construction emissions provided in Table 4.5-5 of the DEIR, we find that the Project's combined emissions during 2019 and 2020 would have a potentially significant air quality impact (see tables below).

2019 Maximum Daily Emissions (pounds/day)

Activity	Year	ROG	NOx	CO	SO2	PM10	PM2.5
Construction - Phase II	2019	71	106	45	0	6	3
Operation - Phase I	2019	88	116	516	1	82	24
Total 2019 Emissions		**159**	**222**	**561**	**1**	**88**	**27**
Significance Thresholds		**137**	**250**	**550**	**250**	**100**	**55**
Exceed?		***Yes***	*No*	***Yes***	*No*	*No*	*No*

2020 Maximum Daily Emissions (pounds/day)

Activity	Year	ROG	NOx	CO	SO2	PM10	PM2.5
Construction - Phase II	2020	43	49	46	0	20	12
Operation - Phase I	2020	88	116	516	1	82	24
Total 2020 Emissions		**131**	**165**	**562**	**1**	**102**	**36**
Significance Thresholds		**137**	**250**	**550**	**250**	**100**	**55**
Exceed?		*No*	*No*	***Yes***	*No*	***Yes***	*No*

Specifically, our analysis demonstrates that in 2019, the Project's combined ROG emissions of 159 pounds per day (lbs/day) and CO emissions of 561 lbs/day would exceed the significance thresholds of 137 lbs/day and 550 lbs/day, respectively. Similarly, our analysis demonstrates that in 2020, the Project's combined CO emissions of 561 lbs/day and PM10 emissions of 102 lbs/day would exceed the significance thresholds of 550 lbs/day and 100 lbs/day, respectively. These updated emission estimates demonstrate that when overlap in emissions from construction of Phase 2 and operation of Phase I is accounted for, the Project would result in a potentially significant air quality impact that was not previously

A-140

examined or identified in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's emissions, and additional mitigation measures should be incorporated, where necessary. A-140

D. Additional, Feasible Air Quality Mitigation is Required

In light of the potentially significant air quality impacts discussed above, the DEIR must analyze and incorporate additional air quality mitigation, as discussed by Commenters' expert in Attachment 1:

> The analysis discussed in the section above demonstrates that construction and operation of the Project may result in a significant air quality impact. Therefore, additional mitigation measures should be applied in order to reduce this impact to a less than significant level. Additional mitigation measures can be found in CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[116], which attempt to reduce criteria air pollutant emissions such as PM10, CO, and ROG. These emissions are byproduct of fuel combustion during vehicle travel; therefore, a reduction in the total vehicle miles traveled (VMT) during operation will result in a reduction in these criteria air pollutant emissions. Mitigation for criteria pollutant emissions should include consideration of the following mobile mitigation measures in an effort to reduce PM10, CO, and ROG emissions to below thresholds. A-141
>
> Reduce VMT by Increasing Transit Accessibility
> Making transit more accessible encourages the use of other modes of transportation and therefore reduces VMT. According to CAPCOA, implementation of this mitigation measure would reduce mobile source emissions by 0.5 to 24.6 percent . . .
>
> Provide Electric Vehicle Parking
> This mitigation measure implements accessible electric vehicle parking to reduce tailpipe emissions. Design features include conductive/inductive electric vehicle charging stations and signage prohibiting parking of non-electric vehicles.
>
> Limit Parking Supply
> This mitigation measure will change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by Project residents and employees, resulting in less VMTs. This will be accomplished in a multi-faceted strategy:

[116] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

A-141 As shown in the Draft EIR, the project would not exceed the thresholds for criteria air pollutants during the operational phase; therefore, mitigation was not required. Construction-related health risks impacts were identified and mitigation measures would be implemented to reduce impacts to below a level of significance. Additionally, as identified in Final EIR Appendix F-2, the project is consistent with the City of San Diego's Climate Action Plan by completion of the Climate Action Plan Consistency Checklist and through implementation of the measures outlined within the CAP Consistency Checklist. In response to public comments, an updated quantitative greenhouse gas analysis with corrected building square footages for consistency was conducted for consistency throughout the Final EIR and included as Appendix F-2 Climate Action Plan Checklist and Greenhouse Gas Analysis in the FEIR.

- Elimination (or reduction) of minimum parking requirements
- Creation of maximum parking requirements
- Provision of shared parking . . .

Unbundle Parking Costs from Property Costs
This measure would unbundle parking costs from property costs. Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost. This removes the burden from those who do not wish to utilize a parking space. Parking will be priced separately from home rents/purchase prices or office leases. An assumption is made that the parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces . . .

A-141

Implement Commute Trip Reduction (CTR) Program
The Project could implement a voluntary Commute Trip Reduction (CTR) program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking . . .

Provide Ride-Sharing Programs
Increasing the vehicle occupancy by ride sharing will result in fewer cars driving the same trip, and thus a decrease in VMT. The Project can include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. Funding may be provided by Community Facilities, District, or County Service Area, or other non-revocable funding mechanism . . .

Implement Subsidized or Discounted Transit Program
This Project could provide subsidized/discounted daily or monthly public transit passes. The Project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer or development. Many entities use revenue from parking to offset the cost of such a Project . . .

Implement Car-Sharing Program
This Project could implement a car-sharing program to allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees. The car-sharing program could be created through a local partnership or through one of many existing car-share companies. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station-based. Transit station-based programs

focus on providing the "last-mile" solution and link transit with commuters' final destinations.

Provide Employer-Sponsored Vanpool/Shuttle
The Project could implement an employer-sponsored vanpool or shuttle. A vanpool will usually service workers' commute to work while a shuttle will service nearby transit stations and surrounding commercial centers. Employer-sponsored vanpool programs entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at least program administration, if not more. The driver usually receives personal use of the van, often for a mileage fee. Scheduling is within the employer's purview, and rider charges are normally set on the basis of vehicle and operating cost.

Implement Commute Trip Reduction Marketing
The Project can implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions . . .

Implement Preferential Parking Permit Program
The Project can provide preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles. The Project should provide wide parking spaces to accommodate vanpool vehicles . . .

A-141

Implement Employee Parking "Cash-Out"
The Project may require employers to offer employee parking "cash-out." The term "cashout" is used to describe the employer providing employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer . . .

Expand Transit Network
The Project may expand the local transit network by adding or modifying existing transit service to enhance the service near the Project site. This will encourage the use of transit and therefore reduce VMT.

Provide Local Shuttles
The Project can provide local shuttle service through coordination with the local transit operator or private contractor. The local shuttles will provide service to transit hubs, commercial centers, and residential areas. . . .

These measures are more stringent and prescriptive than those measures identified in the DEIR. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces emissions released during Project operation. An updated DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce Project emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's emissions are reduced to the maximum extent possible. A-141

XI. THE DEIR FAILS TO ADEQUATELY ANALYZE IMPACTS ASSOCIATED WITH HYDROLOGY

An EIR must evaluate the impacts that irrigation systems, landscaping, grading, and the construction of roadways, berms, impervious surfaces, and other infrastructure will have on drainage patterns, soil stability, and stormwater runoff on and around the project site. *See* CEQA Guidelines App. H; *Sundstrom*, 202 Cal.App.3d 296. An EIR must also consider impacts on floodplains that are in or adjacent to the project site, and evaluate the impacts of locating development in areas that are susceptible to hazardous conditions, including floodplains Guidelines §§15125, 15126.2(a); *Riverwatch v. Cnty. of San Diego* (1999) 76 Cal.App.4th 1428. The placement of housing or other structures within the 100-year flood hazard area can lead to a finding of significant impacts. CEQA Guidelines App. G. A-142

A. The DEIR Does Not Analyze the Impacts of Proposed Amendments to the Atlas Specific Plan

The DEIR provides insufficient, vague, and contradictory information regarding development within the Floodway and Floodplain. As explained in section VII.D, the Atlas Specific Plan recognizes that "Flood control has been a major problem in Mission Valley for many years and is of particular concern in the Hotel Circle area [including the] Town and Country Hotel." Atlas Specific Plan p. 2-1. The proposed amended Atlas Specific Plan retains the statement that "flood control has been a major problem in Mission Valley for many years," but inexplicably omits the statement that flooding risks are particularly high at the Town and Country site. *Compare id. with* Attachment 13 p. II-1. The DEIR confirms that flooding has "become a major problem in Mission Valley," DEIR 4.6-3, but does not recognize the existing Atlas Specific Plan's identification of the Town and Country location as a particularly high-risk site, or explain the omission in the proposed amended Plan. A-143

More significant, even though the Project that is the subject of the DEIR includes the proposed amended Atlas Specific Plan, the DEIR contains no analysis whatsoever of the impacts associated with removing key portions of the existing Specific Plan addressing flood risks. The existing Specific Plan contains extensive analysis and implementation measures to address

A-142 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

A-143 The treatment of the San Diego River and the Mission Valley flood control approach has changed significantly since the Atlas Specific Plan (ASP) was adopted. In 1988 the plan for the River corridor was to extend the First San Diego River Improvement Project (FSDRIP) throughout Mission Valley. This would result in containing the 100 year flood within a channelized river and maximizing the development area adjacent to the River.

In the 28 years since the Atlas Specific Plan was adopted this design approach for the treatment of a river corridor and specifically the San Diego River in Mission Valley has changed. The new design approach is documented in the San Diego River Park Master Plan (SDRPMP) adopted in 2013. The San Diego River Park Master Plan calls for a river corridor comprised of the existing floodway and an adjacent pathway corridor.

With the removal of the Town & Country site from the Atlas Specific Plan and the adoption of the project, the treatment of the San Diego River corridor would no longer be guided by the FSDRIP design approach which was incorporated into the Atlas Specific Plan. It would be guided by the Town & Country Master Plan, which is consistent with the five principles of the San Diego River Park Master Plan.

The floodplain and floodway was analyzed in relation to not only the Atlas Specific Plan, but also included other regulatory guidance documents related to the Atlas Specific Plan, such as the City of San Diego Municipal Code Chapter 14 Art 03 Division 1 (Sections 143.0146(a)(7), 143.0146(b), 143.0146(c)(6), and 143.0145(e)(6)), Mission Valley Planned Development Ordinance adopted into the Mission Valley Community Plan Open Space Element, San Diego River Park Master Plan, and the Code of Federal Regulations – FEMA regulations.

As stated in the Draft EIR, some of the primary flood control elements have already been achieved, particularly due to the construction of the Fashion Valley parking structure. Other elements are no longer relevant or feasible due to hydraulic and physical conditions resulting from the parking structure and other projects such as the trolley line, as well as the current regulatory environment. The Draft EIR further states the engineering and hydraulic requirements from the Municipal Code and FEMA have been met, primarily by causing no-rise of the base flood elevations. More recent San Diego River planning objectives are outlined in the Mission Valley Community Plan and San Diego River Park Master Plan. These documents are based on the current conditions along the

flood risk at the Town and Country Site. Atlas Specific Plan pp. 4-6 – 4-20. For instance, the Specific Plan includes a Flood Management Program for the Town and Country site that was designed with the participation of federal and state agencies. The Flood Management Program aims to "alleviat[e] valley-wide flooding," "reduc[e] existing flooding depths at the Fashion Valley Shopping Center," and "accommodate the Camino de la Reina crossing over the San Diego River without creating backwater problems for [First San Diego River Improvement Project] or the area east of the Town and Country site." *Id.* p. 4-6. It also includes numerous flood control improvements designed to respond to, and alleviate, the "flooding hazard to the Town and Country site." *Id.* p. 4-7. The Atlas Specific Plan addresses the relationship between the Flood Management Program and adjacent properties and land use features, including the Fashion Valley Mall, the Copley and Golden Properties, Camino de la Reina, the Levi-Cushman property, SR-163, and the First San Diego River Improvement Project.

The proposed amended Atlas Specific Plan simply deletes the entire section of the Atlas Specific Plan addressing the Flood Management Program for the Town and Country Site. The proposed Town and Country Master Plan does not include a Flood Management Program, and does not propose flood management measures that are remotely comparable to what is contained in the Specific Plan. Incredibly, the DEIR does not even mention the complete deletion of the Flood Management Program from the Atlas Specific Plan, much less analyze the associated impacts. Nor does the DEIR contain a comparison between the Flood Management Program in the Atlas Specific Plan and flood management in the proposed Town and Country Master Plan.

A-143

There is no basis for the DEIR's failure to analyze or mitigate the impacts of the deletion of the Flood Management Program for the Town and Country Site from the Atlas Specific Plan. Indeed, the DEIR contains only minimal analysis of hydrology and flooding, and does not set forth or discuss any comprehensive plan to manage what is, by the DEIR's own description, a "major problem." DEIR p. 4.6-3. The impacts of this change are not limited to the Town and Country site – they have far-reaching impacts that affect hydrology, land use, environmental protection, circulation, and public safety at adjacent sites within the Floodplain. An EIR is "an environmental 'alarm bell' whose purpose is to alert the public and its responsible official to environmental changes before they have reached ecological points of no return." *City of Inyo*, 32 Cal.App.3d at 810. Here, the DEIR is invalid because it fully fails to analyze and alert the public and responsible officials about the deletion of a critical component of the Atlas Specific Plan.

Relatedly, the DEIR is flawed because it does not adequately describe the Project with regard to the proposed amendment to the Atlas Specific Plan. The Project Description section of the DEIR discussing the amendment to the Atlas Specific Plan contains a total of two sentences stating that the Project site will be removed from the Atlas Specific Plan and will fall under the authority of other plans. DEIR p. 3-16. But, as demonstrated by the deletion of the Flood Management Program, the proposed changes to the Atlas Specific Plan go far beyond the mere removal of the Project site. These are changes that have direct impacts outside the

River corridor and reflect current environmental goals. The Town & Country project is implementing the elements of the recent planning documents as they pertain to the project.

Further, the project's flood control management is discussed in Section 4.6 Hydrology and Water Quality. As stated in Section 4.6, portions of the site would be raised several feet above the base flood elevation, including all proposed new residential buildings built within the Special Flood Hazard Area (SFHA). The project proposes new residential building elevations to be constructed with the lowest floor elevated a minimum of two feet above the base flood elevation. This proposed grading requirement in combination with a "no-rise" analysis has been completed to address any potential flooding impacts for both on-site and off-site areas tributary to the surrounding watershed. The project would implement various construction and post construction Best Management Practices per the Stormwater Pollution Prevention Plan to reduce impacts to receiving waters. Erosion and sediment controls would be used during construction activities to reduce the amount of soils disturbed, prevent erosion and sediment transport into receiving waters, and control/minimize pollutants in site runoff. Furthermore, existing and proposed flows would be routed to flow-through planter boxes and a bioretention basin to further reduce, infiltrate, and treat storm water runoff flows.

Additionally, as discussed in Section 4.6, Hydrology and Water Quality, the removal of impervious surface along the River corridor in conjunction with the proposed bio-retention facilities improve the water quality in accordance with the MS4 permit. The extent of 100-year flood events would not likely be exacerbated by implementation of the project because the project would slightly decrease impervious surface area and attenuate peak on-site flows due to implementation of bio-retention basins.

Finally, the project would be in compliance with the current Municipal and Construction General permits, the City Storm Water Standards, and the Model BMP Design Manual, and any runoff during construction and post-construction operations would be required to be minimized and treated through recommended LID site design and/or structural Best Management Practices mandated by these measures. Construction and post-construction activities of the project would be required to adhere to various impact avoidance and minimization measures discussed in Section 4.6.

Project site, and those changes must be described so that the public and decision-makers can participate in an informed manner. The DEIR's failure to provide "an accurate view of the project" prevents the participation that CEQA is designed to foster. *Cnty. of Inyo*, 71 Cal.App.3d at 192-93. A-143

B. The DEIR's Discussion of Development in the Floodway and Floodplain is Vague and Contradictory

The northern 13.31 acres of the Project lies within the Federal Emergency Management Agency ("FEMA") 100-year Regulatory Floodway. Although most of the FEMA Floodway area is included in the Planned "River Park District" of the Project, a small portion of the "Hotel District" and "Residential District" also lies within the floodway. The entirety of the site lies within the FEMA Floodplain. As City staff noted during preliminary review of the Project, there are "flooding issues" on the Project site that must be addressed in the design of the Project. Attachment 9 p. 36. The DEIR, however, does not adequately analyze potential flooding impacts or describe the measures that will be taken to address them. A-144

As discussed in section VII.A.2.c, the Project's proposed new construction and improvement in the Floodway contravenes San Diego Municipal Code section 143.0145(e)(2)(A), which provides that permanent structures attached to a foundation shall not be located within the Floodway so that they can be moved in case of a flood. The DEIR is deficient because it provides no analysis of the impacts associated with construction within the Floodway. A-145

The DEIR makes vague and contradictory statements regarding how the Project will address its susceptibility to flooding. The DEIR's Hydrology and Water Quality chapter states that "Portions of the site would be raised several feet above the base flood elevation, including all proposed new residential buildings built within the [Special Flood Hazard Area] of the San Diego River would be constructed with the lowest floor elevated a minimum of two feet above the base flood elevation at that location." DEIR p. 4.6-21. The DEIR's Cumulative Impacts section, however, states that there are no significant cumulative impacts associated with flood hazards because "the site would be raised several feet above the base flood elevation to address potential impacts associated with flooding." DEIR p. 7-17. These descriptions are vague, insufficient, and inconsistent. A-146

First, the DEIR's description at DEIR p. 4.6-21 explains that new residential buildings will be raised to address flood hazards, but says nothing about new non-residential buildings that are part of the project such as the new lobby and restaurant. A-147

Second, as Expert Hagemann explain in his comments, *see* Attachment 1, the DEIR's description in the Hydrology and Water Quality chapter of elevation measures that will be taken to alleviate flooding hazards is vague and appears to contradict the description in the A-148

A-144 The existing floodway is delineated on the Tentative Map and as shown there are no portions of the "Residential District" within the floodway. The entire site is located within Special Flood Hazard Area Zone AE per FIRM No. 06073C1618G. The hydraulic analysis completed by Chang Consultants as reflected in the Draft EIR analysis incorporates the proposed grading per the Tentative Map and confirms that the new project has a "no-rise" condition to the existing floodplain. Therefore the project would not exacerbate the existing on-site or off-site flooding conditions.

A-145 Per FEMA regulations no habitable structures are allowed within the floodway. The project does not propose new habitable structures in the floodway. Furthermore there are no structures proposed with foundations within the floodway.

A-146 The project would construct new habitable structures out of the existing floodplain by raising the elevations 2 feet above the base flood elevation as identified by San Diego Municipal Code 146.0146(b)(2) regulations. The limits of grading for the site includes the new residential structures identified on the Tentative Map as lots 1, 2, 3 and 4, the new parking structure, the new lobby and Food and Beverage structures as well as the proposed internal roadway (labeled Lot A) that provides access to these buildings. Existing buildings to remain in the floodway would not include substantial structural modifications as part of this project.

A-147 See Response A-146 above.

A-148 Section 4.6.3.2 Impact Analysis describes which portions of the site would be raised two feet above the base flood level. As described, all proposed new residential buildings built within the Special Flood Hazard Area of the San Diego River would be constructed with the lowest floor elevated a minimum of two feet above the base flood elevation.

Final EIR Chapter 7.0 Cumulative, Section 7.5.5, Hydrology and Water Quality text has been revised in to clarify the portions of the site that would be raised as follows:

> "Additionally, all proposed new residential buildings would be raised two feet above the base flood elevation to address potential impacts associated with flooding."

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Cumulative Impacts chapter. It is unclear whether only "portions of the site" or the whole "site" would be "raised several feet" above the base flood level. A-148

Finally, if it is the case that the entire site is to be elevated several feet, as stated in the DEIR's Cumulative Impacts chapter, then the DEIR is severely flawed for its failure to describe and analyze the impacts associated with the massive grading and fill activities necessary to raise a 39.7-acre site several feet. A-149

Thus, the DEIR is invalid because it does not adequately analyze the impacts associated with construction in the floodway and floodplain. Guidelines §15126.2(a). Further, the description of the structures to be elevated is "curtailed, enigmatic, [and] unstable," and therefore thwarts informed public participation and decision-making. *San Joaquin Raptor Rescue Ctr.*, 149 Cal.App.4th at 654-55. A-150

XII. THE DEIR'S CONSTRUCTION NOISE ANALYSIS AND MITIGATION DOES NOT USE PROPER METHODOLOGY AND LACKS ENFORCEABLE PERFORMANCE STANDARDS

The DEIR analysis must disclose and feasibly mitigate noise impacts. *Los Angeles Unif. Sch. Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019.

First, the DEIR appears to understate significant noise impacts, with unsupported methodology. DEIR p. 4.7-15 confirms that once the multi-family dwellings on Residential Parcels 1 and 2 are constructed and anticipated to be occupied with residents, human noise-sensitive receptors would be established on the southern end of the project site, as close as 63 feet from ongoing construction of Residential Parcels 3 and 4. At times, construction noise will be as high as 95 dBA Leq. DEIR p. 4.7-14. The DEIR concedes that construction noise in Residential Parcels 1 and 2 "could temporarily be as high as approximately 79 dBA Leq," which exceeds the relevant thresholds, but it concludes with no modeling or study that this noise will be insignificant because it will "average" less than 75 dBA Leq during the 12-hour period from 7 a.m. to 7 p.m. under the City's Noise Ordinance. This conclusion, absent modeling, is no more than pulled out of thin air, and is unsupported by substantial evidence as required by CEQA. *Citizens of Goleta Valley*, 52 Cal.3d at 568 (EIR must contain facts and analysis, not just bare conclusions). A-151

Second, the DEIR identifies a host of construction noise mitigation, but again none of this is made enforceable or included in the MRMP. Mitigation measures must be "fully enforceable through permit conditions, agreements, or other measures" so "that feasible mitigation measures will actually be implemented as a condition of development." *Fed'n of Hillside & Canyon Ass'ns*, 83 Cal.App.4th at 1252. As a result, the following measures from DEIR pp. 4.7-16-17 should be made enforceable, in the MRMP, with appropriate performance standards so that the mitigation is definite and not vague. *Mount Shasta*, 210 Cal.App.4th at A-152

A-149 See Response A-146.

A-150 See Response A-146.

A-151 The Draft EIR analyzed and disclosed noise impacts in Section 4.1 Land Use and 4.7 Noise.

The "95 dBA Leq" referenced in the comment is incorrect. The stated metric associated with the 95 dBA numerical value in Draft EIR section 4.7.3.2 is L_{max}. As described in Section 4.7.1 of the Draft EIR, L_{max} and L_{eq} are not the same. L_{eq} is the energy-mean dBA during a measured time interval. In the Draft EIR, we speak of L_{eq} values in the context of one-hour energy-averages, or 12-hour energy-averages. L_{max} values are representative of momentary root-mean-square maximum noise levels that can be reached at any time during the noise-intensive activity.

Using analysis expressions similar to those shown in Response A-45b, the predicted usage of impact-type construction equipment, shown in Table 4.7-6 to have an L_{max} of 95 dBA at 50', would be compliant with the City of San Diego noise ordinance if operating for less than 4 hours of the 12-hour allowable daytime construction period. Construction equipment operation times would be planned and monitored by the construction contractor as Condition of Approval to ensure that noise levels remain below the City of San Diego construction noise threshold of 75 dBA 12-hour L_{eq}.

A-152 Construction noise impacts were determined to be less than significant. The construction noise reducing Project Design Features would be incorporated into the Conditions of Approval.

207:[117]

- Properly maintain and equip all construction equipment with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer's recommendations.
- Equipment engine shrouds should be closed during equipment operation.
- Use electrical power sources, rather than gas-powered generators, wherever feasible to run air compressors and similar power tools.
- Locate construction staging areas as far as feasible from occupied residences.
- Utilize noise attenuation techniques for all construction activity on the project site, as needed to ensure that noise levels remain below 75 dBA Leq at the proposed residences once occupied. Such techniques may include, but are not limited to, the use of sound blankets on noise-generating equipment and the construction of temporary sound barriers adjacent to construction sites, between affected uses.
- Heavy-duty construction equipment should not be operated within 15 feet of adjacent structures to prevent structural damage from construction-generated vibration.
- If heavy-duty construction equipment must be operated within 15 feet of adjacent structures, before and after crack survey should be taken of all structures that are within 15 feet of any construction operations.
- All impact tools should be shrouded or shielded.
- Heavy-duty construction equipment should be staged and used at the farthest distance feasible from adjacent sensitive receptors.
- Construction equipment engines should not be idling for extended periods.
- Fixed/stationary equipment (such as generators, compressors, rock crushers, and cement mixers) should be located as far as possible from noise-sensitive receptors; and
- A means of reporting and handling noise complaints should be established.

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[117] The same is true for stationary noise mitigation measures NOI-1, which lack enforceable performance standards. For example, the requirement for "best design considerations and shielding" do not constitute concrete, definite mitigation performance standards as required by CEQA. *Mount Shasta,* 210 Cal.App.4th at 207.

A-153 See Response A-28.

XIII. THE DEIR GHG ANALYSIS CONTAINS SIGNIFICANT ERRORS AND OMISSIONS, AND ADDITIONAL GHG MITIGATION IS NEEDED

The CEQA Guidelines and recent decisions by the California Supreme Court, including *Center for Biological Diversity v. Cal. Dept. of Fish and Wildlife* (2015) 62 Cal. 4th 204 (commonly referred to as "*Newhall Ranch*"), confirm the importance of undertaking robust GHG analysis for any and all projects. The EIR here fails to do this.

A. The GHG Analysis Underestimates the Project's GHG Significance

First, in concluding that the Project's GHG emissions are below the 900 MMT CO2e per year threshold, the DEIR improperly ***overestimates*** the baseline GHG impacts and ***underestimates*** the Project's GHG emissions. As discussed previously in this letter Section V.F with regard to the DEIR's deficiencies in calculating the existing environmental "baseline," the expert comments of Matt Hagemann attached as Attachment 1 explain:

> The DEIR determines the Project's greenhouse gas ("GHG") impact by taking the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses and comparing it to a screening threshold of 900 MT CO2e per year (Appendix F, pp.237). Using this method, the DEIR concludes that "since the total GHG emissions for the Project would not exceed 900 MT CO2e per year... the Project would not generate GHG emissions that may have a significant impact on the environment" (Appendix F, pp. 242). This conclusion, however, is incorrect, as it is based on a flawed analysis. As a result, we find the DEIR's GHG analysis to be incorrect and unreliable and it should not be relied upon to determine Project significance . . .
>
> [T]he emission estimates relied upon to come to this significance determination were taken from CalEEMod models that utilize incorrect input parameters. Specifically, we found that the CalEEMod model for the existing baseline land uses overestimate the building square footage of the existing buildings, while the CalEEMod model for the Project's proposed land uses underestimate the building square footage of the proposed buildings. As a result, the net increase in emissions that the Project would result in is artificially reduced . . .
>
> according to the DEIR, the existing land uses would generate 21,199 MT CO2E per year and the proposed Project would generate 22,091 MT CO2E per year, resulting in a net increase in emissions of 893 MT CO2E per year (Appendix F, Table 2, p. 22). Because the proposed Project would only result in a net increase in emissions of 893 MT CO2E per year, which is under the 900 MT CO2E significance threshold, the DEIR concludes that the Project would not have a significant GHG impact (Appendix F, pp. 242). This conclusion, however, is incorrect, as the emission

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estimates relied upon to come to this significance determination were taken from CalEEMod models that utilize incorrect input parameters. Specifically, we found that the CalEEMod model for the existing baseline land uses overestimate the building square footage of the existing buildings, while the CalEEMod model for the Project's proposed land uses underestimate the building square footage of the proposed buildings. As a result, the net increase in emissions that the Project would result in is artificially reduced . . .

[T]he DEIR's CalEEMod model overestimates the existing baseline land uses by 37,197 SF. Similarly, the CalEEMod output file for the Project's proposed land use model demonstrates that emissions from the Project were modeled assuming that a 700 room hotel and a mid-rise apartment complex with 840 units will be constructed (see excerpt below) (Appendix F, pp. 417). However, according to the DEIR, a 700 room hotel, a mid-rise apartment complex with 840 units, and an additional 11,400 SF lobby will be constructed, which was not accounted for in the model (p. 3-15, 3-16). Therefore, the DEIR's model underestimates the proposed land uses by 11,400 SF.

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This discrepancy between the CalEEMod model's inputs and the information provided in the DEIR presents a significant issue. The land use types and size features are used throughout CalEEMod in determining default variables and emission factors that go into the model's calculations. By overestimating the existing baseline land uses' total square footage and underestimating the Project's total square footage that will be developed, the net increase in emissions that the Project will result in is greatly underestimated.

In an effort to determine the net increase in GHG emissions that the Project will result in, we prepared two updated models using the most recent CalEEMod version, CalEEMod.2013.2.2. Our first model estimates emissions from the existing land uses using the correct building square footages provided in the DEIR, and our second model estimates emissions from the Project's proposed land uses using the correct building square footages provided in the DEIR. When the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses is correctly modeled, we find that the Project's net increase in GHG emissions would exceed the 900 MT CO2E screening threshold (see table below).

A-154 See Response A-28.

Estimated Annual Greenhouse Gas Emissions			
Emission Source	**Existing Emissions (MT CO2E)**	**Proposed Project (MT CO2E)**	**Net Increase (MT CO2E)**
Area	0	609	609
Energy	7,641	7,934	293
Mobile	12,763	12,463	-299
Waste	257	525	268
Water	239	542	303
Operational Emissions	**20,899**	**22,074**	**1,174**
Amortized Construction Emissions	-	111	111
Total	**20,899**	**22,185**	**1,285**
2020 Threshold	**-**	**-**	**900**
Exceed?	**-**	**-**	***Yes***

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As you can see in the table above, when modeled correctly, we found that the existing land uses would generate 20,899 MT CO2E per year and the proposed Project would generate 22,185 MT CO2E per year, resulting in a net increase in emissions of 1,285 MT CO2E per year, which exceeds the 900 MT CO2E significance threshold. These updated emission estimates demonstrate that when emissions are modeled correctly, the Project would result in a potentially significant GHG impact that was not previously examined or identified in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's GHG emissions, and additional mitigation measures should be incorporated, where necessary.

B. The GHG Analysis Fails to Comply with the City's Climate Action Plan and Fails to Ensure That Mitigation Measures are in the MRMP

Second, the Draft EIR almost completely fails to reference or analyze the Project's consistency with the City's CAP. Moreover, certain GHG mitigation measures are not actually included in the MRMP as required by CEQA , thus calling into question whether they actually are enforceable conditions of the Project. This violates the CAP and CEQA, which requires enforceable mitigation conditions in the MRMP "to ensure that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." *Fed'n of Hillside and Canyon Ass'n*, 83 Cal.App.4th at 1260-1262. As the comments of Matt Hagemann attached as Attachment 1 explain:

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> Not only does the DEIR fail to adequately estimate the Project's GHG emissions, but it also fails to demonstrate consistency with the City of San Diego's Climate Action Plan (CAP). As a result, the Project has the potential to conflict with an

applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Until an updated DEIR is prepared that adequately demonstrates compliance with the CAP, the Project's GHG impact should be considered potentially significant.

In December of 2015, the City of San Diego adopted the Climate Action Plan (CAP), which was developed to reduce GHG emissions from activities within the region, consistent with reduction targets set forth by Assembly Bill 32 (AB32), and in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Specifically, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions. In an effort to "provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA," the City created the Climate Action Plan Consistency Checklist (Checklist). This Checklist provides several options on how a project can demonstrate consistency with the CAP . . .

As stated in the excerpt above, in order for a project to be consistent with the reduction targets identified in the CAP, the Lead Agency must comply with the required mitigation measures set forth within the Consistency Checklist. In order to do so, the Lead Agency must submit a CAP Consistency Checklist Submittal Application, which lists specific measures that the Project can implement in order to comply with applicable CAP strategies. Once the Lead Agency identifies the specific measures the Project will comply with, the Project much include them as conditions of approval, and must provide an explanation of how the proposed Project will implement the requirements described within the Checklist to the satisfaction of the Planning Department. If a Project does not submit a CAP Consistency Checklist Submittal Application, then there is no way to determine whether or not the Project is consistent with the Consistency Checklist, and if the Project is not consistent with the Checklist, then the Project would not be consistent with the CAP. If the Project is not consistent with the CAP, then the Project's cumulative GHG impacts would be considered significant . . .

A-154

While the DEIR states that the Project would be consistent with the CAP, the DEIR fails to submit a CAP Consistency Checklist Submittal Application demonstrating which reduction measures the Project will implement in order to comply with the CAP reduction strategies, and fails to include the specific required mitigation measures within the Checklist as conditions of Project approval (p. 4.8-18). The DEIR does mention several mitigation measures that could potentially satisfy some of the reduction strategies set forth by the CAP, including the installation of roof top solar and LEED certification for the Project's residential buildings, but the

A-155 See Response A-28.

DEIR fails to include these measures as conditions of Project approval, and fails to include them as mitigation measures within the Mitigation, Monitoring, and Reporting Program (p. 4.8-18). As a result, it is unclear what measures will actually be implemented once the Project is approved, and it is still unclear whether implementation of these measures would satisfy requirements set forth by the CAP. By failing to adequately demonstrate compliance with the CAP, the Project's cumulative GHG emissions would have a potentially significant impact. An updated DEIR should be prepared to adequately demonstrate compliance with the CAP, must identify specific measures the Project will implement within a CAP Consistency Checklist Submittal Application, and must include these measures as conditions of Project approval.

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C. Additional GHG Mitigation is Warranted

Third, in light of the GHG significance issues identified by Commenters' experts, additional GHG mitigation is warranted. As expert Hagemann explains in Attachment 1:

Our updated CalEEMod model demonstrates that when emissions are modeled correctly, the Project may result in a potentially significant GHG impact. Therefore, additional mitigation measures must be identified and incorporated in an updated DEIR in order to reduce these emissions to a less-than-significant level. The measures, which were previously suggested for reducing criteria air pollutant emissions, will also effectively reduce the Project's GHG emissions. Additional measures from the California Attorney General's Office that would reduce the Project's GHG emissions include:

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- Use passive solar design to minimize solar heat gain during hot seasons, and enhance natural ventilation.
- Install efficient lighting, (including LEDs) for outdoor lighting.
- Reduce unnecessary outdoor lighting.
- Provide education on energy efficiency to residents, customers and/or tenants.
- Install solar and wind power systems and solar hot water heaters.
- Install solar panels on unused roof and ground space and over carports and parking areas.
- Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use.
- Provide education about water conservation and available programs and incentives.
- Include pedestrian accommodations within projects.
- Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.
- Build or fund a major transit stop within or near the development.

- Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions.
- Create or accommodate car sharing programs, e.g., provide parking spaces for car share vehicles at convenient locations accessible by public transportation.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles . . ."

A-155

These measures are more stringent and prescriptive than those measures identified in the DEIR. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the Project, which subsequently, reduces GHG emissions released during Project operation. An updated DEIR must be prepared to include additional mitigation measures, as well as include an updated GHG analysis to ensure that the necessary mitigation measures are implemented to reduce operational emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible.

XIV. THE DEIR'S ANALYSIS OF WATER DEMAND IS FLAWED

An EIR must consider the effect that a project will have on public infrastructure and utilities, including water demand. *See* CEQA Guidelines App. G. An EIR must also analyze the demand on public utility systems and set forth the "principal engineering proposals" for the Project. Guidelines §15124(c).

A-156

A. The DEIR's Analysis of Water Demand is Based on Population Estimates That the DEIR Contradicts

The DEIR's analysis of existing and proposed water demands is based on residential population assumptions that are contradicted elsewhere in the DEIR. The Public Utilities section of the DEIR states that the projected water demand for the Project's 840 residential units is estimated at 80 gallons per day ("gpd") per person, and the total residential population of the Project is estimated at 2.2 person per unit, or a total of 1,848 residents. DEIR p. 4.13-11, table 4.13-1 n.2. The Parks and Recreational Facilities section of the DEIR, however, projects that the residential population will be 2,394 people. DEIR p. 4.12-9. The result is a discrepancy of 48 acre feet per year ("AFY"). As Expert Hagemann explains:

A-157

> Table 4.13-1 indicates a water use estimate of 147,840 gpd (162.6 AFY) for the 840 new residential units based on 80 gpd per person and 2.2 persons per household (Table 4.13-1). However, if the residential population is increased to 2,394 persons, the resulting persons per household for 840 units increases to 2.85. Based on 80 gpd per person for 2.85 persons at the 840 residential units, the projected water supply requirement would increase to 191,520 gpd (210.6 AFY based on conversion in Table 4.13-1). The revised DEIR needs to provide a more reliable estimate of the future residential population and water demands. The

A-156 Comment noted. The comment is an introductory statement. No further response is required

A-157 The Water Supply Assessment (April 8, 2016) was performed by the City of San Diego Public Utilities Department in compliance with the requirements under SB 610. The Water Supply Assessment was based on the type and number of dwelling units proposed by the project and the Department's standard demand factors as further explained in Response A-31. Based on the assessment, it was determined that the projected level of water use for this project is within the regional water resource planning documents of the City of San Diego, the Water Authority and MWD. Current and future water supplies, as well as the actions necessary to develop these supplies, have been identified in the water resources planning documents of the Department, the Water Authority, and MWD to serve the projected demands of the Project, in addition to existing and planned future water demands of the Department. Also see Response A-31.

A-158 See Response A-31.

existing discrepancy in the estimated populations involves a difference of 48 AFY in projected water demand.

Attachment 1.

Applying the assumptions regarding future residential population in the Parks and Recreational Facilities section, the DEIR significantly underestimates the projected water demand from the Project. Further, the DEIR provides no basis for making one population assumption for parks, but another for water demand. "An EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." *Laurel Heights*, 47 Cal.3d at 405. The DEIR's analysis of impacts associated with projected water demand does not satisfy that basic standard. A-157

B. The DEIR's Analysis of Water Demand is Based on Unsubstantiated Assumptions About Per Capita Consumption

As explained in the previous section, the DEIR's analysis of water demand relies on an 80 gpd per capita assumption. The DEIR states that "80 gallons per day (gpcd) is the City's acceptable standard for multi-family water consumption (includes landscaping water demands)." But, as Expert Hagemann explains, the DEIR provides no basis whatsoever for its statement that 80 gallons per day is an acceptable per capita estimate. Attachment 1. The DEIR does not even provide a citation to City documents substantiating the DEIR's claim. The omission is particularly problematic given that one of the City's own websites estimates that "[t]he average San Diegan uses about 88 gallons of water each day at home for both indoor and outdoor uses."[118] As Expert Hagemann explains,

Water use is likely to vary greatly throughout the City service areas and County-wide. A revised DEIR needs to provide a more definitive baseline for water consumption per capita and account for this projected demand in its calculations for the Project. For instance, an increase of water use from 80 gpd to 88 gpd per person would boost the consumption from 147,840 gpd (162.6 AFY) to 162,624 gpd (178.8 AFY). A-158

Attachment 1.

The DEIR's failure to substantiate its assumptions regarding per capita water use undermines the validity of the analysis and conclusions in the water demand analysis. A conclusion that is "unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind not only fails to crystallize issues but affords no basis for a

[118] Fun Water Facts. Available online at: <https://www.sandiego.gov/water/conservation/kids/funfacts>. The City of San Diego. Accessed October 2016.

comparison of the problems involved with the proposed project and the difficulties involved in the alternatives." *See People v. Cnty. of Kern* (1974) 39 Cal.App.3d 830, 841-42. Here, the DEIR fails because it provides no empirical or experimental data, scientific authorities, or explanatory information as a basis for its analysis. *See id.* A-158

C. The DEIR Fails to Include Key Documents Underlying the Analysis

One of the principal purposes of water system demand analysis in an EIR is to determine what, if any, water system improvements are needed to accommodate a project. To this end, the DEIR's Water System Analysis states that a computer hydraulic analysis included modeling of average day demand, peak hour demand, and maximum day demand, and included fire flow scenarios. DEIR, App. K 8. It claims that "[t]he results of the analysis indicate that the project can be served through the existing 16-inch line in Fashion Valley Road and replacement of an existing 8-inch line with a new 12-inch line in Hotel Circle South/Camino De La Reina," and that the analysis "verifies that the site will have adequate fire flow for all scenarios considered." *Id.* There is no means, however, to review the computer hydraulic analysis or the reported results because, contrary to the Water System Analysis's statement that "[r]esults of the computer hydraulic analysis are provided in Appendix A," there is *no Appendix A* to the Water System Analysis, and the computer hydraulic analysis is not otherwise available.

CEQA requires that "technical data" be included with an EIR. "Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review." 14 C.C.R. §15147; *see also* Kotska & Zischke, *Practice Under the Cal. Envtl. Quality Act*, (2d ed. 2016) §9.18 (explaining that technical data and specialized analyses cited in a draft EIR must be made available to the public for review). The City's failure to provide complete documents referenced and relied upon in the EIR, and failure to provide adequate time to review and comment on those documents, is an abuse of discretion. *See Gilroy Citizens*, 140 Cal.App.4th at 922. The City must re-issue the DEIR for public review, make available Appendix A to the Water System Analysis, and provide a full public comment period. A-159

XV. THE DEIR FAILS TO IDENTIFY AND ANALYZE ALL CUMULATIVE IMPACTS

CEQA requires an analysis of "cumulative impacts," or the impacts of a project together with other past, present, and future projects. Guidelines §15130(a). CEQA section 21083 requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Guidelines §15355(a).) "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." Guidelines §15355(a). A-160

A-159 See Responses A-5b and A-5c.

A-160 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines cover past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those that are outside of the control of the lead agency. Thus, a legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand. As the court stated in *CBE*, 103 Cal.App.4th at 114: A-160

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact. (Citations omitted).

The cumulative impacts analysis must study "probable future projects." CEQA Guidelines, §15130(b)(1)(A). As noted in *San Franciscans for Reasonable Growth v. City and Cnty. of San Francisco (*1984) 151 Cal.App.3d 61, 74, "probable future projects" can be interpreted as reasonably probable future projects. "[T]he fact that a particular development which now appears reasonably foreseeable may, in fact, never occur does not release it from the EIR process. Similarly, the fact that future development may take several forms does not excuse environmental review." *City of Antioch v. City Council* (1986) 187 Cal.App.3d 1325, 1338. Thus, in *Laurel Heights v. Regents* (1988) 47 Cal.3d 376, 393-399, the Supreme Court rejected as a matter of law the agency's contention that the EIR did not need to evaluate the impacts of the project's foreseeable future uses because there had not yet been a formal decision on those uses. A-161

Here, the DEIR does not adequately address the cumulative impacts to air quality (discussed above in section X), GHG (discussed above in section XIII), hydrological impacts (discussed above in section XI), biological resources, traffic, public utilities, public services, water supply, and other resources associated with an unprecedented development boom in Mission Valley. Further, many of the flaws identified in the above comments taint the DEIR's corresponding analysis of cumulative impacts. Indeed, there are some 10,000 residential units that are in various stages of development in the Mission Valley area. Assuming just two residents per unit, this would approximately *double* the current population in Mission Valley. The DEIR is flawed because it does not adequately analyze the impact of the Project together with development that is pending. *See Friends of Eel River v. Sonoma Cnty. Water Agency* (2003) 108 Cal.App.4th 859, 868. A-162

Expert Watt discusses the DEIR's failure with regards to specific issues related to traffic and school facilities as follows: A-163

A-161 Comment noted. The comment provides general guidance regarding CEQA. The comment does not address the adequacy of the Draft EIR. No further response is required.

A-162 Cumulative impacts are addressed in Chapter 7.0 of the Draft EIR. The analysis concluded that cumulative impacts associated with transportation/circulation related to Riverwalk Drive: East of Avenida Del Rio were significant and all other cumulative impacts were less than significant. The list of cumulative projects was complete.

A-163 Refer to Response A-164 with regard to cumulative road impacts, Response A-162 and A-165 with regard to schools, and Response A-30 and A-31 regarding Project Description and A-162 regarding impacts on public services.

The DEIR fails to fully disclose and analyze the Project plus cumulative projects impacts on all essential public services and facilities. This failure stems in part from the lack of a complete and consistent Project description. In addition, the DEIR's consistency analysis fails to recognize information in the DEIR and record about road and school deficiencies. A-163

Per the DEIR the Project at buildout under the cumulative condition would results in significant unavoidable impacts on roads and potentially significant impacts on schools. Roads are not adequate to serve the Project. Per the DEIR, when the Project is built out, numerous roads serving the Project would be operating above capacity:

> "With the addition of project traffic, based on the City of San Diego's significance criteria, significant cumulative impacts are identified on the following segments as the project traffic contribution exceeds the allowable thresholds and would be a significant unavoidable impact of the Project:
>
> - Riverwalk Dr.: East of Avenida Del Rio (LOS F)
> - Camino De La Reina: Hotel Circle N. to Private Drive D (LOS F)." DEIR at page 7-8 to 7-10. A-164

Schools are likely not adequate to serve the Project plus cumulative projects. Per the School District's statement, the cumulative projects plus the Project have the potential to exceed the current capacity of schools serving the Project area:

> . . . in combination with the other noted projects, the cumulative potential increase in students could impact district schools to the point of reaching or exceeding their current capacity. This scenario would require additional planning for sufficient facilities. Possible solutions include reducing the number of non-boundary resident students attending the affected schools, evaluating attendance boundaries, and lastly the consideration of adding portable classroom space." Source: San Diego Unified School District Letter September 2, 2015 at page 4. A-165

The DEIR fails to acknowledge the School District's comment above, and concludes that neither the Project nor the cumulative condition would necessitate the construction of new schools. DEIR at section 4.12 and page 7-23:

> This creation of permanent housing structures would generate new students in the area; however, all of these schools are below their

A-164 The cumulative analysis of transportation/circulation impacts within Section 7.4 of the Draft EIR correctly identifies the roadways anticipated to operate at or above capacity in the cumulative setting whether or not the project is implemented. It further identifies the two roadway segments to which the project contributes significant traffic resulting in a cumulatively considerable transportation/circulation impact. For the two segments to which the project contributes to the cumulative impact, mitigation is discussed. The commenter is correct that the Draft EIR identifies a significant and unavoidable impact as a result of the analysis. The Draft EIR states as follows: "Implementation of TRANS-2 would reduce the project's cumulative impact at Camino De La Reina: Hotel Circle to Private Drive D to below a level of significance. However, there is no feasible mitigation available that would reduce the impact at Riverwalk Drive: East of Avenida Del Rio street segment to a less than significant level as explained in Section 4.2.4.4 of the Draft EIR. Therefore, impacts along Riverwalk Drive: East of Avenida Del Rio street segment would remain significant and unmitigated."

A-165 The commenter correctly states that the School District identified the potential for schools in the area to exceed their capacity in the cumulative condition. Per Government Code §65996, however, the payment of standard school fees constitutes full mitigation of any project impact. By law, payment of school feeds constituted complete mitigation of impacts on schools.

Also see Responses A-30 and A-31 regarding the Project Description.

estimated capacity. The existing schools have sufficient capacity to serve these students, and the project would not result in the need for new or expanded school facilities (SDUSD 2015). DEIR at page 7-24.

The analysis of the Project and Project plus cumulative projects impacts on schools is incomplete for two reasons. First, by failing to fully acknowledge the School District's statements, the DEIR incorrectly concludes that schools are adequate to serve the Project. Second, the DEIR may be underestimating school-related impacts because the DEIR fails to adequately and consistently describe the size or number of bedrooms in the 840 planned dwelling units, and therefore the total population and student population generated by the Project. A revised analysis of school related impacts must be completed based on a stable and complete description of Project details including but not limited to total population and student population generated by the Project.

A-165

Attachment 2, section I.B.1.a.i.

Beyond the specific impacts Ms. Watt identifies related to traffic and schools, however, Ms. Watt also explains that the DEIR's general failure to adequately describe the regional setting undermines the entire cumulative impacts analysis for each issue the DEIR addresses. Given this flaw, Ms. Watt concludes that "[a] revised Project description must be prepared and used in re-analysis of project-related and cumulative impacts." *Id.*

A-166

XVI. THE DEIR DOES NOT INCLUDE AN ADEQUATE ANALYSIS OF PROJECT ALTERNATIVES

An EIR is required to "ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official." *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 197. The analysis must cover "a reasonable range" of alternatives "which could feasibly attain the basic objectives of the project and evaluate the comparative merits of the alternatives." *Friends of the Eel River*, 108 Cal.App.4th at 873. The discussion must "focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." *Id.*

A-167

As Expert Watt explains, the DEIR fails to meet this standard:
After presenting the required "no project" alternatives, the DEIR offers only two alternatives – hotel and conference center renovations only and reduced project and reduced impact to historic uses. DEIR at page ES-5 and Alternatives Section. None of the alternatives offered would avoid or lessen the significant impacts and eliminate remaining project – plan inconsistencies.

A-166 The Draft EIR provides a complete description of the regional setting in Section 2.0 Environmental Setting and within the Existing Conditions subsections of each environmental issue area. The Cumulative Analysis also describes the geographic scope of the cumulative analysis for each environmental issue area.

A-167 Section 15126.6 of the CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project". The project does not identify any significant impacts associated with inconsistency with plans; therefore, no alternative was needed to reduce impacts to this environmental issue areas. The four project alternatives analyzed in Chapter 10.0 of the Draft EIR were developed to identify alternatives that would reduce or eliminate any one of the impacts identified with the project, particularly the impacts that remain significant associated with transportation/circulation and historical resources. As part of the Alternatives analysis Alternative 3 – Hotel and Conference Facility Renovations Only was proposed. Alternative 3 would consist of hotel renovations only and would not include restoration and enhancement of riparian open space habitat or construct a population-based public park, as no residential development would occur. Although this alternative does not meet most of the objectives of the project this Alternative does meet objectives 4 and 5 as identified in Chapter 10.0 of the Draft EIR. Alternative 3 is feasible and the environmentally superior alternative that would result in reduced impacts to air quality and odors, energy, noise, historical resources (built environment), public services and facilities, public utilities, and visual effects and neighborhood character. Alternative 3 would also have no significant and unavoidable impacts to transportation/circulation.

While there is no magic number for how many alternatives an EIR should examine to present a reasonable range, at a minimum, CEQA requires an agency to examine at least one potentially feasible comprehensive alternative to try to avoid or lessen significant environmental impacts that are central to the project, including significant impacts arising from inconsistencies with applicable plans and policies. A-167

As describe in this letter, there are numerous significant environmental impacts that the DEIR has failed to fully reveal as well as significant impacts that are not fully mitigated. The DEIR must evaluate at least one potentially feasible alternative that could eliminate or reduce all the Project's significant environmental impacts both disclosed in the DEIR and thus far undisclosed but likely. A-168

The DEIR must be revised and recirculated to provide a reasonable range of alternatives to allow the public and decision-makers to understand what options are available for this site, and whether there is another viable option that would avoid or reduce the Project's significant impacts. A reasonable range must provide at least one potentially viable comprehensive alternative that aims to reduce all the Project's significant impacts, not just the current options that give with one hand and take with the other. The City can either provide direction to the applicant to develop such an alternative, or retain a design firm and engage the community in the development of this alternative. A better approach would be to update the Mission Valley Community Plan with public engagement instead of entertaining individual Projects in the Mission Valley Community Plan area, and considering one-off Project-based amendments to the Community Plan. This approach, recommended by Community Plan policy, would no doubt provide a superior alternative for redevelopment of this Project site. A-169

Attachment 2, section I.B.4.

Perhaps the most striking omission in the DEIR's alternatives analysis is an alternative that eliminates Residential Parcel 4. As discussed above in sections VII, IX, and elsewhere, this high-intensity development adjacent to wetlands habitat causes numerous impacts and edge effects that would be reduced if the residential development was consolidated on Residential Parcels 1-3. There is no basis for the DEIR's failure to present and analyze this obvious alternative. A-170

XVII. A VALID STATEMENT OF OVERRIDING CONSIDERATIONS IS NEEDED, AND IT MUST INCLUDE ALL FEASIBLE MITIGATION AND ANALYSIS OF JOB QUALITY

The DEIR admits, at a minimum, that the Project will have significant, unmitigated traffic and circulation and historical resource impacts. So too, Commenters' experts have identified A-171

A-168 Refer to other responses with respect to various significant environmental effects. Also refer to Response A-167 for a description of the feasible alternatives analyzed within the Draft EIR.

A-169 See Responses A-167 and A-168. As required under CEQA Guidelines § 15126.6, the Draft EIR considers and discusses multiple alternatives to the project. As required per CEQA Guidelines § 15126.6(a) these alternatives were selected to provide a reasonable range of possible project designs that could feasibly attain most of the basic objectives of the project but avoid or substantially lessen any of the significant effects of the project.

The Mission Valley Community Plan is currently undergoing a comprehensive update, and the project has been designed to be consistent with the overall goals and objectives of the proposed update.

A-170 As described within the Chapter 10.0, Alternatives Analysis, of the Draft EIR, Alternative 3 – Hotel and Conference Facility Renovations Only eliminates all residential development on the project site, including on Parcel 4.

A-171 Comment noted. Pursuant to CEQA Guidelines §15093, decision makers are required to balance the benefits of a project against its unavoidable impacts when determining whether to approve a project. A Statement of Overriding Considerations has been prepared for the consideration of the decision making body (City Council) and left to its discretion to determine whether to approve or deny the project or any of the alternatives, or combination thereof.

additional, significant, or potentially significant land use, traffic and circulation, biological resources, air quality, hydrology, noise, GHG, public facilities and cumulative impacts.

Under CEQA, when an agency approves a project with significant environmental impacts that will not be fully mitigated, it must adopt a "statement of overriding considerations" finding that, because of the project's overriding benefits, it is approving the project despite its environmental harm. Guidelines §15043; Pub. Res. Code §21081(B); *Sierra Club v. Contra Costa County* (1992) 10 Cal.App.4th 1212, 1222. A statement of overriding considerations expresses the "larger, more general reasons for approving the project, such as the need to create new jobs, provide housing, generate taxes and the like." *Concerned Citizens of S. Central LA v. Los Angeles Unif. Sch. Dist.* (1994) 24 Cal.App.4th 826, 847. A-171

A statement of overriding considerations must be supported by substantial evidence in the record. Guidelines §15093(b); *Sierra Club*, 10 Cal.App.4th at 1223. The agency must make "a fully informed and publicly disclosed" decision that "specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts of the project." Guidelines §15043(b). As with all findings, the agency must present an explanation to supply the logical steps between the ultimate finding and the facts in the record. *Topanga Ass'n for a Scenic Cmty. v. Cnty. of Los Angeles* (1974) 11 Cal.3d 506, 515.

A. All Feasible Mitigation Must Be Imposed to Adopt a Statement of Overriding Considerations

An agency may adopt a statement of overriding considerations only *after* it has imposed all feasible mitigation measures to reduce a project's impact to less than significant levels. Guidelines §§15126.4, 15091. CEQA prohibits agencies from approving projects with significant environmental impacts when feasible mitigation measures can substantially lessen or avoid such impacts. Pub. Res. Code §21002. As explained in Guidelines section 15092(b)(2), an agency is prohibited from approving a project unless it has "[e]liminated or substantially lessened all significant effects on the environment where feasible." As stated above in this comment letter and further explained by Commenters' experts, the DEIR fails to do this, particularly in areas of land use, traffic and circulation, biological resources, air quality, hydrology, noise, GHG, public facilities and cumulative impacts. This is improper under CEQA. A-172

B. The DEIR and Statement of Overriding Considerations Must Analyze Job Quality

In addition to imposing all feasible mitigation, to the extent that overriding considerations are needed, key among the findings that the lead agency City *must* make is that: A-173

> Specific economic, legal, social, technological, or other considerations, including *the provision of employment opportunities for highly trained workers*, make infeasible the mitigation measures or alternatives identified in the environmental

A-172 See to Response A-171. As described throughout the environmental document and the response to comments, the Draft EIR identified significant impacts to land use (MSCP), air quality (construction), historical resources (built environment and archaeological), transportation/circulation, noise and biological resources. Furthermore, mitigation measures were identified to reduce impacts to the extent feasible. Where a mitigation measure was found to be infeasible for transportation/circulation and historical resources (built environment), a Finding pursuant to CEQA Guidelines §15091(a)(3) would be made for the project and provided to the City Council for their consideration.

A-173 Pursuant to CEQA Guidelines §15064(e) and 15131, the EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. Refer to Response to Comment A-171.

impact report...[and that those] benefits of the project outweigh the significant effects on the environment.

Pub. Res. Code §21081(a)(3), (b) (emphasis added).

Here, the DEIR makes no attempt to determine whether new jobs created by the Project, in either the construction phase or the operational phase, will be for "highly trained workers," and what the likely salary and wage ranges of these jobs will be. Indeed, as explained above in section VI.G, the DEIR's description of employment is severely deficient. Without this information, the City lacks substantial evidence to make any statement of overriding considerations. A-173

The City should require payment of prevailing wages for all construction phase workers, and living wages for all operational phase workers. Such a requirement will ensure that the Project provides "employment opportunities for highly trained workers" in accordance with the mandates of CEQA. Without such requirements, the Project may actually depress wage rates and fail to provide high quality job opportunities.

In short, the City cannot find that the economic benefits of the Project outweigh the environmental costs if it does not know what the economic benefits will be. A revised DEIR is required to provide this information. This issue of job quality is critically important to Local 30.

XVIII. DEIR RECIRCULATION IS REQUIRED

CEQA requires a lead agency to re-circulate an EIR when significant new information is added to the EIR following public review but before certification. Pub. Res. Code §21092.1. The Guidelines clarify that new information is significant if "the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project" including, for example, "a disclosure showing that ... [a] new significant environmental impact would result from the project." Guidelines §15088.5. A-174

This recirculation principle applies here with regard to additional, significant, or potentially significant land use, traffic and circulation, biological resources, air quality, hydrology, noise, GHG, public facilities and cumulative impacts, as well as to provide required substantial evidence for any statement of overriding considerations. A-175

XIX. THE REQUIRED LAND USE FINDINGS CANNOT BE MADE

The CEQA, land use and other concerns addressed in this letter must be adequately addressed to make the required City of San Diego Zoning Code findings. The entitlements are discretionary, not by right. If the numerous errors and deficiencies discussed herein are not cured, Applicant's requested discretionary entitlements should be rejected by City decision-makers, and the required discretionary findings not be made. *See, e.g.*, SDMC §§122.0105(a); A-176

A-174 Pursuant to CEQA Guidelines Section 15088.5(a), a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The revisions to the Final EIR include typographical corrections, clarification of project features, reduction in wetland impacts, and a reduction in required deviations to the San Diego Municipal Code. The addition of the information does not result in the inclusion of significant new information necessitating recirculation. In addition, the revisions does not deprive the public of a meaningful opportunity to comment on substantial adverse project impacts or feasible mitigation measures or alternatives that are not adopted because there are no new adverse project impacts, and additional mitigation measures are not necessitated. Therefore, the Final EIR does not require recirculation.

A-175 See Responses A-172 A-174 as well as A-171 regarding feasible mitigation measures, statement of overriding considerations and recirculation of an EIR.

A-176 Comment noted. No further response is required.

123.0105(b); 125.0440; 125.1040; 126.0504(a)-(d); 126.0305(a)-(d); 143.0141(a)(4)-(7), (b); 151.0201(c); 1514.0201(d)(2)-(3); 1514.0302(c)(1)(D). This review must not be perfunctory or mechanically superficial. *Stolman v. City of Los Angeles* (2003) 114 Cal.App.4th 916, 923. The inquiry is whether the administrative decision is "supported by the findings, or the findings are not supported by substantial evidence." *Topanga Ass'n*, 11 Cal.3d at 514-515; *Stolman*, 114 Cal.App.4th at 923 (variance reversed for lack of substantial evidence). A-176

XX. CONCLUSION

Commenters are concerned about the environmental impacts of massive projects like Town & Country, and that incomes for workers in hotels and restaurants in projects like Town & Country are insufficient for them to be able to afford to live in San Diego and that they are therefore forced into long commutes or overcrowding to afford housing near their jobs. They therefore value this opportunity to provide these comments, and look forward to working with the City, the developer Loews, and all stakeholders to ensure an equitable and sustainable future for residents and workers in the City. A-177

As set forth in this letter and in the attached expert comments, Commenters are concerned that the DEIR's analysis and mitigation of the Project's impacts are deficient in areas including: Project description, baseline, land use, traffic and circulation, biological resources, air quality, hydrology, noise, GHG, public facilities, cumulative impacts, alternatives, and the required statement of overriding considerations. The DEIR should be recirculated to include this analysis, with additional, enforceable mitigation. A-178

This Project is discretionary, not by right. The City should ensure the Project's environmental impacts are adequately characterized and feasibly mitigated and that the Project actually benefits the City and persons who live and work there. A-179

Commenters respectfully reserve the right to supplement these comments at hearings and proceedings for this Project. *Cmtys. for a Better Env't v. City of Richmond* (2010) 184 Cal.App.4th 70, 86 (EIR invalidated based on comments submitted *after* Final EIR completed). A-180

Finally, on behalf of Commenters, this Office and co-counsel Gideon Kracov are requesting, to the extent they are not already on the notice list, all notices of CEQA actions and any approvals, Project CEQA determinations, or public hearings to be held on the Project under any provision of Title 7 of the California Government Code, as well as the City Municipal Code §112.0302(b)(5). This request is filed pursuant to Public Resources Code §§1092.2 and 21167(f), and Government Code §65092, that require local agencies to mail such notices to any person who has filed a written request for them. Please send notice by electronic and regular mail to: Gideon Kracov, Esq., 801 S. Grand Avenue, 11th Fl., Los Angeles, CA 90017, gk@gideonlaw.net and Tony LoPresti, Esq., 177 Post St. #300, San Francisco, CA 94108, tlopresti@altshulerberzon.com. A-181

A-177 Comment noted.

A-178 See Response A-174.

A-179 See Responses A-172, A-174, A-175 and A-178.

A-180 Comment noted. No further response is required.

A-181 Comment noted. The City will provide notice on all CEQA actions, approvals, determinations, and hearings as requested.

A-182 Comment noted.

A-182

Thank you for consideration of these comments. We ask that this letter and the attachments be placed in the Administrative Record for the Project.

Sincerely,

Jonathan Weissglass
Tony LoPresti
Altshuler Berzon LLP

/s/ Gideon Kracov
Gideon Kracov
Law Office of Gideon Kracov

Attorneys for UNITE HERE Local 30

ATTACHMENTS

Attachment 1 – Matt Hagemann, P.G. comment letter

Attachment 2 – Terrell Watt, AICP comment letter

Attachment 3 – Neal Liddicoat, P.E. comment letter

Attachment 4 – Scott Cashen, M.S. comment letter (with cited references)

Attachment 5 – E-mail from Elizabeth Shearer-Nguyen, Senior Planner, City of San Diego, to Rick Bates, UNITE HERE Local 30 (Sept. 28, 2016)

Attachment 6 – *People of the State of Cal. v. Town and Country Hotel LLC*, Stipulation in Full Settlement for Final Judgment of Permanent Injunction; Judgment Thereon, Case No. GIC880884 (Mar. 19, 2007)

Attachment 7 – RECON, *Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project San Diego, California Project No. 118318* (June 13, 2012)

Attachment 8 – Submittal Response to Planning Commission Resolution Recommendations (Oct. 2015)

Attachment 9 – City of San Diego Cycle 16 Issues Report (Nov. 13, 2015)

Attachment 10 – Draft Town and Country Master Plan (Aug. 2016)

Attachment 11 – Draft Findings for Site Development Approval (Sept. 28, 2015)

Attachment 12 – Letter from Sarah Hudson, Demographer, San Diego Unified School District, to Meghan Haggblade, AECOM (Sept. 2, 2015)

Attachment 13 – Proposed amended Atlas Specific Plan (undated)

Attachment 14 – Town & Country MIR Review (Cycle 9) (undated)

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LETTER A
RTC A-30 EMAIL DOCUMENTATION

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Anders, Patricia

From: Shankar Ramakrishnan <Ramakrishnan@llgengineers.com>
Sent: Monday, October 31, 2016 2:39 PM
To: DelRosario, Sheryll
Cc: Anders, Patricia; Fisher, Yara; Calandra, Mike (Mike.Calandra@sandag.org)
Subject: RE: T&C - Traffic Assumptions

Hi Sheryll,

To summarize our conversation today, here is a brief summary of the traffic modeling methodology:

Traffic models run by SANDAG are based on consultant input on land use and roadway network. In regards to land use inputs, consultants provide land use type and density. For e.g: T&C included 840 multi-family dwelling units, 700 hotel rooms etc. As you can note, we deal primarily with densities such as dwelling unit (DU), square footage (SF) etc. There are no inputs relating to unit occupancy or employment opportunities or population as trip generation is based on # of DU's or SF and not on occupancy. That is why TIA's don't include any information relating to occupancy or population.

Having said that, SANDAG may have some default inputs on unit occupancy, population which is not privy to the consultant. If you need additional information to help craft a response, you can reach out to reach out Mike Calandra. He is very helpful and can provide insights. Mike can be reached at Mike.Calandra@sandag.org or at 619.699.6929.

Thanks
Shankar

Shankar Ramakrishnan, P.E.
Senior Transportation Engineer
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From: DelRosario, Sheryll [mailto:Sheryll.DelRosario@aecom.com]
Sent: Monday, October 31, 2016 12:09 PM
To: Shankar Ramakrishnan
Cc: Anders, Patricia; Fisher, Yara
Subject: T&C - Traffic Assumptions

Hi Shankar,

We are working on the responses to public comments for Town and Country. There were a number of comments regarding the baseline used for the Traffic Study. We'll need your help on clarifying these additional pieces of information:

- Residential and employment occupancy assumptions (i.e. residents and employment per unit)?
- Total residential population numbers used in the traffic models?
- Methodology used

Please let me know if you have any questions.

Thank you!
Sheryll

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Anders, Patricia

From: Steve Nielsen <Steve@dwilsoneng.com>
Sent: Tuesday, November 01, 2016 8:42 AM
To: Anders, Patricia
Cc: DelRosario, Sheryll; Fisher, Yara
Subject: RE: T&C DEIR Public Review Comments

Patty

As stated in our sewer study, the planning criteria used in the study is based on the City of San Diego Water and Sewer Planning and Design Guide (February 2013). This criteria does not use the number of bedrooms to estimate sewage flows from new developments, but instead uses different factors based on the residential density of the proposed project. We did receive a comment during review of our study asking us to base the estimated sewage flows on the number of bedrooms or fixture units if available, but after meeting with the City they agreed that based on this level of planning for the project a more detailed breakdown of the residential areas on the project and application of the density based factors from the design guide would be appropriate. We made this change and the study was accepted by PUD Water and Sewer.

To the best of my knowledge, we never had any bedroom count information on the project and did not use this methodology to project sewer flows from the project. The approach we used is consistent with the City Planning and Design Guide and is consistent with the approach taken on numerous other projects in the City.

Let me know if you have any questions or need anything else.

Steve Nielsen
Dexter Wilson Engineering, Inc.
(760) 438-4422

From: Anders, Patricia [mailto:Patricia.Anders@aecom.com]
Sent: Monday, October 31, 2016 12:49 PM
To: Steve Nielsen
Cc: DelRosario, Sheryll; Fisher, Yara
Subject: T&C DEIR Public Review Comments

Steve, hi. As I mentioned on our call this afternoon, attached are the few pages of the Public Review DEIR relative to the Sewer Systems Analysis. Please review and let us know what your assumptions were on the bedrooms/unit.

. .

Please provide comment by end of day (or sooner) Tuesday.

Thanks-

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LETTER A
ATTACHMENT 1

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TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM SWAPE (ATTACHMENT A-1)

A.1-1 This comment contains introductory paragraphs, including a summary of the Project Description. See the following responses.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
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October 10, 2016

Gideon Kracov
Attorney at Law
801 S. Grand Ave., 11th Fl.
Los Angeles, CA 90017

Subject: Comments on the Town & Country Project

Dear Mr. Kracov:

We have reviewed the August 2016 Draft Environmental Impact Report ("DEIR") and associated appendices for the Town & Country Project ("Project") located in the City of San Diego. The Project proposes consolidation and renovation of portions of an existing hotel and convention building that includes reducing the hotel capacity from 954 to 700 guest rooms and reducing conference facilities from 212,762 to 177,137 square feet; construction of a multi-family residential neighborhood that includes demolition of 27 structures and surface parking and the construction of 840 multi-dwelling units within four, six, and seven- story structures with associated parking structures. Additionally, the Project proposes the construction of a 3.84-acre public park and development of a 14-foot-wide river pathway.

Our review concludes that the DEIR fails to adequately evaluate the Air Quality, Greenhouse Gas, and Public Utilities impacts and as a result, the significance determinations made for the proposed Project are incorrect and unreliable. An updated DEIR should be prepared to adequately assess the potential impacts that the Project may have on water supply, health, regional and local air quality, and global climate change.

A.1-1

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod").[1] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality

[1] CalEEMod website, *available at*: http://www.caleemod.com/

1

A.1-2 See Responses A-45s and A-139.

Act ("CEQA") requires that such changes be justified by substantial evidence.[2] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files, which can be found in Appendix F of the DEIR, disclose to the reader what parameters were utilized in calculating the Project's air pollutant emissions, and make known which default values were changed as well as provide a justification for the values selected.[3]

A.1-1

When we reviewed the Project's CalEEMod output files, we found that several of the values inputted into the model were not consistent with information disclosed in the DEIR. When the Project's emissions are modeled using correct input parameters, we found that the Project will have a significant impact on regional air quality. An updated DEIR should be prepared to include an air quality analysis that adequately evaluates the impacts that the construction and operation of the Project will have.

Failure to Account for Demolition of All Existing Structures

According to the DEIR, the Project will be constructed in two phases (p. 3-13). Phase I of construction includes the demolition of the following structures: 254 hotel rooms, 35,625 square feet (SF) of convention space, 14,298 SF of spa building, 25,652 SF of food and beverage buildings, and 271 existing surface parking spaces[4] (see excerpt below) (Table 3-2, p. 3-15).

Table 3-2
Summary of Demolition, Construction and Renovation for Phase I

Building	Hotel Units	Parking Spaces	Square Footage/Acres
Demolition			
Hotel Rooms	254		
Convention Space			35,625
Spa Building			14,298
Food and Beverage Buildings			25,652
		456 spaces reduced to 185 spaces	
Demolition Total	**254 Rooms**		**75,575**
Renovation			
Convention Center	177,137		
Hotel Rooms	700		
Construction			
Lobby			11,400
Restaurant			11,500
Café			1,300
Hotel Parking Structure		430	145,600
Public Park			3.84 ac.
San Diego River Pathway and River Restoration			
Construction Total	-	**430**	**169,800**

Source: City of San Diego 2016

A.1-2

[2] CalEEMod User Guide, pp. 2, 9, *available at:* http://www.caleemod.com/
[3] CalEEMod User Guide, pp. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)
[4] Table 3-2 indicates that 456 spaces will be reduced to 185 spaces. 456-185 = 271 spaces to be removed during Phase I demolition.

Phase 2 of construction includes the demolition of 63,500 SF of parking structures and 46,500 SF of existing structures (Table 3-4, p. 3-16).

Table 3-4
Summary of Demolition and Construction Activities for Phase 2

Building	Residential Units	Parking Spaces	Square Footage
Demolition			
Parking Structure			63,500
Existing Structures			46,500
Demolition Total			110,000
New Construction			
Residential Parcel 3	255		204,000
Residential Parcel 4	150		120,000
Parking Structure (Residential Parcel 3)		410	162,500
Parking Structure (Residential Parcel 4)		210	63,500
Construction Total	405	620	550,000

Source: City of San Diego 2016

Based off this information, the DEIR should have modeled the Project's construction emissions assuming that all of these existing structures would be demolished as identified in the DEIR. Review of the CalEEMod output files, however, demonstrates that this is not the case.

The CalEEMod model for demolition activities in Phase I only accounts for the demolition of 254 hotel rooms and 14,298 SF of spa building (Appendix F, pp. 253), and the CalEEMod model for demolition activities in Phase 2 only accounts for the demolition of 33,500 SF of the existing parking structure, and 3,000 SF of additional existing structures (see excerpts below) (Appendix F, pp. 324). A.1-2

Phase I Demolition Activities

Town and Country - Hotel Demolition
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	14.30	1000sqft	0.33	14,298.00	0
Hotel	254.00	Room	2.80	122,208.00	0

Phase 2 Demolition Activities

Town and Country - Restaurant and Parking Garage Demolition
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	33.50	1000sqft	1.40	33,500.00	0
High Turnover (Sit Down Restaurant)	3.00	1000sqft	0.10	3,000.00	0

3

A.1-3 See Responses A-45s and A-139.

As you can see in the excerpts above, the DEIR's CalEEMod model for Phase I of construction fails to account for the demolition of the existing parking spaces, convention space, and food and beverage buildings. The DEIR attempts to justify this omission by stating that the "hotel land uses include square footage for demolition of the convention space" (Appendix F, pp. 254). However, if this were the case, then the DEIR should have taken the square footage of the existing 254 rooms to be demolished and should have added an additional 35,625 square feet to this value. Review of the CalEEMod output files demonstrate that not only was this square footage not added to the total building area of the 254 hotel rooms, but that the CalEEMod default square footage of the hotel rooms was actually decreased, rather than increased, without any justification to explain why this default value was changed (Appendix F, pp. 254). This is a significant error that grossly underestimates the potential impacts of demolition.

A.1-2

Similarly, the DEIR's CalEEMod model for Phase II of construction also fails to account for the demolition of the entire parking garage and the entire existing structures. As a result, the Project's construction emissions are even further underestimated. The existing structures included in the DEIR's models compared to what is anticipated to be demolished is summarized in the table below.

A.1-3

Anticipated Demolition Activities to Occur During Construction

			Existing Structures to be Demolished		DEIR Model		Remaining Existing Structures to be Demolished	
Phase	**Activity**	**Land Use Type**	**Amount**	**Unit**	**Amount**	**Unit**	**Amount**	**Unit**
Phase I	Demolition	Hotel Rooms	254	Rooms	254	Rooms	-	-
		Convention Space	35,625	SF	-	-	**35,625**	**SF**
		Spa Building	14,298	SF	14,298	SF	-	-
		Food and Beverage Buildings	25,652	SF	-	-	**25,652**	**SF**
		Surface Parking	271	Spaces	-	-	**271**	**Spaces**
Phase 2	Demolition	Parking Structure	63,500	SF	33,500	SF	**30,000**	**SF**
		Existing Structures	46,500	SF	3,000	SF	**43,500**	**SF**

Failing to account for the demolition of all of the proposed existing structures presents a significant issue. The total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction. The three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[5] Therefore, by failing to account for the demolition of all of the proposed existing structures, fugitive dust emissions, emissions from site removal, and exhaust emissions from hauling trucks traveling to and from the site are greatly underestimated. Due to these reasons, we find the DEIR's CalEEMod model to be inaccurate and it should not be relied upon to determine Project significance.

[5] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/

4

A.1-4 See Response A-138.

Incorrectly Assumed Use of Tier 4 Construction Equipment

The DEIR also estimates the Project's emissions assuming that Tier 4 construction equipment would be utilized during all phases of construction. This assumption, however, is incorrect. As a result, the Project's construction emissions are greatly underestimated.

The DEIR implements several mitigation measures to reduce the Project's air quality impacts. According to mitigation measure AQ-3,

> "When construction activities occur on the Project site after occupancy of any residential parcels, the construction contractor shall use off-road construction diesel engines that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case-by-case basis when the contractor has documented that no Tier 4 equipment or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms" (p. 4.5-26).

As you can see in the excerpt above, while mitigation measure AQ-3 proposes the use of Tier 4 engines, this measure is only applicable to construction activities that "occur on the Project site after occupancy of any residential parcels" (p. 4.5-26). Therefore, the use of Tier 4 equipment is only required once tenants actually occupy the Project's proposed residential units. According to the DEIR,

A.1-4

> "Construction of the Project would occur in several phases. The first phase would include demolition of 254 hotel rooms, convention center space, and spa. Following completion of the demolition phase, the new hotel lobby, café, restaurant, parking garage and water amenity would be constructed. After hotel construction, demolition of the existing parking garage and restaurant would occur. Construction of Residential Parcels 1 (160 units) and 2 (275 units) would occur after all hotel construction and demolition activities. Construction of Residential Parcels 3 (255 units) and 4 (150 units) would begin after construction was completed on Residential Parcels 1 and 2" (p. 4.5-17).

The DEIR explicitly states that construction of the residential parcels would not occur until all hotel construction and demolition activities are completed. Therefore, assuming that the units constructed on Residential Parcels 1 and 2 during Phase I are immediately occupied once construction is completed, only construction of Residential Parcels 3 and 4 would be required to utilize Tier 4 equipment, at a minimum. Therefore, Tier 4 mitigation should have only been applied to these construction activities. Review of the DEIR's CalEEMod output files, however, demonstrates that Tier 3 mitigation was applied to all phases of construction (Appendix F, CalEEMod Modeling Data, pp. 57 – 448). By applying Tier 4 mitigation to all phases of construction when this mitigation is not actually required for all phases, the Project's construction emissions are underestimated. For these reasons, we find the DEIR's air pollution model to be incorrect, and conclude that the model should not be relied upon to determine Project significance.

5

A.1-5 See Responses A-138 and A.1-2.

Updated Analysis Indicates Increase in Pollutant Emissions

In an effort to accurately estimate the Project's demolition emissions, we prepared two updated air models using the most recent CalEEMod version, CalEEMod.2013.2.2. Our first model estimated the emissions from Phase I demolition activities. We relied upon the CalEEMod default square footage and acreage for the existing hotel rooms, as the change made to this value within the DEIR's model was not justified. Furthermore, we added the building square footage of the convention space to the hotel land use, consistent with the DEIR's methods. We included the existing health club, food and beverage buildings, and parking spaces as separate land uses within the model, which reflects all of the existing structures to be demolished during Phase I. Finally, we did not apply Tier 4 mitigation to the off-road equipment needed for hotel demolition, as it is not required by any mitigation listed in the DEIR. A summary of the land uses and values used within our updated model is provided in the table below.

Phase I Demolition	SWAPE Model			
Land Use	Units	Spaces	Building Square Footage	Acres
Hotel	254	-	368,808	8.47
Convention Space	-	-	35,625	0
Spa Building	-	-	14,298	0.33
Food and Beverage Buildings	-	-	25,652	0.59
Surface Parking	-	271	108,400	2.44

A.1-5

Our second model estimated the emissions from Phase II demolition activities. We assumed that 63,500 square feet of parking garage and 46,500 square feet of existing structures would be demolished, consistent with Table 3-4 of the DEIR. Similar to our first model, we did not apply Tier 4 mitigation to the off-road equipment needed for Phase II demolition, as it is not required by any mitigation listed in the DEIR. A summary of the land uses and values used within our updated model is provided in the table below.

Phase II Demolition	SWAPE Model			
Land Use	Units	Spaces	Building Square Footage	Acres
Parking Structure	-	-	63,500	1.46
Existing Structures	-	-	46,500	1.07

When correct input parameters are used to model emissions, we find that the Project's construction emissions from demolition activities increase significantly when compared to the SEIR's model (see tables below).

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Maximum Daily Emissions from Demolition Activities (pounds/day)						
Phase	**Model**	**ROG**	**NOx**	**CO**	**PM10**	**PM2.5**
Phase I	SWAPE	4.9	53.2	44.5	12.0	3.7
	DEIR	4.3	45.3	36.4	4.7	2.4
Percent Increase (%)		***15%***	***18%***	***22%***	***157%***	***52%***

Maximum Daily Emissions from Demolition Activities (pounds/day)						
Phase	**Model**	**ROG**	**NOx**	**CO**	**PM10**	**PM2.5**
Phase II	SWAPE	2.6	25.4	22.0	3.3	1.6
	DEIR	2.5	24.6	21.1	2.6	1.5
Percent Increase (%)		***3%***	***3%***	***5%***	***28%***	***8%***

As you can see in the tables above, for Phase I demolition activities, ROG emissions increase by approximately 15%, NO_x emissions increase by approximately 18%, CO emissions increase by approximately 22%, PM_{10} exhaust emissions increase by approximately 157%, and $PM_{2.5}$ exhaust emissions increase by approximately 52%. Similarly, for Phase II demolition activities, ROG emissions increase by approximately 3%, NO_x emissions increase by approximately 3%, CO emissions increase by approximately 5%, PM_{10} exhaust emissions increase by approximately 28%, and $PM_{2.5}$ exhaust emissions increase by approximately 8%. These updated emission estimates demonstrate that when the Project's construction emissions are estimated correctly, the Project would result in substantially more severe effects than what was previously examined in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's construction emissions, and additional mitigation measures should be incorporated, where necessary.

A.1-5

Failure to Account for Overlap in Construction and Operational Emissions

Not only does the DEIR incorrectly estimate the Project's construction emissions, but it also fails to account for the overlap in emissions that would occur once Phase I of construction is complete and operational, and construction of Phase 2 begins. As a result, the Project's air quality impact is greatly underestimated.

According to the DEIR, Project construction is anticipated to occur in two phases, with Phase 2 starting immediately after Phase I is complete. Construction of Phase I would be completed by 2018 and would become fully operational once construction is complete (p. 4.5-15, Appendix C, p. i). Construction of Phase 2 would occur immediately after, and would be completed in 2020 (p. 4.2-19). Based off this information, from 2019 to 2020, operation of Phase I would overlap with construction of Phase 2. Due to this overlap, the DEIR should have evaluated the Project's air quality impact during these two years assuming that construction of Phase 2 and operation of Phase I would occur concurrently. Review of the DEIR, however, demonstrates that this is not the case.

A.1-6

7

A.1-6 See Response A-45s. The analysis provided in the comment fails to address any emissions for the existing land uses. Therefore, the overlap in construction and operational emissions in the comment substantially overestimates the impact of the project.

As is demonstrated in Table 4.5-5 and Table 4.5-6, the DEIR evaluated the Project's construction emissions and operational emissions separately, and did not account for this overlap in activities (see excerpts below) (p. 4.5-18, 4.5-19).

Table 4.5-5
Estimated Daily Construction Emissions

	ROG	NO_X	CO	SO_2	PM_{10} [1,2]	$PM_{2.5}$ [1]
2017	36.72	221.70	164.63	0.40	41.94	25.01
2018	71.65	74.95	60.62	0.18	20.58	12.15
2019	71.14	105.54	44.52	0.10	6.29	2.72
2020	42.77	48.56	45.70	0.13	20.15	11.75
Maximum Daily Construction Emissions (lbs/day)	71.65	221.70	164.63	0.40	41.94	25.01
Threshold of Significance (lbs/day)	137	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Table 4.5-6
Summary of Modeled Long-Term Operational Emissions

Emissions Source	ROG (lbs/day)	NO_X (lbs/day)	CO (lbs/day)	SO_2 (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Existing Land Uses	82.23	118.60	499.93	0.99	62.42	18.44
Project	102.24	89.47	453.63	1.11	72.48	21.86
Net Change	20.01	(29.13)	(46.30)	0.12	10.06	3.42
Threshold of Significance	137	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = suspended particulate matter; $PM_{2.5}$ = fine particulate matter; lbs/day = pounds per day
Source: Estimated by AECOM in 2015

A.1-6

The DEIR attempts to dismiss the potential significant impact that construction of Phase 2 and operation of Phase I may result in, stating that "based on the estimates in Tables 4.5-5 and 4.5-6, any overlap in construction and operational activities that would occur in 2019 and 2020 would not exceed the thresholds of significance" (p. 4.5-19). This justification, however, for failing to actually evaluate the impacts that this overlap may result in is inadequate, and as a result, the Project's air quality impacts are underestimated.

In an effort to determine the air quality impacts that construction of Phase 2 and operation of Phase I may result in, we conducted a simple analysis. According to Appendix C of the DEIR, build out of Phase I of the Project includes the operation of 700 hotel rooms, approximately 177,137 square feet of convention space, Residential Parcel 1 (160 units), and Residential Parcel 2 (275 units) (Appendix C, Table 9-1, p. 49). Since the DEIR does not estimate the emissions that operation of Phase I would generate, we prepared a CalEEMod model using these land uses. We inputted site specific values when they were available, such as daily vehicle trips, and relied upon default CalEEMod values for the remaining inputs. Additional information on our modeling assumptions can be found in our CalEEMod output files, which are attached to this letter for reference.

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A.1-7 See Responses A-45s and A.1-6.

When the Phase I operational emissions from our updated model are combined with the construction emissions provided in Table 4.5-5 of the DEIR, we find that the Project's combined emissions during 2019 and 2020 would have a potentially significant air quality impact (see tables below).

2019 Maximum Daily Emissions (pounds/day)

Activity	Year	ROG	NOx	CO	SO2	PM10	PM2.5
Construction - Phase II	2019	71	106	45	0	6	3
Operation - Phase I	2019	88	116	516	1	82	24
Total 2019 Emissions		**159**	**222**	**561**	**1**	**88**	**27**
Significance Thresholds		**137**	**250**	**550**	**250**	**100**	**55**
Exceed?		***Yes***	*No*	***Yes***	*No*	*No*	*No*

2020 Maximum Daily Emissions (pounds/day)

Activity	Year	ROG	NOx	CO	SO2	PM10	PM2.5
Construction - Phase II	2020	43	49	46	0	20	12
Operation - Phase I	2020	88	116	516	1	82	24
Total 2020 Emissions		**131**	**165**	**562**	**1**	**102**	**36**
Significance Thresholds		**137**	**250**	**550**	**250**	**100**	**55**
Exceed?		*No*	*No*	***Yes***	*No*	***Yes***	*No*

Specifically, our analysis demonstrates that in 2019, the Project's combined ROG emissions of 159 pounds per day (lbs/day) and CO emissions of 561 lbs/day would exceed the significance thresholds of 137 lbs/day and 550 lbs/day, respectively. Similarly, our analysis demonstrates that in 2020, the Project's combined CO emissions of 561 lbs/day and PM10 emissions of 102 lbs/day would exceed the significance thresholds of 550 lbs/day and 100 lbs/day, respectively. These updated emission estimates demonstrate that when overlap in emissions from construction of Phase 2 and operation of Phase I is accounted for, the Project would result in a potentially significant air quality impact that was not previously examined or identified in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's emissions, and additional mitigation measures should be incorporated, where necessary.

A.1-6

Additional Mobile Source Mitigation Measures Available to Reduce Emissions

The analysis discussed in the section above demonstrates that construction and operation of the Project may result in a significant air quality impact. Therefore, additional mitigation measures should be applied in order to reduce this impact to a less than significant level. Additional mitigation measures can be found in CAPCOA's Quantifying Greenhouse Gas Mitigation Measures, which attempt to reduce criteria air pollutant emissions such as PM_{10}, CO, and ROG.[6] These emissions are byproduct of fuel combustion during vehicle travel; therefore, a reduction in the total vehicle miles traveled (VMT) during operation will result in a reduction in these criteria air pollutant emissions. Mitigation for criteria

A.1-7

[6] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

9

pollutant emissions should include consideration of the following mobile mitigation measures in an effort to reduce PM10, CO, and ROG emissions to below thresholds.

A.1-7

Reduce VMT by Increasing Transit Accessibility

Making transit more accessible encourages the use of other modes of transportation and therefore reduces VMT. According to CAPCOA, implementation of this mitigation measure would reduce mobile source emissions by 0.5 to 24.6 percent. The Project would need to include, at a minimum, the following design features:

- A transit station/stop with high-quality, high-frequency bus service located within a five to ten-minute walk, or roughly a quarter of a mile from stop to edge of development
- Or a rail station located within a 20-minute walk or roughly half a mile from station edge to development
- Fast, frequent, and reliable transit service connecting to a high percentage of regional destinations
- Neighborhood designed for walking and bicycling

A.1-7a

Locate Project Near Bike Path/Bike Lane

A Project that is designed around an existing or planned bicycle facility encourages alternative mode use. This measure is most effective when applied in combination of multiple design elements that encourage this use. This measure should be grouped with the Increase Destination Accessibility strategy to increase the opportunities for multi-modal travel.

A.1-7b

Provide Electric Vehicle Parking

This mitigation measure implements accessible electric vehicle parking to reduce tailpipe emissions. Design features include conductive/inductive electric vehicle charging stations and signage prohibiting parking of non-electric vehicles.

A.1-7c

Limit Parking Supply

This mitigation measure will change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by Project residents and employees, resulting in less VMTs. This will be accomplished in a multi-faceted strategy:

- Elimination (or reduction) of minimum parking requirements
- Creation of maximum parking requirements
- Provision of shared parking

A.1-7d

Unbundle Parking Costs from Property Costs

This measure would unbundle parking costs from property costs. Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost. This removes the burden from those who do not wish to utilize a parking space. Parking will be priced separately from home rents/purchase prices or office leases. An assumption is made that the parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces.

A.1-7e

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A.1-7a-7u As discussed in Sections 4.5 and 4.8 of the Draft EIR, the project is within approximately 1,200 feet to the Fashion Valley Transit Center and would not generate significant unmitigated construction or operational Air Quality and Greenhouse Gas emissions when compared to the City's significance determination thresholds. Therefore, mitigation measures are not required. In addition, the project would be consistent with the applicable strategies and actions of the Climate Action Plan Checklist (Final EIR Appendix F2) related to energy and water efficient buildings, clean and renewable energy, bicycling, walking, transit, and land use. The project would include cool roofs, low-flow plumbing fixtures, renewable energy, and designed to be consistent with Leadership in Energy and Environmental Design Silver standards. Project features listed in the Climate Action Plan Checklist would be included as a condition of approval for the development permit.

Implement Commute Trip Reduction (CTR) Program

The Project could implement a voluntary Commute Trip Reduction (CTR) program with employers to discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The main difference between a voluntary and a required program is:

- Monitoring and reporting is not required
- No established performance standards (i.e. no trip reduction requirements)

The CTR program will provide workers with assistance in using alternative modes of travel. The CTR program should include all of the following to apply the effectiveness reported by the literature:

- Carpooling encouragement
- Ride-matching assistance
- Preferential carpool parking
- Flexible work schedules for carpools
- Half time transportation coordinator
- Vanpool assistance
- Bicycle end-trip facilities

A.1-7f

Provide Ride-Sharing Programs

Increasing the vehicle occupancy by ride sharing will result in fewer cars driving the same trip, and thus a decrease in VMT. The Project can include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. Funding may be provided by Community Facilities, District, or County Service Area, or other non-revocable funding mechanism. The Project can promote ride-sharing programs through a multi-faceted approach such as:

- Designating a certain percentage of parking spaces for ride sharing vehicles
- Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles
- Providing a web site or message board for coordinating rides

A.1-7g

Implement Subsidized or Discounted Transit Program

This Project could provide subsidized/discounted daily or monthly public transit passes. The Project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer or development. Many entities use revenue from parking to offset the cost of such a Project.

A.1-7h

Provide End of Trip Facilities

The Project can provide "end-of-trip" facilities for bicycle riders including showers, secure bicycle lockers, and changing spaces. End-of-trip facilities encourage the use of bicycling as a viable form of travel to destinations, especially to work. End-of-trip facilities provide the added convenience and security needed to encourage bicycle commuting.

A.1-7i

11

Encourage Telecommuting and Alternative Work Schedules

Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks.

A.1-7j

Implement Car-Sharing Program

This Project could implement a car-sharing program to allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees. The car-sharing program could be created through a local partnership or through one of many existing car-share companies. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station-based. Transit station-based programs focus on providing the "last-mile" solution and link transit with commuters' final destinations.

A.1-7k

Provide Employer-Sponsored Vanpool/Shuttle

The Project could implement an employer-sponsored vanpool or shuttle. A vanpool will usually service workers' commute to work while a shuttle will service nearby transit stations and surrounding commercial centers. Employer-sponsored vanpool programs entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at least program administration, if not more. The driver usually receives personal use of the van, often for a mileage fee. Scheduling is within the employer's purview, and rider charges are normally set on the basis of vehicle and operating cost.

A.1-7l

Implement Commute Trip Reduction Marketing

The Project can implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include:

- New employee orientation of trip reduction and alternative mode options
- Event promotions
- Publications

A.1-7m

Implement Preferential Parking Permit Program

The Project can provide preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles. The Project should provide wide parking spaces to accommodate vanpool vehicles.

A.1-7n

Price Workplace Parking

The Project can implement workplace parking pricing at its employment centers. This may include: explicitly charging for parking for its employees, implementing above market rate pricing, validating parking only for invited guests, not providing employee parking and transportation allowances, and educating employees about available alternatives.

A.1-7o

12

Implement Employee Parking "Cash-Out"

The Project may require employers to offer employee parking "cash-out." The term "cashout" is used to describe the employer providing employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer.

A.1-7p

Implement Transit Access Improvements

This Project can improve access to transit facilities through sidewalk/ crosswalk safety enhancements and bus shelter improvements.

A.1-7q

Expand Transit Network

The Project may expand the local transit network by adding or modifying existing transit service to enhance the service near the Project site. This will encourage the use of transit and therefore reduce VMT.

A.1-7r

Provide Local Shuttles

The Project can provide local shuttle service through coordination with the local transit operator or private contractor. The local shuttles will provide service to transit hubs, commercial centers, and residential areas.

A.1-7s

In addition to the measures discussed above, the SCAQMD has previously recommended additional mitigation measures for operational NO_x emissions that result primarily from truck activity emissions for commercial and industrial projects. These measures would also effectively reduce the Project's operational ROG, CO, and PM_{10} emissions. In this case, these measures would apply to the Project's proposed commercial land uses, which are estimated to generate delivery truck trips. Measures recommended for the Waterman Logistic Center that are also applicable for this Project include[7]:

- Provide electric vehicle charging stations that are accessible for trucks.
- Provide electrical hookups at the onsite loading docks and at the truck stops for truckers to plug in any onboard auxiliary equipment.
- Require the proposed warehouse to be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug-in.
- Limit the daily number of trucks allowed at the facility to levels analyzed in the DEIR. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the Project through CEQA prior to allowing this higher activity level.
- Limit the truck trip miles allowed to levels analyzed in the DEIR. If higher truck trip miles are anticipated or required, the Lead Agency should commit to re-evaluating the Project through CEQA prior to allowing this higher activity level.
- Improve traffic flow by signal synchronization.
- Have truck routes clearly marked with trailblazer signs, so that trucks will not enter residential areas.

A.1-7t

[7] SCAQMD Comment Letter in Response to MND for the Waterman Logistic Center, January 2018, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/january/mndwaterman.pdf

- Should the proposed Project generate significant emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in emissions, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce Project impacts.

These measures are more stringent and prescriptive than those measures identified in the DEIR. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces emissions released during Project operation. An updated DEIR must be prepared to include additional mitigation measures, as well as include an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce Project emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's emissions are reduced to the maximum extent possible.

A.1-7u

Greenhouse Gas

Failure to Adequately Assess the Project's Greenhouse Gas Impacts

The DEIR determines the Project's greenhouse gas ("GHG") impact by taking the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses and comparing it to a screening threshold of 900 MT CO2e per year (Appendix F, pp.237). Using this method, the DEIR concludes that "since the total GHG emissions for the Project would not exceed 900 MT CO2e per year... the Project would not generate GHG emissions that may have a significant impact on the environment" (Appendix F, pp. 242). This conclusion, however, is incorrect, as it is based on a flawed analysis. As a result, we find the DEIR's GHG analysis to be incorrect and unreliable and it should not be relied upon to determine Project significance.

A.1-8

Table 2 of Appendix F summarizes the annual baseline GHG emissions generated by the existing land uses and the proposed Project's land uses (see excerpt below) (Appendix F, pp. 240).

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A.1-8 The comment provides an introduction and summary of results from the draft EIR. No response is required. However, following the adoption of the Climate Action Plan, the City developed a Climate Action Plan Consistency Checklist (Final EIR Appendix F2) as a streamlined review process for the Greenhouse Gas emissions analysis of proposed new development projects. Therefore, the Section 4.8 of the Final EIR was revised to demonstrate the project's consistency with the Checklist to determine whether the impacts were significant.

Table 2
Estimated Annual GHG Emissions

Emissions Source	Existing Emissions (MT CO_2e)	Project (MT CO_2e)	Net Change
Area	<1	609	609
Energy	7,940	7,842	(98)
Mobile	12,763	12,463	(300)
Waste	256	525	269
Water	239	541	301
Operational Emissions	21,199	21,981	782
Amortized Construction Emissions		111	111
Total	**21,199**	**22,091**	**893**
2020 Threshold			900
Exceeds Threshold			NO

A.1-8

As you can see in the excerpt above, according to the DEIR, the existing land uses would generate 21,199 MT CO2E per year and the proposed Project would generate 22,091 MT CO2E per year, resulting in a net increase in emissions of 893 MT CO2E per year (Appendix F, Table 2, p. 22). Because the proposed Project would only result in a net increase in emissions of 893 MT CO2E per year, which is under the 900 MT CO2E significance threshold, the DEIR concludes that the Project would not have a significant GHG impact (Appendix F, pp. 242). This conclusion, however, is incorrect, as the emission estimates relied upon to come to this significance determination were taken from CalEEMod models that utilize incorrect input parameters. Specifically, we found that the CalEEMod model for the existing baseline land uses overestimate the building square footage of the existing buildings, while the CalEEMod model for the Project's proposed land uses underestimate the building square footage of the proposed buildings. As a result, the net increase in emissions that the Project would result in is artificially reduced.

A.1-9

The CalEEMod output file for the existing land use model demonstrates that emissions from existing land uses were modeled assuming that a 14,300 SF health club, a 25,650 SF restaurant, and a 954 room hotel currently occupy the site, for a total of 946,454 SF (see excerpt below) (Appendix F, pp. 403).

Town and Country - Existing
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	14.30	1000sqft	0.33	14,300.00	0
High Turnover (Sit Down Restaurant)	25.65	1000sqft	0.59	25,650.00	0
Hotel	954.00	Room	20.50	906,504.00	0

A.1-10

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A.1-9 See Response A-28.

A.1-10 See Responses A-28 for greenhouse gas emissions and A-45s regarding the correction of building square footages.

According to the DEIR, however, the existing land uses only have a gross building square footage of 909,257 SF (p. 4.1-1). Therefore, the DEIR's CalEEMod model overestimates the existing baseline land uses by 37,197 SF. Similarly, the CalEEMod output file for the Project's proposed land use model demonstrates that emissions from the Project were modeled assuming that a 700 room hotel and a mid-rise apartment complex with 840 units will be constructed (see excerpt below) (Appendix F, pp. 417). A.1-10

Town and Country
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	700.00	Room	20.70	762,666.00	0
Apartments Mid Rise	840.00	Dwelling Unit	7.62	1,156,181.00	2402

However, according to the DEIR, a 700 room hotel, a mid-rise apartment complex with 840 units, and an additional 11,400 SF lobby will be constructed, which was not accounted for in the model (p. 3-15, 3-16). Therefore, the DEIR's model underestimates the proposed land uses by 11,400 SF. A.1-11

This discrepancy between the CalEEMod model's inputs and the information provided in the DEIR presents a significant issue. The land use types and size features are used throughout CalEEMod in determining default variables and emission factors that go into the model's calculations.[8] By overestimating the existing baseline land uses' total square footage and underestimating the Project's total square footage that will be developed, the net increase in emissions that the Project will result in is greatly underestimated. A.1-12

In an effort to determine the net increase in GHG emissions that the Project will result in, we prepared two updated models using the most recent CalEEMod version, CalEEMod.2013.2.2. Our first model estimates emissions from the existing land uses using the correct building square footages provided in the DEIR, and our second model estimates emissions from the Project's proposed land uses using the correct building square footages provided in the DEIR. When the net difference in emissions between the Project site's existing land uses and the Project's proposed land uses is correctly modeled, we find that the Project's net increase in GHG emissions would exceed the 900 MT CO2E screening threshold (see table below). A.1-13

[8] CalEEMod User's Guide, p. 14, *available at:* http://www.caleemod.com/

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A.1-11 See Response A-28.

A.1-12 See Responses A-28 for greenhouse gas emissions and A-45s regarding the correction of building square footages.

A.1-13 See Response A-28.

Estimated Annual Greenhouse Gas Emissions			
Emission Source	Existing Emissions (MT CO2E)	Proposed Project (MT CO2E)	Net Increase (MT CO2E)
Area	0	609	609
Energy	7,641	7,934	293
Mobile	12,763	12,463	-299
Waste	257	525	268
Water	239	542	303
Operational Emissions	**20,899**	**22,074**	**1,174**
Amortized Construction Emissions	-	111	111
Total	**20,899**	**22,185**	**1,285**
2020 Threshold	-	-	**900**
Exceed?	-	-	***Yes***

A.1-13

As you can see in the table above, when modeled correctly, we found that the existing land uses would generate 20,899 MT CO2E per year and the proposed Project would generate 22,185 MT CO2E per year, resulting in a net increase in emissions of 1,285 MT CO2E per year, which exceeds the 900 MT CO2E significance threshold. These updated emission estimates demonstrate that when emissions are modeled correctly, the Project would result in a potentially significant GHG impact that was not previously examined or identified in the DEIR. As a result, the DEIR should be revised and recirculated to include an updated model to adequately estimate the Project's GHG emissions, and additional mitigation measures should be incorporated, where necessary.

Additional Mitigation Measures Available to Reduce Project Emissions

Our updated CalEEMod model demonstrates that when emissions are modeled correctly, the Project may result in a potentially significant GHG impact. Therefore, additional mitigation measures must be identified and incorporated in an updated DEIR in order to reduce these emissions to a less-than-significant level. The measures, which were previously suggested for reducing criteria air pollutant emissions, will also effectively reduce the Project's GHG emissions. Additional measures from the California Attorney General's Office[9] that would reduce the Project's GHG emissions include:

A.1-14

- Use passive solar design to minimize solar heat gain during hot seasons, and enhance natural ventilation.
- Install efficient lighting, (including LEDs) for outdoor lighting.
- Reduce unnecessary outdoor lighting.
- Provide education on energy efficiency to residents, customers and/or tenants.
- Install solar and wind power systems and solar hot water heaters.
- Install solar panels on unused roof and ground space and over carports and parking areas.
- Include energy storage where appropriate to optimize renewable energy generation systems and avoid peak energy use.

[9] http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf

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A.1-14 Comment noted. See Responses A-28 for consistency with the Climate Action Plan Checklist.

- Provide education about water conservation and available programs and incentives.
- Include pedestrian accommodations within projects.
- Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.
- Build or fund a major transit stop within or near the development.
- Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions.
- Create or accommodate car sharing programs, e.g., provide parking spaces for car share vehicles at convenient locations accessible by public transportation.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles.

A.1-14

The additional following measures proposed in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[10] can also be implemented in an effort to reduce the Project's GHG emissions to below thresholds.

Obtain Third-party HVAC Commissioning and Verification of Energy Savings

Ensuring the proper installation and construction of energy reduction features is essential to achieving high thermal efficiency in a house. In practice, HVAC systems commonly do not operate at the designed efficiency due to errors in installation or adjustments. A Project Applicant can obtain HVAC commissioning and third-party verification of energy savings in thermal efficiency components including HVAC systems, insulation, windows, and water heating.

A.1-14a

Install Higher Efficacy Public Street and Area Lighting

Lighting sources contribute to GHG emissions indirectly, via the production of the electricity that powers these lights. Public street and area lighting includes streetlights, pedestrian pathway lights, area lighting for parks and parking lots, and outdoor lighting around public buildings. Lighting design should consider the amount of light required for the area intended to be lit. Lumens are the measure of the amount of light perceived by the human eye. Different light fixtures have different efficacies or the amount of lumens produced per watt of power supplied. This is different than efficiency, and it is important that lighting improvements are based on maintaining the appropriate lumens per area when applying this measure. Installing more efficacious lamps will use less electricity while producing the same amount of light, and therefore reduces the associated indirect GHG emissions.

A.1-14b

Limit Outdoor Lighting Requirements

Lighting sources contribute to GHG emissions indirectly, via the production of the electricity that powers these lights. When the operational hours of a light are reduced, GHG emissions are reduced. Strategies for reducing the operational hours of lights include programming lights in public facilities to turn off after-hours, or installing motion sensors on pedestrian pathways.

A.1-14c

[10] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

18

A.1-14a-14e Comment noted. See Responses A-28 for consistency with the Climate Action Plan Checklist. See Responses A-141.

Establish Onsite Renewable Energy Systems- Solar Power

Using electricity generated from photovoltaic (PV) systems displaces electricity demand which would ordinarily be supplied by the local utility. Since zero GHG emissions are associated with electricity generation from PV systems, the GHG emissions reductions from this mitigation measure are equivalent to the emissions that would have been produced had electricity been supplied by the local utility.

A.1-14d

Institute or Extend Recycling and Composting Services

The transport and decomposition of landfill waste and the flaring of landfill gas all produce GHG emissions. Decomposition of waste produces methane, a GHG which has a global warming potential over 20 times that of CO2. The transport of waste from the site of generation to the landfill produces GHG emissions from the combustion of the fuel used to power the vehicle. Choosing waste management practices which reduce the amount of waste sent to landfills will reduce GHG emissions. Strategies to reduce landfill waste include increasing recycling, reuse, and composting, and encouraging lifestyle choices and office practices which reduce waste generation.

A.1-14e

These measures are more stringent and prescriptive than those measures identified in the DEIR. When combined together, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces GHG emissions released during Project operation. An updated DEIR must be prepared to include additional mitigation measures, as well as include an updated GHG analysis to ensure that the necessary mitigation measures are implemented to reduce operational emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible.

Failure to Demonstrate Consistency with Climate Action Plan

Not only does the DEIR fail to adequately estimate the Project's GHG emissions, but it also fails to demonstrate consistency with the City of San Diego's Climate Action Plan (CAP). As a result, the Project has the potential to conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions. Until an updated DEIR is prepared that adequately demonstrates compliance with the CAP, the Project's GHG impact should be considered potentially significant.

A.1-15

In December of 2015, the City of San Diego adopted the Climate Action Plan (CAP), which was developed to reduce GHG emissions from activities within the region, consistent with reduction targets set forth by Assembly Bill 32 (AB32), and in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5.[11] Specifically, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g. the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce GHG emissions.[12] In an effort to "provide a streamlined review

A.1-16

[11] "City of San Diego Climate Action Plan." The City of San Diego, December 15, 2015, available at: https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf

[12] "City of San Diego Climate Action Plan." The City of San Diego, December 15, 2015, available at: https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf, p. 15-16

19

A.1-15 See Response A-28.

A.1-16 See Response A-28.

A.1-17 See Response A-28.

process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA," the City created the Climate Action Plan Consistency Checklist (Checklist).[13][14] This Checklist provides several options on how a project can demonstrate consistency with the CAP. The Checklist states:

> "This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP."[15]

A.1-16

As stated in the excerpt above, in order for a project to be consistent with the reduction targets identified in the CAP, the Lead Agency must comply with the required mitigation measures set forth within the Consistency Checklist. In order to do so, the Lead Agency must submit a CAP Consistency Checklist Submittal Application, which lists specific measures that the Project can implement in order to comply with applicable CAP strategies. Once the Lead Agency identifies the specific measures the Project will comply with, the Project much include them as conditions of approval, and must provide an explanation of how the proposed Project will implement the requirements described within the Checklist to the satisfaction of the Planning Department.[16] If a Project does not submit a CAP Consistency Checklist Submittal Application, then there is no way to determine whether or not the Project is consistent with the Consistency Checklist, and if the Project is not consistent with the Checklist, then the Project would not be consistent with the CAP. If the Project is not consistent with the CAP, then the Project's cumulative GHG impacts would be considered significant.

Therefore, in an effort to demonstrate consistency with the CAP, the proposed Project must submit a CAP Consistency Checklist Submittal Application and must adhere to all of the requirements set forth within this Application. While the DEIR states that the Project would be consistent with the CAP, the DEIR fails to submit a CAP Consistency Checklist Submittal Application demonstrating which reduction measures the Project will implement in order to comply with the CAP reduction strategies, and fails to

A.1-17

[13] "City of San Diego Climate Action Plan." The City of San Diego, December 15, 2015, available at: https://www.sandiego.gov/sites/default/files/final_july_2016_cap.pdf, p. 15-16
[14] "Climate Action Plan Consistency Checklist." The City of San Diego, July 12, 2016, available at: https://www.sandiego.gov/sites/default/files/city_of_san_diego_cap_checklist_071316.pdf
[15] "Climate Action Plan Consistency Checklist." The City of San Diego, July 12, 2016, available at: https://www.sandiego.gov/sites/default/files/city_of_san_diego_cap_checklist_071316.pdf
[16] [16] "Climate Action Plan Consistency Checklist." The City of San Diego, July 12, 2016, available at: https://www.sandiego.gov/sites/default/files/city_of_san_diego_cap_checklist_071316.pdf

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include the specific required mitigation measures within the Checklist as conditions of Project approval (p. 4.8-18). The DEIR does mention several mitigation measures that could potentially satisfy some of the reduction strategies set forth by the CAP, including the installation of roof top solar and LEED certification for the Project's residential buildings, but the DEIR fails to include these measures as conditions of Project approval, and fails to include them as mitigation measures within the Mitigation, Monitoring, and Reporting Program (p. 4.8-18). As a result, it is unclear what measures will actually be implemented once the Project is approved, and it is still unclear whether implementation of these measures would satisfy requirements set forth by the CAP. By failing to adequately demonstrate compliance with the CAP, the Project's cumulative GHG emissions would have a potentially significant impact. An updated DEIR should be prepared to adequately demonstrate compliance with the CAP, must identify specific measures the Project will implement within a CAP Consistency Checklist Submittal Application, and must include these measures as conditions of Project approval.

A.1-17

Public Utilities

Proposed Water Demands Based on Inconsistent Forecasts in the Permitting Documents

Existing water supply is estimated to be 137.0 acre-feet per year (AFY) (Table 4.13-1, p. 4.13-11). Based on a projected requirement of 329.3 AFY, an additional 192.3 AFY are planned to address the requirements of the proposed Project. The projected water demand for 840 multi-family homes (units) is based on 80 gallons per day (gpd) per person based on an estimated 2.2 persons per household (see Note 2, Table 4.13-1, p. 4.13-11). The total residential population based on these estimates is 1,848 persons (based on 2.2 person per household for 840 units). However, in the "Parks and Recreational Facilities" section of the DEIR (p. 4.12.9), the projected population is estimated to be 2,394 persons.

A.1-18

Table 4.13-1 indicates a water use estimate of 147,840 gpd (162.6 AFY) for the 840 new residential units based on 80 gpd per person and 2.2 persons per household (Table 4.13-1). However, if the residential population is increased to 2,394 persons, the resulting persons per household for 840 units increases to 2.85. Based on 80 gpd per person for 2.85 persons at the 840 residential units, the projected water supply requirement would increase to 191,520 gpd (210.6 AFY based on conversion in Table 4.13-1). The revised DEIR needs to provide a more reliable estimate of the future residential population and water demands. The existing discrepancy in the estimated populations involves a difference of 48 AFY in projected water demand.

A.1-19

The DEIR estimates that 80 gpd is an acceptable standard for multi-family water consumption, including landscaping water demands (see Note 2, Table 4.13-1, p. 4.13-11). However, this estimated usage is not substantiated in the DEIR and conflicts with other information on water use in the City and County of San Diego. For example, the City reports on one of its websites that the average San Diegan uses about 88 gpd at home for both indoor and outdoor uses.[17] Water use is likely to vary greatly throughout the City service areas and County-wide. A revised DEIR needs to provide a more definitive baseline for

A.1-20

[17] Fun Water Facts. Available online at: https://www.sandiego.gov/water/conservation/kids/funfacts. The City of San Diego. Accessed October 2016.

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A.1-18 See Response A-31.

A.1-19 See Responses A-30 and A-31.

A.1-20 See Response A-31.

water consumption per capita and account for this projected demand in its calculations for the Project. For instance, an increase of water use from 80 gpd to 88 gpd per person would boost the consumption from 147,840 gpd (162.6 AFY) to 162,624 gpd (178.8 AFY).

A.1-20

Water system demand is a prerequisite metric for determining requirements for water system improvements needed for the Project. The Water System Analysis (DEIR Appendix K) modeled average day demand, peak hour demand, and maximum day demand, as well as fire flow scenarios and determined that the Project can be served through existing pipelines and via improvements to existing pipelines (e.g., increase from 8-inch to 12-inch pipeline). The referenced computer hydraulic analysis (Appendix A to the Water System Analysis) is not included in the DEIR Appendix K document. This computer-based water system model needs to be updated and included in a revised DEIR due to changes in the estimated population and water demand for the proposed Project.

A.1-21

Inconsistent Specifications for Building Levels Above Base Flood Elevation

The DEIR states that, "portions of the site would be raised several feet above the base flood elevation, including all proposed new residential buildings built within the SFHA [Special Flood Hazard Area] of the San Diego River would be constructed with the lowest floor elevated a minimum of two feet above the base flood elevation at that location" (p. 4.6-21). The SFHA is an area subject to inundation by the 1% annual chance flood (100-year flood), also known as the base flood, and the entire property is situated within floodway areas (e.g., Zone AE) adjacent to the San Diego River. But specifications on those buildings that will be raised above the base flood elevation is unclear. In Chapter 7 of the DEIR, it is stated that, "the site would be raised several feet above the base flood elevation to address potential impacts associated with flooding"(p. 7-17). This statement suggests that the entire site will be raised; however, it is suggested elsewhere that only "portions of the site would be raised...". A revised DEIR needs to specifically indicate those structures that will be raised several feet above the base flood elevation and those that will not.

A.1-22

Sincerely,

Matt Hagemann, P.G., C.Hg.

Jessie Jaeger

Attachment 1: CalEEMod Files

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A.1-21 The computer modeling for the Water System Analysis (Draft EIR Appendix K was be made available for an additional 30 days since it was not included as part of Appendix K). No comments were received during the additional 30 day public review period.

A.1-22 See Responses A-45e and A-50.

Town & Country - Phase I Hotel Demolition

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	14.30	1000sqft	0.33	14,298.00	0
Hotel	254.00	Room	8.47	404,433.00	0
High Turnover (Sit Down Restaurant)	25.65	1000sqft	0.59	25,652.00	0
Parking Lot	271.00	Space	2.44	108,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Hotel SF = Default Hotel SF (368,808 SF) + Convention Space (35,625 SF); High Turnover Restaurant = Food and Beverage Buildings

Construction Phase - Consistent with DEIR.

Demolition - Demolition = sum of building square footages to be demolished.

Trips and VMT -

Vehicle Trips - Construction Run Only

Energy Use - Construction Run Only

Water And Wastewater - Construction Run Only

Solid Waste - Construction Run Only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	62.00
tblEnergyUse	LightingElect	3.25	0.00
tblEnergyUse	LightingElect	7.61	0.00
tblEnergyUse	LightingElect	5.08	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24E	3.67	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	NT24NG	11.10	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	10.06	0.00
tblEnergyUse	T24E	5.84	0.00
tblEnergyUse	T24NG	4.54	0.00
tblEnergyUse	T24NG	37.80	0.00
tblEnergyUse	T24NG	49.75	0.00

tblLandUse	LandUseSquareFeet	14,300.00	14,298.00
tblLandUse	LandUseSquareFeet	368,808.00	404,433.00
tblLandUse	LandUseSquareFeet	25,650.00	25,652.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblSolidWaste	SolidWasteGenerationRate	81.51	0.00
tblSolidWaste	SolidWasteGenerationRate	305.24	0.00
tblSolidWaste	SolidWasteGenerationRate	139.06	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblWater	IndoorWaterUseRate	845,746.96	0.00
tblWater	IndoorWaterUseRate	7,785,639.72	0.00
tblWater	IndoorWaterUseRate	6,443,159.58	0.00
tblWater	OutdoorWaterUseRate	518,361.04	0.00
tblWater	OutdoorWaterUseRate	496,955.73	0.00
tblWater	OutdoorWaterUseRate	715,906.62	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.8403	52.8855	42.2361	0.0718	9.7157	2.2625	11.9782	1.5718	2.1061	3.6778	0.0000	7,165.7138	7,165.7138	1.1342	0.0000	7,189.5310
Total	**4.8403**	**52.8855**	**42.2361**	**0.0718**	**9.7157**	**2.2625**	**11.9782**	**1.5718**	**2.1061**	**3.6778**	**0.0000**	**7,165.7138**	**7,165.7138**	**1.1342**	**0.0000**	**7,189.5310**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.8403	52.8855	42.2361	0.0718	9.7157	2.2625	11.9782	1.5718	2.1061	3.6778	0.0000	7,165.7138	7,165.7138	1.1342	0.0000	7,189.5310
Total	**4.8403**	**52.8855**	**42.2361**	**0.0718**	**9.7157**	**2.2625**	**11.9782**	**1.5718**	**2.1061**	**3.6778**	**0.0000**	**7,165.7138**	**7,165.7138**	**1.1342**	**0.0000**	**7,189.5310**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**	**0.0000**	**0.1305**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**	**0.0000**	**0.1305**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	3/28/2017	5	62	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	2,514.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8859	0.0000	8.8859	1.3456	0.0000	1.3456			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**8.8859**	**2.1252**	**11.0111**	**1.3456**	**1.9797**	**3.3254**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7444	10.1325	7.7357	0.0303	0.7066	0.1364	0.8430	0.1935	0.1255	0.3190		3,003.9938	3,003.9938	0.0208		3,004.4305
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0559	0.6070	1.5600e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		125.2526	125.2526	6.0400e-003		125.3794
Total	**0.7921**	**10.1884**	**8.3427**	**0.0318**	**0.8298**	**0.1373**	**0.9671**	**0.2262**	**0.1263**	**0.3525**		**3,129.2465**	**3,129.2465**	**0.0268**		**3,129.8099**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8859	0.0000	8.8859	1.3456	0.0000	1.3456			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**8.8859**	**2.1252**	**11.0111**	**1.3456**	**1.9797**	**3.3254**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7444	10.1325	7.7357	0.0303	0.7066	0.1364	0.8430	0.1935	0.1255	0.3190		3,003.9938	3,003.9938	0.0208		3,004.4305
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0559	0.6070	1.5600e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		125.2526	125.2526	6.0400e-003		125.3794
Total	**0.7921**	**10.1884**	**8.3427**	**0.0318**	**0.8298**	**0.1373**	**0.9671**	**0.2262**	**0.1263**	**0.3525**		**3,129.2465**	**3,129.2465**	**0.0268**		**3,129.8099**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512460	0.073465	0.191476	0.131038	0.036090	0.005150	0.012567	0.023297	0.001873	0.002046	0.006532	0.000565	0.003442

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Unmitigated	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8296					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3700e-003	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**		**0.1305**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8296					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3700e-003	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**		**0.1305**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Phase I Hotel Demolition

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	14.30	1000sqft	0.33	14,298.00	0
Hotel	254.00	Room	8.47	404,433.00	0
High Turnover (Sit Down Restaurant)	25.65	1000sqft	0.59	25,652.00	0
Parking Lot	271.00	Space	2.44	108,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Hotel SF = Default Hotel SF (368,808 SF) + Convention Space (35,625 SF); High Turnover Restaurant = Food and Beverage Buildings

Construction Phase - Consistent with DEIR.

Demolition - Demolition = sum of building square footages to be demolished.

Trips and VMT -

Vehicle Trips - Construction Run Only

Energy Use - Construction Run Only

Water And Wastewater - Construction Run Only

Solid Waste - Construction Run Only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	62.00
tblEnergyUse	LightingElect	3.25	0.00
tblEnergyUse	LightingElect	7.61	0.00
tblEnergyUse	LightingElect	5.08	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24E	3.67	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	NT24NG	11.10	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	10.06	0.00
tblEnergyUse	T24E	5.84	0.00
tblEnergyUse	T24NG	4.54	0.00
tblEnergyUse	T24NG	37.80	0.00
tblEnergyUse	T24NG	49.75	0.00

tblLandUse	LandUseSquareFeet	14,300.00	14,298.00
tblLandUse	LandUseSquareFeet	368,808.00	404,433.00
tblLandUse	LandUseSquareFeet	25,650.00	25,652.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblSolidWaste	SolidWasteGenerationRate	81.51	0.00
tblSolidWaste	SolidWasteGenerationRate	305.24	0.00
tblSolidWaste	SolidWasteGenerationRate	139.06	0.00
tblVehicleTrips	ST_TR	20.87	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	SU_TR	26.73	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	WD_TR	32.93	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblVehicleTrips	WD_TR	8.17	0.00
tblWater	IndoorWaterUseRate	845,746.96	0.00
tblWater	IndoorWaterUseRate	7,785,639.72	0.00
tblWater	IndoorWaterUseRate	6,443,159.58	0.00
tblWater	OutdoorWaterUseRate	518,361.04	0.00
tblWater	OutdoorWaterUseRate	496,955.73	0.00
tblWater	OutdoorWaterUseRate	715,906.62	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9245	53.2186	44.5346	0.0716	9.7157	2.2629	11.9786	1.5718	2.1064	3.6782	0.0000	7,151.0278	7,151.0278	1.1344	0.0000	7,174.8511
Total	**4.9245**	**53.2186**	**44.5346**	**0.0716**	**9.7157**	**2.2629**	**11.9786**	**1.5718**	**2.1064**	**3.6782**	**0.0000**	**7,151.0278**	**7,151.0278**	**1.1344**	**0.0000**	**7,174.8511**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.9245	53.2186	44.5346	0.0716	9.7157	2.2629	11.9786	1.5718	2.1064	3.6782	0.0000	7,151.0278	7,151.0278	1.1344	0.0000	7,174.8511
Total	**4.9245**	**53.2186**	**44.5346**	**0.0716**	**9.7157**	**2.2629**	**11.9786**	**1.5718**	**2.1064**	**3.6782**	**0.0000**	**7,151.0278**	**7,151.0278**	**1.1344**	**0.0000**	**7,174.8511**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**	**0.0000**	**0.1305**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**	**0.0000**	**0.1305**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	3/28/2017	5	62	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	2,514.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8859	0.0000	8.8859	1.3456	0.0000	1.3456			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797		4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**8.8859**	**2.1252**	**11.0111**	**1.3456**	**1.9797**	**3.3254**		**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8259	10.4588	10.0545	0.0302	0.7066	0.1368	0.8434	0.1935	0.1258	0.3193		2,996.9382	2,996.9382	0.0211		2,997.3810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0504	0.0628	0.5868	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		117.6222	117.6222	6.0400e-003		117.7491
Total	**0.8762**	**10.5215**	**10.6412**	**0.0317**	**0.8298**	**0.1377**	**0.9675**	**0.2262**	**0.1267**	**0.3528**		**3,114.5604**	**3,114.5604**	**0.0271**		**3,115.1300**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8859	0.0000	8.8859	1.3456	0.0000	1.3456			0.0000			0.0000
Off-Road	4.0482	42.6971	33.8934	0.0399		2.1252	2.1252		1.9797	1.9797	0.0000	4,036.4674	4,036.4674	1.1073		4,059.7211
Total	**4.0482**	**42.6971**	**33.8934**	**0.0399**	**8.8859**	**2.1252**	**11.0111**	**1.3456**	**1.9797**	**3.3254**	**0.0000**	**4,036.4674**	**4,036.4674**	**1.1073**		**4,059.7211**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8259	10.4588	10.0545	0.0302	0.7066	0.1368	0.8434	0.1935	0.1258	0.3193		2,996.9382	2,996.9382	0.0211		2,997.3810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0504	0.0628	0.5868	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		117.6222	117.6222	6.0400e-003		117.7491
Total	**0.8762**	**10.5215**	**10.6412**	**0.0317**	**0.8298**	**0.1377**	**0.9675**	**0.2262**	**0.1267**	**0.3528**		**3,114.5604**	**3,114.5604**	**0.0271**		**3,115.1300**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512460	0.073465	0.191476	0.131038	0.036090	0.005150	0.012567	0.023297	0.001873	0.002046	0.006532	0.000565	0.003442

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Health Club	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Unmitigated	14.6771	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8296					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3700e-003	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**		**0.1305**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8422					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.8296					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3700e-003	5.3000e-004	0.0578	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		0.1236	0.1236	3.3000e-004		0.1305
Total	**14.6771**	**5.3000e-004**	**0.0578**	**0.0000**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**		**0.1236**	**0.1236**	**3.3000e-004**		**0.1305**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Phase II Restaurant & Parking Demolition

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	63.50	1000sqft	1.46	63,500.00	0
High Turnover (Sit Down Restaurant)	46.50	1000sqft	1.07	46,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Consistent with Table 3-4 Phase II Demolition values.

Construction Phase - Consistent with DEIR.

Demolition - Demolition = parking structure (63,500 SF) + existing structures (46,500 SF) = 110,000 SF

Vehicle Trips - Operational Run Only.

Energy Use - Operational Run Only.

Water And Wastewater - Operational Run Only.

Solid Waste - Operational Run Only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	64.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	7.61	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	10.06	0.00
tblEnergyUse	T24NG	37.80	0.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblSolidWaste	SolidWasteGenerationRate	553.35	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblWater	IndoorWaterUseRate	14,114,317.63	0.00
tblWater	OutdoorWaterUseRate	900,913.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5705	25.3069	21.6242	0.0317	1.9559	1.3927	3.3486	0.3250	1.3026	1.6276	0.0000	3,100.5618	3,100.5618	0.6259	0.0000	3,113.7054
Total	**2.5705**	**25.3069**	**21.6242**	**0.0317**	**1.9559**	**1.3927**	**3.3486**	**0.3250**	**1.3026**	**1.6276**	**0.0000**	**3,100.5618**	**3,100.5618**	**0.6259**	**0.0000**	**3,113.7054**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5705	25.3069	21.6242	0.0317	1.9559	1.3927	3.3486	0.3250	1.3026	1.6276	0.0000	3,100.5618	3,100.5618	0.6259	0.0000	3,113.7054
Total	**2.5705**	**25.3069**	**21.6242**	**0.0317**	**1.9559**	**1.3927**	**3.3486**	**0.3250**	**1.3026**	**1.6276**	**0.0000**	**3,100.5618**	**3,100.5618**	**0.6259**	**0.0000**	**3,113.7054**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**	**0.0000**	**0.0254**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**	**0.0000**	**0.0254**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2018	4/3/2018	5	64	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7130	0.0000	1.7130	0.2594	0.0000	0.2594			0.0000			0.0000
Off-Road	2.3936	23.5008	19.6968	0.0245		1.3660	1.3660		1.2780	1.2780		2,427.2156	2,427.2156	0.6170		2,440.1728
Total	**2.3936**	**23.5008**	**19.6968**	**0.0245**	**1.7130**	**1.3660**	**3.0789**	**0.2594**	**1.2780**	**1.5374**		**2,427.2156**	**2,427.2156**	**0.6170**		**2,440.1728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1393	1.7619	1.4499	5.8200e-003	0.1361	0.0259	0.1621	0.0373	0.0239	0.0611		568.8657	568.8657	4.0100e-003		568.9499
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0377	0.0442	0.4775	1.3500e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		104.4805	104.4805	4.8700e-003		104.5828
Total	**0.1769**	**1.8061**	**1.9274**	**7.1700e-003**	**0.2429**	**0.0267**	**0.2696**	**0.0656**	**0.0246**	**0.0902**		**673.3462**	**673.3462**	**8.8800e-003**		**673.5327**

3.2 Demolition - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7130	0.0000	1.7130	0.2594	0.0000	0.2594			0.0000			0.0000
Off-Road	2.3936	23.5008	19.6968	0.0245		1.3660	1.3660		1.2780	1.2780	0.0000	2,427.2156	2,427.2156	0.6170		2,440.1728
Total	**2.3936**	**23.5008**	**19.6968**	**0.0245**	**1.7130**	**1.3660**	**3.0789**	**0.2594**	**1.2780**	**1.5374**	**0.0000**	**2,427.2156**	**2,427.2156**	**0.6170**		**2,440.1728**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1393	1.7619	1.4499	5.8200e-003	0.1361	0.0259	0.1621	0.0373	0.0239	0.0611		568.8657	568.8657	4.0100e-003		568.9499
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0377	0.0442	0.4775	1.3500e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		104.4805	104.4805	4.8700e-003		104.5828
Total	**0.1769**	**1.8061**	**1.9274**	**7.1700e-003**	**0.2429**	**0.0267**	**0.2696**	**0.0656**	**0.0246**	**0.0902**		**673.3462**	**673.3462**	**8.8800e-003**		**673.5327**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512460	0.073465	0.191476	0.131038	0.036090	0.005150	0.012567	0.023297	0.001873	0.002046	0.006532	0.000565	0.003442

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Unmitigated	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0254**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0254**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Phase II Restaurant & Parking Demolition

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	63.50	1000sqft	1.46	63,500.00	0
High Turnover (Sit Down Restaurant)	46.50	1000sqft	1.07	46,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Consistent with Table 3-4 Phase II Demolition values.

Construction Phase - Consistent with DEIR.

Demolition - Demolition = parking structure (63,500 SF) + existing structures (46,500 SF) = 110,000 SF

Vehicle Trips - Operational Run Only.

Energy Use - Operational Run Only.

Water And Wastewater - Operational Run Only.

Solid Waste - Operational Run Only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	64.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	7.61	0.00
tblEnergyUse	NT24E	23.69	0.00
tblEnergyUse	NT24NG	138.46	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	10.06	0.00
tblEnergyUse	T24NG	37.80	0.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblSolidWaste	SolidWasteGenerationRate	553.35	0.00
tblVehicleTrips	ST_TR	158.37	0.00
tblVehicleTrips	SU_TR	131.84	0.00
tblVehicleTrips	WD_TR	127.15	0.00
tblWater	IndoorWaterUseRate	14,114,317.63	0.00
tblWater	OutdoorWaterUseRate	900,913.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5870	25.3689	22.0423	0.0316	1.9559	1.3927	3.3486	0.3250	1.3027	1.6277	0.0000	3,092.8543	3,092.8543	0.6259	0.0000	3,105.9991
Total	**2.5870**	**25.3689**	**22.0423**	**0.0316**	**1.9559**	**1.3927**	**3.3486**	**0.3250**	**1.3027**	**1.6277**	**0.0000**	**3,092.8543**	**3,092.8543**	**0.6259**	**0.0000**	**3,105.9991**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5870	25.3689	22.0423	0.0316	1.9559	1.3927	3.3486	0.3250	1.3027	1.6277	0.0000	3,092.8543	3,092.8543	0.6259	0.0000	3,105.9991
Total	**2.5870**	**25.3689**	**22.0423**	**0.0316**	**1.9559**	**1.3927**	**3.3486**	**0.3250**	**1.3027**	**1.6277**	**0.0000**	**3,092.8543**	**3,092.8543**	**0.6259**	**0.0000**	**3,105.9991**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**	**0.0000**	**0.0254**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**	**0.0000**	**0.0254**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/4/2018	4/3/2018	5	64	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	500.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7130	0.0000	1.7130	0.2594	0.0000	0.2594			0.0000			0.0000
Off-Road	2.3936	23.5008	19.6968	0.0245		1.3660	1.3660		1.2780	1.2780		2,427.2156	2,427.2156	0.6170		2,440.1728
Total	**2.3936**	**23.5008**	**19.6968**	**0.0245**	**1.7130**	**1.3660**	**3.0789**	**0.2594**	**1.2780**	**1.5374**		**2,427.2156**	**2,427.2156**	**0.6170**		**2,440.1728**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1537	1.8185	1.8862	5.8200e-003	0.1361	0.0260	0.1622	0.0373	0.0239	0.0612		567.5282	567.5282	4.0700e-003		567.6136
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0397	0.0496	0.4593	1.2700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		98.1105	98.1105	4.8700e-003		98.2127
Total	**0.1934**	**1.8681**	**2.3454**	**7.0900e-003**	**0.2429**	**0.0268**	**0.2697**	**0.0656**	**0.0246**	**0.0902**		**665.6387**	**665.6387**	**8.9400e-003**		**665.8263**

3.2 Demolition - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7130	0.0000	1.7130	0.2594	0.0000	0.2594			0.0000			0.0000
Off-Road	2.3936	23.5008	19.6968	0.0245		1.3660	1.3660		1.2780	1.2780	0.0000	2,427.2156	2,427.2156	0.6170		2,440.1728
Total	**2.3936**	**23.5008**	**19.6968**	**0.0245**	**1.7130**	**1.3660**	**3.0789**	**0.2594**	**1.2780**	**1.5374**	**0.0000**	**2,427.2156**	**2,427.2156**	**0.6170**		**2,440.1728**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1537	1.8185	1.8862	5.8200e-003	0.1361	0.0260	0.1622	0.0373	0.0239	0.0612		567.5282	567.5282	4.0700e-003		567.6136
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0397	0.0496	0.4593	1.2700e-003	0.1068	7.6000e-004	0.1076	0.0283	7.0000e-004	0.0290		98.1105	98.1105	4.8700e-003		98.2127
Total	**0.1934**	**1.8681**	**2.3454**	**7.0900e-003**	**0.2429**	**0.0268**	**0.2697**	**0.0656**	**0.0246**	**0.0902**		**665.6387**	**665.6387**	**8.9400e-003**		**665.8263**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512460	0.073465	0.191476	0.131038	0.036090	0.005150	0.012567	0.023297	0.001873	0.002046	0.006532	0.000565	0.003442

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Unmitigated	3.0535	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0254**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0113	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0241	0.0241	6.0000e-005		0.0254
Total	**3.0535**	**1.0000e-004**	**0.0113**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0241**	**0.0241**	**6.0000e-005**		**0.0254**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Operation of Phase I

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	700.00	Room	20.70	762,666.00	0
Apartments Mid Rise	435.00	Dwelling Unit	4.23	598,736.59	1244

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2018
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 840 Units = 1,156,181 SF - DEIR Model; 435 Units = 52% of Residential; 1,156,181 SF x 52% = 598,736.59 SF

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Vehicle Trips - Trip Rates consistent with Traffic Impact Study (Table 9-1).

Woodstoves - Total of 756 gas fireplaces for 840 units. 756 x 52% = 392 fireplaces.

Energy Use - Consistent with DEIR.

Water And Wastewater - Water Use Rates = Total Water Use from DEIR * 52%.

Solid Waste - Hotel - Consistent with DEIR; Apartment = 806*52% = 417

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	741.44	556.08
tblEnergyUse	T24E	160.77	120.58
tblEnergyUse	T24NG	3,820.47	2,865.35
tblFireplaces	NumberGas	239.25	392.00
tblFireplaces	NumberWood	152.25	0.00
tblLandUse	LandUseSquareFeet	1,016,400.00	762,666.00
tblLandUse	LandUseSquareFeet	435,000.00	598,736.59
tblLandUse	LotAcreage	23.33	20.70
tblLandUse	LotAcreage	11.45	4.23
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblSolidWaste	SolidWasteGenerationRate	200.10	417.00
tblSolidWaste	SolidWasteGenerationRate	383.25	348.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	ST_TR	7.16	5.10
tblVehicleTrips	ST_TR	8.19	15.29
tblVehicleTrips	SU_TR	6.07	5.10
tblVehicleTrips	SU_TR	5.95	15.29
tblVehicleTrips	WD_TR	6.59	5.10

tblVehicleTrips	WD_TR	8.17	15.29
tblWater	IndoorWaterUseRate	28,342,001.15	32,661,104.25
tblWater	OutdoorWaterUseRate	17,867,783.33	12,689,211.90
tblWoodstoves	NumberCatalytic	21.75	0.00
tblWoodstoves	NumberNoncatalytic	21.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Energy	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
Mobile	43.2312	96.8895	448.7558	1.1678	78.7905	1.3646	80.1551	21.0327	1.2575	22.2902		95,385.0843	95,385.0843	3.6826		95,462.4192
Total	**85.6511**	**110.2722**	**495.6941**	**1.2476**	**78.7905**	**3.0754**	**81.8659**	**21.0327**	**2.9627**	**23.9954**	**0.0000**	**119,344.1441**	**119,344.1441**	**4.2051**	**0.4381**	**119,568.2493**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Energy	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
Mobile	43.2312	96.8895	448.7558	1.1678	78.7905	1.3646	80.1551	21.0327	1.2575	22.2902		95,385.0843	95,385.0843	3.6826		95,462.4192
Total	**85.6511**	**110.2722**	**495.6941**	**1.2476**	**78.7905**	**3.0754**	**81.8659**	**21.0327**	**2.9627**	**23.9954**	**0.0000**	**119,344.1441**	**119,344.1441**	**4.2051**	**0.4381**	**119,568.2493**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	43.2312	96.8895	448.7558	1.1678	78.7905	1.3646	80.1551	21.0327	1.2575	22.2902		95,385.0843	95,385.0843	3.6826		95,462.4192
Unmitigated	43.2312	96.8895	448.7558	1.1678	78.7905	1.3646	80.1551	21.0327	1.2575	22.2902		95,385.0843	95,385.0843	3.6826		95,462.4192

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,218.50	2,218.50	2218.50	7,134,724	7,134,724
Hotel	10,703.00	10,703.00	10703.00	30,102,778	30,102,778
Total	12,921.50	12,921.50	12,921.50	37,237,503	37,237,503

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	100	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511818	0.073499	0.191840	0.131575	0.036332	0.005186	0.012677	0.022513	0.001864	0.002072	0.006564	0.000601	0.003458

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
NaturalGas Unmitigated	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5395.61	0.0582	0.4972	0.2116	3.1700e-003		0.0402	0.0402		0.0402	0.0402		634.7775	634.7775	0.0122	0.0116	638.6407
Hotel	127146	1.3712	12.4653	10.4708	0.0748		0.9474	0.9474		0.9474	0.9474		14,958.3323	14,958.3323	0.2867	0.2742	15,049.3663
Total		**1.4294**	**12.9625**	**10.6824**	**0.0780**		**0.9876**	**0.9876**		**0.9876**	**0.9876**		**15,593.1099**	**15,593.1099**	**0.2989**	**0.2859**	**15,688.0069**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.39561	0.0582	0.4972	0.2116	3.1700e-003		0.0402	0.0402		0.0402	0.0402		634.7775	634.7775	0.0122	0.0116	638.6407
Hotel	127.146	1.3712	12.4653	10.4708	0.0748		0.9474	0.9474		0.9474	0.9474		14,958.3323	14,958.3323	0.2867	0.2742	15,049.3663
Total		**1.4294**	**12.9625**	**10.6824**	**0.0780**		**0.9876**	**0.9876**		**0.9876**	**0.9876**		**15,593.1099**	**15,593.1099**	**0.2989**	**0.2859**	**15,688.0069**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Unmitigated	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.9745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	29.1340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7609	3.0000e-005	0.0415	0.0000		0.5257	0.5257		0.5202	0.5202	0.0000	8,301.1765	8,301.1765	0.1591	0.1522	8,351.6961
Landscaping	1.1210	0.4202	36.2143	1.9000e-003		0.1975	0.1975		0.1975	0.1975		64.7735	64.7735	0.0645		66.1271
Total	**40.9905**	**0.4202**	**36.2558**	**1.9000e-003**		**0.7233**	**0.7233**		**0.7177**	**0.7177**	**0.0000**	**8,365.9499**	**8,365.9499**	**0.2236**	**0.1522**	**8,417.8232**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.9745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	29.1340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7609	3.0000e-005	0.0415	0.0000		0.5257	0.5257		0.5202	0.5202	0.0000	8,301.1765	8,301.1765	0.1591	0.1522	8,351.6961
Landscaping	1.1210	0.4202	36.2143	1.9000e-003		0.1975	0.1975		0.1975	0.1975		64.7735	64.7735	0.0645		66.1271
Total	**40.9905**	**0.4202**	**36.2558**	**1.9000e-003**		**0.7233**	**0.7233**		**0.7177**	**0.7177**	**0.0000**	**8,365.9499**	**8,365.9499**	**0.2236**	**0.1522**	**8,417.8232**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Operation of Phase I

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	700.00	Room	20.70	762,666.00	0
Apartments Mid Rise	435.00	Dwelling Unit	4.23	598,736.59	1244

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2018
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 840 Units = 1,156,181 SF - DEIR Model; 435 Units = 52% of Residential; 1,156,181 SF x 52% = 598,736.59 SF

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Vehicle Trips - Trip Rates consistent with Traffic Impact Study (Table 9-1).

Woodstoves - Total of 756 gas fireplaces for 840 units. 756 x 52% = 392 fireplaces.

Energy Use - Consistent with DEIR.

Water And Wastewater - Water Use Rates = Total Water Use from DEIR * 52%.

Solid Waste - Hotel - Consistent with DEIR; Apartment = 806*52% = 417

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	741.44	556.08
tblEnergyUse	T24E	160.77	120.58
tblEnergyUse	T24NG	3,820.47	2,865.35
tblFireplaces	NumberGas	239.25	392.00
tblFireplaces	NumberWood	152.25	0.00
tblLandUse	LandUseSquareFeet	1,016,400.00	762,666.00
tblLandUse	LandUseSquareFeet	435,000.00	598,736.59
tblLandUse	LotAcreage	23.33	20.70
tblLandUse	LotAcreage	11.45	4.23
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblSolidWaste	SolidWasteGenerationRate	200.10	417.00
tblSolidWaste	SolidWasteGenerationRate	383.25	348.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	ST_TR	7.16	5.10
tblVehicleTrips	ST_TR	8.19	15.29
tblVehicleTrips	SU_TR	6.07	5.10
tblVehicleTrips	SU_TR	5.95	15.29
tblVehicleTrips	WD_TR	6.59	5.10

tblVehicleTrips	WD_TR	8.17	15.29
tblWater	IndoorWaterUseRate	28,342,001.15	32,661,104.25
tblWater	OutdoorWaterUseRate	17,867,783.33	12,689,211.90
tblWoodstoves	NumberCatalytic	21.75	0.00
tblWoodstoves	NumberNoncatalytic	21.75	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Energy	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
Mobile	45.8863	102.9350	469.3866	1.1096	78.7905	1.3698	80.1603	21.0327	1.2622	22.2949		90,800.3567	90,800.3567	3.6853		90,877.7480
Total	**88.3062**	**116.3177**	**516.3248**	**1.1895**	**78.7905**	**3.0806**	**81.8711**	**21.0327**	**2.9675**	**24.0002**	**0.0000**	**114,759.4164**	**114,759.4164**	**4.2077**	**0.4381**	**114,983.5781**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Energy	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
Mobile	45.8863	102.9350	469.3866	1.1096	78.7905	1.3698	80.1603	21.0327	1.2622	22.2949		90,800.3567	90,800.3567	3.6853		90,877.7480
Total	**88.3062**	**116.3177**	**516.3248**	**1.1895**	**78.7905**	**3.0806**	**81.8711**	**21.0327**	**2.9675**	**24.0002**	**0.0000**	**114,759.4164**	**114,759.4164**	**4.2077**	**0.4381**	**114,983.5781**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	45.8863	102.9350	469.3866	1.1096	78.7905	1.3698	80.1603	21.0327	1.2622	22.2949		90,800.3567	90,800.3567	3.6853		90,877.7480
Unmitigated	45.8863	102.9350	469.3866	1.1096	78.7905	1.3698	80.1603	21.0327	1.2622	22.2949		90,800.3567	90,800.3567	3.6853		90,877.7480

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,218.50	2,218.50	2218.50	7,134,724	7,134,724
Hotel	10,703.00	10,703.00	10703.00	30,102,778	30,102,778
Total	12,921.50	12,921.50	12,921.50	37,237,503	37,237,503

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	100	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.511818	0.073499	0.191840	0.131575	0.036332	0.005186	0.012677	0.022513	0.001864	0.002072	0.006564	0.000601	0.003458

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069
NaturalGas Unmitigated	1.4294	12.9625	10.6824	0.0780		0.9876	0.9876		0.9876	0.9876		15,593.1099	15,593.1099	0.2989	0.2859	15,688.0069

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5395.61	0.0582	0.4972	0.2116	3.1700e-003		0.0402	0.0402		0.0402	0.0402		634.7775	634.7775	0.0122	0.0116	638.6407
Hotel	127146	1.3712	12.4653	10.4708	0.0748		0.9474	0.9474		0.9474	0.9474		14,958.3323	14,958.3323	0.2867	0.2742	15,049.3663
Total		**1.4294**	**12.9625**	**10.6824**	**0.0780**		**0.9876**	**0.9876**		**0.9876**	**0.9876**		**15,593.1099**	**15,593.1099**	**0.2989**	**0.2859**	**15,688.0069**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5.39561	0.0582	0.4972	0.2116	3.1700e-003		0.0402	0.0402		0.0402	0.0402		634.7775	634.7775	0.0122	0.0116	638.6407
Hotel	127.146	1.3712	12.4653	10.4708	0.0748		0.9474	0.9474		0.9474	0.9474		14,958.3323	14,958.3323	0.2867	0.2742	15,049.3663
Total		**1.4294**	**12.9625**	**10.6824**	**0.0780**		**0.9876**	**0.9876**		**0.9876**	**0.9876**		**15,593.1099**	**15,593.1099**	**0.2989**	**0.2859**	**15,688.0069**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232
Unmitigated	40.9905	0.4202	36.2558	1.9000e-003		0.7233	0.7233		0.7177	0.7177	0.0000	8,365.9499	8,365.9499	0.2236	0.1522	8,417.8232

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.9745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	29.1340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7609	3.0000e-005	0.0415	0.0000		0.5257	0.5257		0.5202	0.5202	0.0000	8,301.1765	8,301.1765	0.1591	0.1522	8,351.6961
Landscaping	1.1210	0.4202	36.2143	1.9000e-003		0.1975	0.1975		0.1975	0.1975		64.7735	64.7735	0.0645		66.1271
Total	**40.9905**	**0.4202**	**36.2558**	**1.9000e-003**		**0.7233**	**0.7233**		**0.7177**	**0.7177**	**0.0000**	**8,365.9499**	**8,365.9499**	**0.2236**	**0.1522**	**8,417.8232**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.9745					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	29.1340					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7609	3.0000e-005	0.0415	0.0000		0.5257	0.5257		0.5202	0.5202	0.0000	8,301.1765	8,301.1765	0.1591	0.1522	8,351.6961
Landscaping	1.1210	0.4202	36.2143	1.9000e-003		0.1975	0.1975		0.1975	0.1975		64.7735	64.7735	0.0645		66.1271
Total	**40.9905**	**0.4202**	**36.2558**	**1.9000e-003**		**0.7233**	**0.7233**		**0.7177**	**0.7177**	**0.0000**	**8,365.9499**	**8,365.9499**	**0.2236**	**0.1522**	**8,417.8232**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town and Country

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	14.30	1000sqft	0.33	14,300.00	0
High Turnover (Sit Down Restaurant)	25.65	1000sqft	0.59	25,650.00	0
Hotel	954.00	Room	20.50	869,307.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2015
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Reflects DEIR parameter inputs

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Vehicle Trips - Reflects DEIR parameter inputs.

Water And Wastewater - Reflects DEIR parameter input

Solid Waste - Reflects DEIR parameter intput

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	1,385,208.00	869,307.00
tblLandUse	LotAcreage	31.80	20.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2015
tblSolidWaste	SolidWasteGenerationRate	81.51	0.00
tblSolidWaste	SolidWasteGenerationRate	305.24	0.00
tblSolidWaste	SolidWasteGenerationRate	522.31	564.00
tblVehicleTrips	ST_TR	20.87	20.00
tblVehicleTrips	ST_TR	158.37	8.97
tblVehicleTrips	ST_TR	8.19	15.19
tblVehicleTrips	SU_TR	26.73	20.00
tblVehicleTrips	SU_TR	131.84	8.97
tblVehicleTrips	SU_TR	5.95	15.19
tblVehicleTrips	WD_TR	32.93	20.00
tblVehicleTrips	WD_TR	127.15	8.97
tblVehicleTrips	WD_TR	8.17	15.19
tblWater	IndoorWaterUseRate	24,199,898.58	32,306,005.93

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.6056	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188
Energy	0.3105	2.8229	2.3712	0.0169		0.2145	0.2145		0.2145	0.2145	0.0000	7,606.8053	7,606.8053	0.2414	0.0941	7,641.0439
Mobile	9.9096	19.7181	92.6785	0.1568	10.6373	0.2459	10.8832	2.8450	0.2258	3.0708	0.0000	12,749.8750	12,749.8750	0.6050	0.0000	12,762.5798
Waste						0.0000	0.0000		0.0000	0.0000	114.4869	0.0000	114.4869	6.7660	0.0000	256.5725
Water						0.0000	0.0000		0.0000	0.0000	12.9876	187.6534	200.6409	1.3415	0.0331	239.0610
Total	**14.8258**	**22.5411**	**95.0592**	**0.1737**	**10.6373**	**0.4604**	**11.0977**	**2.8450**	**0.4404**	**3.2853**	**127.4745**	**20,544.3515**	**20,671.8259**	**8.9539**	**0.1272**	**20,899.2761**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.6056	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188
Energy	0.3105	2.8229	2.3712	0.0169		0.2145	0.2145		0.2145	0.2145	0.0000	7,606.8053	7,606.8053	0.2414	0.0941	7,641.0439
Mobile	9.9096	19.7181	92.6785	0.1568	10.6373	0.2459	10.8832	2.8450	0.2258	3.0708	0.0000	12,749.8750	12,749.8750	0.6050	0.0000	12,762.5798
Waste						0.0000	0.0000		0.0000	0.0000	114.4869	0.0000	114.4869	6.7660	0.0000	256.5725
Water						0.0000	0.0000		0.0000	0.0000	12.9876	187.6534	200.6409	1.3413	0.0330	239.0403
Total	**14.8258**	**22.5411**	**95.0592**	**0.1737**	**10.6373**	**0.4604**	**11.0977**	**2.8450**	**0.4404**	**3.2853**	**127.4745**	**20,544.3515**	**20,671.8259**	**8.9537**	**0.1271**	**20,899.2553**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.9096	19.7181	92.6785	0.1568	10.6373	0.2459	10.8832	2.8450	0.2258	3.0708	0.0000	12,749.8750	12,749.8750	0.6050	0.0000	12,762.5798
Unmitigated	9.9096	19.7181	92.6785	0.1568	10.6373	0.2459	10.8832	2.8450	0.2258	3.0708	0.0000	12,749.8750	12,749.8750	0.6050	0.0000	12,762.5798

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	286.00	286.00	286.00	494,113	494,113
High Turnover (Sit Down Restaurant)	230.08	230.08	230.08	266,954	266,954
Hotel	14,491.26	14,491.26	14491.26	27,532,391	27,532,391
Total	15,007.34	15,007.34	15,007.34	28,293,457	28,293,457

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	9.50	7.30	7.30	16.90	64.10	19.00	52	39	9
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,533.7439	4,533.7439	0.1825	0.0378	4,549.2803
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,533.7439	4,533.7439	0.1825	0.0378	4,549.2803
NaturalGas Mitigated	0.3105	2.8229	2.3712	0.0169		0.2145	0.2145		0.2145	0.2145	0.0000	3,073.0615	3,073.0615	0.0589	0.0563	3,091.7636
NaturalGas Unmitigated	0.3105	2.8229	2.3712	0.0169		0.2145	0.2145		0.2145	0.2145	0.0000	3,073.0615	3,073.0615	0.0589	0.0563	3,091.7636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	5.28973e+007	0.2852	2.5930	2.1781	0.0156		0.1971	0.1971		0.1971	0.1971	0.0000	2,822.8030	2,822.8030	0.0541	0.0518	2,839.9821
Health Club	168597	9.1000e-004	8.2600e-003	6.9400e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	8.9970	8.9970	1.7000e-004	1.6000e-004	9.0517
High Turnover (Sit Down Restaurant)	4.52107e+006	0.0244	0.2216	0.1862	1.3300e-003		0.0168	0.0168		0.0168	0.0168	0.0000	241.2615	241.2615	4.6200e-003	4.4200e-003	242.7297
Total		**0.3105**	**2.8229**	**2.3712**	**0.0169**		**0.2145**	**0.2145**		**0.2145**	**0.2145**	**0.0000**	**3,073.0615**	**3,073.0615**	**0.0589**	**0.0563**	**3,091.7636**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	5.28973e+007	0.2852	2.5930	2.1781	0.0156		0.1971	0.1971		0.1971	0.1971	0.0000	2,822.8030	2,822.8030	0.0541	0.0518	2,839.9821
Health Club	168597	9.1000e-004	8.2600e-003	6.9400e-003	5.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	8.9970	8.9970	1.7000e-004	1.6000e-004	9.0517
High Turnover (Sit Down Restaurant)	4.52107e+006	0.0244	0.2216	0.1862	1.3300e-003		0.0168	0.0168		0.0168	0.0168	0.0000	241.2615	241.2615	4.6200e-003	4.4200e-003	242.7297
Total		**0.3105**	**2.8229**	**2.3712**	**0.0169**		**0.2145**	**0.2145**		**0.2145**	**0.2145**	**0.0000**	**3,073.0615**	**3,073.0615**	**0.0589**	**0.0563**	**3,091.7636**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	128700	42.0603	1.6900e-003	3.5000e-004	42.2044
High Turnover (Sit Down Restaurant)	1.06088e+006	346.7062	0.0140	2.8900e-003	347.8943
Hotel	1.26832e+007	4,144.9774	0.1668	0.0345	4,159.1816
Total		**4,533.7439**	**0.1825**	**0.0378**	**4,549.2803**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	128700	42.0603	1.6900e-003	3.5000e-004	42.2044
High Turnover (Sit Down Restaurant)	1.06088e+006	346.7062	0.0140	2.8900e-003	347.8943
Hotel	1.26832e+007	4,144.9774	0.1668	0.0345	4,159.1816
Total		**4,533.7439**	**0.1825**	**0.0378**	**4,549.2803**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.6056	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188
Unmitigated	4.6056	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0536					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.5511					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188
Total	**4.6056**	**9.0000e-005**	**9.4500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0188**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.0536					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.5511					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.3000e-004	9.0000e-005	9.4500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0178	0.0178	5.0000e-005	0.0000	0.0188
Total	**4.6056**	**9.0000e-005**	**9.4500e-003**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.0178**	**0.0178**	**5.0000e-005**	**0.0000**	**0.0188**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	200.6409	1.3413	0.0330	239.0403
Unmitigated	200.6409	1.3415	0.0331	239.0610

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	0.845747 / 0.518361	5.7494	0.0278	7.0000e-004	6.5486
High Turnover (Sit Down Restaurant)	7.78564 / 0.496956	37.4052	0.2551	6.2800e-003	44.7095
Hotel	32.306 / 2.68888	157.4863	1.0586	0.0261	187.8029
Total		**200.6410**	**1.3415**	**0.0331**	**239.0610**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	0.845747 / 0.518361	5.7494	0.0278	7.0000e-004	6.5482
High Turnover (Sit Down Restaurant)	7.78564 / 0.496956	37.4052	0.2551	6.2700e-003	44.7056
Hotel	32.306 / 2.68888	157.4863	1.0584	0.0260	187.7865
Total		**200.6410**	**1.3413**	**0.0330**	**239.0403**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	114.4869	6.7660	0.0000	256.5725
Mitigated	114.4869	6.7660	0.0000	256.5725

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	564	114.4869	6.7660	0.0000	256.5725
Total		**114.4869**	**6.7660**	**0.0000**	**256.5725**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	564	114.4869	6.7660	0.0000	256.5725
Total		**114.4869**	**6.7660**	**0.0000**	**256.5725**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Town & Country - Proposed Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	700.00	Room	20.96	774,066.00	0
Apartments Mid Rise	840.00	Dwelling Unit	7.62	1,156,181.00	2402

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Hotel = Rooms (700) + Convention Space (177,137 SF) + Parking (145,600 SF) + Lobby (11,400SF) + Restaurant/Cafe (12,800SF); Apartments = Units (840 DU) + Parking;

Construction Phase - Operational Run Only.

Off-road Equipment - Operational Run Only.

Vehicle Trips - Trip Rates consistent with DEIR.

Woodstoves - Consistent with DEIR.

Energy Use - Consistent with DEIR.

Water And Wastewater - Consistent with DEIR.

Solid Waste - Consistent with DEIR.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	1.00
tblEnergyUse	LightingElect	741.44	556.08
tblEnergyUse	T24E	160.77	120.58
tblEnergyUse	T24NG	3,820.47	2,865.35
tblFireplaces	NumberGas	462.00	756.00
tblFireplaces	NumberWood	294.00	0.00
tblLandUse	LandUseSquareFeet	1,016,400.00	774,066.00
tblLandUse	LandUseSquareFeet	840,000.00	1,156,181.00
tblLandUse	LotAcreage	23.33	20.96
tblLandUse	LotAcreage	22.11	7.62
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2020
tblSolidWaste	SolidWasteGenerationRate	386.40	806.00
tblSolidWaste	SolidWasteGenerationRate	383.25	348.00
tblVehicleTrips	ST_TR	7.16	5.10
tblVehicleTrips	ST_TR	8.19	15.29
tblVehicleTrips	SU_TR	6.07	5.10
tblVehicleTrips	SU_TR	5.95	15.29
tblVehicleTrips	WD_TR	6.59	5.10
tblVehicleTrips	WD_TR	8.17	15.29
tblWater	IndoorWaterUseRate	54,729,381.52	63,069,718.56
tblWater	OutdoorWaterUseRate	34,503,305.74	24,503,305.74
tblWoodstoves	NumberCatalytic	42.00	0.00
tblWoodstoves	NumberNoncatalytic	42.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	10.4955	0.0724	6.2676	3.3000e-004		0.0760	0.0760		0.0756	0.0756	0.0000	605.6640	605.6640	0.0214	0.0109	609.4972
Energy	0.2745	2.4842	2.0141	0.0150		0.1897	0.1897		0.1897	0.1897	0.0000	7,294.1741	7,294.1741	0.2363	0.0879	7,326.3931
Mobile	7.5049	14.4763	70.6643	0.1795	12.2460	0.2091	12.4551	3.2752	0.1930	3.4682	0.0000	12,453.0739	12,453.0739	0.4909	0.0000	12,463.3823
Waste						0.0000	0.0000		0.0000	0.0000	234.2516	0.0000	234.2516	13.8439	0.0000	524.9729
Water						0.0000	0.0000		0.0000	0.0000	25.6425	440.0783	465.7208	2.6514	0.0659	541.8156
Total	**18.2749**	**17.0329**	**78.9460**	**0.1948**	**12.2460**	**0.4748**	**12.7207**	**3.2752**	**0.4582**	**3.7334**	**259.8941**	**20,792.9902**	**21,052.8843**	**17.2439**	**0.1647**	**21,466.0610**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	10.4955	0.0724	6.2676	3.3000e-004		0.0760	0.0760		0.0756	0.0756	0.0000	605.6640	605.6640	0.0214	0.0109	609.4972
Energy	0.2745	2.4842	2.0141	0.0150		0.1897	0.1897		0.1897	0.1897	0.0000	7,294.1741	7,294.1741	0.2363	0.0879	7,326.3931
Mobile	7.5049	14.4763	70.6643	0.1795	12.2460	0.2091	12.4551	3.2752	0.1930	3.4682	0.0000	12,453.0739	12,453.0739	0.4909	0.0000	12,463.3823
Waste						0.0000	0.0000		0.0000	0.0000	234.2516	0.0000	234.2516	13.8439	0.0000	524.9729
Water						0.0000	0.0000		0.0000	0.0000	25.6425	440.0783	465.7208	2.6510	0.0658	541.7747
Total	**18.2749**	**17.0329**	**78.9460**	**0.1948**	**12.2460**	**0.4748**	**12.7207**	**3.2752**	**0.4582**	**3.7334**	**259.8941**	**20,792.9902**	**21,052.8843**	**17.2434**	**0.1646**	**21,466.0201**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/2/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	8.00	162	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	255	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.5049	14.4763	70.6643	0.1795	12.2460	0.2091	12.4551	3.2752	0.1930	3.4682	0.0000	12,453.0739	12,453.0739	0.4909	0.0000	12,463.3823
Unmitigated	7.5049	14.4763	70.6643	0.1795	12.2460	0.2091	12.4551	3.2752	0.1930	3.4682	0.0000	12,453.0739	12,453.0739	0.4909	0.0000	12,463.3823

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	4,284.00	4,284.00	4284.00	12,232,120	12,232,120
Hotel	10,703.00	10,703.00	10703.00	20,334,959	20,334,959
Total	14,987.00	14,987.00	14,987.00	32,567,079	32,567,079

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513300	0.073549	0.191092	0.130830	0.036094	0.005140	0.012550	0.022916	0.001871	0.002062	0.006564	0.000586	0.003446

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,577.6953	4,577.6953	0.1843	0.0381	4,593.3823
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,577.6953	4,577.6953	0.1843	0.0381	4,593.3823
NaturalGas Mitigated	0.2745	2.4842	2.0141	0.0150		0.1897	0.1897		0.1897	0.1897	0.0000	2,716.4788	2,716.4788	0.0521	0.0498	2,733.0108
NaturalGas Unmitigated	0.2745	2.4842	2.0141	0.0150		0.1897	0.1897		0.1897	0.1897	0.0000	2,716.4788	2,716.4788	0.0521	0.0498	2,733.0108

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.80297e+006	0.0205	0.1752	0.0746	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.9412	202.9412	3.8900e-003	3.7200e-003	204.1762
Hotel	4.71019e+007	0.2540	2.3089	1.9395	0.0139		0.1755	0.1755		0.1755	0.1755	0.0000	2,513.5376	2,513.5376	0.0482	0.0461	2,528.8346
Total		**0.2745**	**2.4842**	**2.0141**	**0.0150**		**0.1897**	**0.1897**		**0.1897**	**0.1897**	**0.0000**	**2,716.4788**	**2,716.4788**	**0.0521**	**0.0498**	**2,733.0108**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.80297e+006	0.0205	0.1752	0.0746	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.9412	202.9412	3.8900e-003	3.7200e-003	204.1762
Hotel	4.71019e+007	0.2540	2.3089	1.9395	0.0139		0.1755	0.1755		0.1755	0.1755	0.0000	2,513.5376	2,513.5376	0.0482	0.0461	2,528.8346
Total		**0.2745**	**2.4842**	**2.0141**	**0.0150**		**0.1897**	**0.1897**		**0.1897**	**0.1897**	**0.0000**	**2,716.4788**	**2,716.4788**	**0.0521**	**0.0498**	**2,733.0108**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.71364e+006	886.8403	0.0357	7.3900e-003	889.8794
Hotel	1.12936e+007	3,690.8550	0.1486	0.0307	3,703.5029
Total		**4,577.6953**	**0.1843**	**0.0381**	**4,593.3823**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.71364e+006	886.8403	0.0357	7.3900e-003	889.8794
Hotel	1.12936e+007	3,690.8550	0.1486	0.0307	3,703.5029
Total		**4,577.6953**	**0.1843**	**0.0381**	**4,593.3823**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	10.4955	0.0724	6.2676	3.3000e-004		0.0760	0.0760		0.0756	0.0756	0.0000	605.6640	605.6640	0.0214	0.0109	609.4972
Unmitigated	10.4955	0.0724	6.2676	3.3000e-004		0.0760	0.0760		0.0756	0.0756	0.0000	605.6640	605.6640	0.0214	0.0109	609.4972

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0602	0.0000	3.2800e-003	0.0000		0.0416	0.0416		0.0411	0.0411	0.0000	595.4633	595.4633	0.0114	0.0109	599.0872
Landscaping	0.1912	0.0724	6.2643	3.3000e-004		0.0344	0.0344		0.0344	0.0344	0.0000	10.2007	10.2007	9.9700e-003	0.0000	10.4100
Total	**10.4955**	**0.0724**	**6.2676**	**3.3000e-004**		**0.0760**	**0.0760**		**0.0756**	**0.0756**	**0.0000**	**605.6640**	**605.6640**	**0.0214**	**0.0109**	**609.4972**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.7056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.5386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0602	0.0000	3.2800e-003	0.0000		0.0416	0.0416		0.0411	0.0411	0.0000	595.4633	595.4633	0.0114	0.0109	599.0872
Landscaping	0.1912	0.0724	6.2643	3.3000e-004		0.0344	0.0344		0.0344	0.0344	0.0000	10.2007	10.2007	9.9700e-003	0.0000	10.4100
Total	**10.4955**	**0.0724**	**6.2676**	**3.3000e-004**		**0.0760**	**0.0760**		**0.0756**	**0.0756**	**0.0000**	**605.6640**	**605.6640**	**0.0214**	**0.0109**	**609.4972**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	465.7208	2.6510	0.0658	541.7747
Unmitigated	465.7208	2.6514	0.0659	541.8156

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	63.0697 / 24.5033	377.3623	2.0695	0.0515	436.7876
Hotel	17.7567 / 1.97297	88.3586	0.5819	0.0144	105.0280
Total		**465.7208**	**2.6514**	**0.0659**	**541.8156**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	63.0697 / 24.5033	377.3623	2.0691	0.0514	436.7557
Hotel	17.7567 / 1.97297	88.3586	0.5818	0.0143	105.0190
Total		**465.7208**	**2.6510**	**0.0658**	**541.7747**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	234.2516	13.8439	0.0000	524.9729
Mitigated	234.2516	13.8439	0.0000	524.9729

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	806	163.6107	9.6691	0.0000	366.6622
Hotel	348	70.6409	4.1748	0.0000	158.3107
Total		**234.2516**	**13.8439**	**0.0000**	**524.9729**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	806	163.6107	9.6691	0.0000	366.6622
Hotel	348	70.6409	4.1748	0.0000	158.3107
Total		**234.2516**	**13.8439**	**0.0000**	**524.9729**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

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Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

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EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES **B.S. CONSERVATION BIOLOGY & ENVIRONMENTAL SCIENCES** *JUNE 2014*

PROJECT EXPERIENCE

SOIL WATER AIR PROTECTION ENTERPRISE ***SANTA MONICA, CA***

AIR QUALITY SPECIALIST

SENIOR ANALYST: CEQA ANALYSIS & MODELING

- Calculated roadway, stationary source, and cumulative impacts for risk and hazard analyses at proposed land use projects.
- Quantified criteria air pollutant and greenhouse gas emissions released during construction and operational activities of proposed land use projects using CalEEMod and EMFAC2011 emission factors.
- Utilized AERSCREEN, a screening dispersion model, to determine the ambient air concentrations at sensitive receptor locations.
- Organized presentations containing figures and tables comparing results of particulate matter analyses to CEQA thresholds.
- Prepared reports that discuss results of the health risk analyses conducted for several land use redevelopment projects.

SENIOR ANALYST: GREENHOUSE GAS MODELING AND DETERMINATION OF SIGNIFICANCE

- Quantified greenhouse gas (GHG) emissions of a "business as usual" scenario for proposed land use projects using CalEEMod.
- Determined compliance of proposed projects with AB 32 GHG reduction targets, with measures described in CARB's Scoping Plan for each land use sector, and with GHG significance thresholds recommended by various Air Quality Management Districts in California.
- Produced tables and figures that compare the results of the GHG analyses to applicable CEQA thresholds and reduction targets.

PROJECT MANAGER: OFF-GASSING OF FORMALDEHYDE FROM FLOORING PRODUCTS

- Determined the appropriate standard test methods to effectively measure formaldehyde emissions from flooring products.
- Compiled and analyzed laboratory testing data. Produced tables, charts, and graphs to exhibit emission levels.
- Compared finalized testing data to Proposition 65 No Significant Risk Level (NSRL) and to CARB's Phase 2 Standard.
- Prepared a final analytical report and organized supporting data for use as Expert testimony in environmental litigation.
- Participated in meetings with clients to discuss project strategy and identify solutions to achieve short and long term goals.

PROJECT ANALYST: EXPOSURE ASSESSMENT OF CONTAMINANTS EMITTED BY INCINERATOR

- Reviewed and organized sampling data, and determined the maximum levels of arsenic, dioxin, and lead in soil samples.
- Determined cumulative and hourly particulate deposition of incinerator and modeled particle dispersion locations using GIS and AERMOD.
- Conducted risk assessment using guidance set forth by the Office of Environmental Health Hazard Assessment (OEHHA).
- Utilized LeadSpread8 to evaluate exposure, and the potential adverse health effects from exposure, to lead in the environment.
- Compared final results of assessment to the Environmental Protection Agency's (EPA) Regional Screening Levels (RSLs).

ACCOMPLISHMENTS

- **Recipient**, Bruins Advantage Scholarship, University of California, Los Angeles ***SEPT 2010 – JUNE 2014***
- **Academic Honoree,** Dean's List, University of California, Los Angeles ***SEPT 2013 – JUNE 2014***
- **Academic Wellness Director**, UCLA Undergraduate Students Associated Council ***SEPT 2013 – JUNE 2014***
- **Student Groups Support Committee Member**, UCLA Undergraduate Students Associated Council ***SEPT 2012 – JUNE 2013***

LETTER A
ATTACHMENT 2

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TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM WATT PLANNING CONSULTANTS (ATTACHMENT A-2)

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415-377-6280
October 13, 2016

Tony LoPresti
Altshuler Berzon LLP
177 Post Street, Suite 300
San Francisco, CA 94108

RE: Comments on Draft Environmental Impact Report for Proposed Town and Country Project; Project No. 424475; SCH No. 2015121066

Dear Mr. LoPresti,

At your request, I have reviewed the draft environmental impact report ("DEIR") for the Proposed Town and Country project ("Project").[1] My review focused on the DEIR's treatment of:

- Project consistency with plans and policies,
- Growth inducing impacts,
- Impacts associated with population, employment and housing, and
- Alternatives

After carefully reviewing the DEIR for the Project, I have concluded that it fails in numerous ways to comply with the requirements of CEQA. As described in detail below, the DEIR fails to (1) adequately describe the Project, (2) analyze Project and cumulative impacts, (3) identify feasible mitigation, and (4) undertake a sufficient study of alternatives.

In preparing these comments I reviewed the following information:

A.2-1

- San Diego General Plan, Mission Valley Community Plan, Atlas Specific Plan and proposed amendments to these plans proposed by the Project
- Draft Town and Country Master Plan
- Zoning and proposed rezone
- Draft Environmental Impact Report and Appendices
- San Diego Transit Oriented Development Guidelines

The discussion of a proposed project's environmental impacts is at the core of any environmental review. Environmental analysis must inform the public and decision-makers of the environmental consequences of their decisions before they are made. To do so, environmental analysis must contain facts and analysis, not just an agency's bare conclusions. A conclusion regarding the significance of an

[1] See Appendix B for Watt Qualifications

1

A.2-1 See Response A-4.

environmental impact that is not based on analysis of the relevant facts fails to fulfill CEQA's fundamental mandate. Numerous substantive flaws in the DEIR's analysis are described below in detail. A.2-1

I. The Project Violates the California Environmental Quality Act

A. The DEIR Provides an Incomplete and Inconsistent Description of the Project and the Project Setting with Respect to Consistency with Plans and Policies, Housing, Employment, Population and Growth

A fundamental requirement of CEQA is that an EIR contain an accurate and complete project description. Without a complete project description, an agency and the public cannot be assured that all the project's environmental impacts have been revealed and mitigated. Because of the Project approvals including plan amendments and a Vesting Tentative Map, the Project may not need to undergo further CEQA review. Thus, this may be the only environmental review conducted for this Project.[2] The City must therefore describe all Project components in as accurate and detailed manner as possible and base its analysis and disclosure of impacts on that complete and consistent Project description. A.2-2

Further CEQA and the CEQA Guidelines mandate that an EIR include a description of the "physical environmental conditions . . . from both a local and a regional perspective. . . Knowledge of the regional setting is critical to the assessment of environmental impacts." CEQA Guidelines Section 15125(a) and (c). This requirement derives from the principle that without an adequate description of the project's local and regional context, the EIR – and thus the decision-makers, agencies and public who rely on the EIR – cannot accurately assess the potentially significant impacts of the proposed Project.

1. The DEIR Lacks a Complete and Consistent Description of the Project

The Project description fails to provide details about the Project necessary for an adequate analysis of impacts. Flaws in the DEIR include inconsistent information, such as the many different descriptions of the Project's resident population, as well as the omission of information critical to an adequate impact analysis, such as the number of bedrooms in the 840 planned dwelling units. Specific examples of elements of the Project missing from the description include but are not limited to the following: A.2-3

a. Total Project Employees

The Project description fails to describe the total number of employees[3] as well as information about Project employees necessary to support adequate impact analysis. The Project is described in the Draft Master Plan as follows: A.2-4

[2] San Diego's General Plan encourages use of prior environmental documents and tiering for infill project's in particular. The magnitude of this Project and the significant plan and policy amendments involved warrant thorough environmental review in a revised EIR prior to Project approval.

[3] The Project description must include employees of both the residential and non-residential (hotel, spa, restaurants, conference center) components of the Project. Employees associated with the residential component of the project include but are not limited to managers, grounds and building maintenance crews, and the like. Part and full time employees must be included in the description.

2

A.2-2 Consistent with CEQA Section 15124, the Project Description as described in Chapter 3.0 of the Draft EIR contains the required information including the precise location and boundaries; statement of objectives; general description of the project's characteristics and a description of the intended uses of the EIR.

A.2-3 See Response A-30 and A-31 regarding the Project Description.

A.2-4 See Response A-30 and A-31 regarding general Project Description, Response A-31 regarding residential population, and A-42 regarding economic issues.

"Reinvent the image of the hotel to create an enhanced visitor experience for hotel guests and neighbors that increases the value for the hotel and transient occupancy tax revenue for the City." Draft Master Plan at page 4.

The Project's stated intent is to enhance the hotel and conference center and add and improve hotel amenities such as spa and restaurants. Draft Master Plan at page 4. The Project could have impacts on the employment numbers, job classifications and salary ranges when compared to the existing complex. Without detailed information in the DEIR however, it is impossible to evaluate the potential impacts of such changes.

A.2-4

The amount of staff engaged in a hotel activity largely depends on the status of the hotel. Luxury hotels that have a greater range of services tend to have high ratios of employees per room, with employees per room ranging from 1 per room to well above 2 employees per room.[4] The number of full and part-time employees and salary ranges also factor into an adequate analysis of impacts. For example, depending on the number of employees, impacts to transportation, housing and growth inducement, may be greater than under the existing condition. The lack of any information about Project employees precludes adequate analysis of impacts and creates a high degree of uncertainty about the conclusions reached in the DEIR concerning the severity of impacts.

b. Commercial Uses Allowed through Intensity Transfers

The Draft Master Plan allows residential uses to be converted to commercial uses where the conversion or "transfer" meets specified criteria. There is no information in the DEIR's Project description about the allowable transfer of residential density to commercial intensity as allowed by the Draft Master Plan. Specifically, the Draft Master Plan includes provisions allowing the transfer or conversion of residential units to commercial uses including retail and/or office. See Section 7.4 Development Intensity Transfer, Draft Master Plan at page 90.

"The Master Plan details the conceptual plan upon which all the technical studies are based. As the Master Plan is implemented and market trends change the plan may change as well. A process to accommodate such change has been established...

Section 7.4.1 Development Intensity Transfer Criteria

A.2-5

The transfer of development intensity from residential to commercial (retail and/or office) uses shall be limited to street or private drive-facing ground floor commercial within residential buildings or live/work units. Any commercial uses within the Residential District shall be neighborhood serving uses that do not directly compete with any use within the Hotel District."

Draft Master Plan provisions include criteria that must be met for such a transfer to occur including a demonstration that the transferred development will not exceed a maximum Average Daily Trips (ADT) of 14,985 and that the maximum density of 84 units per gross acre not be exceeded, among other criteria. Draft Master plan at page 90. These criteria only address traffic related impacts, and do not address other potentially significant impacts associated with replacement of residential uses with commercial uses.

[4] Source: Hotel Industry standards, Urban Land Institute.

3

A.2-5 The commenter is correct that the EIR analyzed the project as proposed without consideration of the transfer of intensity allowances from residential to commercial as described Section 7.4.1 of the Master Plan. The Master Plan has been revised to remove text referencing any allowance for the transfer of residential to commercial intensity or vice versa. Since this allowance has been removed from the Master Plan, no change to the EIR Project Description or analysis is required.

The Project approvals include a Vesting Tentative Map that will "vest" the Project elements and limit future discretionary action to adjust or improve the Project through subsequent approvals and environmental review. Therefore, it is critical that a complete and thorough description of the Project and all Project elements and allowed permutations be articulated so that Project-related and cumulative impacts can be adequately analyzed. The maximum allowable transfer from residential to commercial must be included in the Project description and analyzed fully.

Criteria proposed in the Draft Master Plan that limits the commercial component does not address potentially significant impacts associated with office space and/or retail uses. These non-residential uses, depending on extent, specific location, and specific type can generate different and potentially more significant impacts to noise, air quality, greenhouse gas emissions, housing and growth inducement, among others. For example, if office use is included in the Project, impacts associated with housing and growth will be very different than for a housing project. The Project description must be revised to describe the maximum potential office and/or retail uses under the allowable intensity transfer option and revise the impact analyses accordingly.

A.2-6

c. Commercial Uses Associated with the Hotel and Conference Center.

The DEIR lacks a detailed description of the commercial uses associated with the hotel, (e.g., hotel-related amenities) and conference center. A thorough description of these uses is critical to the adequacy of environmental analysis of traffic, growth inducement, housing and population as well as other impact categories. Proposed hotel- and conference center-related commercial uses, including spa and restaurants, though vaguely described, appear to primarily serve hotel and conference center guests. See DEIR at page 4.2-14. If accurate, characterization of the Project in the Draft Master Plan and DEIR analysis as mixed-use may be overstated and inaccurate.[5]

The importance of a detailed description of the commercial uses is also important because the DEIR consistency analysis invokes "commercial" elements of the Project to support the conclusion the Project is consistent with numerous policies of the General and Community Plans with respect to policies concerning mixed-use development. Commercial uses limited to spa and restaurants serving the hotel and conference center do not meet the City's definition of mixed use nor do they create a mixed-use Project where dependence on the automobile is reduced.

A revised Project description must clearly describe the Project's proposed commercial uses. Vehicle trips vary tremendously by type of commercial use, so details are important. (e.g., fast food or formal restaurant, hours of operation, and other description details that factor into impacts). A revised Project description must be prepared and used in re-analysis of project-related and cumulative impacts.

A.2-7

d. Complete and Consistent Description of the 840 Residential Dwelling Units

The DEIR does not provide much information concerning the proposed residential units beyond that these will be multi-family and generally at densities exceeding 20 units to the acre. DEIR at page 4.2-14.

A.2-8

[5] Per the SDGP and implementing zoning, mixed-use includes a variety of housing types affordable to people with different incomes and needs integrated with residential serving retail, commercial, employment and civic uses to create active and secure pedestrian friendly environments, balanced level of transit ridership throughout the day, walkability and reduced reliance on the automobile.

4

A.2-6 See Response A.2-5.

A.2-7 See Response A.2-2 regarding Project Description. Chapter 3.0 Project Description adequately describes the expected commercial uses on-site including the hotel, spa, restaurant, and retail components, which could be used by visitors as well as surrounding residents. These uses as described were used in the assessment of the environmental analysis.

A.2-8 See Response A-30 regarding size and number of bedrooms, refer to Response A-45-z on unit affordability, and Response A-45p regarding gross density. Pursuant to San Diego Municipal Code Section 143.0410(b)(3), General Development Regulations for Planned Development Permits, dwelling units or total gross floor area is permitted to be calculated over the applicable zone and land use plan—not on a parcel by parcel basis. The project density is 69.54 EDU/acre which is less than the maximum 73 du/ac allowed per the Mission Valley Community Plan and the maximum 70 du/ac allowed per San Diego Municipal Code 1514.0304(c). The Final EIR has been revised to amend the Project Description Table 3-6 Land Development Code Deviations to remove the density deviation and clarify the EDU calculation based on the Mission Valley Community Plan and San Diego Municipal Code allowances.

The Project description lacks information about housing density, affordability, size and number of bedrooms; information critical to an adequate analysis of Project-related and cumulative impacts.

Information in the DEIR sections other than Project description, suggest Project densities will likely be much higher than 20-units to the acre and in fact more than 100 units per acre. See DEIR at page 4.2-61 (Residential Parcel 1 – 160 dwelling units in 1.70 acres; Residential Parcel 2 – 275 dwelling units in 2.53 acres; Residential Parcel 3 – 255 dwelling units in 1.92 acres). Full disclosure of gross and net Project density and overall intensity is an important factor in evaluating many impacts, including policy consistency, aesthetics, and other impacts. A.2-8

In addition to accurately describing Project density and intensity, a revised DEIR must include information about the number of bedrooms in the units or at least number of units or percent likely to be studio, one-, two-, three- and more bedrooms. This detailed Project information is critical to determining the Project's impact on public services including water use and schools, as well as transportation, growth inducement and other impacts. A.2-9

A revised Project description must also disclose the range of rental rates and pricing for sales units. Housing pricing has a direct correlation with several impact categories including trips and type of trips.[6] According to a newly released report, *Location Matters: Affordable Housing and VMT Reduction in San Diego County*, lower income families living near transit own fewer cars, live in smaller units, use transit more and drive much less than higher income families. See Appendix A to this letter. Additional detail concerning the residential component of the Project must be included in a revised DEIR, including housing affordability. A.2-10

Information in the DEIR concerning household size and residential population is inconsistent and incomplete. The Project description contains no information regarding the Project's residential population and is therefore insufficient. Other sections of the DEIR and supporting studies include inconsistent statements and assumptions regarding the Project's residential population ranging from 1.8 residents per unit for a total population of 1,435.5 residents (DEIR, Table 4.13, n.2.) to 2.85 residents per unit for a total population of 2,394 (Parks and Recreation Section of the DEIR). None of the population figures in the DEIR correspond to the Project Proponent's description in the Town & Country Master Plan nor to the Mission Valley Community Plan. A.2-11

The inconstancy of the DEIR and Draft Master Plan's projected residential population and household size with the Mission Valley Community Plan raises other issues as well, including whether the Project is consistent with plans, and whether the Project plus cumulative development exceed the Mission Valley Community Plan planned buildout of residential and non-residential uses. A revised DEIR must include this information in the Project description and use it consistently throughout the impact analyses.

e. Affordable Housing

The DEIR fails to provide any information about the Project's proposal to provide in-lieu fees to meet the City's affordable requirements, including amount of, and timing of the fee. In addition, a revised DEIR A.2-12

[6] See attachment to this letter: Location Matters: Affordable Housing and VMT Reduction in San Diego County

5

A.2-9 See Response A-30 regarding size and number of bedrooms and A-45p regarding project density and intensity. The Draft EIR Project Description describes all project components, and the Draft EIR analyzed the impacts of the project based on the maximum allowable number of residential units (840) and the other project components. Information on number of bedrooms is not required to assess impacts (see Response A-30 and A-31). Section 4.12 Public Services and Facilities concluded that impacts as a result of the project would be less than significant. Section 4.2 Transportation identifies impacts and feasible mitigation measures for all impacts with the exception of the Riverwalk Drive segment east of Avenida Del Rio, which the draft EIR identified as significant and unavoidable. In addition, Chapter 7.0, Cumulative Impacts determined no cumulative impacts to schools or other public services would occur. Chapter 6.0, Growth Inducement concluded the project would not directly or indirectly induce population or economic growth in the surrounding area.

A.2-10 The comment raises economic issues related to housing prices and rental rates. Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in a significant physical environmental impact. See Response A-45z regarding affordability.

A.2-11 See Response A-30 regarding the Project Description. The Project Description and Master Plan include a stable and consistent description of the number of residential units (840), and the impacts of all components of the proposed project were analyzed throughout the EIR. See Response A-31 regarding various City projection factors used for analysis in the Draft EIR. See Response A-45 through A-45oo regarding the project's consistency with the Mission Valley Community Plan. Draft EIR Section 4.1, Land Use, determined the project is generally consistent with the stated goals, objectives, and recommendations of the City of San Diego General Plan, MVCP, SDRPMP, the MSCP, and the San Diego Municipal Code. Chapter 7.0, Cumulative Impacts, determined the project is consistent with the Mission Valley Community Plan planned buildout of residential and non-residential development and would not result in a cumulatively considerable contribution to impacts related to land use when viewed together with the environmental impacts from past, present, and reasonable foreseeable future projects.

A.2-12 See Response A-45c regarding affordability. See Response A-30 regarding the Project Description including housing type and mixed-use project components. A revised Project Description is not required. The Project Description includes a stable description of the number of residential units (840), and the impacts of all components of the proposed project were analyzed throughout the EIR. Chapter 6.0, Growth Inducement, concluded the project would not directly or indirectly induce population or economic growth in the surrounding area. See Response A.2-14 regarding jobs-housing fit.

must also describe how those fees will be used and where to produce affordable housing as part of the Project description.

Lack of affordable housing undermines the City's core goal of mixed-use development to allow people to live and work in close proximity to reduce auto dependency.[7] Information about the Project's proposed housing, and specifically whether it will be affordable to the community area workforce, is both relevant to whether the Project is fully satisfying the City's affordable housing requirements as well as to the analysis of housing related impacts. A revised Project description must include information about housing affordability and that information must be used to evaluate housing-related impacts, including housing affordability, growth inducement and jobs-housing fit. A.2-12

f. Mechanisms to Encourage Local Employment

The Project description lacks any information about mechanisms to encourage local employment. To make the conclusion the Project is consistent with General Plan Land Use policy LU-H.4 encouraging local employment within new development, the DEIR concludes that the Project is consistent because: A.2-13

> "The project encourages local employment as a part of the project and increases access to local employment at Fashion Valley Mall and Fashion Valley Transit Center."

A revised Project description should include information on how the Project proposes to fulfill this promise.

2. The DEIR Fails to Adequately Describe the Regional Setting

The DEIR fails to adequately describe the Project setting, including the regional setting. Setting information is as essential to adequately disclosing and analyzing project-related and cumulative impacts as a complete and consistent Project description. Without baseline setting information it is not possible to determine whether the Project improves or makes worse existing environmental conditions. A.2-14

Examples of regional setting information that is missing from the DEIR includes but is not limited to the following:

- **The existing jobs housing "fit" within the Project site and within the Mission Valley Community area.** Finding the right jobs-housing *balance* has long been an important concern for urban planners. More recently, attention has turned to jobs-housing *fit* – the extent to which housing price is well matched to local job quality. The DEIR should be revised to describe the existing jobs-housing fit in the Mission Valley Community Area and on the Project site. Where the jobs-housing fit is out of balance, transportation impacts, impacts associated with air quality and greenhouse gas emissions, among other impacts, are likely to be significantly greater than where jobs and housing are in proximity and well-matched.

[7] Teachers, police and government workers cannot afford to live in the city they work in and workers in service industries – hotels, restaurants and retail – are relegated to long commutes and overcrowding to afford housing near their jobs. Per the San Diego Housing Commission's report "Addressing the Housing Affordability Crisis in San Diego" (dated November 26, 2015) only 6% of new housing being constructed is for people with low incomes; those in service industries.

6

A.2-13 Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in a significant physical environmental impact. Employment data is not required to analyze impacts to the project as stated in Response A-30; therefore, Chapter 3.0 Project Description does not need to be updated to address local employment.

The project is consistent with the General Plan and the Mission Valley Community Plan (see Responses A-45 through A-45oo). The project is consistent with LU-H.4 by continuing to provide employment opportunities at the site and would encourages and increase access to local employment by being within walking distance to a region employment center, Fashion Valley mall.

A.2-14 See Responses A-24a and A-166 regarding Project Description and regional setting. The Draft EIR provides a complete description of the regional setting in *Section 2.0 Environmental Setting* and within the *Existing Conditions* subsections of each environmental analysis for each issue area. The Cumulative Analysis also describes the geographic scope of the cumulative analysis for each environmental issue area.

Specific bullet points in this comment such as market leakage and current transits usage do not need to be addressed or analyzed as they are not required components per the City of San Diego Traffic Impact Study Manual. In addition, there are no significance thresholds specific to transit analysis outlined in the CEQA Significance Determination Thresholds to determine project impacts. Nonetheless, per the Traffic Impact Study Manual, a qualitative transit review is included in Section 14.0 of the TIA.

An analysis of jobs-housing "fit" is analyzed with respect to overall consistency with regional plans, specifically the General Plan and the Mission Valley Community Plan, which discuss employment and housing. With respect to jobs-housing balance as evaluated in the project's consistency with the General Plan, the project includes the application of the MVPD-MV-M zoning designation and specific conditions as part the MPDP that permit higher-density residential development, commercial and open space land uses on-site within a within a 5-minute walk (approximately 1,200 feet) of Fashion Valley Mall, which is a Subregional Employment District and Fashion Valley Transit Center that is a part of the MTS green line transit corridor and bus routes (consistent with LU-A.1). The project provides higher-density housing, as identified in the Housing Element that is in proximity to existing employment centers and transit amenities (consistent with LU-A.7). The project encourages local employment as a part of the project and increases access to local employment at Fashion Valley Mall and Fashion Valley Transit Center (consistent with LU-H.4.). The project site contains both residential and economic opportunities, and is within walking distance of a major retail center. The Fashion Valley Transit Center,

- **The percent of the workforce in Mission Valley that commutes to and from locations outside the Mission Valley Community area.** This "baseline setting" information serves to inform the questions concerning whether jobs-housing fit will be improved or made worse by the Project and cumulative projects. This information in turn is critical to impact analyses including but not limited to transportation, growth inducement, and housing and population.
- **The range of neighborhood serving uses in the Mission Valley Community area.** Information concerning "market leakage" from Mission Valley – meaning what neighborhood or resident serving retail and service uses are provided outside the Community Plan area to serve Valley residents – will also indicate whether the Project will generate demand for new services. This information is needed to evaluate whether residents of the Project can meet their retail and other daily needs[8] nearby by walking and biking, or will generate additional car trips or transit trips to access more distant services.
- **Demographic and socioeconomic information.** Current baseline setting information concerning demographic and socio-economic information for the Mission Valley Community Plan area including existing population, number of households, household size, household income, employment and employment by type and income range, school age children by age and household is necessary to an adequate and comprehensive analysis.
- **Current use levels and capacity of transit services in the Project area.** The baseline information for the current level of transit use and how much capacity remains is key to the analysis of the adequacy of and frankly attractiveness of transit to serve the needs of Project employees, visitors and residents.

A.2-14

This information is critical to the analysis of Project related impacts. For example, the assumption underlying the DEIR's analysis of multiple impacts (transportation, Air Quality, Greenhouse Gasses (GHG)) is that the Project will generate net zero trips over existing conditions. Without this baseline information and a corresponding analysis comparing the Project to the baseline, there is no baseline for the DEIR's assumption.

B. The DEIR's Analysis of, and Mitigation for, the Impacts of the Proposed Project Are Inadequate

The discussion of a project's environmental impacts is at the core of an EIR. See CEQA Guidelines Section 15126 (a). As explained below, the DEIR's environmental impacts analysis are deficient under CEQA because it fails to provide the necessary facts and analysis to allow the City and the public to make informed decisions about the Project. An EIR must contain facts and analysis, not just bare conclusions. A conclusion regarding the significance of an environmental impact that is not based on analysis of the relevant facts fails to fulfill CEQA's information mandate.

A.2-15

Additionally, an EIR must identify feasible mitigation measures to mitigate significant environmental impacts. CEQA Guidelines Section 15126.4. Under CEQA, "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects. . . ." Pub. Res. Code Section 21002.

[8] Neighborhood serving uses to serve resident daily needs include: grocery, drugstore, banking, childcare, and laundry.

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which is within walking distance of the site, allows for access to a greater portion of San Diego by pedestrians (consistent with ME-A.8). With respect to jobs-housing balance as evaluated in the project's consistency with the MVCP, the project site provides residential and commercial uses on-site. Additionally, the project is within walking distance (approximately 1,200 feet) of Fashion Valley Mall, a subregional employment center and shopping center. The project would provide 3.31 acres of on-site public park as a recreation amenity for residents and the larger Mission Valley community.

As described above and in Response A-30, specific demographic projections and baseline information on current levels of transit use are not necessary to analyze the expected impacts of the proposed project. In fact, the lead agency and reviewing agencies often use a variety of factors and methods for determining project demands on their particular public service or infrastructure facility based on the number and type of dwelling units proposed. Since residential development plans are conceptual and reviewing agencies often use different population and occupancy factors to estimate demand, population estimates were not provided as part of the EIR Project Description (see Response A-31 regarding population demand factors). Further, as stated on page 4.1-8, the project meets the definition of a Transit Oriented Development per the City of San Diego Transit Oriented Development Design Guidelines—specifically an "Urban Transit Oriented Development" being a "Redevelopable Site" (see Section 1, Transit Oriented Development Definitions and Guiding Principles and Section 2 Redeveloping and Urbanizing). The project was strategically designed to encourage pedestrian travel and connectivity as identified in Figure 3-16, Pedestrian Circulation, of the Town & Country Master Plan. The site provides pedestrian travel throughout the site, to the San Diego River Pathway, the new public park, the Fashion Valley Transit Center and Fashion Valley mall. In addition, the existing pedestrian bridge over the San Diego River would be replaced with a multi-use bridge with expanded use to provide pedestrian and bicycle access to Fashion Valley Mall and to the Fashion Valley Transit Center; further facilitating new multi-modal options from the site to these adjacent facilities. The Draft EIR identified significant impacts to transportation/circulation and air quality. The other issue areas identified in the comment were determined to be less than significant.

A.2-15 The Draft EIR contains analysis of issue areas contained in the Draft EIR, identified all issues of potential significance and identifies feasible mitigation measures for all significant impacts with the exception of Riverwalk Drive segment, east of Avenida Del Rio) and historic impacts to the Regency Conference Center. Based on a review of the existing conditions, design plans for the Hazard Center extension and discussions with City staff, this mitigation has been deemed physically infeasible as further explained in the traffic study

As explained below, the DEIR fails to provide decision-makers and the public with detailed, accurate information about the full breadth of the Project's significant environmental impacts with respect to plan and policy consistency, jobs, housing, employment, and growth inducement. Further, the DEIR does not identify and analyze mitigation measures that would reduce or avoid such impacts. A.2-15

1. The DEIR Does Not Properly Analyze the Project's Consistency with Plans

CEQA requires that environmental impact reports analyze the consistency of a project with local plans, including General Plans.[9] Inconsistencies with a General Plan, Community Plan or other plan or ordinance that were enacted to protect the environment may constitute significant impacts in themselves and can also be evidence of other significant impacts.

The DEIR's analysis of the Project's consistency with the San Diego General Plan and Mission Valley Community Plan, in particular, is flawed. The DEIR takes the position that because amendments to the City's plan are proposed, the Project would be consistent with the Plans, plan policies and provisions, and therefore, any conflicts with plans would be less than significant. DEIR at page 4.1-37.

The Plans addressed in these comments include:

- 2008 San Diego General Plan (SDGP)
- Mission Valley Community Plan (MVCP)
- Proposed Draft Town & Country Master Plan (Draft Master Plan) A.2-16
- San Diego Transit Oriented Development (TOD) Guidelines

The DEIR evaluates land use consistency using the City's Significance Determination Thresholds and considers impacts potentially significant if implementation of the Project would:

- Be inconsistent or conflict with the environmental goals, objectives, or guidelines of a community or general plan;
- Be inconsistent or conflict with an adopted land use designation or intensity and cause indirect or secondary environmental impacts;
- Be substantially incompatible with an adopted plan; or
- Be inconsistent or conflict with adopted environmental plans for an area.

DEIR at page 4.1-10

(a) San Diego General Plan (SDGP) and Mission Valley Community Plan (MVCP)

The Project is inconsistent with policies and provisions of the SDGP and MVCP. The DEIR downplays and overlooks inconsistencies between the Project and planning goals, policies and other provisions of the SDGP and MVCP to reach the conclusion that:

"[t]he project is generally consistent with the stated goals, objectives and recommendations" of the City of San Diego General Plan, MVCP, MVCP, and the MSCP as described above. While the project would involve the demolition of the CRHR-eligible Regency Conference Center, which A.2-17

[9] In this case, the San Diego General Plan includes the Mission Valley Community Plan. Together these documents constitute to the General Plan for the area and site and as such must be internally consistent and meet legal requirements for a general plan.

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(Section 18.3, page 131). As provided in Section 4.3, Mitigation Measures HR-1 through HR-3 would address the significant impacts related to the demolition of the Regency Conference Center, but would not reduce the impacts to below a level of significance. Further, the City does not have to adopt every proposed mitigation measure. E.g., *Gilroy Citizens for Responsible Planning v. City of Gilroy* (2006) 140 Cal.App.4th 911, 935."

Section 4.1 Land Use, provides a detailed assessment of the project's consistency with applicable plans, which determined the project was generally consistent with the Mission Valley Community Plan, General Plan, San Diego River Park Master Plan, and other applicable City plans. The Draft EIR Land Use section also determined that land use impacts were less than significant.

With regard to jobs, housing, and employment, pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. A range of feasible alternatives was identified and assessed in Chapter 10.0, Alternatives

A.2-16 CEQA Guidelines §15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision makers should address. A project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment. Generally, a project need not be in perfect conformity with each and every general plan policy. See Responses A-45 through A-45oo regarding the project's consistency with plans.

A.2-17 See Responses A.2-16 and A-45 through A-45oo regarding the project's consistency with applicable City plans.

would be a significant impact to historical resources, the historical review process was fully integrated into the review of this project and all applicable regulations were complied with, therefore the project would be consistent with the City of San Diego General Plan. Therefore, no significant impacts associated with policy would occur." DEIR at page 4.1-37.

A.2-17

Numerous goals, policies, objectives and recommendations of the SDGP and MVCP are relevant to the Project. Many of these are directly at odds with the Project as proposed. The DEIR only evaluates some of the relevant plan provisions, overlooking many that are relevant to the Project. Although there are many others, I detail the issues pertaining to several inconsistencies below.

i. The Project is Inconsistent with General Plan policies pertaining to adequacy of public facilities and services.

The Project is inconsistent with General Plan policies pertaining to the adequacy of public facilities and services. The DEIR states at page 4.1-22:

SDGP Land Use and Community Planning Element	Project Consistency
LU-A.4. Locate village sites where they can be served by existing or planned public facilities and services, including transit services.	Consistent – The project is currently served by public facilities and public services and is within a 5-minute walk (approximately 1,200 feet) of the Fashion Valley Transit Center, including both light rail and bus service.
SDGP Public Facilities, Services, and Safety Element	
PF-C.1. Require development proposals to fully address impacts to public facilities and services.	Consistent – As discussed in Section 4.12, Public Services and Facilities, the project does not result in significant impacts.

A.2-18

The DEIR fails to fully disclose and analyze the Project plus cumulative projects impacts on all essential public services and facilities. This failure stems in part from the lack of a complete and consistent Project description. In addition, the DEIR's consistency analysis fails to recognize information in the DEIR and record about road and school deficiencies.

Per the DEIR, the Project at buildout under the cumulative condition would results in significant unavoidable impacts on roads and potentially significant impacts on schools. Roads are not adequate to serve the Project. Per the DEIR, when the Project is built out, numerous roads serving the Project would be operating above capacity:

"With the addition of project traffic, based on the City of San Diego's significance criteria, significant cumulative impacts are identified on the following segments as the project traffic contribution exceeds the allowable thresholds and would be a significant unavoidable impact of the Project:

- Riverwalk Dr.: East of Avenida Del Rio (LOS F)
- Camino De La Reina: Hotel Circle N. to Private Drive D (LOS F)." DEIR at pages 7-8 to 7-10.

A.2-19

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A.2-18 See Response A.2-16 and A-45 through A-45oo regarding consistency with the General Plan. Section 4.12 Public Services and Facilities contains analysis of the project and determined the impacts to public facilities and services would be less than significant. By law, payment of school feeds constituted complete mitigation of impacts on schools.

A.2-19 The Draft EIR identifies a significant unavoidable impact on one (1) segment, which is Riverwalk Drive: East of Avenida Del Rio. See Section 4.2.4.4 of the Draft EIR.

In regards to the impact on Camino De La Reina between Hotel Circle North and Private Drive D, Mitigation Measures TRANS-1 and TRANS-2 on Section 4.2.4.3 of the Draft EIR describe the proposed improvements. As identified in the Draft EIR, the project would result in significant cumulative impacts. See Response A-165 with regard to schools.

Schools are likely not adequate to serve the Project plus cumulative projects. Per the School District, the cumulative projects in the region plus the Project have the potential to exceed the current capacity of schools serving the Project area:

> "As noted in response to question 4, the TOWN AND COUNTRY MASTER PLAN project itself is not expected to generate enough students to exceed the capacity of the serving schools. However, in combination with the other noted projects, the cumulative potential increase in students could impact district schools to the point of reaching or exceeding their current capacity. This scenario would require additional planning for sufficient facilities. Possible solutions include reducing the number of non-boundary resident students attending the affected schools, evaluating attendance boundaries, and lastly the consideration of adding portable classroom space." Source: San Diego Unified School District Letter September 2, 2015 at page 4.

The DEIR fails to acknowledge the School District's statement above, and concludes that neither the Project nor the cumulative condition would necessitate the construction of new schools. DEIR at section 4.12 and page 7-23:

> "This creation of permanent housing structures would generate new students in the area; however, all of these schools are below their estimated capacity. The existing schools have sufficient capacity to serve these students, and the project would not result in the need for new or expanded school facilities (SDUSD 2015). DEIR at page 7-24.

A.2-19

The analysis of the Project and Project plus cumulative projects impacts on schools is incomplete for two reasons. First, by failing to fully acknowledge the School District's statements, the DEIR incorrectly concludes that schools are adequate to serve the Project. Second, the DEIR may be underestimating school-related impacts because the DEIR fails to adequately and consistently describe the size or number of bedrooms in the 840 planned dwelling units, and therefore the total population and student population generated by the Project. See comments above on Project Description. A revised analysis of school-related impacts must be completed based on a stable and complete description of Project and regional setting details including but not limited to total population and student population generated by the Project, and in combination with other projects.

ii. The Project is inconsistent with planned density and intensity standards

The Project is inconsistent with planned density and intensity standards. DEIR states at page 4.1.22:

SDGP Land Use and Community Planning Element	Project Consistency
LU-A.7. Determine the appropriate mix and densities/intensities of village land uses at the community plan level or at the project level when adequate direction is not provided in the community plan.	The project provides higher-density housing, as identified in the Housing Element, that is in proximity to existing employment centers and transit amenities.

A.2-20

The DEIR erroneously concludes that the Project is consistent with planned and allowable residential density. Even factoring in the proposed Community Plan amendment to increase gross residential

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A.2-20 See Response A.2-16 regarding consistency with the General Plan and A-45p regarding the density and intensity calculations consistent with the Mission Valley Community Plan and San Diego Municipal Code requirements. A density deviation is no longer being requested. See Response A-31 regarding population.

density to 84 units per acre, the Project remains inconsistent with planned and allowable density and intensity standards.[10]

The General Plan and community plans must include standards for population density (measured in number of persons per acre) and building intensity (using measures such as site coverage, floor area ratio, building type and size, or units per acre). This detail is required so that the General Plan and community plans can provide the blueprint for development throughout the community and provide for the correlation of planned land uses with infrastructure and services.

Planned and allowable density for the Project site can be found in the Mission Valley Community Plan:

> "Development Guidelines
>
> Employ the Planned Development Permit (PDP) approach to residential and/or commercial development to encourage a mix of housing types and densities, integration of commercial uses, and flexibility in site arrangement. Residential use will be allowed to occur without the use of PDP permit up to a maximum of 14 dwelling units to the acre. However, higher densities of up to 73 dwelling units may be obtained through the Planned Development approach. This approach will ensure residents that higher density development will provide open space and recreational facilities." Mission Valley Community Plan at page 42. Underlining for emphasis added.

A.2-20

In addition to the density standards in the MVCP, the MVCP also projects a residential capacity of 15,159 dwelling units or 24,558 residents based on an occupancy rate of 1.62 persons per dwelling units. MVCP at page 39. The SDGP similarly contains standards for land use density and intensity. Table LU-4, at page LU-16 of the SDGP provides for high densities up to 74 dwelling units to the acre in both the residential high and commercial categories.

The Project exceeds these allowable densities by proposing significantly higher densities – more than 100 units per net acre. Project residential density does not include the additional intensity of the non-residential uses (hotel, conference center and ancillary uses). See DEIR at page 4.2-61 and 3-10 (Residential Parcel 1 – 160 dwelling units in 1.70 acres; Residential Parcel 2 – 275 dwelling units in 2.53 acres; Residential Parcel 3 – 255 dwelling units in 1.92 acres). The Project description fails to clearly disclose the net density of the residential component of the Project and fails to provide a consistent description of the Project's residential population. *See, e.g.*, Project description at page 3-10. Where density is called out, the DEIR downplays the density and overall site intensity, noting the density is "over 20 DU/ac." See DEIR at 4.2-61.

A proposed Community Plan amendment would allow a maximum of 84 dwelling units per gross acreage of the entire residential zone, but does not propose a maximum density per net acre or an amended

[10] Planned and permissible densities and intensities in the City's adopted plans are foundational to the City's planning for public infrastructure and services. Therefore, if the Project exceeds planned densities and intensities it is also likely the Project and certainly the Project plus cumulative projects will also exceed the capacity of infrastructure and services. This too must be taken into consideration in revised impact analyses once a stable and complete Project description has been completed.

statement of population density. DEIR at page 4.1-38. Because the Plan amendment does not provide clear, consistent and complete standards for density and intensity for the Project site in both the SDGP and MVCP, the Project remains inconsistent with the MVCP and the SDGP. In addition, the DEIR's approach to the consistency analysis with applicable plan densities and intensities is incomplete because it fails to fully consider the specific density requirements in the MVCP, including planned residential capacity and dwelling units, planned population and household size. In sum, the MVCP and SDGP together lack a consistent and clear statement of population density and intensity against which the Project can be compared and deemed consistent.

A.2-20

The Project should not receive the maximum density allowed by the plans, because the Project fails to include the required commercial facilities necessary to achieve the maximum density allocation:

> "Employ the Planned Development Permit (PDP) approach to residential and/or commercial development to encourage a mix of housing types and densities, integration of commercial uses, and flexibility in site arrangement. *Residential use will be allowed to occur without the use of PDP permit up to a maximum density of 14 dwelling units to the acre. However, higher densities of up to 73 dwelling units may be obtained through the Planned Development approach. This approach will ensure residents that higher density development will provide open space and recreational facilities." See also page 47 of the MVCP: "Permit medium- to medium-high density residential development (up to 73 units per acre) in conjunction with commercial facilities, through utilization of PRD/PCD permits." MVCP at page 42. Emphasis added.*

A.2-21

Here the Project not only exceeds the density limits by a significant amount, but the Project does not include required commercial facilities that serve the residential uses.

iii. The Project is inconsistent with the Plan policies requiring affordable housing

The Project does not describe the planned dwelling units as affordable, and there is no indication in the DEIR that any of the units would be restricted as affordable. The DEIR fails to provide Project description and setting information necessary for an adequate analysis of whether the Project is consistent with the City's affordable housing requirements. Specifically, without information about the Project's employment and community plan area's jobs-housing fit, it is not possible to analyze project impacts on housing in general, let alone with the City's goals and policies on affordable housing.

The DEIR fails to mention in the consistency analysis that the MVCP includes a provision to provide affordable housing as follows:

A.2-22

> "Provide low-and moderate-cost housing." MVCP at page 46.

The SDGP Land Use and Community Planning Element also contains numerous goals and policies calling for the promotion of balanced communities including provision of affordable housing within the community. Among these is LU-H.1:

> "Promote development of balanced communities that take into account community-wide involvement, participation, and needs. Subsection b. Provide affordable housing opportunities within the community to help offset the displacement of the existing population."

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A.2-21 See Response A.2-20 above regarding density maximums. As stated in Section 4.1 Land Use, the project meets the definition of a Transit Oriented Development per the City of San Diego Transit Oriented Development Design Guidelines—specifically an "Urban Transit Oriented Development" being a "Redevelopable Site" (see Section 1, Transit Oriented Development Definitions and Guiding Principles and Section 2 Redeveloping and Urbanizing), including required commercial uses that would serve residents and hotel guest.

A.2-22 See Response A-45c.

The DEIR consistency analysis finds the Project consistent with LU-H.1, but fails to explain how the Project is consistent with the affordable housing provision. A.2-22

The SDGP Housing Element also contains numerous goals and policies concerning affordable housing. For example, SDGP Housing Element Goal 1 states:

> "Ensure the provision of sufficient housing for all income groups to accommodate San Diego's anticipated share of regional growth over the next housing element cycle, 2013-2020, in a manner consistent with the development pattern of the sustainable communities strategy (SCS), that will help meet regional GHG targets by improving transportation and land use coordination and jobs/housing balance, creating more transit-oriented, compact and walkable communities, providing more housing capacity for all income levels, and protecting resource areas." HE-44.

The DEIR consistency analysis fails to mention this Goal as well as numerous policies in the SDGP Housing Element relevant to the Project. For example, HE-A.7 of the SDGP provides:

> "Work to develop a comprehensive strategy for addressing the critical need for more workforce housing, serving moderate to middle income workers in San Diego. In keeping with the goals of SB 375 and the Sustainable Communities Strategy, the City should strive to promote the location of workforce housing proximate to employment and/or multimodal transportation facilities." HE at page 45. A.2-23

The Project description is incomplete as to the affordability of proposed new housing units. There is virtually no discussion of housing in the DEIR since the document finds housing and population impacts less than significant with any supporting evidence or analysis. Housing affordability to the local workforce is a critical element of a mixed use and balanced community. Unless evidence and analysis is forthcoming in a revised DEIR, it appears the Project is inconsistent with applicable policies requiring affordable housing as part of the Project (LU-H.1. and MVCP Affordable Housing policy). The lack of affordable housing in the Project also likely means that employees will be traveling greater distances, rendering the DEIR's conclusions concerning transportation, air quality and GHG impacts inaccurate and low.

iv. The Project is inconsistent with the City's Balanced Community Policy

The Project is inconsistent with the City's balanced community policy. The DEIR asserts that the Project is consistent with the General Plan Policy LU-H.1. DEIR 4.1-22.

Land Use and Community Planning Element	Project Consistency
LU-H.1. Promote development of balanced communities that take into account community-wide involvement, participation, and needs. a. Plan village development with the involvement of a broad range of neighborhood, business, and recognized community planning groups and consideration of the needs of individual neighborhoods, available resources, and willing partners.	Consistent – The project advocates for community needs by incorporating the Mission Valley Community Plan Update summaries and reports and coordinating with the Mission Valley Community Planning Group. The project specifically creates improved recreation opportunities for the community, introduces public park infrastructure, and provides educational learning programs for the San Diego River.

A.2-24

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A.2-23 The project is contributing to the housing stock by providing 840 additional units in a Transit Priority Area. See Response A-45c regarding affordable housing. See Responses A-45 through A-45oo regarding consistency with the General Plan. Consistent with CEQA Section 15124, the Project Description as described in Chapter 3.0 of the Draft EIR contains the required information including the precise location and boundaries; statement of objectives; general description of the project's characteristics and a description of the intended uses of the EIR. The Final EIR, Table 4.1-3 City of San Diego General Plan Consistency Analysis, has been amended to add reference to Land Development Code § 142.1304, Inclusionary Affordable Housing Fee as illustrated below.

LU-H.1. Promote development of balanced communities that take into account community-wide involvement, participation, and needs. a. Plan village development with the involvement of a broad range of neighborhood, business, and recognized community planning groups and consideration of the needs of individual neighborhoods, available resources, and willing partners. b. Invest strategically in public infrastructure and offer development incentives that are consistent with the neighborhood's vision. c. Recognize the important role that schools play in neighborhood life and look for opportunities to form closer partnerships among local schools, residents, neighborhood groups, and the City with the goal of improving public education. d. Ensure that neighborhood development and redevelopment addresses the needs of older people, particularly those disadvantaged by age, disability, or poverty. e. Provide affordable housing opportunities within the community to help offset the displacement of the existing population. f. Provide a full range of senior housing from active adult to convalescent care in an environment conducive to the specific needs of the senior population.	Consistent – The project advocates for community needs by incorporating the Mission Valley Community Plan Update summaries and reports and coordinating with the Mission Valley Community Planning Group. The project specifically creates improved recreation opportunities for the community, introduces public park infrastructure, and provides educational learning programs for the San Diego River. Additionally, the project would be required to comply with Land Development Code § 142.1304, Inclusionary Affordable Housing Fee.

A.2-24 The project is consistent with the Mission Valley Community Plan and General Plan as described in Responses 45a through 45oo and Section 4.1 Land Use of the Draft EIR. The General Plan policies cited are broad community wide planning goals and not specific regulatory requirements implemented in detail

b. Invest strategically in public infrastructure and offer development incentives that are consistent with the neighborhood's vision. c. Recognize the important role that schools can play in neighborhood life and look for opportunities to form closer partnerships among local schools, residents, neighborhood groups, and the City with the goal of improving public education. d. Ensure that neighborhood development and redevelopment addresses the needs of older people, particularly those disadvantaged by age, disability, or poverty. e. Provide affordable housing opportunities within the community to help offset the displacement of the existing population. f. Provide a full range of senior housing from active adult to convalescent care in an environment conducive to the specific needs of the senior population.	

The DEIR is flawed because it makes conclusory statements regarding the Project's consistency with the General Plan that do not have any basis in fact and are often contradicted and/or unsupported by information in the DEIR itself. This consistency determination is an example of such a conclusory statement. First, the DEIR does not discuss the affordability of the housing within the Project. There is no mention of the type of dwelling units proposed, including size, number of bedrooms or rental / sales pricing that would indicate how the Project would address affordable housing requirements in the City's plans. In addition, the Project as proposed lacks sufficient information about how the Project has addressed community-wide involvement, participation, and needs.

A.2-24

v. The Project is inconsistent with the City's Transit Oriented District Plans, Provisions and Policies

The Project is inconsistent with the City's Transit Oriented District plans and policies. The DEIR erroneously finds the Project consistent:

A.2-25

SDGP Land Use and Community Planning Element	Project Consistency
Goal: Mixed-use located throughout the City and connected by high quality transit. DEIR at page 4.1-21	Consistent – The project is a mixed-use development including commercial, residential, and open space lands uses within a 5-minute walk (approximately 1200 feet) of the Fashion Valley Transit Center which is served by MTS Green Line Trolley and several bus routes. DEIR at page 4.1-2

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for each individual project. CEQA Guidelines §15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision makers should address. A project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment. Generally, a project need not be in perfect conformity with each and every general plan policy. See Responses A.2-22 with regards to affordable housing and A.2-14 regarding balanced communities. See Response A-30 regarding how all aspects of the project, including type of units, were analyzed throughout the Draft EIR.

Throughout the discretionary permit process, the applicant engaged the public for community input and involvement. During the process, the project was presented to the Mission Valley Community Planning Group four times, the Mission Valley Design Review Board four times, the City Park and Recreation Board, and the City Wetlands Advisory Board. The project was approved unanimously by the Mission Valley Community Planning Design Advisory Board on February 27, 2017; and by Mission Valley Community Planning Group on March 1, 2017. The public park was recommended for approval on January 19, 2017 by the Parks and Recreation Board. The Wetlands Advisory Board unanimously concurred with the project's findings of no wetland impacts on January 19, 2017.

A.2-25 See Response A-45 through A-45oo with regards to consistency with the General Plan and Mission Valley Community Plan. The project is proposing a mix of commercial, retail, housing, and recreational uses on site. As stated in Section 2.9 of the Draft EIR, the project site is an "Urban Transit Oriented Development" on a "Redevelopable Site" and subject to San Diego Transit-Oriented Design Guidelines Sections 1, 2, and 4–11 (City of San Diego 1992). See Response A-45p regarding allowable density and intensity pursuant to the Mission Valley Community Plan and the San Diego Municipal Code.

LU-I-11. Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services and providing access to high quality transit services.	Consistent – The project is a mixed-use development integrating commercial, residential, and open space land uses with enhanced pedestrian connections within a 5-minute (approximately 1200 feet) walk to both Fashion Valley Transit Center and Fashion Valley Mall.
MVCP Land Use and Community Plan Element	Project Consistency
Residential Objective #2: Encourage development which combines and integrated residential uses with commercial and service uses.	Consistent – The Project integrates commercial and residential uses in mixed-use, walkable, compact development. ... DEIR at page 4.1-31

The City of San Diego General Plan provides numerous other goals, policies and provisions to further the City of Villages smart growth strategy that focuses growth into dense mixed-use pedestrian friendly transit oriented districts. This is a foundational theme of San Diego's planning. The Community Plan reinforces this theme as does the City's Transit Oriented Development (TOD) Guidelines. The Project purports to be consistent with this foundational goal, but in fact is not.

The entire Project area is within a 2,000-foot walking distance of the MTS Fashion Valley transit center. The site is identified as an urban TOD and redevelopable site and is therefore subject to the TOD Guide. Per the City's TOD Guide, "the Transit-Oriented Development (TOD) concept is simple: moderate to high density housing, along with complementing public uses, jobs, retail and services, are concentrated in mixed-use development located at strategic points along the regional transit system." TOD Guidelines at page 2. Providing a "walkable" environment is a key aspect of TODs: TODs seek to bring many services, local retail, parks, day care, civic services, housing within walking distance to minimize trips and maximize walking."

A.2-25

The Mission Valley Community Plan reinforces this central theme by calling for amenities to serve residential development to reduce dependence on the automobile, including neighborhood and convenience shopping, medical and other professional office complexes, community facilities and services, and child care centers:

"Residential development should be in the form of generally self-contained areas. The following proposals are intended to achieve this concept:

1. Provide amenities intended primarily for use by residents. These amenities should include:
   a. Leisure activity areas.
   b. Active recreational facilities.
   c. Child care centers.
   d. *Neighborhood and convenience shopping and medical and other similar professional office complexes*.
   e. Cultural/educational opportunities.
   f. Community facilities and services.
2. Design internal pedestrian and bicycle circulation paths to reduce dependency on the automobile and minimize conflicts among pedestrian, bicycle and automobile traffic." MVCP at page 42 (emphasis added).

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The Project fails to meet the City's basic requirements for a mixed-use project as called for in the San Diego General Plan, Mission Valley Community Plan and TOD Guidelines. Contrary to the requirements, the Project fails to include the mix of land uses necessary to meet the fundamental objectives of a TOD – to link land use to reinforce transit use and walking trips between housing, work, services and play. The Project does not include neighborhood serving uses and convenience shopping; services which are used by a residential population on a daily basis. Such uses, including but not limited to grocery, pharmacy, banking and child-care, are the minimum required to achieve the benefits of mixed-use development. A.2-25

There are limited commercial uses (spa and restaurant) associated with the hotel and conference center. However, for the reasons described above, these uses are not the same as neighborhood services uses for daily needs of residents. In addition, there are commercial retail uses located at the adjacent Fashion Valley Mall. The Fashion Valley Mall website (http://www.simon.com/mall/fashion-valley/stores) contains a directory of mall establishments. The DEIR should evaluate the extent to which commercial uses proposed in the Project and on adjacent sites will meet the basic daily needs of new residents (e.g., full service grocery, pharmacy, banking, child-care, laundry and the like).[11] While the proposed Master Plan allows a "development intensity transfer" from residential to retail or office, the Project as proposed does not include any neighborhood-serving retail uses. A.2-26

A central premise of the environmental analysis is that the Project as proposed will be mixed-use and therefore generate net zero additional average daily trips. The Project, however, lacks the mix of uses necessary to achieve the benefits of mixed-use development and will therefore not reduce vehicle trips as claimed in the DEIR. A.2-27

The DEIR fails to take the distinction between neighborhood-serving commercial uses and general commercial uses into account. The applicable plans, however, regulate development based on this distinction. For instance, the MVCP allows for medium and medium-high density housing (up to 73 units per acre) only where commercial services are also provided to serve the neighborhood. MVCP 47.

As described above, the Project lacks the kinds of neighborhood serving uses, including grocery, pharmacy, banking, and child-care, necessary to render the Project consistent with these Plan policies. The Project appears to lack housing affordable to the workforce as well, another essential element of mixed-use. A revised DEIR must adequately address Project consistency with applicable mixed use and TOD policies and requirements. A.2-28

v. The Project Is Inconsistent with the Overarching Goals and Policies of the General Plan; A Comprehensive Community Plan Update is Necessary Prior to Considering the Proposed Project

The overarching goals of the City's General Plan call for development to fulfill smart growth strategies through development of a city of mixed use transit oriented Villages. Through coordinated and consistent General and community plans, the City seeks to implement this and other related goals. A.2-29

While urban "infill" is generally viewed as a solution to many of these challenges, **all infill is not equal**. That is why CEQA streamlining is afforded to projects that meet a high bar in terms of providing A.2-30

[11] City of San Diego TOD Guidelines at page 14: "A commercial core at the center of each TOD is essential because it permits most residents and employees to walk or ride bicycles to obtain basis goods and services." "At a minimum, the core area should provide convenience retail and civic sites."

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A.2-26 See Responses A-45z and A.2-24 regarding Transit Oriented Development uses on site. See Response A.2-5 regarding density transfer.

A.2-27 See Responses A-75 and A-80 with regards to average daily trips and mixed uses and A.2-24 regarding project's Transit Oriented Development uses.

A.2-28 See Response A-45g regarding Transit Oriented Development/mixed-uses goals and consistency with the General Plan and Mission Valley Community Plan, including the allowance of the proposed commercial uses with the project site. The Project does provide some neighborhood serving uses such as restaurants a park, and retail uses.

A.2-29 See Response A-45g regarding Transit Oriented Development/mixed-uses goals.

A.2-30 Comment noted. See also Response A.2-29.

affordable housing in areas of high walkability and available and sufficient transit, and provide a range of public benefits including funding to expand and improve transit and to offset cost of transit for employees and residents, and affordable workforce housing beyond local ordinance requirements, among other considerations. Unless careful attention is given to developing infill that addresses (fully mitigates) the range of critical challenges facing cities like San Diego, the impacts can become more significant and development can impede achievement of goals including those articulated by the City of San Diego General Plan. "One off" projects and plan amendments such as is proposed take the City farther from its goal. A.2-30

The Project's approach to achieving consistency with the City's plans and policies is a series of plan amendments. The Project's proposed plan and policy amendments ignore the relationship of the City's plans and coordination of those plans – particularly General and Community Plans – to implement community goals. The approach the Project is taking to amending the General Plans to achieve Project consistency will likely render the various plans internally inconsistent.

The SDGP and its Housing Element emphasize the important relationship of the General Plan and Community Plans and of using Community Plan updates, rather than Project-driven amendments, to implement the goals of the City. A.2-31

The SDGP provides:

> Community plans represent a significant and vital component of the Land Use Element in that they contain more detailed land use designations and site-specific policy recommendations than is possible on a citywide level... In order to maintain consistency with the Housing Element and the General Plan and state housing law, community plans must continue to identify areas appropriate for both single-family and multifamily development, in new growth areas, as well as in already developed areas where it may be appropriate to modify existing development patterns. Community plans are the vehicle for implementing state law pertaining to provision of housing opportunities, and meeting the City's housing needs and regional fair share goal... Community plans are to be updated on a regular basis. Community plans are to apply the land use designations... and provide community-specific and on-the-ground recommendations that will make possible the implementation of community goals and the General Plan. SDGP at page LU-21.[12]

[12] Both the SDGP and the SDGP Housing Element contain numerous other provisions and policies noting the essential role of the Community Plan and relationship of the GP, HE and community plans in carrying out the City's community goals. Examples include but are not limited to the following: LU-C.1 (requiring consistency of community plans with other community plans and the General Plan as they establish the coordinated framework to guide development of the City over the long-term); LU-C.2 (requiring detailed site specific recommendations for village sites); LU-C.5 (requiring regular updates of community plans with public participation); HE-A.4 ("Through the community plan update process, encourage location and resource efficient development. The community plans should focus on policies which promote a cluster of activities and services to establish a balance of housing, jobs, shopping, schools, and recreation, providing residents and employees with the option of walking, biking or using transit rather than driving").

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A.2-31 See Responses A-45 through A-45oo regarding consistency with the General Plan and Mission Valley Community Plan. The Master Plan is a comprehensive planning document that would unify the redevelopment of the site for both the existing and new development. The Master Plan implements the vision of the General Plan and the City of San Diego Transit Oriented Development Design Guidelines—specifically an "Urban Transit Oriented Development" being a "Redevelopable Site" (see Section 1, Transit Oriented Development Definitions and Guiding Principles and Section 2 Redeveloping and Urbanizing). The Master Plan is a programmatic planning document that would ensure the orderly development of the site. The project has been presented to the Mission Valley Community Planning Group four times since project initiation. The Mission Valley Community Plan is currently undergoing a comprehensive update, and the project has been designed to be consistent with the overall goals and objectives of the proposed update. Further, as discussed in Section 4.1, Land Use, subsection 4.1.3, Impact Analysis, because the project would not be making major policy amendments, the project would generally not conflict with the environmental goals, objectives, or guidelines of a General Plan or Community Plan or other applicable land use plans. With project approval, the amendments would be

The EIR did not take a piecemeal-planning approach rather it evaluated the environmental impacts of the project and associated entitlements. The Mission Valley Community Plan is currently undergoing a comprehensive update, and the project has been designed to be consistent with the overall goals and objectives of the proposed update.

The approach taken by the Project sidesteps the General Plan and Housing Element provisions pointing to the use of Community Plan updates, not Projects, to drive the kinds of major policy amendments requested by the Project. The motivation for the City's adoption of the Mission Valley Community Plan in part, was that development had been occurring in a "largely unplanned fashion." MVCP at page 15. The City should reject a return to the piecemeal-planning approach that is embodied in this Project, and instead proceed with a comprehensive Community Plan update.

A.2-31

2. The DEIR's Analysis of and Mitigation for the Project's Population, Employment and Housing Impacts is Inadequate

For a project as large as the one proposed here, it is especially important that the DEIR comprehensively identify and analyze its impacts on population, employment and housing demand. When a project draws new people to an area, the increased population is likely to require new services, and possibly new housing to support the workforce,[13] which will impact the environment.

CEQA requires that an EIR analyze these impacts. California Courts have established a framework for considering population-related impacts. When analyzing these impacts, an EIR should identify the number and type of housing units that persons working in the project area can be anticipated to require, and identify the probable location of those units. The EIR also should consider whether the Project includes sufficient services and public facilities to accommodate the anticipated increase in population. If it is concluded that the communities lack sufficient units and/or services, the EIR should identify that fact and explain that action will need to be taken. Once the EIR determines the action needed to provide sufficient housing, services and public facilities, CEQA then requires an examination of the environmental consequences of such action.

A.2-32

A complete analysis of population growth thus requires two distinct and logical steps. First, an EIR must accurately and completely estimate the population growth that a project would cause, both directly and indirectly. Specifically, in this case, the DEIR must estimate the population growth accommodated by the new housing and the number of employees the Project will require as compared with existing, including whether those employees are likely to be new to the region. Guidelines Appx. G Section XII(a) directing analysis of whether project would induce substantial population growth. The DEIR also must consider the growth that a project would indirectly cause, whether through stimulating the local economy so that new employment opportunities draw new population or by providing infrastructure that allows new residential construction. Guidelines Section 15126.2(d) ("Discuss the ways in which the proposed project could foster economic or population growth. . . . ").

Step two in analyzing the impacts of population growth is to consider the environmental impacts of serving that estimated new direct and indirect population. Thus, the EIR must not only evaluate whether a project would induce substantial growth, but also whether such growth would require construction of new housing, infrastructure or services, including schools. Guidelines App. G Section

[13] In this case the workforce may be different with respect to salary range, number of part and full time employees, other aspects when compared to the existing development. These changes over existing could lead to greater impacts and must be analyzed.

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A.2-32 See Response A 2-2. The project is located within an existing urban developed area. The Project Description describes the total number of maximum units and does not provide a breakdown of unit size or exact populations, which is not required to assess project impacts; therefore a revised Project Description is not required. The Project Description includes a stable description of the number of residential units (840), and the impacts of all components of the proposed project were analyzed throughout the EIR. See Responses A-30 and 31 regarding population factor assessments and how project demand on public services and facilities was generated as the basis of the analysis.

The Draft EIR conducted an assessment of the project's demand on existing public services and utilities. The assessment was conducted to determine if the project would place demands on services and utilities resulting in the need for new or expanded public service facilities, or would result in the need for new systems or require substantial alterations to existing utilities that would result in physical impacts. Section 4.12, Public Services and Facilities and Section 4.13 Public Utilities analyzed the impact of all aspects of the project, would have on public services and facilities. The Draft EIR determined that all impacts would be less than significant, including the payment of standard school fees which constitutes full mitigation of any project impact, and direct and cumulative.

As further described in Chapter 6.0 of this EIR, the project would not induce substantial population growth in the surrounding area, as the project proposes redevelopment of a site with existing infrastructure and utilities. Additionally, since the project does not propose the extension of roads or other infrastructure to unserved areas, it does not have the potential to indirectly increase population or housing. Furthermore, since there are currently no residential units on the project site, the project does not displace substantial numbers of existing housing or people, which could necessitate the construction of replacement housing elsewhere. Therefore, the project does not have the potential to result in environmental effects associated with population and housing.

See Response A-164 with regard to cumulative road impacts and A-165 with regard to schools.

See Response A-45c and A.2-13 regarding employment impacts. Economic issues with only speculative relationships to physical impacts are not proper concerns of an EIR, e.g., CEQA Guidelines Section 15131, and no further response is required. In addition, see Responses A-45z and A-48. Further, the project would continue to provide employment opportunities and facilitate multi-modal means of transportation for employees thereby reducing dependency on single occupancy use riders. As stated in Section 4.1 Land Use, subsection 4.1.3, Impact Analysis, Table 4.1-3, the project would maintain

XII(a), (c). If new construction will occur, then the EIR must analyze the environmental impacts of that construction. The EIR must also consider whether the new population would place demands on public services, including schools and roads. Guidelines Appx. G Section XIII(a). The EIR then must consider the environmental impacts of providing such facilities if they are necessary.

Here the DEIR fails to consistently and accurately estimate and analyze direct and indirect population growth caused by the Project. The DEIR does not disclose that the Project would also indirectly induce additional people to move to the area, which could result in additional potentially significant environmental impacts. In fact, as described in detail above, the Project description fails to provide consistent and complete information about the Project's population, employment and housing. A.2-32

The DEIR concludes that the Project would not indirectly cause population growth, but is merely accommodating growth in Mission Valley. DEIR at page 6-1. This is too simplistic a conclusion, as no single factor determines whether a project will indirectly trigger population growth. For example, in this case, a population increase could require new and expanded services.

The DEIR's failure to adequately evaluate the Project's impacts on population, employment and housing constitutes a serious flaw. The DEIR should be revised to include a comprehensive analysis of these impacts and identify effective and enforceable mitigation for those impacts that are determined to be significant.

3. The DEIR's Analysis of the Project's Growth-Inducing Impacts is Flawed

CEQA requires that an EIR include a "detailed statement" setting forth the growth-inducing impacts of a proposed project. Pub. Res. Code Section 21100(b)(5). A proposed project is either directly or indirectly growth-inducing if it: (1) fosters economic or population growth or requires additional housing; (2) removes obstacles to growth; (3) taxes community services or facilities to such an extent that new services or facilities would be necessary; or encourages or facilitates other activities that cause significant environmental effects. Guidelines Section 15126.2(d). While the growth inducing impacts of a project need not be labeled as adverse, the secondary impacts of growth (e.g., air quality, transportation, greenhouse gas emissions, etc.) may be significant and adverse. In such cases, the secondary impacts of growth inducement must be disclosed as significant secondary or indirect impacts of the project. A.2-33

In this case, the DEIR brushes off potential growth inducing impacts of the Project in less than two pages that are devoid of facts and analysis. DEIR at page 6-1 to 6-2. This substantial Project undoubtedly will induce substantial growth, but the DEIR altogether fails to analyze this impact and concludes without evidence that the Project would not directly or indirectly induce population or economic growth in the surrounding area.

The failure of the DEIR to adequately describe the Project and project setting plays a prominent role in the DEIR's failure to analyze growth-inducing impacts. Essential to an adequate analysis of growth inducing impacts is a full accounting of the direct development elements, including total residential and non-residential uses, total residents, employees and visitors, among other elements that factor into a growth-inducing analysis. In this case, the first of only three short paragraphs on long-term growth inducement, is telling:

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employment opportunities on site by encouraging local employment as a part of the project and increasing access to local employment at Fashion Valley Mall and Fashion Valley Transit Center.

See Response A.2-33 regarding evaluating population impacts and growth inducement.

A.2-33 Draft EIR Section 6, Growth Inducement, addresses the potential impacts associated with future growth and development as a result of implementation of the proposed project. Growth inducing impacts can occur when development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional development in the project area. Also included in this category are projects that would remove physical obstacles to population growth, such as the construction of a new roadway into an undeveloped area or a wastewater treatment plant with excess capacity to serve additional new development. Construction of these types of infrastructure projects cannot be considered isolated from the immediate development that they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area (such as a new residential community that requires additional commercial uses to support residents). The growth inducing potential of a project could also be considered significant if it fosters growth in excess of what is assumed in the local master plans and land use plans, or in projections made by regional planning agencies.

As addressed in Section 6, Growth Inducement, construction of the project would require a temporary increase in the need for labor and materials. The demand for construction workers would likely be met by the local labor force and would not require a substantial number of nonlocal workers. Consequently, an increase in demand for local temporary or permanent housing for nonlocal workers would not occur. Additionally, the demand for goods, services, products, and materials associated with construction projects would not be so great as to require new supply services. Accordingly, no associated substantial short-term growth-inducing effects would result.

The project would involve the construction of 840 multi-family residential units to house permanent residents of the Mission Valley community or other local residents. All of these units would be multi-family. New project site residents may stimulate economic growth in the area by purchasing goods and services from the new and existing retail/commercial businesses in the vicinity. The area surrounding the site already has an extensive number of supporting retail and services to accommodate population growth at the project site. Rather than creating or inducing new growth, the project serves to direct the location and type of development based on land use planning concepts to promote a

"The project would involve the construction of 840 multi-family residential units to house permanent residents of the Mission Valley community. All of these units would be multi-family. The SANDAG 2050 Regional Growth Forecast average household size projection is roughly 2.85, and this would lead to an additional 2,394 permanent residents at the project site." DEIR at page 6-1. A.2-33

It is important to repeat here that the DEIR and project documents contain inconsistent descriptions of the Project's population and household size and that a consistent and stable description of the Project's population, employment and housing type is a critical first step to completing an adequate analysis of growth inducement.

In addition to the lengthy list of Project description elements that are missing from the DEIR and therefore the analysis, additional details that must be factored into a revised analysis include:

- How many total employees will be generated by the Project elements as compared with existing employment and at what pay ranges? The addition of 840 residential units will certainly generate part-time if not full-time employees associated with building and grounds services, management and maintenance. Yet, the DEIR is silent as to the number and type of jobs associated with the Project. A.2-34
- What is the economic outcome of the development of 840 new units in terms of income creation, job creation both short-term construction and long-term services? Models such as IMPLAN are typically used to determine the economic benefit of new development. Applied to total units or non-residential uses, such models can be used to determine the indirect or growth-inducing effect of new development. Total income is used in turn to derive demand for other services (e.g., retail, financial, medical, public, other). A.2-35
- What is the correlation between services within the Community Plan and the Project site to address the demands generated by new residents? The Project setting provides only the barest description of services on site and in the surrounding area without any correlation between the services needed and demands of new residents (e.g., full grocery, drugstore, financial services as well as other services that if not provided in walking distance typically generate a car trip for convenience of bringing goods home). A.2-36
- What is the jobs-housing "fit" of the existing (and potentially new) full and part-time employees in the Project area non-residential uses (including hotel, new restaurants, hotel services and convention center) to proposed housing? A.2-37
- What is the expected event-generated employment associated with the renovated and enhanced conference and meeting rooms? Depending on event activity, the renovated and enhanced venue could generate employment – full and part-time, beyond existing? A.2-38
- How many visitors are expected as compared with existing uses, attracted by the new hotel amenities, enhanced conference center and meeting rooms and restaurants? What is the income expected to be generated by visitors above existing revenues? Just like for the residents and employees on site, an economic model applied to this income stream should be used to project additional potential for growth in services. A.2-39
- The Draft Master Plan/Project approvals would allow a "development intensity transfer" from residential to commercial. Draft Master Plan at page 90. What is the maximum amount of commercial development (retail and/or office) and likely uses allowed given the limitations A.2-40

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sustainable, transit-oriented neighborhood village with residential units and accessible open space recreation. The project, therefore, would accommodate anticipated population growth in Mission Valley.

The project would not remove an obstacle to growth or expand public services and facilities to accommodate additional economic or population growth beyond that proposed for the site. While surrounding roads may be improved to serve the project site as part of the project, roadways already exist throughout the project site and the improvements would simply act to improve access to the area, accommodate anticipated traffic flows and patterns.

The project site is fully served by public infrastructure and does not propose to extend new infrastructure or increase the capacity of public services, such as water or sewer, in excess of what is necessary to adequately serve the project site. The WSA prepared for the project concluded that the existing water supplies are available to meet the projected water demands of the project. The WSA determined the project would not result in a need for new water systems beyond the project footprint, or require substantial alterations to existing water utilities. Although the project includes some improvements to existing utilities within the site, these improvements would serve only the project and would not extend off-site. Additionally, surrounding areas are generally developed with existing urban uses and the overall area is currently served by public infrastructure. For additional details on public infrastructure and utilities, see Section 4.13 of this EIR.

See Response A.2-14 regarding project setting.

A.2-34 Pursuant to CEQA Guidelines §15064(e) and 15131, an EIR need not address economic or social changes unless the change would result in in a significant physical environmental impact. No further response is necessary.

A.2-35 See Response A.2-34 regarding economic issues related to job creation.

A.2-36 The project is providing a variety of hotel related commercial and retail, as well as restaurant/cafes uses that are permitted within the MVCP and implemented through the new zoning classification. These uses would be available to the future residents, local community, and visitors. Other regional services are conveniently accessed at the nearby Fashion Valley mall, within walking distance of the project site.

A.2-37 See Response A.2-14 regarding jobs-housing "fit".

A.2-38 See Response A.2-34 regarding economic issues.

A.2-39 See Response A.2-34 regarding economic issues.

A.2-40 See Response A.2-5.

specified (street or private drive-facing; not competitive with hotel uses)? What are the likely number of full- and part-time employees, and indirect economic activity? A.2-40

This and other information is critical to a thorough analysis of growth inducement. Without this and other information, the DEIR's conclusion that the Project would not induce growth and merely accommodates growth is unsupported by facts, evidence and analysis. DEIR at page 6-1. A.2-41

In addition, the DEIR lacks analysis concerning the extent to which the Project would generate demand for additional public services and infrastructure including schools, roads, transit improvements and the like. Until the Project is fully and consistently described, an analysis of the infrastructure and public services impacts associated with Project growth cannot be completed. Therefore, the DEIR's conclusion such impacts are less than significant is conclusory and unsupported by facts, analysis and evidence. As described above, both schools and some roads lack adequate capacity to serve the Project plus cumulative development. A revised analysis must also be included in a revised DEIR describing likely expansion or improvement of those facilities and the potential indirect impacts associated with expansion or improvement.[14] A.2-42

Along these same lines, the precedent-setting nature of the Project must be evaluated. If approved, the Project would allow a level and intensity of development beyond that anticipated or allowed by the Mission Valley Community Plan. The DEIR must be revised to analyze the environmental impacts from the potential for other sites in the area to develop at greater intensities as well. What are the other sites in Mission Valley that are similarly underutilized and ripe for redevelopment? As stated above, a superior approach would be a comprehensive update of the Mission Valley Community Plan rather than piecemeal, "spot" amendments on a project by project request basis. If a project by project approach to amending the Mission Valley Community Plan is acceptable, the potential growth inducing impacts as well as precedent for additional amendments and similar changes in development patterns in the Community Plan area must be completed. A.2-43

4. The DEIR Fails to Analyze an Adequate Comprehensive Alternative to the Project

After presenting the required "no project" alternatives, the DEIR offers only two alternatives – hotel and conference center renovations only and reduced project and reduced impact to historic uses. DEIR at page ES-5 and Alternatives Section. None of the alternatives offered would avoid or lessen the significant impacts and eliminate remaining project – plan inconsistencies. A.2-44

While there is no magic number for how many alternatives an EIR should examine to present a reasonable range, at a minimum, CEQA requires an agency to examine at least one potentially feasible comprehensive alternative to try to avoid or lessen significant environmental impacts that are central to the project, including significant impacts arising from inconsistencies with applicable plans and policies.

As described in this letter, there are numerous significant environmental impacts that the DEIR has failed to fully reveal as well as significant impacts that are not fully mitigated. The DEIR must evaluate at

[14] In the letter dated September 2, 2016, the School District referenced the possible addition of classrooms to address overcrowding as a result of the Project plus cumulative Projects. This is an example of the kind of growth induced facility that must be described and analyzed. See San Diego Unified School District Project Comment Letter at page 4.

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A.2-41 See Response A.2-33.

A.2-42 See Response A-45p regarding density, A-164 with regard to cumulative road impacts, and A-165 with regard to schools.

A.2-43 The comment indicates that this project will set precedent. See Response A-45p regarding proposed density and amendment to the MVCP as the project complies with the allowable density of the MVCP. It is not the responsibility of this project to identify or analyze other under-utilized sites. Each project must undergo its own independent environmental review. Furthermore, this project would not propose broad changes or uses that would affect other sites or projects. See Response A.2-33 regarding growth inducement also reference Chapter 7.0 for cumulative analysis. The Mission Valley Community Plan is currently undergoing a comprehensive update, and the project has been designed to be consistent with the overall goals and objectives of the proposed update.

A.2-44 See Response A-167 through A-169 regarding project alternatives.

least one potentially feasible alternative that eliminates or reduces all the Project's significant environmental impacts both disclosed in the DEIR and thus far undisclosed but likely.

The DEIR must be revised and recirculated to provide a reasonable range of alternatives to allow the public and decision-makers to understand what options are available for this site, and whether there is another viable option that would avoid or reduce the Project's significant impacts. A reasonable range must provide at least one potentially viable comprehensive alternative that aims to reduce all the Project's significant impacts. The City can either provide direction to the applicant to develop such an alternative, or retain a design firm and engage the community in the development of this alternative. A better approach would be to update the Mission Valley Community Plan with public engagement instead of entertaining individual Projects in the Mission Valley Community Plan area, and considering one-off Project-based amendments to the applicable Plans. This approach, recommended by Community Plan policy, would no doubt provide a superior alternative for redevelopment of this Project site. A.2-44

II. Concluding Comments

The DEIR suffers from numerous deficiencies, many of which render it inadequate under CEQA. The deficiencies of the DEIR necessitate extensive revision of the document and recirculation for public comment. As currently proposed, the Project conflicts with numerous provisions of the San Diego General Plan, Mission Valley Community Plan, and other applicable plans. As such, the City should reevaluate the Project and require changes in its design to reduce the Project's significant impacts and bring it into conformance with applicable plans, policies and other requirements. A.2-45

Very truly yours,

Terry Watt

Terry Watt, AICP

Attachments:

- Appendix A: LOCATION MATTERS: Affordable Housing and VMT Reduction in San Diego County. Link: http://housingsandiego.org/wp-content/uploads/2016/09/AffordableHousingAndVMTReduction.pdf
- Appendix B: Watt Qualifications

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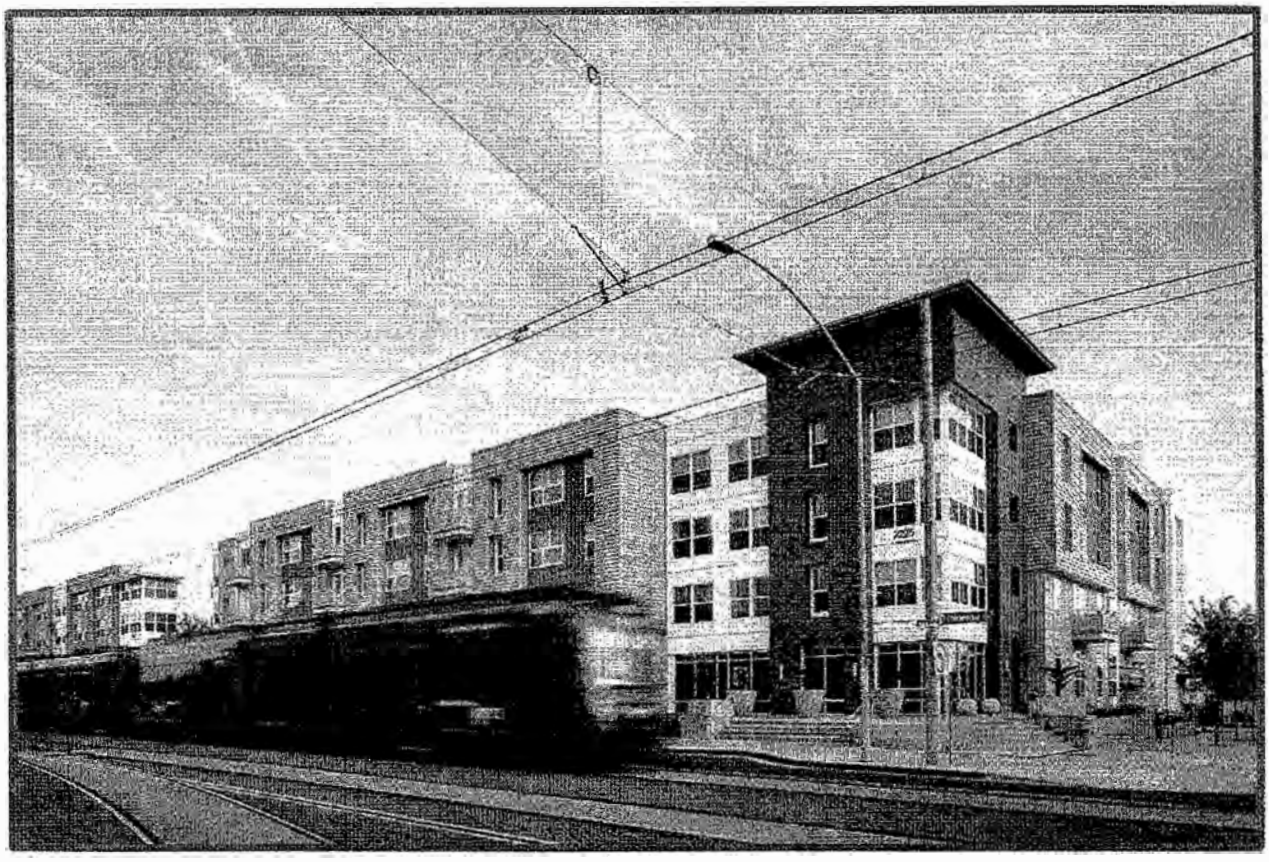
A.2-45 As identified within the Draft EIR and throughout the response to comments A-45 through A-45oo, the project is determined to be generally consistent with the stated goals, objectives, and recommendations of the City of San Diego General Plan, MVCP, SDRPMP, the MSCP, and the San Diego Municipal Code. Regarding recirculation, refer to Responses A-174 and A-175.

Appendix A

Location Matters: Affordable Housing and VMT Reduction in San Diego County



LOCATION MATTERS:

Affordable Housing and VMT Reduction in San Diego County

SEPTEMBER 2016

The San Diego Foundation
Growing a Vibrant Region

SAN DIEGO HOUSING FEDERATION

CNT

California Housing Partnership Corporation

Affordable Housing and VMT Reduction in San Diego County

This report was prepared for the San Diego Housing Federation (SDHF) by the Center for Neighborhood Technology (CNT) and co-authored with the California Housing Partnership Corporation (CHPC).

In 2015, CNT, with support of CHPC, completed a statistical analysis of household travel in California to estimate the relationship between income, location-efficiency, and vehicle miles traveled (VMT) throughout the state. Location efficient places have access to jobs and services and allow residents and visitors to get around by walking, biking, or on transit, reducing car travel. This report applies the findings from the statewide study (available here) to households in San Diego County. This report is meant to inform local planning and development efforts aimed at reducing VMT and resulting greenhouse gas (GHG) emissions. The report also provides guidance on use of the state's Affordable Housing and Sustainable Communities (AHSC) program to support development of location-efficient affordable homes and GHG-reducing transportation investments in San Diego County.

Summary of Key Findings

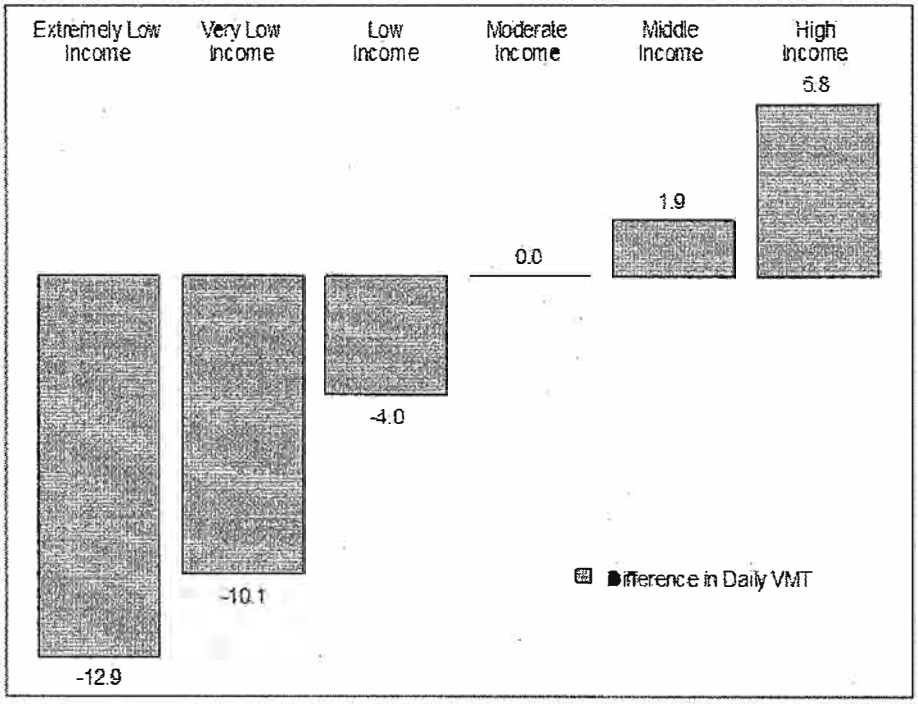
- Lower-income households drive significantly less than median income households in San Diego County. The lowest income households (those earning 50% of median income or less) drive ***10-12.9 fewer*** miles per day. Meanwhile, high-income households drive nearly ***6 miles more*** than median income households.
- Lower income and higher income households show the same potential reduction in VMT when living in more location efficient places compared to areas with less location efficiency. However, because lower income households have much lower VMT to start, they experience greater percentage reductions in VMT than higher income households.
- Living in the County's most location efficient areas results in significantly lower VMT. These areas include the region's urban core (City of San Diego), trolley-served East County communities (La Mesa, El Cajon, Lemon Grove), San Diego's South Bay (National City), and cities on the Sprinter light rail line (Escondido, San Marcos, Vista and Oceanside).
- Lower-income households are more likely to live in transit-rich areas than higher-income households. This tendency is shared by diverse household types with lower-income families and seniors far more likely to live near transit than higher income households of similar demographics.
- Lower-income households living near transit own fewer cars, live in smaller units, and are likely to live in larger buildings, all factors that contribute to lower-income households' propensity to live at greater densities near high quality transit, making affordable housing near transit a more efficient use of space with lower per-unit costs than market rate housing.
- The AHSC program could fund an estimated **1,100 affordable homes** near transit in San Diego County that will eliminate an estimated **65.6 million miles of driving** from San Diego County roads and provide **17.9 thousand metric tons** of GHG reductions over the lifetime of the developments.

SAN DIEGO HOUSING FEDERATION

For more information on this report, please visit the San Diego Housing Federation's website at housingsandiego.org/advocacy/climateaction.

Impact of Household Income on VMT in San Diego

CNT calculated the impact of income on VMT in San Diego for a household with average demographics for the county and the average level of location efficiency (as defined in the next section) for the county's neighborhoods. This analysis revealed that Extremely Low Income (ELI) households earning up to 30% of the area median income (AMI) drive 12.9 miles less than a median income household. Very Low Income (VLI) households, earning between 30% and 50% of AMI, drive 10 miles less than median. Meanwhile, high-income households earning over 150% of AMI drive nearly 6 miles more than median. These differences add up: a high-income household would drive 6,800 more miles per year than an otherwise similar ELI household.



Location Efficiency Impacts on VMT

Excluding household income and demographics to focus only on the VMT impact of location efficiency shows that VMT drops with increased location efficiency. CNT used three variables to measure location efficiency in the half mile around each household: 1) **employment density** measured as jobs per square mile, serves as a proxy for access to neighborhood services and amenities as well as local job opportunities, 2) **transit availability**, measured by the number of transit vehicles (e.g., bus, light rail, heavy rail) making stops in the neighborhood around the household on a weekly basis, indicates the level of transit service a household enjoys, and 3) **neighborhood commute distance** for workers living around the household showing proximity of the neighborhood to regional job opportunities.

Increasing location efficiency reduces VMT for all households by the same amount. Because lower income households start from a lower level of VMT, however, they experience greater percentage reductions in VMT with increased location efficiency. The elasticities[i] in the table on the following page show the percentage change in household VMT in response to percentage change in each of the three

[i]An elasticity measures one variable's responsiveness to change in another variable, in this case the elasticities show each income group's percentage reduction in VMT divided by the percentage increase in location efficiency.

location efficiency factors. In all cases, lower income households show greater percentage change in VMT in response to increased location efficiency.

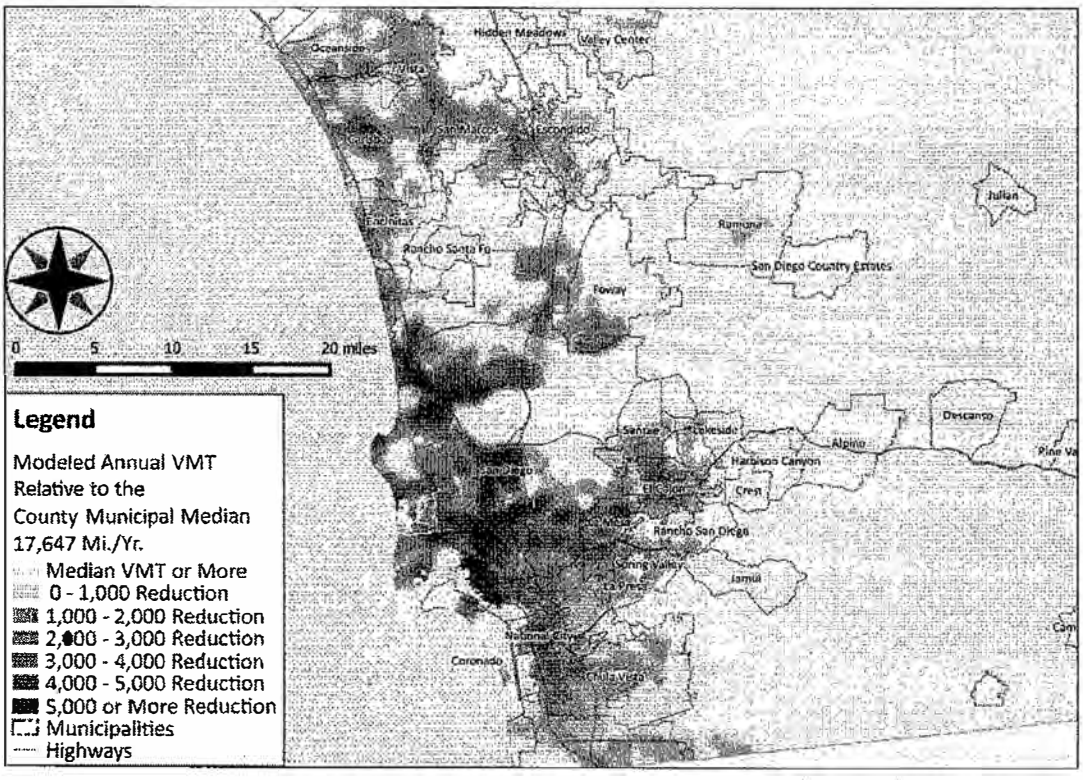
Elasticity of VMT in Response to Changes in Location Efficiency

Income Group	Employment Density	Transit Availability	Neighborhood Commute Distance
Extremely Low (ELI)	-0.097	-0.034	0.246
Very Low (VLI)	-0.089	-0.031	0.227
Low (LI)	-0.072	-0.025	0.183
Moderate (MI)	-0.066	-0.023	0.169
Middle (MdI)	-0.061	-0.021	0.155
High (HI)	-0.056	-0.02	0.143

Mapping The Impact of Location Efficiency on Annual Household VMT

The map below shows annual household VMT in San Diego County for a median household. Areas with darker shading have lower estimated VMT and, therefore, are the most likely sites for location efficient development. San Diego's planning agencies should be investing most heavily in building affordable communities in the region's urban core (City of San Diego), along trolley service to East County communities (La Mesa, El Cajon, Lemon Grove), in San Diego's South Bay (National City), and cities along the Sprinter light rail line (Escondido, San Marcos, Vista and Oceanside). The map also highlights the need for greater transit investment to connect to jobs rich areas such as the University of California San Diego and nearby neighborhoods and commercial areas.

Estimated Annual VMT Reduction by Location in San Diego County



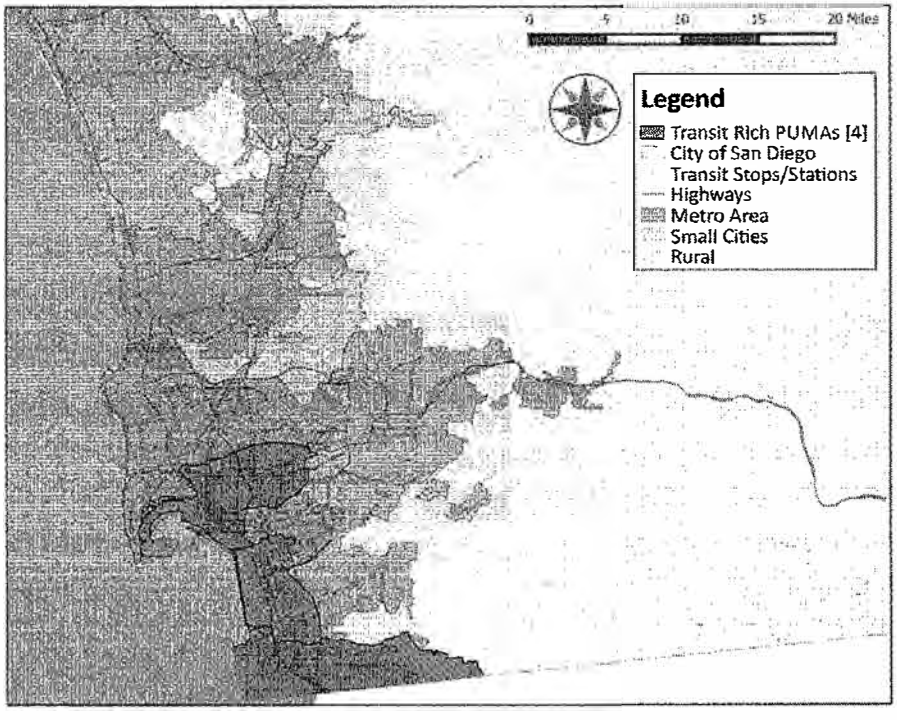
Applying the Model: San Diego County Households Living in Transit-Rich Areas

While households of different incomes experience the same amount of VMT reduction with increased location efficiency, different income groups have different housing characteristics, different rates of living near transit, different patterns of car ownership, and different demographics, each of which can affect VMT reduction in location efficient developments.

To investigate these effects, the model was applied to actual households living in the most transit-rich areas of San Diego County using data from the US Census Public Use Microdata Area (PUMA) level. PUMAs are districts of roughly 100,000 residents each that the Census uses to release highly detailed household data. CNT identified transit-rich areas in San Diego by selecting those PUMAs where 70% of households have at least 1,000 transit vehicles per week (buses, rail) making stops within a half mile. The four transit-rich PUMAs, shown in red on the map on the below, account for 20% of San Diego County households and constitute a location-efficient geography with full data on the inhabitants.

Households were assigned to income groups based on household size and income and further grouped into clusters by household type. Households with children were clustered as Families. Households with a ratio greater than one of senior citizens to non-senior adults were clustered as Seniors. Households with a low ratio of seniors and no children were clustered as Adults.

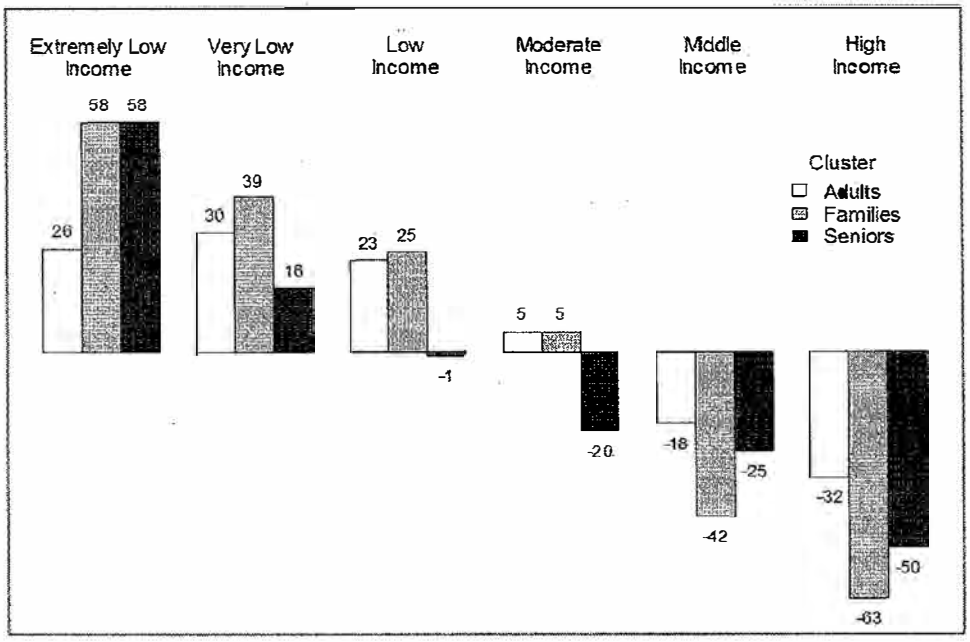
Transit-Rich PUMAs in San Diego County



Lower Income Households Are More Likely to Live in Transit Accessible Areas

As the figure on the following page makes clear, lower-income households of all household types are much more likely to live in transit-rich areas. In contrast, middle and high-income households are less likely to live near transit. Lower income families with children and senior households have an even higher likelihood of living in transit-rich areas while higher income households of these types are markedly less likely to live near transit.

Likelihood of Living in Transit-Rich PUMAs by Household Income and Type (in Percentages)



Lower Income Households Use Space More Efficiently in Transit-Rich Areas

Lower income households own fewer cars, live in smaller units, and tend to live in larger multifamily buildings than higher-income families. As a result, lower-income households use less space for parking cars and tend to live at higher densities. For higher income households, it is just the opposite, demonstrating that lower-income households use space in location-efficient areas more efficiently.

For example:

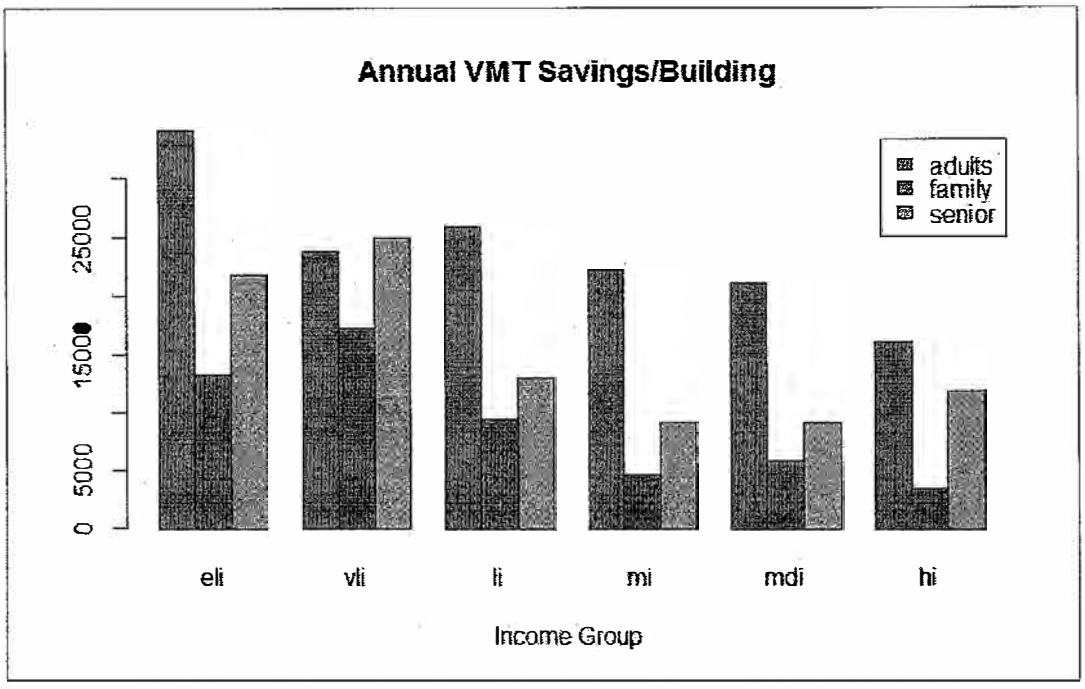
- A Very Low Income Family takes up ***32% less*** space in their building than the Median Family while a High Income Family takes up ***12% more*** space than the median – even though both families have roughly the same number of inhabitants (4.3 vs. 4.2, respectively).

- This pattern also extends to parking, which absorbs valuable buildable land and can cost tens of thousands of dollars to build. ELI and VLI households own fewer cars and consequently need ***52% and 33% less*** parking respectively.

As a result of lower income households' greater residential density and reduced parking need, the benefits of location-efficient living can be more widely shared at a lower cost per unit in affordable developments.

The following graph illustrates this point using the predicted annual VMT reduction associated with developing a parcel within a transit-rich area for the average households, by income and household cluster, currently living outside the transit-rich area (but within the San Diego Metro Region). The household characteristics are based on a weighted average, by income and household cluster, of the PUMS data from the non-transit-rich PUMAs. The initial location-efficiency characteristics are based on PUMA averages weighted by the number of households, by income and cluster. The final location-efficiency characteristics are based on PUMA averages weighted by all households (i.e. to provide the same values). The VMT model is used to calculate the annual VMT for a single household in both locations. Those benefits are then aggregated by the number of households, by income and household type that live in a typical building in transit-rich areas. The graph shows that in all cases, a parcel aimed

at lower-income household results in greater VMT reductions than developing the same parcel for higher-income households.



Estimating the future GHG reduction benefits of building affordable transit-oriented development

For this analysis, we assume that a new affordable unit will be occupied by a household moving from a location less accessible by transit to a development built in an area with good transit (using the four transit-rich PUMAs). While it cannot be guaranteed that new TOD units will be occupied by a mover from a less transit-accessible area, each new TOD unit represents an addition to the total supply of housing near transit and an additional household living near transit that otherwise could not afford to do so.

- We focus our calculations on Extremely Low-Income, Very Low-Income, and Low Income households because public investment is most essential to building and preserving homes for these income groups, and we also assume these units will be occupied by families (rather than seniors or adults only). We assume that homes in affordable TOD would serve 26% ELI households, 51% VLI households and 23% LI households based on the income mix of the 2015-2016 AHSC funded projects.

- The average difference in annual VMT for this mix of ELI, VLI and LI family households living in four transit-rich PUMAs areas vs. non-transit-rich areas is −53,798 VMT per year per building with an average of 50 units per building.

- We assume an average of $300 million per year will be invested in affordable housing through the AHSC program in each of the three fiscal years running from 2016/2017 through 2018/2019 based on estimates that cap-and-trade funds will be $2 billion in 2015, rising by $500 million per year as well as the precedent from the 2015-2016 funding round that affordable housing receives more than the statutorily guaranteed 50% of AHSC funds. We also assume that San

Diego County will receive 8% of these funds (assuming allocation will roughly correspond to population by county and following San Diego's results from the 2015-2016 funding round).

- In light of the most recent AHSC program guidelines, we assume that each housing development will receive an estimated average award of $65,000 per unit from these cap-and-trade funds. In the past, each affordable unit receiving funding has been required to remain affordable for 55 years, so we keep that timeframe for funded developments.

Based on these assumptions, we estimate that over **1,100 transit-connected homes** can be built in San Diego, or a little more than 22 buildings of 50 units each. Together, these affordable homes would remove **1,191,842 miles** of vehicle travel **per year** from our roads. Over the 55-year estimated life of these buildings, this equates to eliminating **65.6 million miles of driving** from San Diego County roads and **17.9 thousand metric tons** of GHG reductions, even with cleaner cars and fuels anticipated in the future[ii].

Conclusion

The research presented in this report finds that investment in location efficient housing for lower income households is a very reasonable component to a climate change program aimed at reducing VMT. Developing parcels for lower-income households is likely to lead to higher reductions in VMT than developing those parcels for higher income populations. Low income households live at higher densities in location-efficient areas, in part due to lower car ownership, allowing the benefits of location efficiency to be more widely realized and thus leading to additional VMT reductions.

Not only will investing in location efficient homes affordable to lower income households help the County meet its GHG and congestion management goals, it will also improve access and opportunity for vulnerable working families and seniors. In addition, the maps of San Diego's potential for VMT reduction highlight the need for increased transit investment to better connect residents to concentrations of jobs and services as well as the need to plan for and invest in housing for households of all incomes along the County's expanding transit infrastructure and near its jobs-rich areas.

[ii] Estimates used conversion factor of 273.15 CO2 grams per mile based on ARB's EMFAC 2011 CO2 emission rates. These include Low Carbon Fuel Standards and "Pavley" efficiency standards. 2035 rates were used as the average for all years.

Policy Recommendations from the San Diego Housing Federation

The San Diego Housing Federation has developed the following recommendations to build on the findings of this report with concrete local actions that can support GHG reduction and equitable growth through policies that fund and encourage affordable housing development in location efficient parts of the county:

1. Ensure a significant percentage of housing built near transit is affordable to lower income households through a combination of land-use policies:
    - Require inclusion of a percentage of affordable homes in all transit-oriented development.
    - Implement land value capture near transit that requires a percentage of affordable housing when height and density are increased.
    - Encourage public agencies to dedicate land near transit for affordable housing and set aside funds for site acquisition.

2. Require a dedicated set-aside of funding for transit-oriented affordable homes and related infrastructure as a component of any new funding streams.

3. Use the Smart Growth Incentive Program and other regional and local funding programs to reward jurisdictions that plan for and fund affordable housing near transit and are making significant progress toward Regional Housing Needs Assessment (RHNA) goals.

4. Create a transit-oriented affordable housing fund to finance affordable housing preservation and development near transit.

5. Ensure local compliance with AB744 and consider greater parking reductions for 100% affordable developments within a quarter mile of transit.

6. Increase height and density for affordable housing near transit beyond state density bonus law and expedite approvals for affordable housing near transit through affordable housing overlay zones or other mechanisms.

7. Invest in transit to link housing to jobs and services.

8. Identify transportation infrastructure investments to connect affordable housing to transit and support walking, biking, and transit use in order to leverage state funding through the Affordable Housing and Sustainable Communities (AHSC) program.

9. Foster cooperation and coordination between housing, planning, transportation, and public works departments to coordinate competitive AHSC applications.

Acknowledgements

San Diego Foundation
This report made possible by funding from The San Diego Foundation whose mission is to improve the quality of life in all of our communities by providing leadership for effective philanthropy that builds enduring assets and by promoting community solutions through research, convenings and actions that advance the common good. The opinions expressed in this publication are those of the San Diego Housing Federation and do not necessarily reflect the views of The San Diego Foundation.

About SDHF
Since 1990, the San Diego Housing Federation has worked to build and sustain a vital affordable housing program for the San Diego region by working to increase the variety and supply of safe, stable, and permanently affordable homes for lower income San Diegans.

About CNT
The Center for Neighborhood Technology is a nonprofit research and advocacy organization committed to improving urban economies and environments across the United States. We do this through innovation and by researching and analyzing urban problems; testing and promoting economically efficient and environmentally sound solutions; and demonstrating the value of investing in sustainable solutions.

About California Housing Partnership
California Housing Partnership is a nonprofit created by the California Legislature to help preserve the state's existing supply of affordable homes and to provide leadership on affordable housing policy and finance. In partnership with nonprofit and government housing agencies, CHPC provides the expertise, technical assistance, and advocacy leadership necessary to create and preserve homes affordable to lower income households in California.

Appendix Table 1.

Average Household Composition by Household Type of Residents of Transit Rich Areas

	Share	Age Cohorts					Occupation	
Income Group	% of Group	0-5	6-17	18-64	65+	Total	Work	Study
Extremely Low	100.0	0.3	0.6	1.3	0.3	2.5	0.8	0.3
Adults	42.3	0.0	0.0	1.4	0.1	1.5	0.9	0.5
Families	38.4	0.7	1.6	1.9	0.1	4.3	1.1	0.3
Seniors	19.3	0.0	0.0	0.0	1.1	1.1	0.2	0.0
Very Low	100.0	0.3	0.5	1.5	0.3	2.7	1.3	0.2
Adults	44.4	0.0	0.0	1.5	0.2	1.7	1.3	0.2
Families	38.2	0.7	1.3	2.2	0.1	**4.3**	1.7	0.3
Seniors	17.4	0.0	0.0	0.1	1.3	1.4	0.4	0.0
Low	100.0	0.2	0.5	1.8	0.3	2.8	1.6	0.2
Adults	53.1	0.0	0.0	1.8	0.2	2.0	1.6	0.3
Families	35.8	0.6	1.3	2.3	0.1	4.3	1.9	0.3
Seniors	11.1	0.0	0.0	0.0	1.4	1.5	0.3	0.0
Moderate	100.0	0.2	0.4	2.1	0.3	2.9	1.9	0.3
Adults	57.9	0.0	0.0	1.9	0.1	2.1	1.8	0.3
Families	33.3	0.6	1.2	2.8	0.2	4.8	2.5	0.4
Seniors	8.8	0.0	0.0	0.2	1.6	1.7	0.6	0.0
Middle	100.0	0.2	0.2	1.9	0.2	2.5	1.8	0.3
Adults	64.5	0.0	0.0	1.9	0.1	2.0	1.8	0.3
Families	25.3	0.7	0.9	2.5	0.0	4.2	2.2	0.3
Seniors	10.2	0.0	0.0	0.2	1.7	1.9	1.0	0.0
High	100.0	0.1	0.2	1.9	0.2	2.4	1.9	0.2
Adults	72.7	0.0	0.0	1.9	0.1	2.0	1.9	0.2
Families	19.7	0.6	0.9	2.5	0.1	**4.2**	2.4	0.3
Seniors	7.7	0.0	0.0	0.1	1.7	1.9	0.6	0.0

Appendix Table 2.

Spatial Differences by Household Cluster in Transit Rich Areas

Income Group	Share	Cars		Parking Spaces	Rooms in Unit			Share of Building		
	% of Group	Per HH	Per Person	% Difference from median	Per HH	Per Person	% Difference from median	Per HH	Per Person	% Difference from median
Extremely Low	100.0	1.0	0.4	-52.3%	3.6	1.4	-24.0%	0.41	0.17	-36.3%
Adults	42.3	1.0	0.6	-48.7%	3.4	2.2	-20.6%	0.36	0.24	-35.4%
Families	38.4	1.1	0.3	-51.8%	3.9	0.9	-28.8%	0.51	0.12	-34.0%
Seniors	19.3	0.6	0.6	-63.5%	3.5	3.1	-32.7%	0.35	0.31	-57.9%
Very Low	100.0	1.4	0.5	-33.0%	3.9	1.5	-17.2%	0.48	0.18	-25.6%
Adults	44.4	1.3	0.7	-31.9%	3.7	2.1	-12.2%	0.42	0.24	-23.8%
Families	38.2	1.6	0.4	-30.6%	4.1	1.0	-26.4%	0.52	0.12	**-32.2%**
Seniors	17.4	0.9	0.7	-45.5%	4.2	3.0	-19.4%	0.56	0.39	-32.8%
Low	100.0	1.6	0.6	-22.6%	4.3	1.6	-9.7%	0.54	0.20	-16.4%
Adults	53.1	1.5	0.7	-20.9%	4.0	2.0	-4.6%	0.47	0.23	-15.9%
Families	35.8	1.8	0.4	-23.7%	4.6	1.1	-16.9%	0.63	0.15	-18.2%
Seniors	11.1	1.2	0.8	-29.9%	4.5	3.1	-13.3%	0.64	0.43	-23.3%
Moderate	100.0	2.0	0.7	0.0%	4.8	1.6	0.0%	0.65	0.22	0.0%
Adults	57.9	1.9	0.9	0.0%	4.2	2.0	0.0%	0.55	0.27	0.0%
Families	33.3	2.4	0.5	0.0%	5.5	1.2	0.0%	0.77	0.16	0.0%
Seniors	8.8	1.7	1.0	0.0%	5.2	3.0	0.0%	0.83	0.48	0.0%
Middle	100.0	2.0	0.8	-2.0%	4.8	1.9	1.7%	0.61	0.24	-6.7%
Adults	64.5	1.8	0.9	-2.3%	4.3	2.2	1.9%	0.49	0.25	-11.5%
Families	25.3	2.4	0.6	3.3%	5.5	1.3	0.0%	0.81	0.19	5.6%
Seniors	10.2	1.8	1.0	4.4%	6.4	3.4	22.6%	0.83	0.44	0.1%
High	100.0	2.1	0.8	1.5%	5.3	2.2	10.5%	0.63	0.26	-3.7%
Adults	72.7	2.0	1.0	4.4%	4.9	2.4	16.3%	0.55	0.27	-0.1%
Families	19.7	2.5	0.6	5.2%	6.3	1.5	13.0%	0.86	0.21	**11.6%**
Seniors	7.7	1.9	1.0	6.5%	5.9	3.2	12.4%	0.72	0.39	-13.5%

Appendix B

Watt Qualifications

Terry Watt, AICP
Terry Watt Planning Consultants
1937 Filbert Street - San Francisco, CA 94123
terrywatt@att.net Cell: 415-377-6280

Terry Watt, AICP, owns Terry Watt Planning Consultants. Ms. Watt's firm specializes in planning and implementation projects with a focus on regionally-significant land use and conservation work that advances sustainable development patterns and practices. Prior to forming her own consulting group, she was the staff planning expert with the environmental and land use law firm Shute, Mihaly & Weinberger. She is an expert in general and specific planning and zoning, open space and agricultural land conservation strategies and approaches and environmental compliance, including CEQA and NEPA. Her skills also include facilitation and negotiation, public outreach and project management. Terry is a frequent presenter at regional, national and statewide workshops and symposiums. Her conservation work has helped organizations and clients permanently protect nearly 300,000 acres of conservation lands in California, raise over $1 billion for land conservation, and designate many more acres as important conservation landscapes to be avoided by development and prioritized for acquisition. She holds a Master's Degree in City and Regional Planning from the University of Southern California and a multi-disciplinary Bachelor's Degree in Urban Studies from Stanford University.

Terry works with a wide variety of clients throughout California including non-profit organizations, government agencies and foundations. She volunteers up to half her professional time on select projects. Recent projects and roles include:

- Project Manager and Governor's Office Liaison for San Joaquin Valley: Least Conflict Lands for Solar PV project. Project funding came from the Hewlett and Energy Foundation's, matched by environmental organizations, the California Energy Commission and other private parties. The objective of the project was to identify areas in the Valley that had very low resource values for renewable energy to serve as an incentive for development of least conflict lands rather than valuable resource lands. Watt was responsible for overall project management and day to day coordination, multi-stakeholder (150 stakeholders) and agency (57 federal, local and agency advisors) outreach and participation, facilitation of meetings, Governor's Office convening's, all project logistics and project report. Link to Collaboration Platform – Data Basin San Joaquin Valley: http://sjvp.databasin.org/
- Planning Consultant to California Attorney General's Office - Environment Section focusing on climate change, CEQA and general plans. (2007- 2010). While working with the Environment Section, assisted with settlements (Stockton General Plan, Pleasanton Housing Element and CEQA litigation); identified locally based best practices for local government planning to address climate change issues; and managed government outreach and consultation on general plans and climate action plans/energy elements/sustainability planning efforts. Post 2010 continue to provide periodic consulting services to the Environment Section related to select cases.
- Measure M-2 Sales Tax and Environmental Mitigation Measure. (2009-). Terry was the Co-project manager/facilitator of a 30+-member environmental coalition that through a unique partnership with the Orange County Transportation Authority (OCTA) and state and federal wildlife agencies generated nearly $500 million in funding for programmatic environmental mitigation (conservation land acquisition and stewardship) in Measure M2, Orange County Transportation Sales Tax.
- State Office of Planning and Research Special Projects (2011 – ongoing). Currently advising OPR on General Plan Guidelines, Infill and Renewable Energy Templates as part of the required update of the General Plan Guidelines, and CEQA Guidelines updates.
- Marin Countywide General Plan and Environmental Impact Report (2004 to 2007). Project Manager for the award-winning Marin Countywide Plan Update and its Environmental Impact Report. The General Plan was among the first to incorporate leading edge climate change, greenhouse gas emissions reduction and sustainability policies as well as monitoring, tracking and implementation measures to measure success.
- Staff to the Martis Fund, a joint project of five environmental groups and a Business Group (Highlands Group and DMB Inc.). (2008 – ongoing). The Fund was created as a result of litigation settlement. The Fund has distributed

over $15 million dollars since its inception to a range of conservation (acquisition of over 5,000 acres of open space), stewardship and restoration projects and workforce housing projects (emergency rental housing support, down payment assistance and low income apartments). Funding comes from a permanent transfer fee on all real estate sales at Martis Camp. http://www.martisfund.org/PDFs/Martis-Fund-Brochure.pdf

- Tejon Ranch Land Use and Conservation Agreement. (2006 – ongoing). Project coordinator for a dialogue process between environmental groups (Natural Resources Defense Council, Sierra Club, Endangered Habitats League, Planning and Conservation League, Audubon California) and The Tejon Ranch Company that resulted in a major Land Use and Conservation Agreement for the permanent protection of 240,000+ acres (90%) of the 270,000 acre Tejon Ranch. Secretary John Laird refers to the Agreement as a "miracle" agreement. In return for permanent conservation of 240,000+ acres, environmental groups agreed not to oppose projects within the development footprints; but can comment on regional planning efforts and the projects. Terry has an ongoing role overseeing implementation of the Agreement, including early role forming and managing the Conservancy formed by the Agreement. The Agreement provided the cornerstone of the Habitat Conservation Plan for a major portion of the Ranch; the Tejon Multi-Species Habitat Conservation Plan, TUMSHP, approved in April 2013. She recently joined the Board of the Tejon Ranch Conservancy created and funded by the Agreement.
- Orange County Wildlife Corridor. Project coordinator and architect for dialogue process between environmental and conservation organizations, City of Irvine and Lennar/Five Points development team that resulted in an 8 party Agreement, related general plan amendment and full funding to build an urban wildlife corridor to the specifications of the science team (6-member team jointly selected by all groups) connecting two high value conservation areas in central Orange County (Coastal and Eastern NCCP/HCP lands). Watt provides some ongoing implementation support.
- Ongoing assistance and authorship of expert comments on projects with recent letters on the proposed draft Amador County General Plan on behalf of the Foothill Conservancy and the proposed Squaw Valley Resort on behalf of a coalition of environmental and labor organizations.
- Facilitator to the Bolsa Chica Land Trust for recent agreement with Landowners to purchase remaining private acres of the Bolsa Chica uplands. Currently assisting with fundraising for the property.
- Advisor to the Nature Conservancy, the American Farmland Trust, Center for Law, Energy and Environment on numerous publications concerning urban infill and conservation.

PROFESSIONAL MEMBERSHIPS AND BOARDS

- Lambda Alpha International - Golden Gate Chapter
- American Institute of Certified Planners (AICP)
- American Planning Association (APA)
- Tahoe Fund Founding Board Member
- Tejon Ranch Conservancy Board Member
- Santa Lucia Conservancy Board Member
- Founder Council of Infill Builders
- Board Member, Planning and Conservation League
- Member of Agricultural Stewardship Council of the American Farmland Trust

AWARDS

- State and National APA Awards for Marin County General Plan
- APA Awards for South Livermore Valley Plans
- Carla Bard Award for Individual Achievement, PCL
- Environment Now Award for Measure M Support

LETTER A
ATTACHMENT 3

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October 14, 2016

Mr. Gideon Kracov
Attorney at Law
801 S. Grand Ave., 11th Floor
Los Angeles, CA 90017

Subject: ***Review of Transportation/Circulation Analysis – Draft Environmental Impact Report Town and Country Project, San Diego, California***

Dear Mr. Kracov:

As requested, MRO Engineers, Inc., (MRO) has reviewed the "Transportation/Circulation" section of the Draft Environmental Impact Report (DEIR) for the proposed Town and Country Project (AECOM, Inc., August 2016). The "Transportation/Circulation" section of the DEIR is based on a transportation impact analysis prepared by Linscott, Law & Greenspan (LLG). (Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016.) The LLG traffic study is presented as Appendix C to the DEIR.

Our review focused on the technical adequacy of the Transportation/Circulation analysis, including the detailed procedures and conclusions documented in the LLG study.

Transportation/Circulation Analysis Review

Our review of the DEIR Transportation/Circulation analysis revealed potentially significant deficiencies that should be addressed prior to approval of the project and its related environmental documentation by the City of San Diego. These issues are summarized below.

1. ***Traffic Volume Data*** – According to the DEIR (p. 4.2-3) and the LLG report (p. 14), intersection and roadway segment traffic counts were performed on September 24 and 25, 2014. These counts serve as the basis for much of the traffic impact analysis. Specifically, they represent a key component of the following traffic analysis scenarios that were documented in the LLG report:

   - Existing Conditions;
   - Existing + Total Project;
   - Near-Term (Opening Day 2018), in which cumulative project volumes were added to the existing traffic volumes;
   - Near-Term (Opening Day 2018) + Project Phase I;
   - Year 2022, in which a growth factor was applied to the Near-Term traffic volumes; and
   - Year 2022 + Project (Phases I and II).

   Consequently, it is important to be aware of the level of activity at Town & Country on those days. In particular, what percentage of the 954 existing hotel rooms and the 212,762 square feet (SF) of convention space were occupied? How do those percentages compare to a "typical" day at Town & Country? If the activity level was below average on the days in question, it would be

A.3-1

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM MRO ENGINEERS, INC. (ATTACHMENT A-3)

A.3-1 Under the CEQA guidelines, the baseline is normally "the physical environmental conditions in the vicinity of the project, as they exist at the time environmental analysis is commenced". In addition, per the *City of San Diego Traffic Impact Study Manual* (*Chapter 3*), existing traffic counts are required to be conducted during traditional morning and afternoon peak periods of the street system. The traffic counts for the project were conducted based on the above standards, which included conducting counts during weekday commuter peak hours of 7 AM to 9 AM and 4 PM to 6 PM on Wednesday September 23 and Thursday September 24, 2014. The traffic consultant LLG reported that hotel staff stated that the count days were typical operating days and therefore there was no reason to believe occupancy was significantly higher or lower than usual on those days given that occupancy rates vary on a daily basis depending on type of convention center events (local vs. non-local) and guest arrival patterns (drive vs. fly) among various other factors. In addition, weekday traffic was counted and analyzed per City traffic study guidelines as overall weekday peak period traffic is typically considerably higher than weekend traffic due to commuting.

In addition a comparison of historical peak hour volumes from other development project's transportation impact studies (Union Tribune Master Plan and Legacy International Center projects, counts conducted in 2012) in the area was conducted which showed that the peak hour traffic volumes in the vicinity of the project have been stable and consistent. Therefore, based on the above, the traffic counts conducted on a typical weekday represent an adequate "baseline" condition.

appropriate to adjust the traffic counts upward to reflect a typical day. The DEIR provides no data or analysis on this critical point.

Because the intersection traffic volumes represent the most critical input parameter in the level of service calculation process, any inaccuracies in those values directly affect the validity of the level of service results. In short, to the extent that the "existing" peak-hour or daily traffic volumes are inaccurate, the corresponding level of service results reported in the traffic analysis will be invalid, and a misleading representation of the environmental setting and project-related impacts will be provided.

A.3-1

2. ***Project Trip Generation*** – Background information regarding the estimated project trip generation is presented on DEIR pp. 4.2-13 – 4.2-15. In addition, detailed trip generation estimates for Phase I of the proposed Town & Country Master Plan are presented in DEIR Table 4.2-11 (pp. 4.2-53 – 4.2-55) and LLG Table 9-1 (pp. 49 - 50). Similar estimates for Phases I and II combined are summarized in DEIR Table 4.2-15 (pp. 4.2-61 – 4.2-63) and LLG Table 10-1 (pp. 69 – 70). We have identified several issues relating to these estimates.

The Hotel Trip Generation is Inaccurate

In determining the number of trips to be eliminated as a result of demolition of 254 hotel rooms, the DEIR traffic analysis improperly assumed that the current 954 rooms are fully occupied. This is unrealistic and inconsistent with other information presented in the DEIR. Specifically, footnote 4 in DEIR Table 4.13-1 (p. 4.13-11) says:

> *Based on research done for the Hotel calculations* [of water usage] *the occupancy rate is 80% for San Diego (City Data)*

Applying the 80 percent occupancy factor referenced here indicates that only 763 rooms would typically be occupied at Town & Country. Thus, implementation of the proposed 700-room hotel project would only eliminate the trips associated with 63 rooms, not 254 rooms. Table 1 summarizes the trip generation differences associated with this baseline error for each pertinent time period.

A.3-2

Table 1
Hotel Trip Generation Comparison

	Daily		AM Peak Hour		PM Peak Hour	
Hotel Room Reduction	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
254 Rooms[1]	10.0/Room	2,540	6% of Daily	152	8% of Daily	203
63 Rooms[2]		630		38		50
Difference		1,910		114		153

Notes:
[1] At 100 percent occupancy, per DEIR traffic analysis.
[2] At 80 percent occupancy, per City data.

A.3-2 See Response A-25.

By incorrectly including a baseline assumption that the hotel is fully occupied, the DEIR traffic analysis overstates the volume of daily traffic to be eliminated by over 1,900 trips. In the AM peak hour, the DEIR traffic analysis eliminated 114 too many trips, and in the PM peak hour, the reduction was 153 trips too high. Consequently, the net trip generation associated with the proposed project was underestimated by these amounts, potentially leading to understatement of the project traffic impacts.

We would also note that the 80 percent occupancy factor referenced in DEIR Table 4.13-1 is apparently a City-wide average. If the actual average occupancy factor at Town & Country is lower than this, than the trip generation discrepancy is even greater. In fact, if the actual occupancy factor is 73 percent or less, then fewer than 700 rooms would be occupied at Town & Country on a typical night, and no trip generation reduction would be appropriate.

A.3-2

Having established the hotel baseline at 763 rooms based on documented City of San Diego occupancy data, it is then appropriate to assume 100 percent occupancy of the renovated 700-room hotel, rather than applying the 80 percent occupancy factor. Given that current demand at Town & Country is for 763 rooms, the DEIR presents no evidence to suggest that the renovated hotel will generate lower demand. If anything, the upgraded facilities should result in even greater demand. Moreover, this methodology is consistent with the conservative approach to development of project-related trip generation estimates typically employed in a CEQA traffic impact analysis.

The Hotel Trip Generation Rate Is Based On Old and Limited Data

As described on LLG p. 44:

> *Per the City's* Tip [sic] Generation Manual, *the trip rate for "hotel with convention facilities and restaurant" is 10 trips/room. The trip rate of 10/room was developed from traffic count surveys at four (4) hotels with convention facilities in 1985.*

Thus, a total of four 31-year-old data points represent the foundation for the analysis of one of the critical actions proposed in the Town & Country project, the demolition of 254 hotel rooms.

We note that the proposed project is located on a road called Hotel Circle, which is the home of at least 15 hotels. (Source: www.hotelcircle.net) Thus, abundant opportunities exist to perform targeted data collection that would provide up-to-date information with respect to the travel characteristics of hotel guests in the immediate vicinity of the proposed project.

A.3-3

For comparison, we note that the universally-accepted Institute of Transportation Engineers (ITE) *Trip Generation Manual* (Ninth Edition, 2012) documents a daily trip generation rate (8.92 trips/occupied room) that is more than 10 percent lower than the rate used in the LLG analysis. Similarly, the PM peak-hour trip rates in the ITE document are over 10 percent lower than the San Diego rates.

Because the hotel rooms are to be demolished, the hotel trips are deducted from the existing traffic volumes. Thus, if the hotel trip estimate baseline is unrealistically high (as it would be if the San Diego trip rate is too high), that deduction will be excessive and the traffic impacts of the proposed project will be understated.

The validity of the hotel trip generation rates used in the Traffic/Circulation analysis must be confirmed.

A.3-3 See Response A-70.

The Convention Space Trip Generation Rate Is Based On Old Data

With regard to the trip generation rate employed for the project's convention space, the LLG report says (p. 45):

> *The* City of San Diego Trip Generation Manual *does not include a trip rate for convention space. Therefore, LLG derived the trip rate for the convention space from historical data at the T&C property. This data is included in the approved 1985 Atlas Specific Plan - Traffic Impact Study.*

Again, the analysis reaches far into the past to develop trip generation rates for the on-site convention space. No information is provided, however, to verify that the 31-year-old data that serves as the basis for this process remains valid in the year 2016. This conclusion is not supported by substantial evidence in the DEIR.

A.3-4

The Spa Trip Generation Rate Is Speculative

The LLG report (p. 45) states that, because the spa serves both hotel guests and other local patrons, ". . . only 50% of the spa was used as credit towards its demolition to only account for the external trips generated by the non-hotel guests." No basis is presented for this assumption, however, so the spa trip generation estimate is speculative, at best.

A.3-5

The Trip Reduction for Transit Use is Excessive

According to p. 46 of the LLG report:

> *Based on national research outlined in the* ITE Trip Generation Handbook (Table B.3, 2nd Edition, *included in Appendix G4), a minimum of 5% vehicle trip reduction is recommended for commercial uses within 0.25 mile of a light rail transit station.*

Three points are in order regarding this statement. First, nowhere does the *Trip Generation Handbook* indicate that these are "minimum" values, as suggested by the statement. Instead, they are simply described as the "estimated reduction in site vehicle trip generation." (ITE, p. 123)

Second, a highlighted area on p. 123 of the ITE *Trip Generation Handbook* specifically states that:

A.3-6

> *Vehicle trip reduction factors are only for commute trips (not all trips generated by a site)*

Despite this, the assumed 5 percent transit trip reduction factor has been applied across the board for the proposed project, for non-commute trips as well as commute trips. Consequently, the reduction associated with potential transit use has been overstated and the resulting net project trip generation has been understated.

Third, further examination of Table B.3 in the ITE *Trip Generation Handbook* reveals that application of the 5 percent transit trip reduction is also subject to the following additional condition:

A.3-7

> *Minimum FAR* [Floor Area Ratio] *of 1 per gross acre for commercial/industrial development.*

According to DEIR p. 3-3, the total site has an area of 39.72 acres or 1,730,203 SF. Thus, in order to satisfy the FAR condition associated with application of the 5 percent transit reduction,

A.3-4 See Response A-75.

A.3-5 The 2015 and 2016 spa data (attached) shows that the average utilization of the spa by non-hotel guests was approximately 65%. Since only 50% was used as credit, it is therefore concluded that the spa trip generation is conservative.

A.3-6 See Response A-76 and A-77.

A.3-7 See Response A-77.

the proposed development must total that same square footage; when the development area equals the land area, the FAR will be 1 per gross acre.

The proposed non-hotel development will consist of the following elements:

- Convention space: 177,137 SF (DEIR, p. 3-15)
- Phase I residential (435 dwelling units): 348,000 SF (DEIR, p. 3-15)
- Phase II residential (405 dwelling units): 324,000 SF (DEIR, p. 3-16)
- Restaurant/café: 12,800 SF (DEIR, p. 3-15)
- Hotel lobby: 11,400 SF (DEIR, p. 3-15)

A.3-7

The development listed above totals 873,337 SF. The square footage of the hotel is not provided in the DEIR, but to reach a FAR of 1.0, the hotel development (700 rooms) would need to equal 856,866 SF.

DEIR p. 4.1-1 says the total existing development equals 909,257 SF. Subtracting out the existing convention space (212,762 SF), the spa (14,298 SF), and the on-site restaurants (25,652 SF) reveals that the existing 954 hotel rooms total 656,545 SF. Therefore, even if the entire existing hotel were to be retained, the total project square footage would be 1,529,882 SF, which is equivalent to a FAR of 0.88.

Assuming that the square footage of the reduced hotel is roughly proportional to the number of rooms (i.e., 700 / 954 = 0.73), the approximate square footage of the modified hotel would be 481,742 SF. This suggests a total project square footage of about 1,355,079 SF, a FAR of 0.78.

Clearly, the square footage of the proposed project is insufficient to reach a FAR value of 1 per gross acre, as required in order to apply the 5 percent transit reduction factor presented in the ITE *Trip Generation Handbook*. Therefore, the proposed project trip generation is underestimated in the Transportation/Circulation analysis, and the project impacts are understated.

The DEIR Provides a Misleading Description of the Transit/Mixed-Use Reductions

As noted above, the LLG traffic impact analysis incorporated adjustments to the trip generation estimation process, which were intended to account for the possibility that employees and visitors at the project site will use nearby transit service and to reflect the mixed-use nature of the project. Page 47 of the LLG report says:

> *. . . a 5% transit/mixed-use credit for the hotel and a 5% transit/mixed-use credit for the convention space were applied to account for their interaction with the* [Fashion Valley] *transit center and Mall.*
>
> *For residential uses, per City standards, allowable community mixed-use (10%) and transit credits (5%) for the residential uses were taken.*

A.3-8

However, careful review of the LLG trip generation estimate tables (Table 9-1 (pp. 49 - 50) for Phase I and Table 10-1 (pp. 69 – 70) for Phases I and II combined), reveals that the actual percentage reductions were often substantially higher than these values. Table 2 summarizes a comparison of the claimed transit/mixed-use reductions and the actual percentages employed.

A.3-8 See Response A-80.

Table 2
Transit/Mixed-Use Reduction Summary

Land Use		Transit/Mixed-Use Reductions[1]					
		Daily		AM Peak Hour		PM Peak Hour	
		Claimed	Actual	Claimed	Actual	Claimed	Actual
Hotel	Transit/Mixed-Use Combined	5%	5%	5%	9%	5%	6%
Convention Space	Transit/Mixed-Use Combined	5%	5%	5%	9%	5%	6%
Residential	Transit	5%	5%	5%	9%	5%	6%
	Mixed-Use	10%	10%	10%	8%	10%	10%

Notes:
[1] Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016, Table 9-1, pp. 49 – 50 and Table 10-1, pp. 69 – 70.

As shown, only the reductions associated with the daily traffic estimates conform to the claims made in the LLG report. In the AM peak hour, the reductions are generally 9 percent instead of the claimed 5 percent (although the mixed-use reduction for the residential uses is 8 percent instead of the claimed 10 percent). In the PM peak hour, the actual reductions are again higher than claimed, except for the residential mixed-use adjustment, which matches the claim.

A.3-8

Also, we note that, while a transit/mixed-use credit is applied to the "proposed" hotel and convention space in LLG Table 9-1 (p. 49), a similar adjustment is not applied to the "existing" versions of those land uses. This is an improper inconsistency, given the fact that the Fashion Valley Transit Center currently exists and is available for use by employees and visitors at those land uses. The failure to account for existing transit usage overestimates the trip generation associated with those land uses and, therefore, results in excessive trip reductions in connection with the portions of those land uses to be demolished. As a result, the net trip generation of the proposed project is understated.

A.3-9

Project Trip Generation Summary

The trip generation estimates developed with respect to the proposed Town and Country Master Plan project are flawed.[1] The trip generation rates for the hotel and convention space are based on old and limited data, the spa trip generation assumptions are questionable and unsubstantiated, the trip generation reduction for transit usage is excessive and inappropriate. In addition, the DEIR provides a misleading description of the magnitude of the transit/mixed-use reductions. Correcting these errors will result in higher trip generation estimates for the proposed project, which likely will result in greater project-related traffic impacts. The Town and Country

A.3-10

[1] The project trip generation estimates are also misstated. DEIR p. 4.2-16 states, "With the addition of project traffic, several street segments are calculated to show better operations than existing conditions" because ". . . the reduction in traffic [due to demolition] is greater than the traffic added from the new residential uses." DEIR p. 4.2-15 contains a similar statement regarding intersection delay. In fact, DEIR Table 4.2-15 shows that the daily traffic generated by the project site will be exactly the same after completion of the proposed project as it is today. Also, the project will generate 173 additional outbound trips in the AM peak hour and 78 additional inbound trips in the PM peak hour, compared to existing conditions.

A.3-9 See Response A-81.

A.3-10 See Responses A-70, A-75, A-77, A-80 and A-81.

traffic impact analysis must be modified to correct these significant errors, and the revised analysis must be incorporated into a new environmental document. A.3-10

3. ***Driveway Traffic Control*** – The LLG report (p. 101) says that Private Drive A (i.e., the main driveway serving the project on Hotel Circle) will be signalized. This description is inconsistent with other descriptions of the driveway. No analysis was presented to demonstrate that the driveway's intersection with Hotel Circle North meets one or more signal warrants to justify the installation of a signal. Further, no analysis was documented to ensure that the signal could safely fit within the existing system of traffic signals along Hotel Circle. Of particular concern is the spacing of the proposed signal from the existing signals, as well as possible sight distance/visibility issues with respect to the curve on Hotel Circle to the east of the project site, where the street passes under Interstate 8. A.3-11

4. ***Freeway Level of Service Calculations*** – According to the DEIR (p. 4.2-3) and the LLG report (p. 14), freeway traffic volume data was obtained as described below:

   Existing weekday ADT [Average Daily Traffic] *and peak hour (7:00-9:00 AM and 4:00-6:00 PM) volumes were obtained for the freeway segments located within the project study area. The primary source of the volumes was Caltrans PeMS database. Data was collected from PeMS for weekday in September 2014 and averaged.*

   The freeway segment analysis methodology is described below (LLG, p. 20 – 21):

   The procedure involves comparing the peak hour volume of the mainline segment to the theoretical capacity of the roadway (V/C). The procedure for calculating freeway LOS involves the estimation of volume to capacity (V/C) ratio using the following equation: A.3-12

   V/C = (Daily Volume * Peak Hour Percent * Directional Factor * Truck Factor) / Capacity

   Daily Volume = *Average Daily Traffic (ADT)*

   Peak Hour Percent = *Percentage of ADT occurring during the peak hour*

   Directional Factor = *Percentage of peak hour traffic occurring in peak direction*

   Truck Factor = *Truck/terrain factor to represent influence of heavy vehicles & grades*

   Capacity = *2,000 vehicles/lane/hour for mainline, and 1,200 for auxiliary lanes.*

   Thus, even after supposedly acquiring existing peak-hour freeway traffic volumes from the Caltrans database, the analysis of those road segments was based on estimated values that were derived by applying multiple adjustment factors to daily volumes. While it is certainly appropriate to apply a factor to convert truck traffic into "passenger car equivalents," each of the other factors introduces an additional margin of error.

   It is unclear why, if peak-hour freeway volume data was available from the Caltrans PeMS database, the analysis was instead based on estimated values. And if, for some reason, the peak-hour data in the Caltrans database was considered deficient, why were actual counts of peak-hour traffic not performed?

A.3-11 The Private Drive A/Hotel Circle North intersection will not be signalized. The intersection would be controlled by a "stop sign" on Private Drive A. Section 4.2.7.2 of the Final EIR has been changed accordingly.

A.3-12 The freeway analyses were conducted per City of San Diego Traffic Study guidelines and Caltrans District 11 freeway analysis methodologies. The existing traffic counts (peak hour and Average Daily Trips) were obtained using Caltrans database counts. From these counts, various factors (such as K factor (relationship of peak hour to Average Daily Trips) and D factor (freeway directionality) were derived. The forecast traffic model provides freeway average daily traffic volumes and these factors were used to convert Average Daily Trips into peak hour volumes for analysis purposes to derive a volume / capacity ratio and Level of Service.

5. ***Parking Analysis*** – With regard to potential parking impacts, the DEIR concludes (p.4.2-34):

> *The project would meet the required minimum parking for residential use and result in a surplus of 65 spaces for hotel use compared to the minimum required under LDC shared parking; therefore, the project is not expected to have a significant impact on off-site parking.*

Pages 102 – 110 of the LLG report describe in detail the analysis of the adequacy of the project's proposed parking supply. The analysis of the two major components of the project are addressed separately below.

Hotel and Convention Space

Table 13-1 (p. 105) in the LLG report indicates that the hotel and convention component of the proposed project will generate peak demand for 856 parking spaces. (No corresponding table is provided in the DEIR.) In comparison, the proposed parking supply for this portion of the project is 921 spaces, which suggests a parking surplus of 65 spaces. That conclusion is based on the following considerations:

- Application of the hotel parking ratio required in the *City of San Diego Municipal Code* (Chapter 14, Article 2, Division 5, p. 15).
- Application of a parking ratio for the convention space that is 75 percent less than the City's code requirement (i.e., 2.50 spaces/1,000 SF instead of 10.0 spaces/1,000 SF).
- Conduct of a shared parking analysis, as allowed by the City of San Diego.

A.3-13

Review of LLG Table 13-1, which summarizes the shared parking analysis referenced above, reveals that the hourly parking demand distribution for the hotel rooms was taken directly from the *City of San Diego Municipal Code*. For reasons that are unexplained, though, the hourly demand distributions for the convention space are taken from the Urban Land Institute (ULI) *Shared Parking* report, instead of the City code. This alters the analysis results significantly. Table 3 illustrates the effect of using the ULI information in place of the City's adopted percentages for the convention space.

As shown, by arbitrarily using convention space hourly demand patterns from the ULI document instead of the official City of San Diego factors, the DEIR analysis underestimates the peak parking demand by 35 spaces (34 spaces when the transit/mixed-use credit is considered). The primary difference relates to estimated demand patterns at 9:00 PM, when the DEIR analysis assumed that the convention-related parking demand would be 10 percent of the peak value (i.e., 36 spaces), while the *San Diego Municipal Code* indicates that demand will be 100 percent of peak (i.e., 356 spaces), a difference of 320 spaces.

No explanation is provided to justify use of the ULI hourly percentages in place of the City's factors. If the City's factors were satisfactory for the hotel use, why not for the convention space?

A.3-13 The time of day distribution for convention space was used from the Urban Land Institute publication as the City of San Diego includes 100% occupancy of the convention space until 9 PM. While this may be conservative, the applicant expects that the convention space would not be 100% occupied after 5 PM. Urban Land Institute publication includes 100% occupancy until 5 PM, with decreasing occupancies as the evening progresses. This time of day distribution is more representative of Town & Country convention space utilization and hence Urban Land Institute standards were used. The City of San Diego does allow alternative standards to be used if the Land Development Code standards are not representative of the proposed use.

As noted in the commenter calculations, even if 100% convention space occupancy was assumed until 9 PM, a surplus of parking is calculated. As shown in Section 4.2.6.2, the project is calculated with a parking surplus of 65 spaces for the hotel and convention space.

A.3-14 See Responses A-82 and A-85.

Table 3
Shared Parking Analysis Comparison

Hour of Day	Estimated Hourly Parking Demand: Hotel (Using San Diego Hourly Factors per DEIR/LLG)[1] Hourly %	Hotel Parking Spaces	Exhibit/Convention Space: ULI Hourly Factors (per DEIR/LLG)[1] Hourly %	ULI Parking Spaces	San Diego Municipal Code Hourly Factors[2] Hourly %	San Diego Parking Spaces	Total Demand: ULI[1]	Total Demand: San Diego[2]
6:00 AM	100%	700	0%	0	0%	0	700	700
7:00 AM	95%	665	0%	0	0%	0	665	665
8:00 AM	85%	595	50%	178	50%	178	773	773
9:00 AM	85%	595	100%	356	100%	356	**951**	951
10:00 AM	80%	560	100%	356	100%	356	916	916
11:00 AM	75%	525	100%	356	100%	356	881	881
12:00 PM	70%	490	100%	356	100%	356	846	846
1:00 PM	70%	490	100%	356	100%	356	846	846
2:00 PM	70%	490	100%	356	100%	356	846	846
3:00 PM	60%	420	100%	356	100%	356	776	776
4:00 PM	65%	455	100%	356	100%	356	811	811
5:00 PM	60%	420	100%	356	100%	356	776	776
6:00 PM	65%	455	50%	178	100%	356	633	811
7:00 PM	75%	525	30%	107	100%	356	632	881
8:00 PM	85%	595	30%	107	100%	356	702	951
9:00 PM	90%	630	10%	36	100%	356	666	**986**
10:00 PM	90%	630	0%	0	50%	178	630	808
11:00 PM	100%	700	0%	0	0%	0	700	700
12:00 AM	100%	700	0%	0	0%	0	700	700
						Total Parking Demand	**951**	**986**
						10% Transit/Mixed-Use Credit	95	99
						Net Parking Demand	**856**	**887**
						Proposed Parking Supply	921	921
						Surplus	**65**	**34**

Notes:
[1] Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016, Table 13-1, p. 105.
[2] Reference: City of San Diego, *San Diego Municipal Code*, Chapter 14, Article 2, Division 5, Table 142-05J, p. 40.

A.3-13

The DEIR/LLG analysis also incorporates a reduction in parking demand to reflect assumed transit/mixed-use activity at the proposed project. Specifically, the analysis assumed a 10 percent reduction in parking demand, which reduced the derived peak parking demand estimate from 951 spaces to 856 spaces. Thus, according to the DEIR, the combination of varying hourly demand patterns at the hotel and convention uses and transit/mixed-use activity would result in a

A.3-14

surplus of 65 parking spaces. (As noted, our revised analysis using the City of San Diego's demand patterns suggests that this surplus would be reduced to 34 spaces.)

Although, in strictly mathematical terms, this may serve the proposed project's parking demand, in practical terms it fails to do so. Imagine, for example, that you are attending a convention in the Golden Pacific Ballroom near the northwest corner of the site. Because you are unfamiliar with Town and Country, you enter the site and drive toward the surface parking lots near that facility. Now imagine your frustration and annoyance at discovering that every parking space in those lots is occupied, because the 65 (or 34) surplus parking spaces are all located in one of the parking garages. So you drive to the new four-story parking structure adjacent to the Grand Exhibit Ballroom, only to find that it is also fully occupied and the only available spaces are all located in the subterranean garage.

Consider also the real possibility that the reduction in parking demand associated with transit/mixed-use considerations might not actually reach 10 percent. In fact, achieving the assumed 10 percent reduction in parking demand is uncertain, as the actual reduction will vary from day to day and at different times of the year.

Suppose, on a particular day, only a 3 percent reduction is achieved. On that day, the peak parking demand will be 922 spaces, which would exceed the available supply. If an even lower reduction is demand is achieved, drivers would be aimlessly circulating through the project site, in search of an empty parking space that does not exist. Moreover, these unfortunate individuals have very little alternative, as no on-street parking will be provided along the project's frontage on Hotel Circle North and Fashion Valley Road.

A.3-14

In any event, an estimated parking surplus of 65 (or 34) spaces is inadequate, given the margin of error inherent in the analysis.

Moreover, the parking analysis provides an overly-optimistic view of the adequacy of the proposed number of parking spaces. One key modification to the parking demand analysis that would provide a more accurate, more realistic estimate of the number of parking spaces needed at the proposed project is described below.

Specifically, the analysis must incorporate a common convention in parking studies: a "safety factor" or "margin of error" must be applied to the derived peak demand figure. For example, assuming a commonly-accepted 10 percent safety factor, an estimated peak demand of 951 spaces would result in a recommended parking supply of 1,046 parking spaces (i.e., 951 * 1.10 = 1,046). Applying this same factor to the more realistic peak demand figure derived above (i.e., 986 spaces) would indicate a recommended parking supply of 1,085 spaces.

Another way of looking at this is to consider the "effective capacity" or "effective supply" of the parking facility to be 85 to 95 percent of the total supply, as described in the Institute of Transportation Engineers *Transportation Planning Handbook* (Third Edition, 2009, p. 812.) That document specifically states the following:

> *When determining the adequacy of an existing multi-facility parking system, a parking analyst will usually assign effective supply factors to each of the different facilities to determine the overall effective supply and then compare the effective supply with the design day parking generation. To provide the desired effective supply, the expected parking generation rate at the peak time on the design day is divided by the effective supply factor. For example, if 1,000 vehicles are expected to be parked at the peak hour*

in the design day with a 90-percent effective supply factor, 1000/0.90 = 1,111 spaces would be required for the system to work reasonably well in that hour. . .

The intent of the effective supply concept is that the system will work reasonably well on the design day, but there may be difficulty finding an available space in hours above the design hour. This is truly a practical need; for example, parking facilities with access and revenue controls are often closed before the parking facility becomes completely full, because it is just too difficult to find available space. . . . Users may perceive that there is a serious or even severe parking problem even though there may be spaces available somewhere in the system.

A.3-14

With this approach, the proposed parking supply of 921 spaces represents an effective supply of about 829 spaces, assuming a 90 percent "effective supply factor" (i.e., 921 * 0.90 = 829). Compared to our modified peak demand estimate of 887 spaces (including the transit/mixed-use adjustment), this would indicate a deficiency of 58 parking spaces. With respect to our unadjusted demand figure of 986 spaces, a deficit of 157 spaces results.

Even considering the 856-space net parking demand presented in the DEIR, a deficit of 28 spaces is projected relative to the 829-space effective supply. And if the 10 percent transit/mixed-use reduction in demand fails to occur, the DEIR's 951-space parking demand will result in a deficit of 122 spaces.

Residential Parking

LLG Table 13-3 (p. 107 – 108) summarizes the derivation of the parking requirements for the proposed residential components of the project. (Again, no corresponding table is provided in the DEIR.) According to that table, the parking supply on Residential Parcels 1 and 4 will exactly match the City's parking requirement, while parking surpluses are expected on Residential Parcels 2 and 3.

With the exception of studio units, the residential parking requirements were estimated using the City of San Diego parking ratios for "transit areas" in Table 142-05C of the Municipal Code (Chapter 14, Article 2, Division 5, p. 9 – 10); the studio units were evaluated using the parking ratio for "Basic" areas. Although the use of the Transit Area parking ratios is allowed under City code, several questions remain. For example, as with the hotel/convention space discussed above, we wonder what happens if the anticipated transit usage fails to occur? To provide an indication of the implications of this possibility, Table 4 shows a comparison of the residential parking requirements using the "Transit Area" ratios and the "Basic" ratios.

A.3-15

As shown, if the assumed reduction in parking demand associated with transit use and the mixed-use nature of the proposed project fails to materialize, parking deficits of 26 – 28 spaces will occur at Residential Parcels 1 and 4, and the estimated parking surplus at Residential Parcels 2 and 3 will be no more than 10 spaces.

Given the lack of a parking surplus at two of the parcels, what will happen when the residents own more vehicles than can be accommodated?

And where will guests park? And service and delivery vehicles?

The failure to recognize the considerations presented here represents a substantial deficiency in the analysis of the proposed project's parking system. Unless the parking supply is increased or

A.3-15 See Responses A-82 and A-85.

the magnitude of the project is reduced (resulting in lower parking demand), the project's parking supply will be inadequate, and a significant impact will result.

Table 4
Residential Parking Comparison[1]

Unit Type	No. of Units	"Transit Area" Parking Requirement[2] Ratio	"Transit Area" Parking Requirement[2] No. of Spaces	"Basic" Parking Requirement[2] Ratio	"Basic" Parking Requirement[2] No. of Spaces
Residential Parcel 1					
Studio	48	1.25[3]	60	1.25	60
1 BR / 1 BA	64	1.25	80	1.5	96
2 BR / 2 BA	48	1.75	84	2.0	96
TOTAL	160		224		252
		Proposed Parking Supply	224		224
		Surplus (Deficit)	0		(28)
Residential Parcel 2					
Studio	83	1.25[3]	104	1.25	104
1 BR / 1 BA	110	1.25	137	1.5	165
2 BR / 2 BA	82	1.75	144	2.0	164
TOTAL	275		385		433
		Proposed Parking Supply	443		443
		Surplus (Deficit)	58		10
Residential Parcel 3					
Studio	77	1.25[3]	96	1.25	96
1 BR / 1 BA	102	1.25	127	1.5	153
2 BR / 2 BA	76	1.75	133	2.0	152
TOTAL	255		356		401
		Proposed Parking Supply	410		410
		Surplus (Deficit)	54		9
Residential Parcel 4					
Studio	45	1.25[4]	56	1.25	56
1 BR / 1 BA	60	1.25	75	1.5	90
2 BR / 2 BA	45	1.75	79	2.0	90
TOTAL	150		210		236
		Proposed Parking Supply	210		210
		Surplus (Deficit)	0		(26)

Notes:
Notes:
[1] Reference: Linscott, Law & Greenspan, *Transportation Impact Analysis – Town & Country Master Plan*, June 22, 2016, Table 13-3, p. 107 - 108.
[2] Reference: City of San Diego, *San Diego Municipal Code*, Chapter 14, Article 2, Division 5, Table 142-05C, pp. 9 – 10.
[3] "Basic" parking ratio used for studio units.

A.3-15

CONCLUSION

Our review of the "Transportation/Circulation" section of the Draft Environmental Impact Report for the proposed Town and Country Project in San Diego, California revealed several substantial issues affecting the validity of the conclusions presented in that document. Of greatest concern are deficiencies in the estimation of the volume of traffic to be associated with the proposed project as well as the adequacy of the project's parking supply. In both cases, we believe that the project's impacts have been understated, thereby requiring completion of a corrected traffic impact analysis, which will likely reveal significant impacts that were not documented in the DEIR. That modified traffic impact analysis should be incorporated into a revised environmental document, which must be circulated for further public review.

We hope this information is useful. If you have questions concerning anything presented here, please feel free to contact me at (916) 783-3838.

Sincerely,

MRO ENGINEERS, INC.

Neal K. Liddicoat, P.E.
Traffic Engineering Manager

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LETTER A
ATTACHMENT 4

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Scott Cashen, M.S.—Independent Biological Resources Consultant

October 12, 2016

Mr. Tony LoPresti
Altshuler Berzon LLP
177 Post Street, Suite 300
San Francisco, CA 94108

Subject: Comments on the Draft Environmental Impact Report Prepared for the Town and Country Project

Dear Mr. LoPresti:

This letter contains my comments on the Draft Environmental Impact Report ("DEIR") prepared by the City of San Diego ("City") for the Town and Country Project ("Project"). Lowe Enterprises Real Estate ("Applicant" or "Project Proponent") proposes a master plan for the 39.7-acre Town & Country Hotel and Convention Center site, and numerous other related discretionary permits and approvals. Critical proposed elements of the master plan include a consolidated and renovated hotel and convention center; a new compact multi-family residential neighborhood; a restored San Diego River open space habitat; a new passive public park; and multi-use San Diego River Pathway providing a link in a regional recreational corridor.

A.4-1

I am an environmental biologist with 23 years of professional experience in wildlife ecology and natural resource management. I have served as a biological resources expert for over 100 projects in California. My experience and scope of work in this regard has included assisting various clients with evaluations of biological resource issues, reviewing environmental compliance documents prepared pursuant to the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), and submitting written comments in response to CEQA and NEPA documents. My work has included the preparation of written and oral testimony for the California Energy Commission, California Public Utilities Commission, and Federal courts. My educational background includes a B.S. in Resource Management from the University of California at Berkeley, and a M.S. in Wildlife and Fisheries Science from the Pennsylvania State University. A true and correct copy of my current curriculum vitae is attached hereto.

A.4-2

I have gained particular knowledge of the biological resource issues associated with the Project through my work on numerous other projects in San Diego County. The comments herein are based on my review of the environmental documents prepared for the Project, a review of scientific literature pertaining to biological resources known to occur in the Project area, consultations with other biological resource experts, and the knowledge and experience I have acquired during more than 23 years of working in the field of natural resources management.

3264 Hudson Avenue, Walnut Creek, CA 94597 1

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM SCOTT CASHEN, M.S. (ATTACHMENT A-4)

A.4-1 Comment acknowledged. The comment does not address the adequacy of the EIR

A.4-2 Comment acknowledged. The comment does not address the adequacy of the EIR

A.4-3 See Responses A-38 through A-41.

I. PROJECT DESCRIPTION

A. New Storm Water Management Area and Drainage Channel

The Project includes installation of a new storm water management area and drainage channel that would convey water from the Project site to the San Diego River. A portion of the new drainage channel would be located within the Multi-Habitat Planning Area ("MHPA"). The DEIR provides virtually no information on the proposed storm water management area and drainage channel. However, according to the Biological Technical Report ("BTR") that was prepared for the Project:

> The stormwater management area depicted on Figure 3 includes a water quality basin to treat runoff, as well as a new outfall structure. A new drainage channel will be graded from the stormwater management area to the San Diego River channel to convey treated water from the outfall to the river channel. The new drainage channel will be up to approximately 28 feet wide and naturally vegetated with a combination of coastal sage scrub and riparian species with an emphasis on low growing species.[1]

This description appears inconsistent with information provided in the DEIR, which states the new outlet "would have adequate improvements (i.e., new culvert headwall, riprap energy dissipaters) to reduce storm runoff to nonerosive velocities."[2] Riprap in the new drainage channel is inconsistent with the BTR's description of the channel being "naturally vegetated."

A.4-3

The DEIR does not describe or map the extent of the riprap energy dissipaters and other "improvements" associated with the new outlet and drainage channel. As a result, it is impossible to evaluate the Project's compliance with the City's Multiple Species Conservation Program ("MSCP") Subarea Plan, which prohibits riprap, concrete, and other unnatural materials in the MHPA.

The BTR indicates the new drainage channel will be naturally vegetated with a combination of coastal sage scrub and riparian species, and that it will be located within an area that will be restored to a coastal sage scrub buffer zone per Site Development Permit ("SDP") #400602.[3] It is unclear if the new drainage channel is being counted as credit towards the mitigation requirements of SDP #400602. Furthermore, coastal sage scrub species do not grow in drainage channels, nor do they survive in floodplains.[4]

[1] BTR, p. 4.
[2] DEIR, p. 4.6-21.
[3] BTR, p. 4.
[4] California Wildlife Habitat Relationships System. 2005 [update]. Wildlife Habitats: Coastal Scrub. California Department of Fish and Game. California Interagency Wildlife Task Group. Available at: <https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats>.

2

II. EXISTING CONDITIONS

A. Biological Resource Surveys

1. ANIMALS

The BTR lists numerous special-status animal species that have the potential to occur at the Project site.[5] The City's *Biology Guidelines* establish that focused surveys are required for listed species.[6] Focused surveys are also required for "non-listed" sensitive species if there is a reasonable likelihood the species could occur at the site. The case-by-case determination on whether focused surveys are required is made, in part, through discussion with the California Department of Fish and Wildlife ("CDFW") and U.S. Fish and Wildlife Service ("USFWS").

A.4-4

The CDFW submitted written comments to the City in response to the Notice of Preparation ("NOP") that was issued for the Project. CDFW stated the DEIR should include:

1. "A thorough, recent floristic-based assessment of special status plants and natural communities following the Department's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities."
2. "A current inventory [i.e., complete count] of the biological resources associated with each habitat type on site and within the area of potential effect."
3. "An inventory [i.e., complete count] of rare, threatened, endangered and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, §15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variation in use of the project area should also be addressed."[7]

A.4-5

To further clarify the information needed to assess Project impacts, CDFW's letter indicated:

> Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, **are required**. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.[8]

A.4-6

The Project Proponent's consultant, AECOM, subsequently conducted protocol-level surveys for the least Bell's vireo ("LBV") during the 2016 breeding season. However, it

A.4-7

[5] BTR, Appendix E.

[6] City of San Diego. 2012 [amended]. San Diego Municipal Code: Land Development Code, Biology Guidelines. Table 1.

[7] DEIR, Appendix A. California Department of Fish and Wildlife. 2016 Jan 15. Comments on the Notice of Preparation of a Draft Environmental Impact Report for Town and Country, City of San Diego, San Diego County, California (Project Number 424475, SCH #2015121066). pp. 9 and 10.

[8] *Ibid* [emphasis added].

3

A.4-4 See Response A-13.

A.4-5 See Response A-13.

A.4-6 See Responses A-10 and A-13.

A.4-7 See Responses A-10 and A-13.

failed to conduct any of the other surveys specified in CDFW's comment letter. Specifically, AECOM did not: (1) conduct a floristic-based assessment of special-status plants; (2) conduct a current inventory of biological resources associated with each habitat type; (3) conduct a current inventory of sensitive species on the site and within the area of potential effect; (4) address seasonal variation in use of the Project area by fish and wildlife; (5) conduct focused, species-specific surveys (except for LBV); or (6) develop species-specific survey procedures in consultation with the CDFW and USFWS. Indeed, AECOM's survey efforts were limited to a single site visit in September 2014, which the DEIR described as the following:

> A field reconnaissance survey was conducted on September 11, 2014, by AECOM biologists Lance Woolley and James McMorran to map existing vegetation, identify potential for rare plant occurrences, and assess wildlife habitat. The field reconnaissance survey was conducted within the [Biological Study Area ("BSA")] by walking accessible portions of the BSA. The reconnaissance survey focused on areas of the BSA with potential to support natural and potentially sensitive biological resources (i.e., the San Diego River bisecting the northern portion of the BSA). All plant and wildlife species detected were recorded; Appendix B and Appendix C provide a complete list of plant and wildlife species, respectively, observed during the field reconnaissance survey.[9]

A.4-7

This description is insufficient to assess the value of the information gained during the reconnaissance survey. The DEIR fails to identify the level of effort (i.e., total man-hours) devoted to the survey and the time of day the survey was conducted. In addition, the DEIR does not provide a map or other information identifying the specific areas that were surveyed, versus the areas that could not be surveyed because they were not "accessible." The DEIR indicates the survey focused on areas within the BSA that the biologists believed had the potential to support sensitive biological resources. However, it does not identify those areas as being anything beyond "the San Diego River," which is too vague a description to ascertain the extent to which the biologists also examined the surrounding uplands for sensitive biological resources.

A.4-8

September is a poor time of year to detect sensitive biological resources. Many special-status plants, including ones that have the potential to occur at the Project site, are only evident and identifiable during the spring.[10] In addition, most North American bird species complete their breeding activities by August (or earlier). As a result, they are less active and vocal, and consequently, much more difficult to detect in September.[11] The western spadefoot (i.e., the only special-status amphibian that AECOM concluded could occur at the site) occurs below ground during September (i.e., in aestivation: a state of

A.4-9

[9] BTR, p. 21.
[10] CNPS, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org>.
[11] CJ Ralph and JM Scott, editors. 1981. Estimating numbers of terrestrial birds. Studies in Avian Biology 6.

A.4-8 See Response A-16.

A.4-9 See Responses A-10 and A-17.

torpor).[12] As a result, the AECOM biologists would have been incapable of detecting this species even if they conducted their survey at night (the species is nocturnal).

A.4-9

AECOM's failure to conduct focused surveys has three principal implications on the Project. First, data from focused surveys is required for the public, decision makers, and resource agencies to have a thorough understanding of existing conditions. Second, without a complete understanding of existing conditions, the City does not have the information needed to perform an accurate impact assessment, and consequently, to formulate appropriate mitigation. Third, focused surveys are required to comply with the City's Land Development Code (*Biology Guidelines*). This is particularly important because the *Biology Guidelines* state the following with regard to species that are not covered under the MSCP: "[i]f surveys are not done at the appropriate time of year, and the potential for occurrence is moderate to high (based on historical knowledge, site records, determination by the biologist, etc.), then it will be concluded that their presence exists on the property."[13] Therefore, at a minimum, the City must assume presence of the following special-status animal species:[14]

A.4-10

- Western spadefoot
- Two-striped gartersnake
- South coast gartersnake
- White-tailed kite
- Vaux's swift
- Clark's marsh wren
- Yellow warbler[15]
- Yellow-breasted chat
- Western red bat

2. PLANTS

Special-status plant species have the potential to occur on the Project site.[16] These include San Diego ambrosia (*Ambrosia pumila*), San Diego marsh-elder (*Iva hayesiana*), San Diego sagewort (*Artemisia palmeri*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*).[17] San Diego ambrosia is a federally listed endangered species. San Diego marsh-elder has a California Rare Plant Rank of 2B, which means it meets the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380. Incidental take of San Diego marsh-elder, San Diego sagewort, and southwestern spiny rush is not authorized under the City's Multiple Species Conservation Program ("MSCP").[18]

A.4-11

[12] California Department of Fish and Game, California Interagency Wildlife Task Group. 2000 [update]. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.
[13] City of San Diego. 2012 [amended]. San Diego Municipal Code: Land Development Code, Biology Guidelines. p. 18.
[14] BTR, Appendix E.
[15] Presence already confirmed at Project site.
[16] BTR, Appendix E.
[17] BTR, Appendix E.
[18] BTR, Appendix E.

5

A.4-10 See Responses A-18 and A-21.

A.4-11 See Response A-21.

A.4-12 See Responses A-21 and A-22.

AECOM did not conduct focused (protocol-level) surveys for special-status plants that could be affected by the Project. CDFW survey guidelines indicate focused botanical surveys should be conducted *whenever natural or naturalized vegetation occurs on a project site* and the project has the potential for direct or indirect effects on vegetation.[19] Natural and naturalized vegetation occur on and adjacent to the Project site, and the Project will have direct and indirect impacts on that vegetation.[20] Therefore, to establish existing conditions and comply with CDFW guidelines, the Applicant needs to conduct appropriately timed botanical surveys throughout all portions of the Project area and buffer zone containing natural or naturalized vegetation. Data from those surveys are required to fully assess existing conditions, analyze Project impacts, and formulate appropriate mitigation for impacts to sensitive botanical resources.

A.4-11

a. San Diego Ambrosia

McGlaughlin and Friar (2007) described the primary habitat for San Diego ambrosia as: "upper terraces of rivers and drainages in areas that have been heavily impacted by anthropogenic disturbances and changing flood regimes."[21] The USFWS provided a somewhat broader description when it listed the species as Endangered in 2002. It stated: "*Ambrosia pumila* primarily occurs on upper terraces of rivers and drainages as well as in open grasslands, openings in coastal sage scrub, and occasionally in areas adjacent to vernal pools.[22] The species may also be found in disturbed sites such as fire fuel breaks and edges of dirt roadways."[23] Based on these descriptions, in conjunction with the geographic range of the species, potentially suitable habitat for San Diego ambrosia occurs within the Project area.

A.4-12

AECOM concluded there was a low potential for San Diego ambrosia to occur at the Project site because: "potential habitat occurs adjacent to the San Diego River but is only marginally suitable."[24] The BTR does not explain why the potential habitat is only "marginally suitable." According to the Atlas Specific Plan (2016, proposed amended): San Diego ambrosia "could reasonably be expected" to occur in the lower San Diego River floodplain.[25] There are documented records of San Diego ambrosia occurring

[19] CDFG. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Available at: http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Plants.

[20] DEIR, Figure 4.4-1.

[21] McGlaughlin ME, EA Friar. 2007. Clonality in the Endangered *Ambrosia pumila* (Asteraceae) Inferred from RAPD Markers; Implications for Conservation and Management. Conservation Genetics 8(2):319-330. Abstract available at: <http://link.springer.com/article/10.1007/s10592-006-9171-4>.

[22] U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) From Southern California; final rule. Federal Register, volume 67, number 127, pages 44372–44382.

[23] *Ibid.*

[24] BTR, Appendix E.

[25] Amended Atlas Specific Plan, p. IV-20.

6

along the San Diego River floodplain approximately two miles upstream of the Project site.[26]

The City cannot rule out the potential that San Diego ambrosia occurs at the Project site until the Applicant conducts focused surveys that adhere to USFWS guidelines.[27] AECOM's failure to detect the species during the September 2014 site visit is not evidence of absence because the species occurs underground, and its aerial stems may not be present from late summer to early spring.[28]

A.4-12

b. Other Special-Status Plants

The BTR lists four special-status plant species that have at least some potential to occur within the BSA: San Diego ambrosia, San Diego sagewort, San Diego marsh-elder, and southwestern spiny rush.[29] For almost all the other species AECOM concluded: "[s]uitable habitat for this species does not occur within the study area."[30] However, this conclusion does not appear to be justified for every species that the BTR ruled out on the basis of habitat (e.g., Dean's milk-vetch).[31]

A.4-13

B. Non-Native Plants

A key component of the Project is the Applicant's proposal to restore and enhance approximately 7.5 acres of native habitat by removing exotic (nonnative) plants and installing natives.[32] According to the BTR, approximately 72% of plant species recorded on-site (i.e., 55 out of 76) are nonnative. This information is used to justify the merits of the proposed Project. For example, the DEIR states the existing wetlands are relatively low quality "due to the dominance (approximately 72 percent site-wide) of nonnative species and the intensity of edge effects," and that the Project would result in a "net benefit to all wetlands on-site."[33] However, there are two fundamental problems with the DEIR's rationale:

A.4-14

First, data indicating 72% of the species are nonnative are of limited value without corresponding data on the distribution, abundance, and cover of those nonnatives. The BTR failed to provide those data. The *proportion* of nonnative species (i.e., 55 out of 76

A.4-15

[26] Data provided by the participants of the Consortium of California Herbaria. Available at: <http://ucjeps.berkeley.edu/consortium/>. (Accessed 2016 Oct 8).

[27] U.S. Fish and Wildlife Service. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. p. 1.

[28] U.S. Fish and Wildlife Service. 2002. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) From Southern California; final rule. Federal Register, volume 67, number 127, pages 44372–44382.

[29] BTR, Appendix E.

[30] BTR, Appendix E.

[31] *See* DEIR, p. 4.4-8 and BTR, p. 32. *See also* California Natural Diversity Database. 2016 Oct 4. RareFind 5. California Department of Fish and Wildlife. (occurrence records for Dean's milk-vetch).

[32] BTR, p. 64.

[33] DEIR, pp. 4.4-66 and -69.

7

A.4-13 See Response A-23.

A.4-14 Comment acknowledged. The comment does not address the adequacy of the EIR.

A.4-15 See Responses A-8 and A-9.

species) does not necessarily mean those species are abundant, or that they have a negative influence on all 7.5 acres of the proposed restoration and enhancement area.

Second, the DEIR misapplies the ecological meaning of "dominance." The *Manual of California Vegetation* (Sawyer et al. 2009) provides the following definitions:[34]

- *Dominance*: The extent to which a species or growth form has a strong influence in a stand because of its size, abundance, or cover.
- *Dominant species*: An abundant species with high cover in relation to other species in the layer with highest canopy cover. We typically define dominant species as those with at least 50% relative cover within a particular layer.

A.4-15

Thus, determining dominance requires measurements of abundance and cover. The proportion of nonnative species does not indicate dominance. This issue is confounded because AECOM did indeed measure dominance at the wetland delineation sampling points. The corresponding data indicate several (6 out of 10) of the sampling points are at least partially dominated by *native species*.[35] This invalidates the argument that all of the wetlands on-site are relatively low quality due to the dominance of nonnative species.

Due to the issues described above, it is impossible to assess existing conditions with respect to nonnative plants, and thus, the value of the Applicant's proposed restoration and enhancement measures.

C. Wetlands

The DEIR's conclusion that wetlands on-site are "low quality" is not justified by evidence in the record. Most notably, after hearing a presentation by the Project Proponent and consulting Lead Biologist, the City's Wetlands Advisory Board (which consists of wetlands experts and scientists) concluded that the wetlands on site are "high quality."[36]

A.4-16

The City's *Biology Guidelines* establish the criteria that need to be considered in assessing wetland quality.[37] According to the *Biology Guidelines*:

> Wetland quality shall be thoroughly analyzed in the project's biological technical report using the criteria listed above [on pages 26-27] and based on best available scientific information. Wetland quality determinations shall be a discretionary action made on a case-by-case basis, with not all low-quality criteria required to make a low quality determination. Alternatively, the presence of any factor to any significant amount or degree may preclude a determination of low quality.

A.4-17

[34] Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation.* Second edition. California Native Plant Society, Sacramento. p. 1246.

[35] *See* BTR, Appendix B, Figures 4a and 4b. *See also* wetland delineation data forms provided *in:* BTR, Appendix B to Appendix D.

[36] Wetland's Advisory Board meeting on September 22, 2016.

[37] City of San Diego. 2012 [amended]. San Diego Municipal Code: Land Development Code, Biology Guidelines. pp. 26 through 29.

A.4-16 See Response A-12.

A.4-17 See Response A-12.

> All criteria shall be carefully considered when making a wetland quality determination.[38]

The BTR did not analyze all of the criteria listed in the *Biology Guidelines*, nor could it because the biologists did not conduct surveys "at the most appropriate time to characterize the resident and migratory species" as required by the guidelines.[39, 40] As a result, the Applicant's "low-quality" determination did not adhere to the City's *Biology Guidelines*. A.4-17

According to the DEIR:

> Currently, wetlands in the project area are considered to be low quality as the area is highly constrained by urban development (e.g., parking lots, commercial development, and transportation corridors), subject to relatively intense edge effects, and degraded by nonnative species. Native species diversity and abundance documented during field surveys was relatively low for a riparian system (approximately 72 percent of plant species recorded on-site are nonnative), and all wetlands on-site (including those that will be impacted) have substantial restoration and enhancement potential.[41] A.4-18

In ecological applications, *diversity* is a measure of species richness (i.e., number of species) and species evenness (i.e., relative abundance among species). These measurements are then entered into a formula to calculate a diversity index, which is expressed as a numerical value (not a percentage). AECOM's biologists did not calculate diversity, or even measure abundance (quantity). The fact that 72% of the plant species recorded on-site are nonnative is a proportion—not the diversity or abundance. Therefore, the DEIR fails to provide evidence that native species diversity and abundance is relatively low at the Project site.

The sampling data that were collected during the wetland delineation do not support the DEIR's statement that *all* wetlands on-site have *substantial* restoration and enhancement potential. The key components of the Applicant's restoration and enhancement program are: (a) removal of nonnatives, and (b) installation of natives.[42] However, the wetland delineation sampling data indicate some of the wetlands on-site are at least partially dominated by native species, and that those native species provide substantial cover.[43] A.4-19

Based on my review of the City's Biology Guidelines and CDFW's NOP comments, in conjunction with the information provided in the BTR and DEIR, I concur with the Wetlands Advisory Board that the wetlands at the Project site do not qualify as "low quality." The wetlands provide connectivity (criterion 'e'); relative high species diversity A.4-20

[38] *Ibid*, p. 29.

[39] *Ibid*, pp. 26 and 27, criterion I(b).

[40] The criteria listed in the *Biology Guidelines* are: (a) use by special-status and/or other indigenous species; (b) diversity of native flora and fauna; (c) enhancement or restoration potential; (d) habitat function/ecological role; (e) connectivity; (f) hydrologic function; (g) status of watershed; and (h) source and quality of water. *See* Biology Guidelines, pp. 26 and 27.

[41] DEIR, p. 4.4-66.

[42] BTR, Appendix A.

[43] *See* wetland delineation data forms provided *in:* BTR, Appendix B to Appendix D.

9

A.4-18 See Response A-8.

A.4-19 See Responses A-8 and A-9.

A.4-20 See Response A-12.

(criterion 'b'); essential habitat for special-status and/or other indigenous species (criteria 'a' and 'd'); and important hydrologic functions (criterion 'f').[44] In addition, they possess enhancement or restoration potential (criterion 'e'). For these reasons, the wetlands cannot be considered "low quality."

A.4-20

III. IMPACTS

A. Special-Status Species

The DEIR fails to disclose and fully analyze the effects of the proposed restoration and enhancement activities on sensitive biological resources. Because plants exhibit some redundancy in ecosystem function, exotic plant species can substitute in part for natives in performing a range of ecosystem functions, including wildlife support and soil binding. Consequently the removal of exotics can result in significant perturbations to ecosystem functions during the period of transition to native cover.[45]

A.4-21

Many special-status species occur at a locale because of specific biotic and abiotic conditions unrelated to the origin of the vegetation (e.g., native vs. exotic). For example, the occurrence of many special-status plant species is correlated with specific microhabitat conditions in the environment (e.g., soil type, moisture, and shade level among many others). If the special-status plant requires a specific shade level, removing all the exotic trees that provide the necessary shade could eliminate the plant. Similarly, many special-status bird species are limited to vegetation communities possessing specific structural components (e.g., nesting substrate, canopy cover, foliage volume).[46] For these species, the origin of the plants in the community is unimportant as long as structure requirements are met. The proposed restoration and enhancement activities would have substantial effects on the existing ecosystem. The DEIR fails to analyze those effects, including the effect vegetation removal would have on the specific microhabitat requirements associated with special-status species occurring, or potentially occurring, in the Project area.

A.4-22

The DEIR fails to provide adequate information on the abundance and distribution of the plants proposed for removal. It also fails to provide adequate information on the proposed removal methods; it simply states: "[e]xotic species will be removed by hand, mechanical weed cutters, or herbicide applications."[47] Based on the information provided in the DEIR, approximately 50% of the proposed restoration and enhancement area is comprised of eucalyptus woodland.[48] If this is accurate, it means the Applicant

A.4-23

[44] *See* DEIR, Appendix A. California Department of Fish and Wildlife. 2016 Jan 15. Comments on the Notice of Preparation of a Draft Environmental Impact Report for Town and Country, City of San Diego, San Diego County, California (Project Number 424475, SCH #2015121066).

[45] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.

[46] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight.

[47] BTR, Appendix A, p. 7.

[48] BTR, Figure 7 and Table 1.

A.4-21 See Responses A-94 and A-95.

A.4-22 See Response A-95.

A.4-23 See Response A-96.

will be removing a lot of eucalyptus trees. This is important because the DEIR fails to establish how felled trees will be removed from the site without causing major soil disturbance and impacts to wetlands. Furthermore, the canopy and soil binding properties provided by trees prevents soil erosion. The DEIR fails to establish how the Applicant would control erosion in areas where the entire canopy will be removed (e.g., the eucalyptus woodland), and where heavy equipment presumably would be required to extricate felled trees. The only information provided in the Applicant's Restoration and Enhancement Plan is that: "[t]he Installation and Maintenance Contractor will install and maintain appropriate erosion control materials (e.g. straw wattles)."[49] Based on my experience as a forester, straw wattles would be incapable of preventing soil transfer into the San Diego River.

A.4-23

B. Least Bell's Vireo

Although the least Bell's vireo ("LBV") was not detected or observed during protocol-level surveys, the BTR concludes that habitat within the Project area is "suitable and capable of supporting breeding LBV."[50] Moreover, the DEIR explicitly states that it assumes the LBV will be present on the site in the future due to Project-related restoration and enhancement of suitable nesting habitat.[51] The DEIR fails to justify why LBV habitat on the Project site needs to be restored and enhanced if it is currently suitable and capable of supporting breeding LBV. Furthermore, if presence of LBV at the site is an assumption (or goal) of the Project: (a) the DEIR needs to incorporate a LBV monitoring program to validate that assumption, and (b) LBV use of the site needs to be reflected in the success criteria proposed for the Restoration and Enhancement Plan.

A.4-24

According to the BTR: "the Proposed Project is designed in a manner that increases the likelihood for the Site to support nesting [LBV] pairs in the future."[52] This conclusion appears to be based on the fundamental assumption that restoring native vegetation communities would improve habitat conditions for the LBV. That assumption is not necessarily valid because it ignores the numerous other factors that affect habitat suitability (e.g., presence of cowbirds, corridor width, and intensity of edge effects).[53] Whereas the Project may restore and enhance habitat from a vegetation standpoint, it would simultaneously degrade habitat by increasing the severity of adverse edge effects (edge effects are discussed further below). This could render the habitat unsuitable to LBV even if vegetative conditions are ideal. More importantly, it could create a habitat "sink" by attracting birds to places where they will be susceptible to heightened mortality (e.g., due to human disturbance, domestic cats, and window strikes) or reduced reproductive success.[54]

A.4-25

[49] BTR, Appendix A, p. 5.
[50] BTR, Appendix F, p. 4.
[51] DEIR, p. 4.4-26 and BTR, p. 36.
[52] BTR, p. 36.
[53] *Ibid.*
[54] A "sink" habitat is one in which reproduction is insufficient to balance local mortality. The population can persist in the habitat only by being a net importer of individuals, which then become subject to mortality.

11

A.4-24 See Responses A-105 and A-106.

A.4-25 See Responses A-105 and A-106.

Without an analysis of limiting factors, an adaptive management strategy to address factors adversely affecting LBV habitat once the Project is implemented, and performance standards specific to LBV habitat use, the record does not support the findings made in the DEIR. A.4-26

C. Avian Collisions

Riparian habitat within the San Diego River corridor supports a diverse and abundant assemblage of resident bird species.[55] In addition, it provides important "stopover" habitat for birds that migrate along the Pacific Flyway, and at finer spatial scales (e.g., locally and regionally).[56]

One hundred million to 1 billion birds are killed annually by daytime window collisions at low-level structures in the U.S. alone.[57] The visual system of birds is simply not capable of perceiving glass as a physical obstacle.[58] The Project involves the construction of multiple new buildings designed to reorient development toward the river corridor. The DEIR acknowledges the Project poses a collision hazard to birds, and that buildings covered with a large percentage of windows or glass pose a greater threat.[59] Its analysis of the avian collision threat is then limited to the following: A.4-27

> The structures would not be designed with a predominantly reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials selected for the project. Therefore, direct impacts to potentially occurring special-status bird species from collisions with the project components would be less than significant.[60]

The DEIR's analysis is insufficient for several reasons:

First, the DEIR does not provide design standards for the amount (percentage) of windows or glass associated with the proposed buildings. As a result, it is impossible to infer what is meant by "structures would not be designed with a predominantly reflective material," and whether this includes windows coated with a "non-reflective" material. This is important because anti-reflective technology does not eliminate *all* light reflection; high reflectance can still occur.[61] Furthermore, according to the Town and Country Draft Master Plan: "[e]ntrances and windows, not garages, should be the A.4-28

[55] BTR, p. 44.

[56] BTR, pp. 43 through 45.

[57] Evans Ogden LJ. 2002. Summary Report on the Bird Friendly Building Program: Effect of Light Reduction on Collision of Migratory Birds. Special Report for the Fatal Light Awareness Program (FLAP). Available at: http://www.flap.org/.

[58] Klem D Jr. 2009. Preventing Bird-Window Collisions. The Wilson Journal of Ornithology 121(2):314–321.

[59] DEIR, p. 4.4-27.

[60] *Ibid.*

[61] *See*: <http://www.suniva.com/documents/Suniva%20Reflection%20and%20Glare%20Report%20-%20Marketing%20-%20August%202012.pdf>.

A.4-26 See Response A-106.

A.4-27 See Responses A-57 and A-99.

A.4-28 See Response A-99.

dominant elements of the front façades. Window and door placement, size, material, and style should help define a building's architectural style."[62]

A.4-28

Second, the DEIR fails to provide evidence that compliance with the City's regulations for lighting and glare would reduce avian collisions to a less than significant level. Indeed, the City's Glare Regulations state: "[a] maximum of 50 percent of the exterior of a building may be comprised of reflective material that has a light-reflectivity factor greater than 30 percent" unless the City Manager determines that their use would contribute to diminished quality of riparian habitat.[63] It is unclear whether the threat of avian collisions constitutes "diminished quality of riparian habitat." Nevertheless, because the DEIR does not provide the City Manager's determination, it is impossible to infer whether ≤ 50% of each building might be comprised of reflective material (as allowed under the City's Glare Regulations).

A.4-29

Third, the DEIR fails to identify the mortality threshold that was used to determine avian collisions would be less than significant. The DEIR fails to establish how many deaths (due to collisions) are anticipated, and how many deaths it would take to constitute a significant impact. This is important because the population sizes of some special-status species are so low that they cannot sustain any additive mortality (i.e., the local population will go extinct).[64] This is especially true for species such as the least Bell's vireo, which rely on small remnant patches of habitat in urban areas.[65] The Project would have a significant impact on this species even if it killed only one or two vireos.

A.4-30

Due to the issues described above, the City must analyze the avian collision hazard as a potentially significant impact, and it must provide adequate mitigation.

A.4-31

D. Edge Effects

The DEIR acknowledges the Project could exacerbate adverse "edge effects" on biological resources.[66] These include adverse effects due to noise, lighting, mesopredators (e.g., raccoons, coyotes), domestic pets, and human presence.[67] The DEIR concludes the Project's contribution to edge effects would be less than significant because: (a) edge effects already exist within the BSA, and (b) the Project would comply with the *Land Use Adjacency Guidelines*.[68] The DEIR's conclusion is not justified for the following two reasons:

A.4-32

[62] Town and Country Draft Master Plan, p. 72.

[63] DEIR, p. 4.11-10.

[64] Klem Jr., D. 1990. Collisions between birds and windows: mortality and prevention. Journal of Field Ornithology 61:120-128. *See also* Longcore T, C Rich, P. Mineau et al. 2012. An Estimate of Avian Mortality at Communication Towers in the United States and Canada. PLoS One 7(4):e34025.

[65] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.

[66] DEIR, p. 4.4-40.

[67] DEIR, pp. 4.4-27 through -29.

[68] DEIR, pp. 4.4-29 and -30.

A.4-29 See Response A-99

A.4-30 See Response A-101.

A.4-31 See Responses A-57, A-99 and A-1012.

A.4-32 See Responses A-106 and A-108.

First, the DEIR acknowledges the Project could exacerbate adverse edge effects on biological resources.[69] However, it fails to provide any actual analysis of this issue; it simply concludes the Project's contribution to additional, or more severe, edge effects would be less than significant. As discussed in subsequent sections, this conclusion is not supported by evidence.

A.4-32

Second, compliance with the *Land Use Adjacency Guidelines* would reduce, but not eliminate, adverse edge effects. The DEIR cannot assume implementation of the guidelines would reduce adverse edge effects to a less-than-significant level, especially without a monitoring program that verifies that assumption.

1. HUMAN PRESENCE

Recreation, and human presence in general, can have negative impacts on ecosystems, plants, and wildlife. Impacts can be caused by trampling, soil compaction, erosion, disturbance (due to noise and motion), pollution, nutrient loading, and introduction of non-native invasive plant species. Some birds, such as raptors, tend to desert their nests if the birds are exposed to human activity during incubation.[70] Even shouting is enough to keep raptors away from their nests.[71] Absence from the nest can lead to missed feedings, predation on eggs or young, or to overheating, chilling, or desiccation of eggs and young.[72]

A.4-33

The Project includes several features (e.g., new parks and trails), and management actions (e.g., elimination of transient encampments), that would promote increased recreational use of the San Diego River corridor ("corridor").[73] In addition, the Project includes the construction of up to 840 multi-family dwelling units in close proximity to the corridor (i.e., within ¼-mile of the river). Therefore, one of the reasonably foreseeable outcomes of the Project is a considerable increase in human activity within and along the corridor.

The DEIR's analysis of this issue is limited to the statement that the Project "has the *potential* to increase human presence in the vicinity of sensitive habitats."[74] It is not possible to assess potentially significant impacts to sensitive species and habitats without an estimate of how much the Project might increase human activity in the corridor.

2. PREDATION

Implementation of the Project would enhance conditions favorable for native and non-native predators (e.g., raccoons, skunks, and domestic cats). These predators can

A.4-34

[69] DEIR, p. 4.4-40.
[70] Richardson CT, CK Miller. 1997. Recommendations for Protecting Raptors from Human Disturbance: A Review. Wildlife Society Bulletin 25(3):634-638.
[71] *Ibid.*
[72] *Ibid.*
[73] San Diego River Natural Resource Management Plan, p. 117.
[74] DEIR, p. 4.4-29. [emphasis added].

14

A.4-33 See Responses A-112 and B-33.

A.4-34 See Response A-109.

decimate bird communities.[75] For example, small remnant patches of breeding bird habitat in urban areas may contain such low numbers of a particular species that small increases in predation rates can cause extirpation.[76] In such cases, increased densities of cats and other predators subsidized by the surrounding urban landscape can be sufficient to cause loss of the species.[77]

The BTR acknowledges: "human presence can lead to increased presence of mesopredators (e.g., raccoons, coyotes) and domestic pets that can prey upon or harass special-status species."[78] Incredibly, the DEIR's analysis of this issue is limited to the statement that: "[h]uman commensal wildlife species *likely* already occupy the BSA, and are expected to continue to use the BSA following implementation of the project."[79] This minimal level of analysis is insufficient. The City must analyze how Project features (e.g., proposed residences) and outcomes (e.g., overall increase in human presence in the river corridor) might benefit predator populations. It then must analyze the potential consequences of the augmented (or new) predator populations on biological resources occurring in the Project area. Because the DEIR does not incorporate mitigation, the City does not have the basis to conclude the Project would not have an additional, or more severe, impact on special-status species due to an increase in mesopredators and domestic pets.

A.4-34

Domestic cats and other non-native animals kill millions of birds every year.[80] To reduce the effects of non-native animals on native birds, the Riparian Habitat Joint Venture recommends the following:

1. Avoid establishing human habitat near riparian zones.
2. Do not feed or otherwise encourage populations of feral animals.
3. Keep cats indoors.
4. Do not put bird feeders in a yard where a cat might ambush feeding birds.
5. Humanely control non-native species when necessary.

The implementation of mandatory measures of this kind is feasible and would substantially reduce the effects of the Project on native birds (including special-status species). As a result, they should be incorporated into the EIR as mandatory mitigation obligations.

[75] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.
[76] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.
[77] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 13.
[78] BTR, p. 70.
[79] DEIR, p. 4.4-28. [emphasis added].
[80] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 93.

A.4-35 See Responses A-108 and A-110.

3. NIGHT LIGHTING

Artificial light that alters the natural patterns of light and dark in ecosystems is termed "ecological light pollution." This is different from the broad-scale phenomenon "astronomical light pollution," whereby stars and other celestial bodies are washed out by light that is either directed or reflected upward.[81]

Ecological light pollution has demonstrable effects on the behavioral and population ecology of organisms, with serious implications on community ecology.[82] The DEIR acknowledges nighttime lighting can affect wildlife in myriad ways.[83] The DEIR further acknowledges reorienting development on-site toward the San Diego River (including construction of new park space adjacent to the River) will increase the amount of light sources adjacent to sensitive habitats.[84] The DEIR, however, concludes that implementation of mitigation measure BIO-7 would mitigate significant adverse effects associated with nighttime lighting to a level below significance.[85] Mitigation measure BIO-7 states:

> To avoid indirect lighting impacts on wildlife, all lighting adjacent to the MHPA shall be shielded, unidirectional, and directed away from preserve areas using appropriate placement and shields. If lighting adjacent to the MHPA is required for nighttime construction, it shall be directed away from sensitive habitats, using appropriate placement and shielding.[86]

A.4-35

The DEIR's conclusion that BIO-7 would mitigate nighttime lighting impacts on wildlife to a less-than-significant level is unjustified because BIO-7 addresses "astronomical light pollution"—not "ecological light pollution" (i.e., shielded lights can still cause ecological light pollution).[87]

The DEIR states: "[a]ll lighting within 100 feet of the MHPA would be shielded and directed away from the MHPA. The conversion of 3.22 acres of existing parking lot adjacent to the MHPA to habitat and park space would also reduce the amount of light entering sensitive habitats within the MHPA compared to existing conditions."[88] This statement cannot be substantiated because the DEIR does not identify the amount of lighting that would be installed within 100 feet of the MHPA, nor does it identify the amount of lighting that currently exists at the 3.22-acre parking lot. Indeed, the DEIR fails to provide any quantitative information pertaining to: (a) lights currently operating in the Project area, and (b) new lights that would be installed as a result of the Project.

[81] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.
[82] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.
[83] DEIR, p. 4.4-29.
[84] DEIR, p. 4.4-29.
[85] DEIR, p. 4.4-35.
[86] DEIR, pp. 4.4-31 and -32.
[87] Longcore T, C Rich. 2004. Ecological Light Pollution. Frontiers in Ecology and the Environment 2:191-198.
[88] DEIR, p. 4.1-49.

16

A.4-36 See Response A-45oo.

The DEIR acknowledges the Project includes new night lighting. However, it fails to identify: (a) the height and abundance of new lights; (b) the types of lights that will be installed; (c) the luminosity of the bulbs; and (d) the location of light fixtures. This information is essential to evaluating Project impacts, because effects to wildlife due to night lighting are dependent on the *illumination* (light incident per unit area), *intensity* (the number of photons per unit area) and *spectral content* (expressed by wavelength). A.4-35

4. BROWN-HEADED COWBIRD

Historically, the least Bell's vireo was one of the most common breeding birds in riparian habitat in California.[89] Today, the least Bell's vireo remains absent from the bulk of its historical range and is restricted to eight southern counties, with the majority of birds occurring in San Diego County.[90]

Nest parasitism by the brown-headed cowbird (a species that is not indigenous to California) is one of the primary reasons for the decline of the least Bell's vireo.[91] Because a parasitized nest rarely fledges any vireo young, nest parasitism of least Bell's vireo results in drastically reduced nest success.[92] Cowbird trapping has been shown to decrease the incidence of cowbird nest parasitism.[93] Intensive programs to control brown-headed cowbirds (e.g., at Camp Pendleton) have virtually eliminated cowbird parasitism of least Bell's vireo nests and facilitated vireo population growth.[94] A.4-36

Brown-headed cowbirds have been observed on the Project site.[95] The Project, however, would not incorporate cowbird monitoring and control methods. According to the DEIR: "[t]he project would not introduce any new uses that would result in significant increases to the existing brown-headed cowbird population (e.g., horse stables, golf courses). Therefore, cowbird monitoring and control are not required by the project."[96] These statements are incorrect.

Cowbirds are frequently associated with anthropogenic features, including suburban areas with lawns, bird feeders, parks, picnic areas, and internal and external edges created by

[89] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 19.
[90] *Ibid.*
[91] Lynn S, B Kus. 2011. Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California. 2011 Annual Data Summary. USGS Western Ecological Research Center, San Diego Field Station. 59 pp.
[92] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 19.
[93] Lynn S, B Kus. 2011. Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California. 2011 Annual Data Summary. USGS Western Ecological Research Center, San Diego Field Station. 59 pp.
[94] *Ibid.*
[95] DEIR, p. 4.1-54.
[96] DEIR, p. 4.1-54.

A.4-37 See Response A-113.

development.[97] The Project would result in the creation of park space (e.g., for picnicking) adjacent to the MHPA.[98] It also entails development of residential housing and a storm water management area. These features could support and attract cowbirds.[99] Because the Project would not incorporate cowbird monitoring, the DEIR has no basis for the conclusion that the Project would not "result in significant increases to the existing brown-headed cowbird population"—especially because the DEIR has not defined what constitutes a "significant increase."

A.4-36

The DEIR suggests cowbird monitoring and control are not required under the City's MSCP Subarea Plan.[100] This is incorrect. According to the MSCP Subarea Plan: "Jurisdictions *must require* new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds."[101] In addition, the City's Biological Mitigation Ordinance states: "[c]onditions shall be developed for projects located adjacent to Least Bell's Vireo habitat to monitor and control the population of brown-headed cowbirds."[102]

Because the DEIR assumes the least Bell's vireo will occupy the Project area in the future for nesting purposes, and because the Project will create (or maintain) conditions attractive to brown-headed cowbirds, the City must incorporate cowbird monitoring and control as a required mitigation measure.

5. SHADING

The proposed Project includes a new seven-story residential building on the south side of the San Diego River corridor. The building would be approximately 85 feet tall.[103] The DEIR fails to analyze how shade from the building would affect vegetation (and habitat) within the river corridor. Shade can alter plants in numerous ways. For example, shade can affect phenology (e.g., timing of flowering and seed maturation), biomass, rate of growth, and survivorship.[104] It can also affect a plant's ability to respond to competition and defoliation (e.g., due to trampling or herbivory). These effects can have significant impacts on the ecological community. As a result, the City must analyze potentially significant impacts due to shading from the Project's buildings and structures.

A.4-37

[97] U.S. Department of the Interior, Bureau of Reclamation. 2004. Brown-headed Cowbird Management Techniques Manual. p. 11.

[98] DEIR, p. 4.1-50.

[99] Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 76.

[100] DEIR, pp. 4.1-53 and -54.

[101] Subarea Plan, p. 165. [emphasis added].

[102] Biological Mitigation Ordinance, p. 12.

[103] DEIR, p. 4.11-14

[104] For example, *see* Pierson EA, RN Mack, RA Black. 1990. The effect of shading on photosynthesis, growth, and regrowth following defoliation for *Bromus tectorum*. Oecologia 84(4):534-543. Abstract available at: <http://link.springer.com/article/10.1007/BF00328171>.

A.4-38 See Response A-115.

IV. MITIGATION ISSUES

A. Nesting Birds

Most nesting bird species are protected by the Migratory Bird Treaty Act ("MBTA"), and in some cases the State and federal government. The DEIR requires the Applicant to conduct a pre-construction survey for nesting birds "if grading or vegetation clearing/trimming is proposed in or adjacent to native habitat."[105] The DEIR does not justify limiting the surveys to "native habitat." Numerous bird species protected by the MBTA are known to construct nests in nonnative habitat.

The DEIR fails to provide evidence that a pre-construction survey would mitigate impacts to nesting birds to a less-than-significant level. First, the DEIR fails to establish minimum standards for the pre-construction nesting bird survey, including the acceptable survey techniques, level of effort, and extent to which the survey should extend into "adjacent" habitat. Second, nest finding is labor intensive and can be extremely difficult due to the tendency of many species to construct well-concealed or camouflaged nests.[106] As a result, most studies that involve locating bird nests employ a variety of search techniques. These include watching parental behavior (e.g., carrying nest material or food), territory mapping, and systematically searching nesting substrates.[107] Based on the density and vertical complexity of vegetation in the Project area, it would be impossible for biologists to reliably locate all bird nests that could be affected by Project activities. Recognizing the inherent difficulty in locating bird nests, resource agencies recommend limiting activities that could impact nesting birds to the non-breeding season. USFWS guidelines state:

> If a proposed project or action includes the potential for take of migratory birds and/or the loss or degradation of migratory bird habitat and work cannot occur outside the migratory bird nesting season (either the primary or maximum nesting season), project proponents will need to provide the USFWS with an explanation for why work has to occur during the migratory bird nesting season. Further, in these cases, project proponents also need to demonstrate that all efforts to complete work outside the migratory bird nesting season were attempted, and that the reasons work needs to be completed during the nesting season were beyond the proponent's control.[108]

In addition, the City's Subarea Plan indicates exotic species removal activities should be avoided during the reproductive season.[109] If the Applicant will be allowed to conduct Project activities during the avian nesting season, the City must require the Applicant to

A.4-38

[105] DEIR, p. 4.4-31.

[106] DeSante DF, GR Geupel. 1987. Landbird productivity in central coastal California: the relationship to annual rainfall and a reproductive failure in 1986. Condor. 89:636-653.

[107] Martin TE, GR Geupel. 1993. Nest-Monitoring Plots: Methods for Locating Nests and Monitoring Success. J. Field Ornithol. 64(4):507-519.

[108] U.S. Fish and Wildlife Service, Migratory Bird Management. 2010. Suggested Priority of Migratory Bird Conservation Actions for Projects. p. 1.

[109] Subarea Plan, p. 54.

provide justification for why those activities cannot occur outside the nesting season. In addition, the City must specify the techniques that should be applied to nest surveys, the expected level of effort (i.e., hours per unit area), the search area, the time of day surveys will be permitted, and the techniques that should be used to minimize human-induced disturbance.

A.4-38

B. Western Red Bat

The DEIR requires the Applicant to conduct a pre-construction survey for the western red bat "if grading or vegetation clearing/trimming is proposed in or adjacent to native habitat during the typical bat breeding season defined by the City's MSCP Subarea Plan (i.e., March–September)."[110] The DEIR fails to establish minimum standards for the survey, including the timing of the survey in relation to disturbance activities, and the extent to which the survey should extend into "adjacent" habitat.

A.4-39

Western red bat roosts are located primarily in the foliage of trees or shrubs.[111] Roosts are very difficult to locate and cannot be reliably detected through a standard "preconstruction" survey.[112] As a result, the mitigation measure proposed in the DEIR is insufficient to avoid and minimize potentially significant impacts to this species.

C. Fugitive Dust

Mitigation Measure BIO-9 states:

> To avoid indirect impacts to sensitive vegetation communities and special-status plant species, dust suppression measures shall be implemented during construction to minimize the creation of dust clouds. These measures include applying water at least once per day or as determined necessary by the biological monitor to prevent visible dust emissions from exceeding 100 feet in length in any direction.[113]

A.4-40

Sensitive vegetation communities are located within 100 feet of construction areas. Special-status plant species also may be located within 100 feet of construction areas. As a result, allowing dust emissions to extend 100 feet in length would result in a potentially significant, unmitigated impact on sensitive botanical resources.

D. Southwestern Pond Turtle

The distribution and abundance of southwestern pond turtles in the Project area is unknown because AECOM did not conduct focused surveys for the species. This has implications on the Project's compliance with the City's MSCP Subarea Plan, which

A.4-41

[110] DEIR, p. 4.4-31.

[111] Western Bat Working Group. 2005 (Update). Species Accounts: Western Red Bat. Available at: <http://www.wbwg.org/speciesinfo/species_accounts/allbats.pdf>.

[112] *Ibid.*

[113] DEIR, p. 4.4-32.

A.4-39 See Response A-116.

A.4-40 See Responses A-119 and A-120.

A.4-41 See Response A-117.

A.4-42 See Response A-118.

requires the Applicant to "[m]aintain and manage a 1,500-foot area around known locations within preserve lands for the species."[114]

Western pond turtles use terrestrial habitat for refuge, nesting, and resting. Rathbun et al. (2002) reported mean maximum distances of 49.7 m, 93.7 m, and 12.0 m from the nearest water for these three types of terrestrial habitat use, respectively.[115] However, travel distances appear to be a function of site-specific factors, and females have been reported ranging as far as 500 meters from a watercourse to find suitable nesting habitat.[116] The DEIR fails to incorporate mitigation to avoid and minimize impacts to pond turtles (including nests) that may occur in terrestrial habitat impacted by the Project.

A.4-41

E. Other Special-Status Species

The DEIR includes mitigation (albeit insufficient) for potentially significant impacts to sensitive vegetation communities, nesting birds, and the western red bat. However, it fails to require surveys, avoidance measures, or any other mitigation for potentially significant impacts to special-status plants and herptile species that could be impacted by the Project. The City's Biology Guidelines direct the City to assume presence of special-status species that have a moderate to high potential for occurrence, *if* surveys are not done at the appropriate time of year. Therefore, the City must assume presence of:

- Western spadefoot
- Two-striped gartersnake
- South coast gartersnake
- San Diego marsh-elder
- San Diego sagewort
- Southwestern spiny rush

A.4-42

Because the DEIR does not incorporate mitigation for potentially significant impacts to these species specifically, it does not have the basis to conclude: "[d]irect and indirect impacts to special-status plant and wildlife species are mitigated to a level below significance with implementation of BIO-1 through BIO-12."[117] Indeed, mitigation measures BIO-1 through BIO-12 do not require any attempts to locate these species prior to implementation of the Project. As a result, impacts to the six species listed above would be potentially significant and unmitigated.

[114] DEIR, p. 4.4-64.
[115] Rathbun GB, NJ Scott Jr, TJ Murphey. 2002. Terrestrial Habitat Use by Pacific Pond Turtles in a Mediterranean Climate. Southwestern Naturalist 47(2):225-235.
[116] Reese DA, HH Welsh Jr. 1998. Habitat use by western pond turtles in the Trinity River, California. Journal of Wildlife Management 62(3):842-853.
[117] DEIR, p. 4.4-35.

F. Restoration Credit

The DEIR claims the Project would enhance 3.53 acres of southern cottonwood-willow riparian forest.[118] This figure incorporates: (a) 0.70 acres of open water within the main channel of the San Diego River, and (b) 0.02 acres of coastal and valley freshwater marsh.[119] The DEIR provides no evidence that habitat enhancement activities would occur in these two habitat types.

According to the Restoration and Enhancement Plan, enhancement opportunities for the southern cottonwood-willow riparian forest include: "removal of non-native plant species and revegetation with native plant species similar to adjacent areas along the San Diego River channel."[120] The coastal and valley freshwater marsh contains native plants, therefore it does not need enhancement.[121] The open water within the main channel of the San Diego River does not contain any emergent vegetation, therefore it too does not require enhancement.[122]

A.4-43

G. Restoration Plan

A key component of the Project is the restoration and enhancement of habitat along the San Diego River corridor. However, the DEIR provides almost no discussion of what restoring and enhancing ''habitat'' actually means: for instance, it does not establish what constitutes habitat or define the essential components of habitat. This issue is confounded because the DEIR does not clearly define the goals of the Restoration and Enhancement Plan ("Plan"), and thus, it is unclear whether the purpose of the Plan is to restore (and enhance) habitat for plants, wildlife, or the entire suite of native species that historically occurred in the Project area.

According to the BTR, the Project would restore and enhance degraded habitats on-site to generate "*a healthy, functioning river ecosystem.*"[123] Therefore, although not explicitly stated, the BTR claims the Project would restore (and enhance) habitat for native vegetation, fish, and wildlife, as well as the ecosystem processes needed to sustain those organisms. Morrison (2002) provides a summary of the basic information needed for a successful wildlife restoration plan:

> Much of restoration involves improving the conditions for native species of wildlife. To be ultimately successful, our restoration plans must be guided by the needs of the wildlife in the project area. We need information on species abundances, distribution, both current and historic. We need details on habitat requirements, including proper plant species composition and structure. We need to understand niche relationships, especially constraints on resource acquisition. We need to know food requirements and breeding locations. We need to

A.4-44

[118] DEIR, p. 4.4-66.
[119] DEIR, Figure 4.4-5. *See also* BTR, Figure 7, Table 1, and p. 29.
[120] BTR, Appendix A, p. 4.
[121] BTR, p. 29.
[122] *Ibid.*
[123] BTR, p. v. [emphasis added].

A.4-43 See Responses A-106 and A-35.

A.4-44 See Response A-121.

> understand the role that succession will play in species turnovers. We need to know the problems associated with exotic species of plants and animals, the problems of restoring small, isolated areas, and more...*Applying general prescriptions most often leads to unpredictable results, some of which may cause more harm than good.*[124]

A.4-44

The Applicant did not collect data on the abundances and distribution of native wildlife in the Project area. Similarly, the Applicant did not assess the factors affecting habitat use in the Project area, including constraints on reproduction and resource acquisition. Therefore, the Applicant did not acquire the site-specific information needed for a successful restoration plan.

A.4-45

Instead of collecting data and assessing ecological constraints, the Applicant simply assumed that replacing exotic plants with native ones would benefit native wildlife; that ecosystem functions and values would improve; and that habitat at the site would be "restored." These are not necessarily valid assumptions because habitat suitability is dictated by numerous biotic and abiotic factors besides vegetation. For example, because plants exhibit some redundancy in ecosystem function, exotic plant species can substitute in part for natives in performing a range of ecosystem functions, including wildlife support.[125] Indeed, in some cases native wildlife species preferentially select exotic plants over native ones, and the factor limiting habitat suitability is entirely independent of plant species composition.[126] Documents prepared by the Applicant have not demonstrated comprehension of these issues. Although I strongly support efforts to restore and enhance habitat within the San Diego River corridor, the Applicant should not attempt those efforts until it collects the data needed to gain a thorough understanding of existing habitat conditions and constraints.

A.4-46

1. Goals and Performance Standards

The Plan fails to articulate the specific goals of the Applicant's habitat restoration and enhancement efforts. This impairs the ability to evaluate the appropriateness of the performance standards proposed in the Plan.

A.4-47

The performance standards proposed in the Plan do not reflect success of a habitat restoration program. As Morrison (2002) and other have pointed out, the success of a habitat restoration project should be judged by how wildlife species respond to it.[127] The

A.4-48

[124] Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). pp. 1 and 2. [emphasis added].
[125] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.
[126] Westman WE. 1990. Park Management of Exotic Plant Species: Problems and Issues. Conservation Biology 4(3):251-260.
[127] Morrison ML. 2002. Wildlife Restoration: Techniques for Habitat Analysis and Animal Monitoring. Island Press: Washington (DC). p. 1. *See also* Riparian Habitat Joint Venture. 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. p. 142. *See also* USGS Western Ecological Research Center [webpage]. n.d. Bird Use of Restored Riparian Habitat. Available at: <http://www.werc.usgs.gov/Project.aspx?ProjectID=46>.

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A.4-45 See Responses A-10 and A-121.

A.4-46 See Responses A-8 and A-121.

A.4-47 See Response A-124.

A.4-48 See Responses A-121 and A-124.

Applicant's Plan does not incorporate any measures of, or performance standards for, wildlife response. Indeed, the performance standards proposed in the Plan are limited to container plant survival; and native plant cover, density, and diversity relative to reference sites.[128]

A.4-48

RECON (2012) prepared a mitigation plan to address the requirements of the stipulated judgment.[129] In February 2013, the City issued a Site Development Permit (SDP#400602) for the restoration and enhancement of the site. The DEIR proposes a new restoration and enhancement plan (prepared by AECOM) that would supersede RECON's 2012 plan.[130] The DEIR discloses that the Applicant has proposed modifying the previously required SDP Restoration/Enhancement Area. However, the DEIR fails to disclose that the performance standards proposed in AECOM's plan are much less rigorous than the ones in RECON's plan. Specifically, RECON's plan included performance goals pertaining to: (1) structural diversity, coverage, and spatial density of habitat; (2) percent of exotic and invasive vegetation present; (3) hydrologic regime of the riparian zone, hydrologic inputs, and saturation duration; (4) micro and macro topographic complexity; and (5) vegetation roughness and organic carbon.[131] The DEIR fails to justify why performance standards pertaining to many of these topics have been omitted from the currently proposed Plan.

A.4-49

2. Proposed Monitoring Methods

AECOM's Plan proposes qualitative and quantitative monitoring for five years following the initial restoration and enhancement efforts. The Plan states:

> Beginning in Year 2, permanent vegetation sampling stations will be established within the restoration area to measure year-to-year changes in shrub or tree cover, density, and diversity following the protocol of the California Native Plant Society (CNPS) Plant Communities Project sampling method based on a 50-meter point transect centered on a 5x50-meter plot…At least one plot per three acres will be established in each plant community of a specific restoration area to determine vegetation cover, plant community composition, vegetation density, and plant diversity of each area.[132]

A.4-50

The proposed sampling scheme needs to be clarified. It is unclear what AECOM means by a sampling method based on "a 50-meter point transect [line] centered on a 5x50-meter plot" (i.e., a point-line centered on a rectangle). The DEIR does not include a copy of the "CNPS Plant Communities Project sampling method," nor could I find anything with that name on CNPS's website (or anywhere online).

A.4-51

[128] BTR, Appendix A, pp. 10 and 11.
[129] RECON Environmental, Inc. 2012. Conceptual Mitigation Plan for the Town & Country Hotel Interim Parking Lot Expansion Project. Project No. 118313. June 13, 2012.
[130] BTR, Appendix A.
[131] RECON Environmental, Inc. 2012. Conceptual Mitigation Plan for the Town & Country Hotel Interim Parking Lot Expansion Project. Project No. 118313. June 13, 2012. p. 27.
[132] BTR, Appendix A, p. 9.

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A.4-49 See Response A-126.

A.4-50 See Response A-127.

A.4-51 See Response A-128.

The sampling effort described in AECOM's Plan is not appropriate for the proposed Project. Establishing one plot per three acres in each plant community equates to one plot in the oak woodland, one plot in the coastal sage scrub, and two plots in the riparian forest. This is unlikely to result in a representative sample and cannot be used to demonstrate success throughout the entire restoration/enhancement area. A.4-52

AECOM's Plan proposes performance standards for native plant diversity; however, it does not identify how diversity will be calculated. As discussed previously, *diversity* is expressed as an index that accounts for species richness and evenness. Species composition is not equivalent to diversity, as suggested in the Plan.[133] A.4-53

3. Reference Sites

AECOM's Plan indicates: "[v]egetation sampling data will be compared to baseline data collected at reference sites in nearby native plant communities. Results will objectively demonstrate if the restoration areas approach the community characteristics of the reference habitat."[134] The Plan needs to identify the statistical techniques that will be used for this comparison. A.4-54

The sampling methods proposed in AECOM's Plan fail to account for the vertical stratification associated with least Bell's vireo habitat. Kus (1998) used the "stacked cube" method to quantify vegetation structure at least Bell's vireo restoration sites. She then compared the data to a model of canopy architecture derived from least Bell's vireo territories in natural habitat.[135] Whereas the proposal to compare sampling data from the Project site with data from reference sites is appropriate, the Plan needs to incorporate measurements of vertical stratification. To facilitate adaptive management, data collected at the Project site should be capable of being used in the habitat model developed by Kus (1998). A.4-55

4. Professional Experience

The Applicant proposes use of a Restoration Specialist that: "will have a minimum of two years of experience in upland and riparian habitat restoration, understand upland and riparian plant communities, and have expertise in upland and riparian plant and wildlife identification and ecology."[136] The proposed qualifications are vague and provide little assurance the Restoration Specialist would be capable of implementing a successful restoration program. A person with as little as two years of professional experience in upland and riparian habitat restoration is insufficient. Indeed, upland and riparian habitat restoration projects cannot even be completed in two years. This issue is exacerbated because the DEIR does not identify the party responsible for approving the qualifications of the Restoration Specialist. A.4-56

[133] BTR, Appendix A, p. 10.
[134] BTR, Appendix A, p. 9.
[135] Kus BE. 1998. Use of Restored Riparian Habitat by the Endangered Least Bell's Vireo (*Vireo bellii pusillus*). Restoration Ecology 6(1):75-82.
[136] BTR, Appendix A, p. 4.

25

A.4-52 See Response A-129.

A.4-53 See Response A-130.

A.4-54 See Response A-131.

A.4-55 See Response A-132.

A.4-56 See Response A-133.

A.4-57 Comment acknowledged. The comment does not address the adequacy of the EIR.

V. CONCLUSION

Due to the issues discussed above, it is my professional opinion that the Project would have significant impacts on several sensitive biological resources. The DEIR that was prepared for the Project does not provide the mitigation necessary to ensure those impacts are reduced to a less than significant level. As a result, it is my professional opinion that the City needs to revise and re-circulate the Project's DEIR.

A.4-57

Sincerely,

Scott Cashen, M.S.
Senior Biologist

A.4-58 Comment acknowledged. The comment does not address the adequacy of the EIR.

Scott Cashen, M.S.
Senior Wildlife
Ecologist

Scott Cashen has 23 years of professional experience in natural resources management. During that time he has worked as a field biologist, forester, environmental consultant, and instructor of Wildlife Management. Mr. Cashen focuses on CEQA/NEPA compliance issues, endangered species, scientific field studies, and other topics that require a high level of scientific expertise.

Mr. Cashen has knowledge and experience with numerous taxa, ecoregions, biological resource issues, and environmental regulations. As a biological resources expert, Mr. Cashen is knowledgeable of the various agency-promulgated guidelines for field surveys, impact assessments, and mitigation. Mr. Cashen has led field investigations on several special-status species, including ones focusing on the yellow-legged frog, red-legged frog, desert tortoise, steelhead, burrowing owl, California spotted owl, northern goshawk, willow flycatcher, Peninsular bighorn sheep, red panda, and various forest carnivores.

A.4-58

Mr. Cashen is a recognized expert on the environmental impacts of renewable energy development. He has been involved in the environmental review process of over 80 solar, wind, biomass, and geothermal energy projects. Mr. Cashen's role in this capacity has encompassed all stages of the environmental review process, from initial document review through litigation support. Mr. Cashen has provided expert witness testimony on several of the Department of the Interior's "fast-tracked" renewable energy projects. His testimony on those projects helped lead agencies develop project alternatives and mitigation measures to reduce environmental impacts associated with the projects.

Mr. Cashen was a member of the independent scientific review panel for the Quincy Library Group project, the largest community forestry project in the United States. As a member of the panel, Mr. Cashen was responsible for advising the U.S. Forest Service on its scientific monitoring program, and for preparing a final report to Congress describing the effectiveness of the Herger-Feinstein Forest Recovery Act of 1998.

AREAS OF EXPERTISE

- CEQA, NEPA, and Endangered Species Act compliance issues
- Comprehensive biological resource assessments
- Endangered species management
- Renewable energy development
- Scientific field studies, grant writing and technical editing

EDUCATION

M.S. Wildlife and Fisheries Science - The Pennsylvania State University (1998)

Cashen, Curriculum Vitae

Thesis: *Avain Use of Restored Wetlands in Pennsylvania*
B.S. Resource Management - The University of California, Berkeley (1992)

A.4-58

Cashen, Curriculum Vitae

PROFESSIONAL EXPERIENCE

Litigation Support / Expert Witness

Mr. Cashen has served as a biological resources expert for over 100 projects subject to environmental review under the California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA). As a biological resources expert, Mr. Cashen reviews CEQA/NEPA documents and provides his clients with an assessment of biological resource issues. He then submits formal comments on the scientific and legal adequacy of the project's environmental documents (e.g., Environmental Impact Statement). If needed, Mr. Cashen conducts field studies to generate evidence for legal testimony, or he can obtain supplemental testimony from his deep network of species-specific experts. Mr. Cashen has provided written and oral testimony to the California Energy Commission, California Public Utilities Commission, and U.S. district courts. His clients have included law firms, non-profit organizations, and citizen groups.

REPRESENTATIVE EXPERIENCE

Solar Energy
- Abengoa Mojave Solar Project
- Avenal Energy Power Plant
- Beacon Solar Energy Project
- Blythe Solar Power Project
- Calico Solar Project
- California Flats Solar Project
- Calipatria Solar Farm II
- Carrizo Energy Solar Farm
- Catalina Renewable Energy
- Fink Road Solar Farm
- Genesis Solar Energy Project
- Heber Solar Energy Facility
- Imperial Valley Solar Project
- Ivanpah Solar Electric Generating
- Maricopa Sun Solar Complex
- McCoy Solar Project
- Mt. Signal and Calexico Solar
- Panoche Valley Solar
- San Joaquin Solar I & II
- San Luis Solar Project
- Stateline Solar Project
- Solar Gen II Projects
- SR Solis Oro Loma
- Vestal Solar Facilities
- Victorville 2 Power Project
- Willow Springs Solar

Geothermal Energy
- Casa Diablo IV Geothermal
- East Brawley Geothermal
- Mammoth Pacific 1 Replacement
- Orni 21 Geothermal Project
- Western GeoPower Plant

Wind Energy
- Catalina Renewable Energy
- Ocotillo Wind Energy Project
- SD County Wind Energy
- Searchlight Wind Project
- Shu'luuk Wind Project
- Tres Vaqueros Repowering Project
- Tule Wind Project
- Vasco Winds Relicensing Project

Biomass Facilities
- CA Ethanol Project
- Colusa Biomass Project
- Tracy Green Energy Project

Other
- DRECP
- Carnegie SVRA Expansion Project
- Lakeview Substation Project
- Monterey Bay Shores Ecoresort
- Phillips 66 Rail Spur
- Valero Benecia Crude By Rail
- World Logistics Center

A.4-58

Cashen, Curriculum Vitae

Project Management

Mr. Cashen has managed several large-scale wildlife, forestry, and natural resource management projects. Many of the projects have required hiring and training field crews, coordinating with other professionals, and communicating with project stakeholders. Mr. Cashen's experience in study design, data collection, and scientific writing make him an effective project manager, and his background in several different natural resource disciplines enable him to address the many facets of contemporary land management in a cost-effective manner.

REPRESENTATIVE EXPERIENCE

Wildlife Studies

- Peninsular Bighorn Sheep Resource Use and Behavior Study: (*CA State Parks*)
- "KV" Spotted Owl and Northern Goshawk Inventory: (*USFS, Plumas NF*)
- Amphibian Inventory Project: (*USFS, Plumas NF*)
- San Mateo Creek Steelhead Restoration Project: (*Trout Unlimited and CA Coastal Conservancy, Orange County*)
- Delta Meadows State Park Special-Status Species Inventory: (*CA State Parks, Locke*)

A.4-58

Natural Resources Management

- Mather Lake Resource Management Study and Plan – (*Sacramento County*)
- Placer County Vernal Pool Study – (*Placer County*)
- Weidemann Ranch Mitigation Project – (*Toll Brothers, Inc., San Ramon*)
- Ion Communities Biological Resource Assessments – (*Ion Communities, Riverside and San Bernardino Counties*)
- Del Rio Hills Biological Resource Assessment – (*The Wyro Company, Rio Vista*)

Forestry

- Forest Health Improvement Projects – (*CalFire, SD and Riverside Counties*)
- San Diego Bark Beetle Tree Removal Project – (*SDG&E, San Diego Co.*)
- San Diego Bark Beetle Tree Removal Project – (*San Diego County/NRCS*)
- Hillslope Monitoring Project – (*CalFire, throughout California*)

Cashen, Curriculum Vitae

Biological Resources

Mr. Cashen has a diverse background with biological resources. He has conducted comprehensive biological resource assessments, habitat evaluations, species inventories, and scientific peer review. Mr. Cashen has led investigations on several special-status species, including ones focusing on the foothill yellow-legged frog, mountain yellow-legged frog, desert tortoise, steelhead, burrowing owl, California spotted owl, northern goshawk, willow flycatcher, Peninsular bighorn sheep, red panda, and forest carnivores.

REPRESENTATIVE EXPERIENCE

Biological Assessments/Biological Evaluations ("BA/BE")

- Aquatic Species BA/BE – Reliable Power Project (*SF Public Utilities Commission*)
- Terrestrial Species BA/BE – Reliable Power Project (*SF Public Utilities Commission*)
- Management Indicator Species Report – Reliable Power Project (*SF Public Utilities Commission*)
- Migratory Bird Report – Reliable Power Project (*SF Public Utilities Commission*)
- Terrestrial and Aquatic Species BA – Lower Cherry Aqueduct (*SF Public Utilities Commission*)
- Terrestrial and Aquatic Species BE – Lower Cherry Aqueduct (*SF Public Utilities Commission*)
- Terrestrial and Aquatic Species BA/BE – Public Lands Lease Application (*Society for the Conservation of Bighorn Sheep*)
- Terrestrial and Aquatic Species BA/BE – Simon Newman Ranch (*The Nature Conservancy*)

Avian

- Study design and Lead Investigator - Delta Meadows State Park Special-Status Species Inventory *(CA State Parks: Locke)*
- Study design and lead bird surveyor - Placer County Vernal Pool Study *(Placer County: throughout Placer County)*
- Surveyor - Willow flycatcher habitat mapping *(USFS: Plumas NF)*
- Independent surveyor - Tolay Creek, Cullinan Ranch, and Guadacanal Village restoration projects *(Ducks Unlimited/USGS: San Pablo Bay)*
- Study design and Lead Investigator - Bird use of restored wetlands research *(Pennsylvania Game Commission: throughout Pennsylvania)*
- Study design and surveyor - Baseline inventory of bird species at a 400-acre site in Napa County *(HCV Associates: Napa)*

A.4-58

Cashen, Curriculum Vitae

- Surveyor - Baseline inventory of bird abundance following diesel spill *(LFR Levine-Fricke: Suisun Bay)*
- Study design and lead bird surveyor - Green Valley Creek Riparian Restoration Site *(City of Fairfield: Fairfield, CA)*
- Surveyor - Burrowing owl relocation and monitoring *(US Navy: Dixon, CA)*
- Surveyor - Pre-construction burrowing owl surveys *(various clients: Livermore, San Ramon, Rio Vista, Napa, Victorville, Imperial County, San Diego County)*
- Surveyor - Backcountry bird inventory *(National Park Service: Eagle, Alaska)*
- Lead surveyor - Tidal salt marsh bird surveys (*Point Reyes Bird Observatory: throughout Bay Area*)
- Surveyor – Pre-construction surveys for nesting birds (*various clients and locations)*

Amphibian

- Crew Leader - Red-legged frog, foothill yellow-legged frog, and mountain yellow-legged frog surveys *(USFS: Plumas NF)*
- Surveyor - Foothill yellow-legged frog surveys *(PG&E: North Fork Feather River)*
- Surveyor - Mountain yellow-legged frog surveys *(El Dorado Irrigation District: Desolation Wilderness)*
- Crew Leader - Bullfrog eradication *(Trout Unlimited: Cleveland NF)*

Fish and Aquatic Resources

- Surveyor - Hardhead minnow and other fish surveys *(USFS: Plumas NF)*
- Surveyor - Weber Creek aquatic habitat mapping (*El Dorado Irrigation District: Placerville, CA*)
- Surveyor - Green Valley Creek aquatic habitat mapping *(City of Fairfield: Fairfield, CA)*
- GPS Specialist - Salmonid spawning habitat mapping *(CDFG: Sacramento River)*
- Surveyor - Fish composition and abundance study (*PG&E: Upper North Fork Feather River and Lake Almanor*)
- Crew Leader - Surveys of steelhead abundance and habitat use *(CA Coastal Conservancy: Gualala River estuary)*
- Crew Leader - Exotic species identification and eradication *(Trout Unlimited: Cleveland NF)*

A.4-58

Cashen, Curriculum Vitae

Mammals

- Principal Investigator – Peninsular bighorn sheep resource use and behavior study (*California State Parks: Freeman Properties*)
- Scientific Advisor –Study on red panda occupancy and abundance in eastern Nepal *(The Red Panda Network: CA and Nepal)*
- Surveyor - Forest carnivore surveys *(University of CA: Tahoe NF)*
- Surveyor - Relocation and monitoring of salt marsh harvest mice and other small mammals *(US Navy: Skagg's Island, CA)*
- Surveyor – Surveys for Monterey dusky-footed woodrat. Relocation of woodrat houses (*Touré Associates: Prunedale*)

Natural Resource Investigations / Multiple Species Studies

- Scientific Review Team Member – Member of the scientific review team assessing the effectiveness of the US Forest Service's implementation of the Herger-Feinstein Quincy Library Group Act.
- Lead Consultant - Baseline biological resource assessments and habitat mapping for CDF management units *(CDF: San Diego, San Bernardino, and Riverside Counties)*
- Biological Resources Expert – Peer review of CEQA/NEPA documents (*various law firms, non-profit organizations, and citizen groups)*
- Lead Consultant - Pre- and post-harvest biological resource assessments of tree removal sites *(SDG&E: San Diego County)*
- Crew Leader - T&E species habitat evaluations for Biological Assessment in support of a steelhead restoration plan *(Trout Unlimited: Cleveland NF)*
- Lead Investigator - Resource Management Study and Plan for Mather Lake Regional Park *(County of Sacramento: Sacramento, CA)*
- Lead Investigator - Biological Resources Assessment for 1,070-acre Alfaro Ranch property *(Yuba County, CA)*
- Lead Investigator - Wildlife Strike Hazard Management Plan *(HCV Associates: Napa)*
- Lead Investigator - Del Rio Hills Biological Resource Assessment *(The Wyro Company: Rio Vista, CA)*
- Lead Investigator – Ion Communities project sites (*Ion Communities: Riverside and San Bernardino Counties*)
- Surveyor – Tahoe Pilot Project: Validation of California's Wildlife Habitat Relationships (CWHR) Model *(University of California: Tahoe NF)*

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Cashen, Curriculum Vitae

Forestry

Mr. Cashen has five years of experience working as a consulting forester on projects throughout California. Mr. Cashen has consulted with landowners and timber operators on forest management practices; and he has worked on a variety of forestry tasks including selective tree marking, forest inventory, harvest layout, erosion control, and supervision of logging operations. Mr. Cashen's experience with many different natural resources enable him to provide a holistic approach to forest management, rather than just management of timber resources.

REPRESENTATIVE EXPERIENCE

- Lead Consultant - CalFire fuels treatment projects *(SD and Riverside Counties)*
- Lead Consultant and supervisor of harvest activities – San Diego Gas and Electric Bark Beetle Tree Removal Project *(San Diego)*
- Crew Leader - Hillslope Monitoring Program *(CalFire: throughout California)*
- Consulting Forester – Forest inventories and timber harvest projects *(various clients throughout California)*

Grant Writing and Technical Editing

A.4-58

Mr. Cashen has prepared and submitted over 50 proposals and grant applications. Many of the projects listed herein were acquired through proposals he wrote. Mr. Cashen's clients and colleagues have recognized his strong scientific writing skills and ability to generate technically superior proposal packages. Consequently, he routinely prepares funding applications and conducts technical editing for various clients.

PERMITS

U.S. Fish and Wildlife Service Section 10(a)(1)(A) Recovery Permit for the Peninsular bighorn sheep

PROFESSIONAL ORGANIZATIONS / ASSOCIATIONS

The Wildlife Society
Cal Alumni Foresters
Mt. Diablo Audubon Society

OTHER AFFILIATIONS

Scientific Advisor and Grant Writer – *The Red Panda Network*
Scientific Advisor – *Mt. Diablo Audubon Society*
Grant Writer – *American Conservation Experience*

Cashen, Curriculum Vitae

TEACHING EXPERIENCE

Instructor: Wildlife Management - The Pennsylvania State University, 1998

Teaching Assistant: Ornithology - The Pennsylvania State University, 1996-1997

PUBLICATIONS

Gutiérrez RJ, AS Cheng, DR Becker, S Cashen, et al. 2015. Legislated collaboration in a conservation conflict: a case study of the Quincy Library group in California, USA. Chapter 19 *in*: Redpath SR, et al. (eds). Conflicts in Conservation: Navigating Towards Solutions. Cambridge Univ. Press, Cambridge, UK.

Cheng AS, RJ Gutiérrez RJ, S Cashen, et al. 2016. Is There a Place for Legislating Place-Based Collaborative Forestry Proposals?: Examining the Herger-Feinstein Quincy Library Group Forest Recovery Act Pilot Project. Journal of Forestry.

A.4-58

Cashen, Curriculum Vitae

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SCOTT CASHEN: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE TOWN AND COUNTRY PROJECT

CITED REFERENCE

CDFG. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Available at: http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Plants

Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities

State of California
CALIFORNIA NATURAL RESOURCES AGENCY
Department of Fish and Game
November 24, 2009[1]

INTRODUCTION AND PURPOSE

The conservation of special status native plants and their habitats, as well as natural communities, is integral to maintaining biological diversity. The purpose of these protocols is to facilitate a consistent and systematic approach to the survey and assessment of special status native plants and natural communities so that reliable information is produced and the potential of locating a special status plant species or natural community is maximized. They may also help those who prepare and review environmental documents determine when a botanical survey is needed, how field surveys may be conducted, what information to include in a survey report, and what qualifications to consider for surveyors. The protocols may help avoid delays caused when inadequate biological information is provided during the environmental review process; assist lead, trustee and responsible reviewing agencies to make an informed decision regarding the direct, indirect, and cumulative effects of a proposed development, activity, or action on special status native plants and natural communities; meet California Environmental Quality Act (CEQA)[2] requirements for adequate disclosure of potential impacts; and conserve public trust resources.

DEPARTMENT OF FISH AND GAME TRUSTEE AND RESPONSIBLE AGENCY MISSION

The mission of the Department of Fish and Game (DFG) is to manage California's diverse wildlife and native plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. DFG has jurisdiction over the conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations (Fish and Game Code §1802). DFG, as trustee agency under CEQA §15386, provides expertise in reviewing and commenting on environmental documents and makes protocols regarding potential negative impacts to those resources held in trust for the people of California.

Certain species are in danger of extinction because their habitats have been severely reduced in acreage, are threatened with destruction or adverse modification, or because of a combination of these and other factors. The California Endangered Species Act (CESA) provides additional protections for such species, including take prohibitions (Fish and Game Code §2050 *et seq.*). As a responsible agency, DFG has the authority to issue permits for the take of species listed under CESA if the take is incidental to an otherwise lawful activity; DFG has determined that the impacts of the take have been minimized and fully mitigated; and, the take would not jeopardize the continued existence of the species (Fish and Game Code §2081). Surveys are one of the preliminary steps to detect a listed or special status plant species or natural community that may be impacted significantly by a project.

DEFINITIONS

Botanical surveys provide information used to determine the potential environmental effects of proposed projects on all special status plants and natural communities as required by law (i.e., CEQA, CESA, and Federal Endangered Species Act (ESA)). Some key terms in this document appear in **bold font** for assistance in use of the document.

For the purposes of this document, **special status plants** include all plant species that meet one or more of the following criteria[3]:

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1 This document replaces the DFG document entitled "Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities."

2 http://ceres.ca.gov/ceqa/

3 Adapted from the East Alameda County Conservation Strategy available at http://www.fws.gov/sacramento/EACCS/Documents/080228_Species_Evaluation_EACCS.pdf

- Listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing as threatened or endangered under the ESA (50 CFR §17.12).

- Listed[4] or candidates for listing by the State of California as threatened or endangered under CESA (Fish and Game Code §2050 *et seq.*). A species, subspecies, or variety of plant is **endangered** when the prospects of its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, disease, or other factors (Fish and Game Code §2062). A plant is **threatened** when it is likely to become endangered in the foreseeable future in the absence of special protection and management measures (Fish and Game Code §2067).

- Listed as rare under the California Native Plant Protection Act (Fish and Game Code §1900 *et seq*.). A plant is **rare** when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens (Fish and Game Code §1901).

- Meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:

  - Species considered by the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (Lists 1A, 1B and 2);

  - Species that may warrant consideration on the basis of local significance or recent biological information[5];

  - Some species included on the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List* (California Department of Fish and Game 2008)[6].

- Considered a **locally significant species,** that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Special status natural communities are communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status species or their habitat. The most current version of the Department's *List of California Terrestrial Natural Communities*[7] indicates which natural communities are of special status given the current state of the California classification.

Most types of wetlands and riparian communities are considered special status natural communities due to their limited distribution in California. These natural communities often contain special status plants such as those described above. These protocols may be used in conjunction with protocols formulated by other agencies, for example, those developed by the U.S. Army Corps of Engineers to delineate jurisdictional wetlands[8] or by the U.S. Fish and Wildlife Service to survey for the presence of special status plants[9].

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4 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

5 In general, CNPS List 3 plants (plants about which more information is needed) and List 4 plants (plants of limited distribution) may not warrant consideration under CEQA §15380. These plants may be included on special status plant lists such as those developed by counties where they would be addressed under CEQA §15380. List 3 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a List 4 plant are significant even if individual project impacts are not. List 3 and 4 plants are also included in the California Natural Diversity Database's (CNDDB) *Special Plants, Bryophytes, and Lichens List.* [Refer to the current online published list available at: http://www.dfg.ca.gov/biogeodata.] Data on Lists 3 and 4 plants should be submitted to CNDDB. Such data aids in determining or revising priority ranking.

6 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

7 http://www.dfg.ca.gov/biogeodata/vegcamp/pdfs/natcomlist.pdf. The rare natural communities are asterisked on this list.

8 http://www.wetlands.com/regs/tlpge02e.htm

9 U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/sacramento/es/protocol.htm

BOTANICAL SURVEYS

Conduct botanical surveys prior to the commencement of any activities that may modify vegetation, such as clearing, mowing, or ground-breaking activities. It is appropriate to conduct a botanical field survey when:

- Natural (or naturalized) vegetation occurs on the site, and it is unknown if special status plant species or natural communities occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
- Special status plants or natural communities have historically been identified on the project site; or
- Special status plants or natural communities occur on sites with similar physical and biological properties as the project site.

SURVEY OBJECTIVES

Conduct field surveys in a manner which maximizes the likelihood of locating special status plant species or special status natural communities that may be present. Surveys should be **floristic in nature**, meaning that every plant taxon that occurs on site is identified to the taxonomic level necessary to determine rarity and listing status. "Focused surveys" that are limited to habitats known to support special status species or are restricted to lists of likely potential species are not considered floristic in nature and are not adequate to identify all plant taxa on site to the level necessary to determine rarity and listing status. Include a list of plants and natural communities detected on the site for each botanical survey conducted. More than one field visit may be necessary to adequately capture the floristic diversity of a site. An indication of the prevalence (estimated total numbers, percent cover, density, etc.) of the species and communities on the site is also useful to assess the significance of a particular population.

SURVEY PREPARATION

Before field surveys are conducted, compile relevant botanical information in the general project area to provide a regional context for the investigators. Consult the CNDDB[10] and BIOS[11] for known occurrences of special status plants and natural communities in the project area prior to field surveys. Generally, identify vegetation and habitat types potentially occurring in the project area based on biological and physical properties of the site and surrounding ecoregion[12], unless a larger assessment area is appropriate. Then, develop a list of special status plants with the potential to occur within these vegetation types. This list can serve as a tool for the investigators and facilitate the use of reference sites; however, special status plants on site might not be limited to those on the list. Field surveys and subsequent reporting should be comprehensive and floristic in nature and not restricted to or focused only on this list. Include in the survey report the list of potential special status species and natural communities, and the list of references used to compile the background botanical information for the site.

SURVEY EXTENT

Surveys should be comprehensive over the entire site, including areas that will be directly or indirectly impacted by the project. Adjoining properties should also be surveyed where direct or indirect project effects, such as those from fuel modification or herbicide application, could potentially extend offsite. Pre-project surveys restricted to known CNDDB rare plant locations may not identify all special status plants and communities present and do not provide a sufficient level of information to determine potential impacts.

FIELD SURVEY METHOD

Conduct surveys using **systematic field techniques** in all habitats of the site to ensure thorough coverage of potential impact areas. The level of effort required per given area and habitat is dependent upon the vegetation and its overall diversity and structural complexity, which determines the distance at which plants can be identified. Conduct surveys by walking over the entire site to ensure thorough coverage, noting all plant taxa

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10 Available at http://www.dfg.ca.gov/biogeodata/cnddb

11 http://www.bios.dfg.ca.gov/

12 Ecological Subregions of California, available at http://www.fs.fed.us/r5/projects/ecoregions/toc.htm

observed. The level of effort should be sufficient to provide comprehensive reporting. For example, one person-hour per eight acres per survey date is needed for a comprehensive field survey in grassland with medium diversity and moderate terrain[13], with additional time allocated for species identification.

TIMING AND NUMBER OF VISITS

Conduct surveys in the field at the time of year when species are both evident and identifiable. Usually this is during flowering or fruiting. Space visits throughout the growing season to accurately determine what plants exist on site. Many times this may involve multiple visits to the same site (e.g. in early, mid, and late-season for flowering plants) to capture the floristic diversity at a level necessary to determine if special status plants are present[14]. The timing and number of visits are determined by geographic location, the natural communities present, and the weather patterns of the year(s) in which the surveys are conducted.

REFERENCE SITES

When special status plants are known to occur in the type(s) of habitat present in the project area, observe reference sites (nearby accessible occurrences of the plants) to determine whether those species are identifiable at the time of the survey and to obtain a visual image of the target species, associated habitat, and associated natural community.

USE OF EXISTING SURVEYS

For some sites, floristic inventories or special status plant surveys may already exist. Additional surveys may be necessary for the following reasons:

- Surveys are not current[15]; or
- Surveys were conducted in natural systems that commonly experience year to year fluctuations such as periods of drought or flooding (e.g. vernal pool habitats or riverine systems); or
- Surveys are not comprehensive in nature; or fire history, land use, physical conditions of the site, or climatic conditions have changed since the last survey was conducted[16]; or
- Surveys were conducted in natural systems where special status plants may not be observed if an annual above ground phase is not visible (e.g. flowers from a bulb); or
- Changes in vegetation or species distribution may have occurred since the last survey was conducted, due to habitat alteration, fluctuations in species abundance and/or seed bank dynamics.

NEGATIVE SURVEYS

Adverse conditions may prevent investigators from determining the presence of, or accurately identifying, some species in potential habitat of target species. Disease, drought, predation, or herbivory may preclude the presence or identification of target species in any given year. Discuss such conditions in the report.

The failure to locate a known special status plant occurrence during one field season does not constitute evidence that this plant occurrence no longer exists at this location, particularly if adverse conditions are present. For example, surveys over a number of years may be necessary if the species is an annual plant having a persistent, long-lived seed bank and is known not to germinate every year. Visits to the site in more

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[13] Adapted from U.S. Fish and Wildlife Service kit fox survey guidelines available at www.fws.gov/sacramento/es/documents/kitfox_no_protocol.pdf

[14] U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/sacramento/es/protocol.htm

[15] Habitats, such as grasslands or desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. In forested areas, however, surveys at intervals of five years may adequately represent current conditions. For forested areas, refer to "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at https://r1.dfg.ca.gov/portal/Portals/12/THPBotanicalGuidelinesJuly2005.pdf

[16] U.S. Fish and Wildlife Service Survey Guidelines available at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/botanicalinventories.pdf

than one year increase the likelihood of detection of a special status plant especially if conditions change. To further substantiate negative findings for a known occurrence, a visit to a nearby reference site may ensure that the timing of the survey was appropriate.

REPORTING AND DATA COLLECTION

Adequate information about special status plants and natural communities present in a project area will enable reviewing agencies and the public to effectively assess potential impacts to special status plants or natural communities[17] and will guide the development of minimization and mitigation measures. The next section describes necessary information to assess impacts. For comprehensive, systematic surveys where no special status species or natural communities were found, reporting and data collection responsibilities for investigators remain as described below, excluding specific occurrence information.

SPECIAL STATUS PLANT OR NATURAL COMMUNITY OBSERVATIONS

Record the following information for locations of each special status plant or natural community detected during a field survey of a project site.

- A detailed map (1:24,000 or larger) showing locations and boundaries of each special status species occurrence or natural community found as related to the proposed project. Mark occurrences and boundaries as accurately as possible. Locations documented by use of global positioning system (GPS) coordinates must include the datum[18] in which they were collected;
- The site-specific characteristics of occurrences, such as associated species, habitat and microhabitat, structure of vegetation, topographic features, soil type, texture, and soil parent material. If the species is associated with a wetland, provide a description of the direction of flow and integrity of surface or subsurface hydrology and adjacent off-site hydrological influences as appropriate;
- The number of individuals in each special status plant population as counted (if population is small) or estimated (if population is large);
- If applicable, information about the percentage of individuals in each life stage such as seedlings vs. reproductive individuals;
- The number of individuals of the species per unit area, identifying areas of relatively high, medium and low density of the species over the project site; and
- Digital images of the target species and representative habitats to support information and descriptions.

FIELD SURVEY FORMS

When a special status plant or natural community is located, complete and submit to the CNDDB a California Native Species (or Community) Field Survey Form[19] or equivalent written report, accompanied by a copy of the relevant portion of a 7.5 minute topographic map with the occurrence mapped. Present locations documented by use of GPS coordinates in map and digital form. Data submitted in digital form must include the datum[20] in which it was collected. If a potentially undescribed special status natural community is found on the site, document it with a Rapid Assessment or Relevé form[21] and submit it with the CNDDB form.

VOUCHER COLLECTION

Voucher specimens provide verifiable documentation of species presence and identification as well as a public record of conditions. This information is vital to all conservation efforts. Collection of voucher specimens should

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17 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata. For Timber Harvest Plans (THPs) please refer to the "Guidelines for Conservation of Sensitive Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations", available at https://r1.dfg.ca.gov/portal/Portals/12/THPBotanicalGuidelinesJuly2005.pdf

18 NAD83, NAD27 or WGS84

19 http://www.dfg.ca.gov/biogeodata

20 NAD83, NAD27 or WGS84

21 http://www.dfg.ca.gov/biogeodata/vegcamp/veg_publications_protocols.asp

be conducted in a manner that is consistent with conservation ethics, and is in accordance with applicable state and federal permit requirements (e.g. incidental take permit, scientific collection permit). Voucher collections of special status species (or suspected special status species) should be made only when such actions would not jeopardize the continued existence of the population or species.

Deposit voucher specimens with an indexed regional herbarium[22] no later than 60 days after the collections have been made. Digital imagery can be used to supplement plant identification and document habitat. Record all relevant permittee names and permit numbers on specimen labels. A collecting permit is required prior to the collection of State-listed plant species[23].

BOTANICAL SURVEY REPORTS

Include reports of botanical field surveys containing the following information with project environmental documents:

- **Project and site description**
  - A description of the proposed project;
  - A detailed map of the project location and study area that identifies topographic and landscape features and includes a north arrow and bar scale; and,
  - A written description of the biological setting, including vegetation[24] and structure of the vegetation; geological and hydrological characteristics; and land use or management history.
- **Detailed description of survey methodology and results**
  - Dates of field surveys (indicating which areas were surveyed on which dates), name of field investigator(s), and total person-hours spent on field surveys;
  - A discussion of how the timing of the surveys affects the comprehensiveness of the survey;
  - A list of potential special status species or natural communities;
  - A description of the area surveyed relative to the project area;
  - References cited, persons contacted, and herbaria visited;
  - Description of reference site(s), if visited, and phenological development of special status plant(s);
  - A list of all taxa occurring on the project site. Identify plants to the taxonomic level necessary to determine whether or not they are a special status species;
  - Any use of existing surveys and a discussion of applicability to this project;
  - A discussion of the potential for a false negative survey;
  - Provide detailed data and maps for all special plants detected. Information specified above under the headings “Special Status Plant or Natural Community Observations,” and “Field Survey Forms,” should be provided for locations of each special status plant detected;
  - Copies of all California Native Species Field Survey Forms or Natural Community Field Survey Forms should be sent to the CNDDB and included in the environmental document as an Appendix. It is not necessary to submit entire environmental documents to the CNDDB; and,
  - The location of voucher specimens, if collected.

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22 For a complete list of indexed herbaria, see: Holmgren, P., N. Holmgren and L. Barnett. 1990. Index Herbariorum, Part 1: Herbaria of the World. New York Botanic Garden, Bronx, New York. 693 pp. Or: http://www.nybg.org/bsci/ih/ih.html

23 Refer to current online published lists available at: http://www.dfg.ca.gov/biogeodata.

24 A vegetation map that uses the National Vegetation Classification System (http://biology.usgs.gov/npsveg/nvcs.html), for example *A Manual of California Vegetation*, and highlights any special status natural communities. If another vegetation classification system is used, the report should reference the system, provide the reason for its use, and provide a crosswalk to the National Vegetation Classification System.

- **Assessment of potential impacts**
  - A discussion of the significance of special status plant populations in the project area considering nearby populations and total species distribution;
  - A discussion of the significance of special status natural communities in the project area considering nearby occurrences and natural community distribution;
  - A discussion of direct, indirect, and cumulative impacts to the plants and natural communities;
  - A discussion of threats, including those from invasive species, to the plants and natural communities;
  - A discussion of the degree of impact, if any, of the proposed project on unoccupied, potential habitat of the species;
  - A discussion of the immediacy of potential impacts; and,
  - Recommended measures to avoid, minimize, or mitigate impacts.

QUALIFICATIONS

Botanical consultants should possess the following qualifications:

- Knowledge of plant taxonomy and natural community ecology;
- Familiarity with the plants of the area, including special status species;
- Familiarity with natural communities of the area, including special status natural communities;
- Experience conducting floristic field surveys or experience with floristic surveys conducted under the direction of an experienced surveyor;
- Familiarity with the appropriate state and federal statutes related to plants and plant collecting; and,
- Experience with analyzing impacts of development on native plant species and natural communities.

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The Condor 89:636–653

LANDBIRD PRODUCTIVITY IN CENTRAL COASTAL CALIFORNIA: THE RELATIONSHIP TO ANNUAL RAINFALL, AND A REPRODUCTIVE FAILURE IN 1986[1]

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Abstract. The avian productivity of 51 locally breeding species in coastal grassland, coastal scrub, and mixed evergreen forest habitats was estimated from 11 years of standardized mist-netting data collected between 10 May and 17 August at Point Reyes Bird Observatory's Palomarin Field Station. A relationship between the number of young birds banded per 100 net hr and the amount of annual (winter) rainfall during the previous season was apparent for the 10 years 1976 to 1985: productivity was low (19 to 32% below the 10-year mean) in years of extremely low rainfall, increased to a maximum (21 to 39% above the 10-year mean) in years of average or slightly above average rainfall, and decreased substantially (20% below the 10-year mean) in years of very heavy rainfall. The number of young birds banded per 100 net hr in 1986, however, was 62.3% below the previous 10-year mean and fell well outside the above relationship. This high level of reproductive failure occurred in most of the 51 locally breeding species and was independent of migratory behavior, habitat choice, and nest location. It was not independent of foraging behavior, however, as swallows and woodpeckers, species that feed their young on insects produced in decomposer- or detritus-based food chains rather than in primary production-based food chains, showed no significant reduction in productivity. Timing of the decrease in young birds suggests that the onset of reproductive failure occurred in mid-May, well after the nesting season began. Such a large-scale reproductive failure of virtually an entire landbird community has not been reported before and no obvious weather factors appear to explain it. Preliminary data indicate that the reproductive failure was not confined to the vicinity of Palomarin or to central coastal California but rather extended over much of northern California even to the west slope of the Sierra Nevada. It is interesting, but perhaps only coincidental, that several circumstances of this phenomenon, including its timing, appear to coincide remarkably well with the passage of a radioactive "cloud" from the Chernobyl nuclear power plant accident and associated rainfall.

Key words: Landbirds; productivity; reproductive failure; annual rainfall; community dynamics; California; mist-netting.

INTRODUCTION

Because the standard procedure for determining avian productivity, the monitoring of individual nests, is extremely time consuming and labor intensive for landbirds with widely dispersed and well hidden nests, little information exists concerning the long-term productivity of an entire landbird community. In fact, most of the existing data concerning the annual variations in landbird reproductive success have arisen from intensive single-species studies (e.g., Nice 1937, Perrins and Moss 1975, Nolan 1978, Pinkowski 1979, Petrinovitch and Patterson 1983, Tiainen 1983). The determination of reproductive success on a community-wide basis, however, must be a necessary and important component of the effort to understand what controls the dynamics and stability of avian communities, a question that continues to be the subject of ecological debate (Wiens 1983, 1984a; Noon et al. 1985; Dunning 1986). Information regarding annual variations in the reproductive success of various species or guilds of species within the community can provide additional insight toward understanding the dynamics of avian communities. Furthermore, long-term data on the extent and causes of natural fluctuations in the productivity of avian communities are necessary for a proper evaluation of the effects of human-caused environmental disturbances upon these communities. Wiens (1984b) provided convincing arguments for the importance of long-term studies of avian populations and communities.

Weather factors, including temperature, rainfall and snowpack, have been implicated as proximate causes of variations in avian productivity

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in a number of studies (Bryant 1975; Smith and Andersen 1982; Murphy 1983a,b; Tiainen 1983). Coastal central California typically experiences a Mediterranean climate characterized by mild wet winters and warm dry summers. Along the immediate coast, where the Point Reyes Bird Observatory's (PRBO's) Palomarin Field Station is located, the summer drought is ameliorated slightly by the occurrence of persistent fog. Nevertheless, nearly 83% of the annual precipitation falls as rain during the 5 months November to March while only 5% falls during the 5 months May to September. One might expect, therefore, that the amount of annual (essentially, winter) rainfall could affect subsequent reproductive success by affecting the quantity and quality of vegetative growth, which could, in turn, affect the food resources available for raising young as well as the amount of cover available for hiding nests.

For the past 11 years, PRBO personnel have monitored the productivity of 51 locally breeding bird species in coastal grassland, coastal scrub, and mixed evergreen forest habitats at the Palomarin Field Station by means of a standardized mist-netting program. Here, we present some of the results of this study. In particular, we describe the relationship between avian productivity during a given summer and the amount of rainfall during the previous winter, and document an unprecedented reproductive failure that occurred in 1986.

STUDY AREA AND METHODS

An array of 20 12-m nylon mist nets was established at 14 permanent locations at the Palomarin Field Station of the PRBO, just inside the southern end of the Point Reyes National Seashore in Marin County, California (37°56′N and 122°45′W). Fourteen of the 20 nets were located at eight sites along the western edge of the Arroyo Hondo in mixed evergreen forest habitat comprised primarily of coast live oak (*Quercus agrifolia*), California-bay (*Umbellularia californica*), Douglas-fir (*Pseudotsuga Menziesii*), blueblossom (*Ceanothus thyrsiflorus*), and California buckeye (*Aesculus californicus*). The bottom of the arroyo contained a narrow riparian growth of red alder (*Alnus oregona*). Six of these eight forest sites contained double nets stacked one over the other, while the other two forest sites contained single nets. The remaining six single nets were located at six sites in disturbed successional stage coastal scrub habitat adjacent to the arroyo. This habitat was comprised primarily of coyote bush (*Baccharis pilularis*), California sage (*Artemisia californica*), bush monkey flower (*Mimulus aurantiacus*), poison oak (*Rhus diversiloba*), California blackberry (*Rubus vitifolius*), and California coffeeberry (*Rhamnus californica*) interspersed with patches of introduced annual grasses (*Avena, Holcus, Phalaris*), thistles (*Cirseum*), and wild radish (*Raphanus sativa*). Thirty-mm mesh nets were used in the eight protected (from the wind) forest locations whereas 36-mm mesh nets were used in the six more exposed coastal scrub sites.

Disturbed successional stage coastal scrub habitat extended south and southwest for some 450 m from the general location of the nets to the bluffs immediately overlooking the Pacific Ocean. Both disturbed and undisturbed coastal scrub, interspersed with a number of small creeks and drainages, extended west and northwest from the study area for more than 20 km. A second-growth Douglas-fir forest bordered the study area on the north and extended for some 6 km up and over a forested ridge. The mixed evergreen forest of the Arroyo Hondo bordered the study area on the east and was variously 200 to 500 m wide. Moderately grazed coastal grassland and coastal scrub habitat extended for some 5 km to the southeast from the arroyo. Most of the coastal scrub habitat in the area, both to the northwest and to the southeast of the study area as well as that in the study area itself, was located on an old, relatively level marine terrace at about 60 m elevation.

Nets were run daily (weather permitting; i.e., not raining or excessively windy) from 10 May to 17 August during each of the 11 years 1976 to 1986. May 10 corresponds to the earliest date that a HY bird (excluding hummingbirds) was ever captured during the entire 11 years. Hummingbirds were excluded from this analysis because of the unavailability of hummingbird bands during several years of the study. August 17 is 100 days (ten 10-day periods) after 10 May and corresponds to the time after which substantial numbers of migrant birds begin to inundate the study area. There is no doubt that a few migrant individuals of several long-distance migrant species occurred each year prior to 17 August, particularly during the 20 days 29 July to 17 August. These data, however, are included in this analysis because substantial numbers of locally

TABLE 1. Birds banded at the Palomarin Field Station 10 May to 17 August. Comparison of 1986 with the previous 10 years.

Species	Behavioral class				Hatching-year birds						After-hatching-year birds					
					1976–1985						1976–1985					
	M[1]	H[2]	N[3]	F[4]	Mean[5]	SE[6]	1986[5]	% 1986[7]/Mean	No. of SE[8]	CI[9] (%)	Mean[5]	SE[6]	1986[5]	% 1986[7]/Mean	No. of SE[8]	CI[9] (%)
Band-tailed Pigeon	S	W	T	V	0.01	0.01	0.00	0.0	*[10]	*[10]	0.00	0.00	0.00	—	—	—
Mourning Dove	S	G	T	V	0.02	0.02	0.00	0.0	*	*	0.07	0.03	0.00	0.0	*[10]	*[10]
Downy Woodpecker	R	W	C	B	0.57	0.08	0.44	77.2	−1.63	80	0.13	0.05	0.00	0.0	*	*
Hairy Woodpecker	R	W	C	B	0.20	0.06	0.35	175.0	+2.50	95	0.12	0.04	0.00	0.0	*	*
Northern Flicker	S	W	C	B	0.22	0.06	0.53	240.9	+5.17	99.9	0.12	0.03	0.26	216.7	*	*
Olive-sided Flycatcher	L	W	T	S	0.29	0.06	0.09	31.0	−3.33	99	0.60	0.07	0.79	131.7	+2.71	95
Western Wood-Peewee	L	W	T	S	0.12	0.03	0.00	0.0	*	*	0.31	0.11	0.09	29.0	−2.00	90
Western Flycatcher	L	W	B	S	9.03	1.08	3.42	37.9	−5.19	99.9	1.81	0.21	1.40	77.3	−1.95	90
Ash-throated Flycatcher	L	W	C	S	0.02	0.01	0.00	0.0	*	*	0.23	0.06	0.00	0.0	−3.83	99
Tree Swallow	L	G	C	H	0.05	0.03	0.00	0.0	*	*	0.29	0.10	0.44	151.7	+1.50	80
Violet-green Swallow	L	W	C	H	0.10	0.04	0.00	0.0	*	*	0.40	0.11	0.44	110.0	+0.36	20
Northern Rough-winged Swallow	L	G	C	H	0.06	0.03	0.00	0.0	*	*	0.10	0.04	0.00	0.0	*	*
Cliff Swallow	L	S	B	H	0.07	0.03	0.18	257.1	*	*	0.55	0.09	0.00	0.0	−6.11	99.9
Barn Swallow	L	S	B	H	0.84	0.22	0.88	104.8	+0.18	10	0.32	0.08	0.61	190.6	+3.63	99
Steller's Jay	R	W	T	G	0.26	0.05	0.44	169.2	+3.60	99	0.18	0.08	0.35	194.4	*	*
Scrub Jay	R	S	S	G	0.09	0.03	0.00	0.0	*	*	0.09	0.02	0.00	0.0	*	*
Chestnut-backed Chickadee	R	W	C	F	4.76	0.46	1.49	31.3	−7.11	99.99	0.27	0.06	0.61	225.9	+5.67	99.9
Plain Titmouse	R	W	C	F	0.04	0.04	0.00	0.0	*	*	0.00	0.00	0.00	—	—	—
Bushtit	R	S	S	F	4.93	0.86	2.63	53.3	−2.67	95	0.70	0.18	0.53	75.7	−0.94	60
Red-breasted Nuthatch	S	W	C	B	0.11	0.06	0.09	81.8	*	*	0.01	0.01	0.00	0.0	*	*
Brown Creeper	R	W	B	B	2.11	0.25	0.70	33.2	−5.64	99.9	0.09	0.03	0.09	100.0	*	*
Bewick's Wren	R	S	C	F	6.67	0.57	1.76	26.4	−8.61	99.99	0.37	0.09	0.09	24.3	−3.11	98
Winter Wren	R	W	G	G	0.41	0.11	0.00	0.0	−3.73	99	0.06	0.03	0.09	150.0	*	*
Golden-crowned Kinglet	R	W	T	F	0.84	0.31	0.09	10.7	−2.42	95	0.07	0.02	0.00	0.0	*	*
Western Bluebird	R	G	C	G	0.04	0.02	0.00	0.0	*	*	0.16	0.06	0.00	0.0	*	*
Swainson's Thrush	L	W	S	G	2.44	0.34	0.53	21.7	−5.62	99.9	4.77	0.43	5.88	123.3	+2.58	95
Hermit Thrush	L	W	S	G	0.19	0.09	0.09	47.4	*	*	0.04	0.02	0.00	0.0	*	*
American Robin	S	G	T	G	0.20	0.09	0.00	0.0	−2.27	95	0.49	0.09	0.53	108.2	+0.44	30
Wrentit	R	S	S	F	6.81	0.40	3.34	49.0	−8.67	99.99	0.89	0.13	2.46	276.4	+12.08	99.99
European Starling	S	G	C	G	0.06	0.05	0.00	0.0	*	*	0.06	0.03	0.00	0.0	*	*
Hutton's Vireo	R	W	T	F	1.95	0.31	1.05	53.8	−2.90	98	0.15	0.04	0.09	60.0	*	*
Warbling Vireo	L	W	T	F	2.29	0.54	0.00	0.0	−4.24	99	1.83	0.25	1.58	86.3	−1.00	60

TABLE 1. Continued.

Species	Behavioral class				Hatching-year birds						After-hatching-year birds					
					1976–1985			% 1986[7] / Mean	No. of SE[8]	CI[9] (%)	1976–1985			% 1986[7] / Mean	No. of SE[8]	CI[9] (%)
	M[1]	H[2]	N[3]	F[4]	Mean[5]	SE[6]	1986[5]				Mean[5]	SE[6]	1986[5]			
Orange-crowned Warbler	L	W	G	F	4.36	0.45	1.23	28.2	−6.96	99.99	2.44	0.29	0.70	28.7	−6.00	99.9
MacGillivray's Warbler	L	W	G	F	0.28	0.08	0.00	0.0	−3.50	99	0.15	0.04	0.09	60.0	*	*
Wilson's Warbler	L	W	G	F	13.80	1.42	3.86	28.0	−7.00	99.99	2.42	0.17	2.19	90.5	−1.35	70
Black-headed Grosbeak	L	W	T	F	0.58	0.11	0.00	0.0	−5.27	99.9	0.74	0.13	0.70	94.6	−0.31	20
Rufous-sided Towhee	R	S	G	G	1.09	0.14	0.79	72.5	−2.14	90	0.51	0.07	1.05	205.9	+7.71	99.99
Brown Towhee	R	S	S	G	0.26	0.09	0.00	0.0	−2.89	98	0.10	0.02	0.18	180.0	+4.00	99
Rufous-crowned Sparrow	R	S	G	G	0.10	0.03	0.00	0.0	*	*	0.03	0.02	0.00	0.0	*	*
Black-chinned Sparrow	L	S	S	G	0.00	0.00	0.00	—	—	—	0.01	0.01	0.00	0.0	*	*
Savannah Sparrow	S	G	G	G	0.05	0.02	0.00	0.0	*	*	0.01	0.01	0.00	0.0	*	*
Grasshopper Sparrow	L	G	G	G	0.02	0.01	0.09	450.0	*	*	0.02	0.02	0.00	0.0	*	*
Song Sparrow	R	S	S	G	9.88	1.31	3.16	32.0	−5.13	99.9	0.81	0.11	0.79	97.5	−0.18	10
White-crowned Sparrow	R	S	S	G	3.90	0.51	3.51	90.0	−0.76	50	0.40	0.07	0.53	132.5	+1.86	90
Dark-eyed Junco	S	W	G	G	2.57	0.62	0.61	23.7	−3.16	98	0.16	0.04	0.35	218.7	*	*
Red-winged Blackbird	S	G	S	G	0.00	0.00	0.00	—	—	—	0.02	0.01	0.00	0.0	*	*
Brown-headed Cowbird	L	G	S	G	0.00	0.00	0.00	—	—	—	0.09	0.03	0.00	0.0	*	*
Purple Finch	S	W	T	V	2.66	0.64	0.79	29.7	−2.92	98	5.69	1.08	4.74	83.3	−0.88	60
House Finch	S	G	T	V	0.54	0.21	0.09	16.7	−2.14	90	0.76	0.18	0.44	57.9	−1.78	80
Pine Siskin	S	W	T	V	6.37	1.18	1.58	24.8	−4.06	99	4.49	0.78	3.34	74.4	−1.47	80
American Goldfinch	S	S	S	V	1.01	0.23	1.40	138.6	+1.70	80	1.43	0.19	1.14	79.7	−1.53	80
Total					93.26	6.13	35.20	37.7	−9.47	99.99	35.50	2.22	32.57	91.7	−1.32	70

[1] Migratory behavior: L = long-distance migrants, species in which individuals that breed in the neighborhood of the Palomarin Field Station winter primarily in the tropics, and never winter in numbers north of southern California; S = short-distance migrants, in which individuals that breed in the neighborhood of the Palomarin Field Station winter in substantial numbers at the latitude of Palomarin but not in the neighborhood of Palomarin; R = residents, in which individuals that breed in the neighborhood of Palomarin are permanent residents at Palomarin.

[2] Habitat preference: G = grassland species that prefer open, grazed, or mowed grassland habitat or the edges of grassland habitat for foraging when in the neighborhood of the Palomarin Field Station; S = scrubland species that prefer undisturbed or disturbed coastal scrub habitat for foraging when in the neighborhood of Palomarin; W = woodland species that prefer woodland habitat for foraging when in the neighborhood of Palomarin.

[3] Nest location: G = ground nesters; S = shrub nesters; T = tree nesters; C = cavity nesters; B = building or structure nesters. These classifications were made on the basis of observations of individuals nesting in the neighborhood of Palomarin. The four building or structure nesters place their open-cup or closed nests on a human-made structure, against a bank or a tree trunk, or behind the loose bark of a tree trunk.

[4] Foraging behavior during the breeding season: H = hawking; S = sallying; F = foliage gleaning; B = bark gleaning, including both probing and pecking; G = ground gleaning; V = vegetation regurgitating. This last group includes both pigeons and doves and the carduelline finches (Purple and House finches, Pine Siskin, and American Goldfinch), all of which forage, to some extent, during the breeding season on vegetable matter and regurgitate that food to their young.

[5] Birds banded per 1,000 net hr.

[6] Standard error of the mean.

[7] The percentage that the 1986 value was of the previous 10-year mean.

[8] The number of standard errors that the 1986 value was removed from the previous 10-year mean. Calculated as (1986 value − mean value for 1976 to 1985)/SE of the mean for 1976 to 1985.

[9] The largest confidence interval of the 1976 to 1985 mean that the 1986 value was outside of.

[10] Rare species, averaging less than two individuals per year. Sample size too small to allow a meaningful comparison of 1986 with the previous 10 years.

fledged individuals of various resident and short-distance migrant species were still being captured in the nets during these 20 days, especially in years in which the breeding season was prolonged.

The nets were run for 6 hr per day beginning 15 min after local sunrise. The nets were always opened in a standardized order and were always closed in the same order. Thus, 120 net hr were accumulated in each full day of netting. This standardized program was faithfully adhered to from 1979 through 1986. Prior to 1979, the standardization was not quite so rigorous, but the total net hours and timing were quite similar to later years.

All birds captured were brought back to the on-site Field Station (10 to 300 m from the various nets) for processing, banding, weighing, and measuring. Age was determined by the degree of skull pneumatization and other morphological, mensural, and plumage characteristics as appropriate for the various species. Juvenile and immature birds in their first calendar year are referred to as hatching-year (HY) birds. Adult birds in their second or later calendar years are called after-hatching-year (AHY) birds. We were unable to age 0.26% of the birds encountered during the 11 years because of difficulty in determining the degree of skull pneumatization. These individuals were excluded from this analysis.

We used the number of HY birds (primarily dispersing juveniles but also, to a lesser extent, dispersing immatures) banded per 100 net hr of operation, and/or the ratio of HY/AHY birds banded during the same period as our measures of avian productivity. It should be noted that this method cannot be used directly to compare productivity between various species or species groups, either in terms of the number of young birds banded per 100 net hr or in terms of the young/adult ratio. This is because capture rates obtained from mist-netting procedures may be biased because of species-specific or age-specific differences in microhabitat preference, foraging height and behavior, flocking behavior, home range size, dispersal distance, and dispersal rate (Karr 1981, DeSante 1983). This method, however, can be used very effectively to compare the productivity of a given species or species group from year to year, and to compare various species and groups of species in terms of their annual variability in productivity. This is because juvenal and immature dispersal, for the most part, is assumed to be independent of local weather conditions.

This paper deals with data collected on 51 locally breeding species of birds (known to have bred at least once within 2 km of the netting operation) of which at least one individual was banded between 10 May and 17 August during the 11-year period 1976 to 1986 (Table 1; scientific names in Appendix). The 51 species were classified according to migratory behavior (three groups), habitat preference (three groups), nest location (five groups), and foraging behavior (six groups). These classifications were based upon the seasonalities of occurrence, habitat preferences, nest locations, and foraging behaviors of individual birds observed in the neighborhood of the Palomarin Field Station and thus are specific to that location. Additional information useful for migratory behavior and habitat preference classifications was obtained from Grinnell and Miller (1944), and for nest location classifications from Harrison (1979).

The comparisons of 1986 with the previous 10 years were based upon summary statistics (mean, standard error of the mean, confidence intervals for the mean, and range) for the years 1976 to 1985. Statistical significance was assumed if the 1986 value fell outside the 95% confidence interval for the mean for 1976 to 1985. The smoothed curve describing the relationship between annual productivity and annual rainfall, along with the 95% confidence interval of the smooth, was obtained by the B-spline adaptive regression technique (DeBoor 1978, Craven and Wahba 1979, O'Sullivan 1985, Silverman 1985).

RESULTS

The annual variability in the number of birds banded per 100 net hr (between 10 May and 17 August) over the 10-year period 1976 to 1985 was similar for HY (CV = 20.8%) and AHY (CV = 19.8%) birds (Fig. 1). Furthermore, for these same 10 years, the number of HY birds in any given year was positively correlated with the number of AHY birds in that same year (r = 0.849). In 1986, however, the number of HY birds banded per 100 net hr dropped dramatically while the number of AHY birds banded per 100 net hr was consistent with the previous 10 years. In fact, the number of HY birds banded per 100 net hr in 1986 was only 37.7% of the mean of the previous 10 years (Fig. 2a). Not only did the 1986 value fall well outside the 99% con-

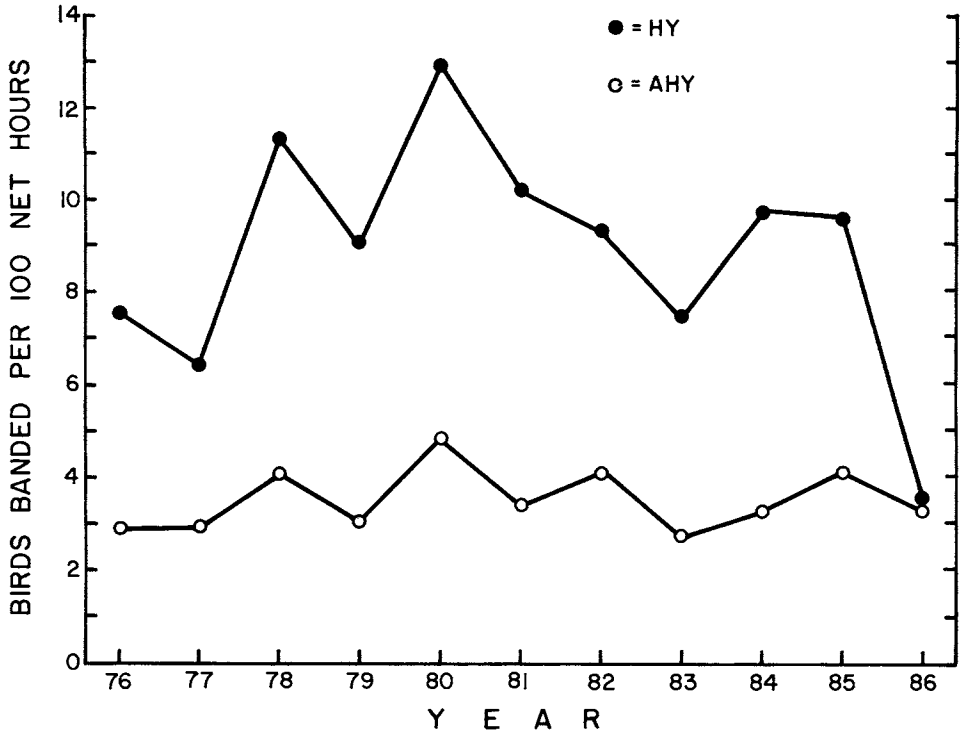


FIGURE 1. Number of birds of all species combined banded per 100 net hr during the period 10 May to 17 August for each of 11 years.

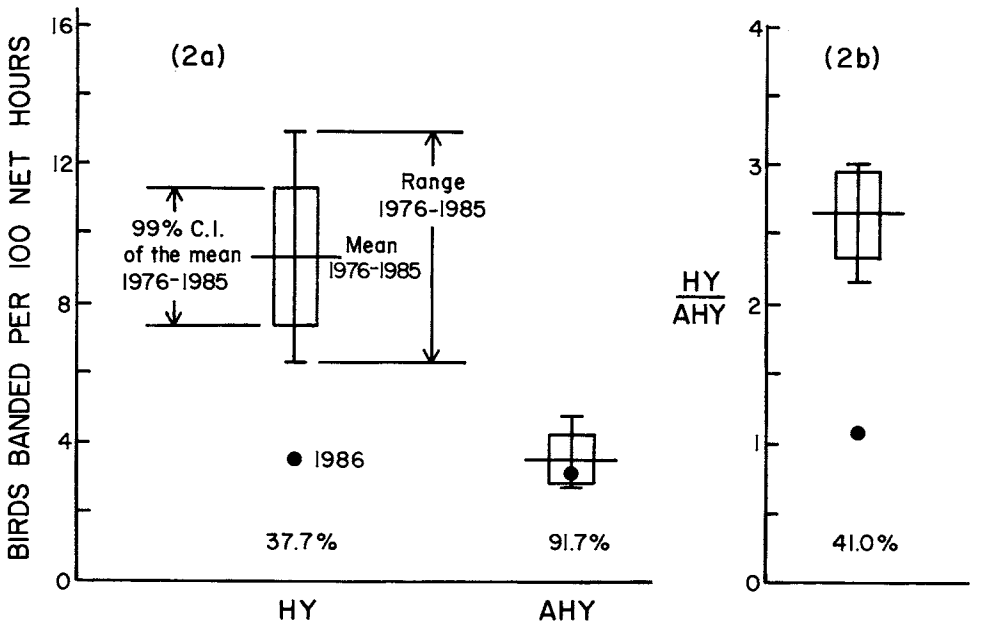


FIGURE 2. Comparison of 1986 with the previous 10 years with respect to banding data during the 100-day period 10 May to 17 August. (2a) Birds banded per 100 net hr. (2b) HY/AHY ratio. Shown in each case are the mean value for the 10 years 1976 to 1985 (long horizontal line), the 99% confidence interval of this 10-year mean (closed rectangle), the range of these 10 years (vertical line terminated by short horizontal lines), the 1986 value (filled circle), and the percentage that the 1986 value was of the previous 10-year mean.

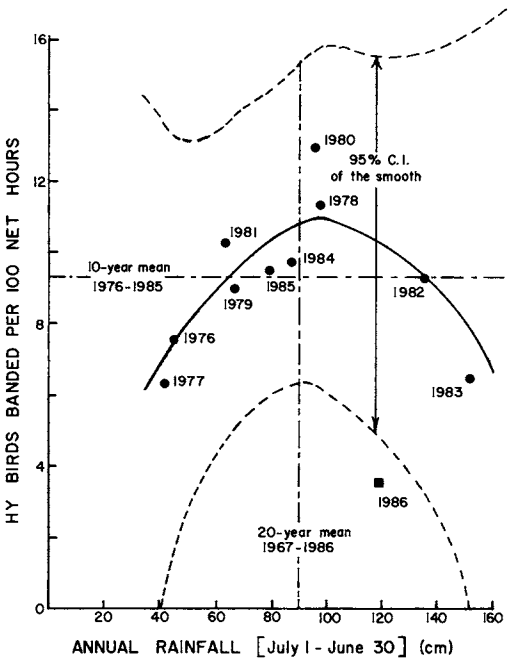


FIGURE 3. Number of HY birds banded per 100 net hr (during the period 10 May to 17 August) as a function of annual rainfall measured from 1 July to 30 June for the 11 years 1976 to 1986. Also shown are the smoothed curve for the 10 years 1976 to 1985 and the 95% confidence interval for the smooth as obtained by the B-spline adaptive regression technique.

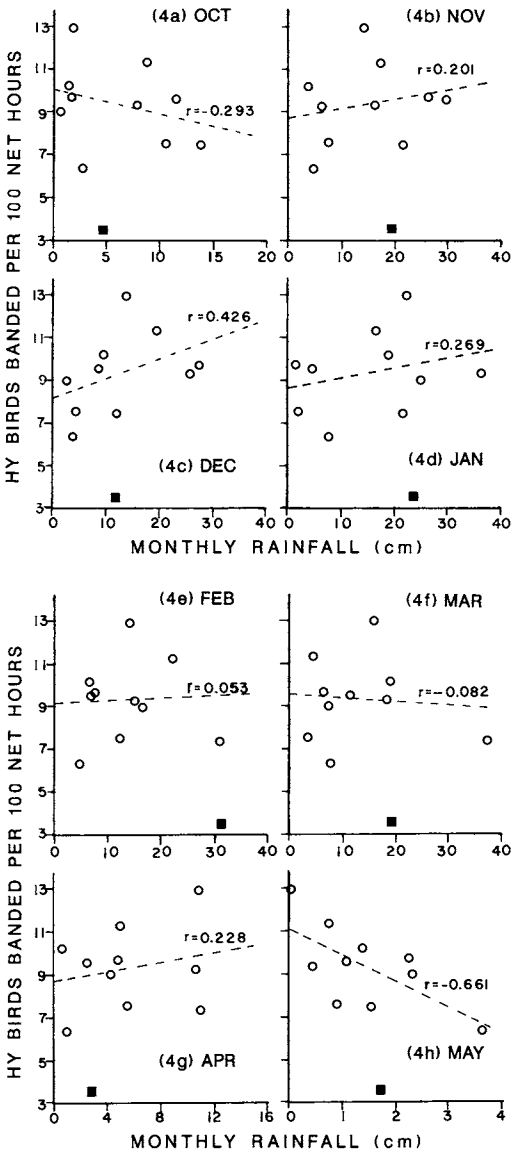


FIGURE 4. Number of HY birds banded per 100 net hr (during the period 10 May to 17 August) as a function of monthly rainfall totals for the 10 years 1976 to 1985 (O) and for 1986 (■). Also shown are the linear regression lines and correlation coefficients for the 10 years 1976 to 1985. (4a) October. (4b) November. (4c) December. (4d) January. (4e) February. (4f) March. (4g) April. (4h) May.

fidence interval of the previous 10-year mean (in fact, well outside the 99.99% confidence interval, being 9.47 standard errors from the mean), it also fell well outside the entire range of values for the previous 10 years. In contrast, the number of AHY birds banded per 100 net hr in 1986 was 91.7% of the previous 10-year mean and fell well within the 99% confidence interval of the previous 10-year mean (and within the 80% confidence interval as well, being only 1.32 standard errors from the mean). Thus, a highly significant decrease in the number of young birds occurred in 1986 without a concomitant decrease in the number of adults.

The annual variability in the HY/AHY ratio over the 10-year period 1976 to 1985 (CV = 11.4%) was considerably less than that for either the number of HY or AHY birds. This was because, during this period, the number of HY birds in any given year was directly related to the number of AHY birds in that same year. As a result, the 99% confidence interval of the 10-year mean for the HY/AHY ratio, as well as the 10-year range of the HY/AHY ratio, was quite narrow (Fig. 2b). The 1986 value of the HY/AHY ratio, however, was only 41.0% of the previous 10-year mean and fell far outside both the 99% confidence interval of the mean (in fact, far outside the 99.99% confidence interval, being 16.37 stan-

TABLE 2. Springtime temperatures (°C) during the period 20 April to 31 May for the past 5 years.

	1982	1983	1984	1985	1986
Minimum (range)	1–11	4–10	3–12	2–12	1–12
Minimum (mean)	5.6	7.2	7.6	6.4	6.2
Maximum (range)	11–26	15–28	16–26	15–25	13–27
Maximum (mean)	18.0	18.8	20.0	19.3	20.0

dard errors from the mean) and the range of the previous 10 years, a highly significant decrease.

THE RELATIONSHIP BETWEEN AVIAN PRODUCTIVITY AND WINTER RAINFALL

The relationship between annual productivity (the number of HY birds of all 51 locally breeding species banded per 100 net hr between 10 May and 17 August) and annual rainfall (measured from 1 July of the previous year to 30 June of the year in question) was consistent for the 10 years 1976 to 1985 (Fig. 3). Productivity appeared to be at a maximum (21 to 39% above the 10-year mean) at average or slightly above average rainfall levels and showed pronounced drops (19 to 32% below the 10-year mean) at both extremely low and extremely high levels of winter rainfall. The number of HY birds banded per 100 net hr in 1986, however, was 62.3% below the 10-year mean, and was well outside the 95% confidence limit of the smoothed curve for the previous 10 years. Certainly, variations in the total annual rainfall were not a cause for the drastically lowered productivity in 1986.

It may be suggested that the amount of rain that falls in a given, perhaps critical, month could influence reproductive success as strongly as the total annual rainfall. This, however, was not the case. Annual productivity (the number of HY birds banded per 100 net hr) over the 10-year period 1976 to 1985 showed no obvious relationship to monthly rainfall totals for any of the 8 months October to May (rainfall during the remaining 4 months was nearly negligible), with the possible exception of May when a weak negative correlation between productivity and rainfall occurred (Figs. 4a–h). While this latter case suggests that late spring storms might adversely affect reproductive success, the weak correlation could well be spurious, being driven primarily by the single extreme 1977 data point. It should not be surprising that no obvious relationships emerged between productivity and individual monthly rainfall totals because the monthly rainfall totals themselves were only weakly correlated with total annual rainfall. In fact, Spearman's rank correlation coefficients between monthly rainfall totals and total annual rainfall over the 10-year period 1976 to 1985 ranged from −0.491 to +0.770 for the 8 individual months October to May and averaged only +0.450. Indeed, as is obvious from Figure 4, monthly winter rainfall totals at Palomarin showed very high variabilities. The coefficients of variation over the 10 years 1976 to 1985 ranged from 60.6% to 82.2% for the 8 individual months October to May and averaged 71.3%. In contrast, the coefficient of variation for total annual rainfall over the same 10 years was 41.6%, quite high but considerably less than the average monthly variabilities. Such a situation is probably characteristic of Mediterranean climates.

It is also evident from these data that the 1985–1986 rainfall, while 38.0% above the previous 10-year mean, was extreme during only one month, February, when a record 31.55 cm occurred (Figs. 4a–h). It is unlikely, however, that this high total February rainfall could alone have been responsible for the 1986 reproductive failure because a similarly high total February rainfall (31.19 cm) occurred in 1983 and was followed by extremely heavy March and April total rainfalls as well (a record 37.59 cm in March and a record 11.05 cm in April). Yet, reproductive success in 1983 was reduced only 20.4% from the 10-year mean while reproductive success in 1986 was reduced 62.3% from the 10-year mean. Thus, the various total monthly rainfalls in 1985–1986 provide no obvious explanation for the 1986 reproductive failure.

Springtime temperatures did not provide an obvious explanation for the 1986 reproductive failure at Palomarin either (Table 2). Slightly clearer than usual weather during the period 20 April to 31 May produced nightly minimum temperatures that averaged 7.5% below the previous 4-year mean and daily maximum temperatures that averaged 5.1% above the previous

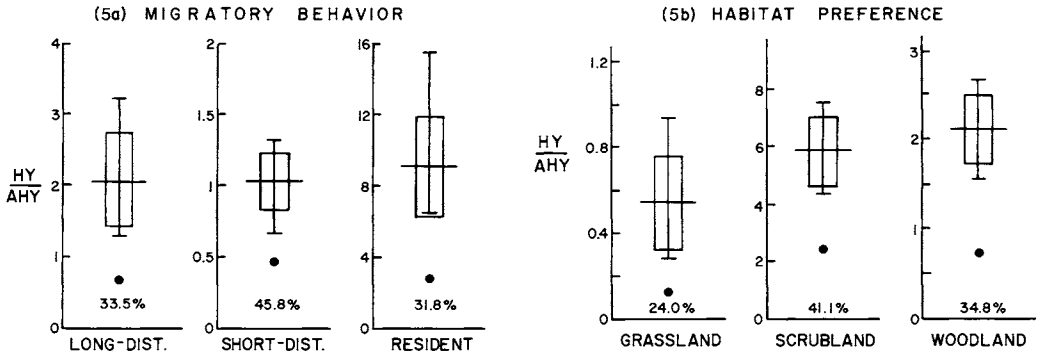


FIGURE 5. Comparison of 1986 with the previous 10 years for the HY/AHY ratio as determined from banding data during the 100-day period 10 May to 17 August for 51 species classified according to (5a) migratory behavior, (5b) habitat preference, (5c) nest location (next page), and (5d) foraging behavior (next page). Symbols and information presented are as in Figure 2.

4-year mean, but in neither case did the range of maximum or minimum temperatures fall outside the range of the previous 4 years.

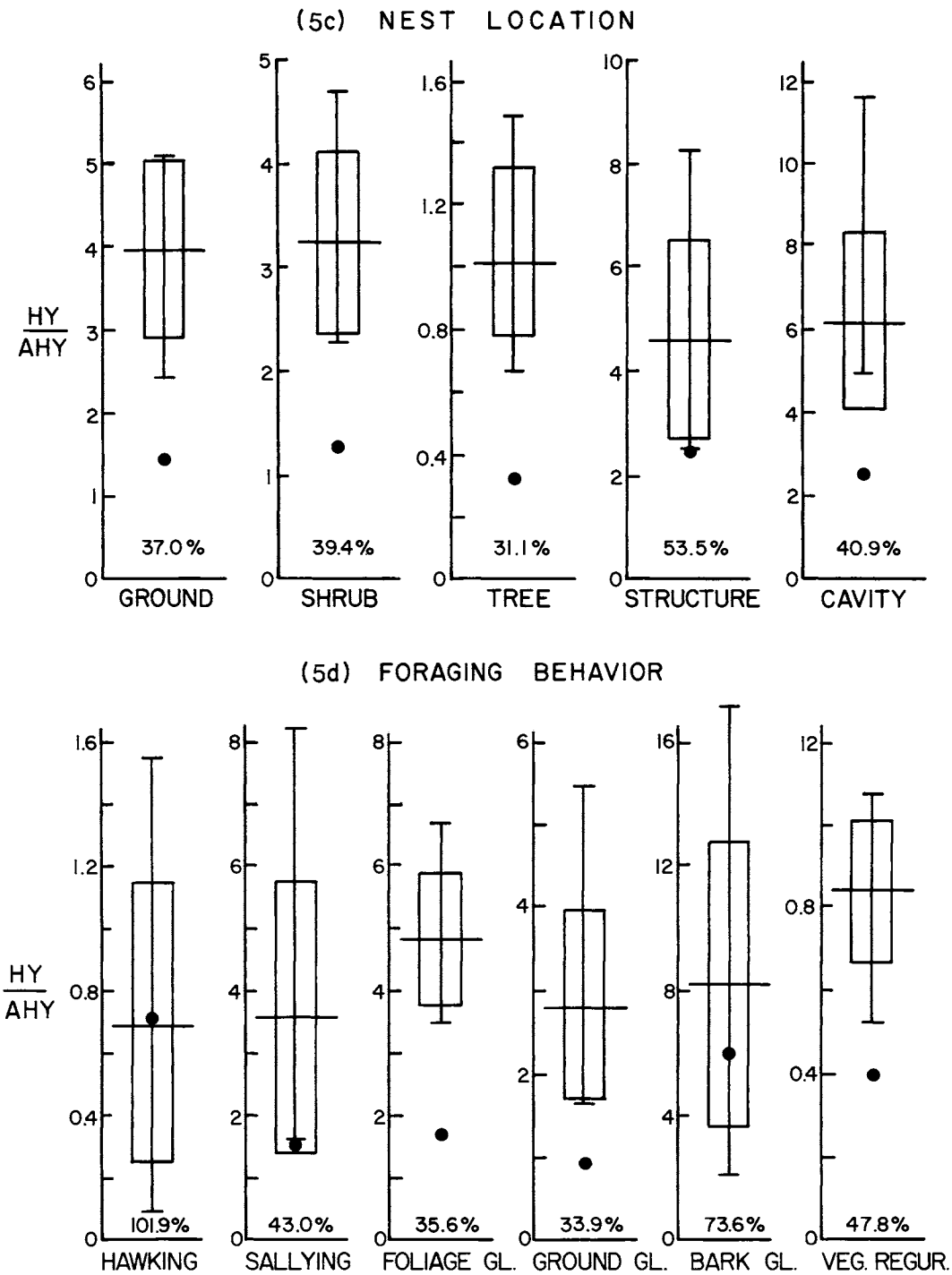
Finally, no major habitat changes have occurred in the past 11 years within at least 2 km of the study area (which lies inside the Point Reyes National Seashore), other than the gradual continuing natural succession of a portion of the disturbed coastal scrub. Furthermore, no direct application of pesticides, herbicides, or other chemical contaminants were known to have occurred in the past 11 years within at least 2 km of the study area.

THE 1986 REPRODUCTIVE FAILURE: INDIVIDUAL SPECIES AND SPECIES GROUPS

During the 10-year period 1976 to 1985, HY individuals of 31 of the 51 locally breeding species were captured in large enough numbers to allow meaningful comparisions with 1986 (Table 1). Significant decreases in the number of HY birds banded occurred in 1986 for 22 of these 31 species. In contrast, significant increases in the number of HY birds banded occurred in 1986 for only three species (Hairy Woodpecker, Northern Flicker, and Steller's Jay), while nonsignificant changes (four decreases and two increases) occurred in 1986 for six species (Downy Woodpecker, Barn Swallow, Rufous-sided Towhee, White-crowned Sparrow, House Finch, and American Goldfinch). Furthermore, only four of the 20 rare species showed increases in 1986 in the number of HY birds banded. It appears, therefore, that the 1986 reproductive failure was characteristic of the great majority of individual species as well as being highly significant for all species combined.

For AHY birds, 26 of the 51 species had large enough sample sizes during the 1976 to 1985 period to permit meaningful comparisons with 1986 (Table 1). In striking contrast to the situation for HY birds, only four of these 26 species showed significant decreases in 1986 in the number of AHY birds banded, while seven species showed significant increases in 1986, and 15 species showed nonsignificant changes in 1986 (11 decreases and four increases). Thus, no consistent increasing or decreasing trends in the number of AHY birds banded in 1986 were characteristic of the various individual species. This is in agreement with the fact that the total number of AHY birds banded in 1986 for all species combined did not differ significantly from the previous 10-year mean.

In order to provide further possible insights into the 1986 reproductive failure, species were grouped according to migratory behavior, habitat preference, nest location, and foraging behavior and the HY/AHY ratios of these groups were examined. (See footnotes to Table 1 for definitions of each of the groups.) Highly significant decreases in the HY/AHY ratio occurred in 1986 for all three groups of species classified by migratory behavior (Fig. 5a; the 1986 value was 6.73 SE from the mean of the previous 10 years for the 19 long-distance migrant species, 9.44 SE from the mean for the 13 short-distance migrant species, and 7.33 SE for the 19 resident species). These results indicate that if the 1986 reproductive failure was related to factors operating during the previous winter on the wintering grounds of the various species, these factors were not confined either to the vicinity of the Palomarin Field Station or to the tropics but



instead were very widely distributed. Alternatively, these results suggest that the factors involved were more likely operative during the breeding season at Palomarin.

Highly significant decreases in the HY/AHY ratio also occurred in 1986 for species characteristic of each of the major habitat types in the vicinity of the Palomarin Field Station (Fig. 5b;

the 1986 value was 6.20 SE from the mean of the previous 10 years for the 11 grassland species, 9.35 SE from the mean for the 13 scrubland species, and 11.58 SE for the 27 woodland species). The factors that contributed to the 1986 reproductive failure, therefore, were apparently not confined to any one habitat.

We created five nest location classifications in order to determine if the potential susceptibility to nest predators could have had an effect upon the severity of the 1986 reproductive failure. In particular, we felt that cavity nesters and, to a lesser extent, structure nesters should be less susceptible to nest predation than open-cup nesters that nest either on the ground or in shrubs or trees. Species in all five nest location groups, however, showed highly significant decreases in the HY/AHY ratio in 1986, although structure nesters (but not necessarily cavity nesters) were perhaps less severely affected (Fig. 5c; the 1986 value was 7.67 SE from the mean of the previous 10 years for the nine ground-nesting species, 7.32 SE from the mean for the 12 shrub-nesting species, 8.61 SE for the 13 tree-nesting species, 5.67 SE for the 13 cavity nesters, and 3.67 SE for the four structure nesters). This suggests that the factors causing the reduced reproductive success in 1986 were not primarily related to nest predation. The striking consistency across the various species groupings in the magnitude of the 1986 reproductive failure should be noted at this point. For all 11 groups of species classified according to migratory behavior, habitat preference, and nest location, 1986 produced, by far, the poorest HY/AHY ratio. For nine of these 11 groups, the 1986 HY/AHY ratio was only 24 to 41% of the previous 10-year mean.

Finally, we grouped the species according to their breeding season foraging behavior into six groups (Fig. 5d). These groups were developed not only to indicate the type of foraging behavior used by adult birds in the breeding season but also to reflect upon the type of food fed to nestlings. The 12 foliage-gleaning, 19 ground-gleaning, and 6 vegetation-regurgitating species showed highly significant decreases in the HY/AHY ratios in 1986 (being, respectively, 9.62, 5.37, and 8.23 SE from the mean of the previous 10 years). The 4 sallying species also showed a dramatic decrease in productivity in 1986, the HY/AHY ratio being 3.04 SE from the mean of the previous 10 years and thus falling well outside the 98% confidence interval, but barely inside the 99% confidence interval, of the mean. In sharp contrast to those four groups of species, two groups, the five hawking species (swallows) and five bark-gleaning species (woodpeckers, nuthatches, and creepers), showed no significant decreases in productivity in 1986, the HY/AHY ratio being, respectively, only 0.09 and 1.55 SE from the mean of the previous 10 years.

TIMING OF THE 1986 REPRODUCTIVE FAILURE

We next inquired when, during the season, the 1986 reproductive failure occurred. Was it evident from the very start of the season or did it occur sometime after the breeding season had begun? By comparing the 1986 HY capture rates during each of the ten 10-day periods between 10 May and 17 August with those of the previous 10 years, we found that 1986 started out as a perfectly normal year (Fig. 6a). Although the numbers of HY birds captured during the first three 10-day periods are always small, the numbers in 1986 were not significantly different from those in previous years, being some 95%, 109%, and 131%, respectively, of the previous 10-year mean. Beginning in the fourth 10-day period, however, highly significant decreases were detected in 1986 that increased in severity to a low of only 24% of average in the eighth 10-day period in late July. A slight recovery may have occurred in the ninth and tenth periods with decreases only to 34% and 37% of average, respectively. In summary, it was as if the peak of production that normally occurs from late June to mid-August simply never occurred at all in 1986, and numbers of HY birds remained roughly at early June levels.

It must be stressed here that the HY birds captured in our standardized battery of mist nets and shown in Figure 6a were, in the vast majority of cases, birds in juvenal plumage that were undergoing juvenal dispersal. They had fully grown tails and were independent of parental

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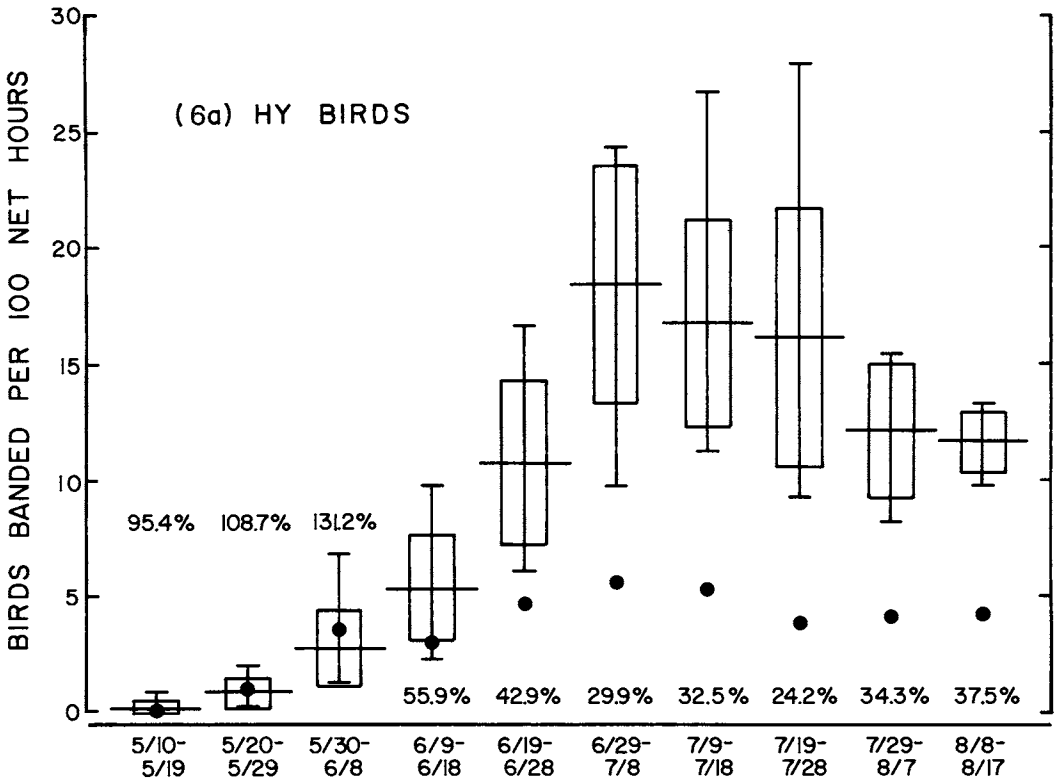
FIGURE 6. Comparison of 1986 with the previous 10 years for the number of birds banded per 100 net hr during each of the ten 10-day periods between 10 May and 17 August. (6a) HY birds. (6b) AHY birds. Symbols and information presented are as in Figures 2 and 5.



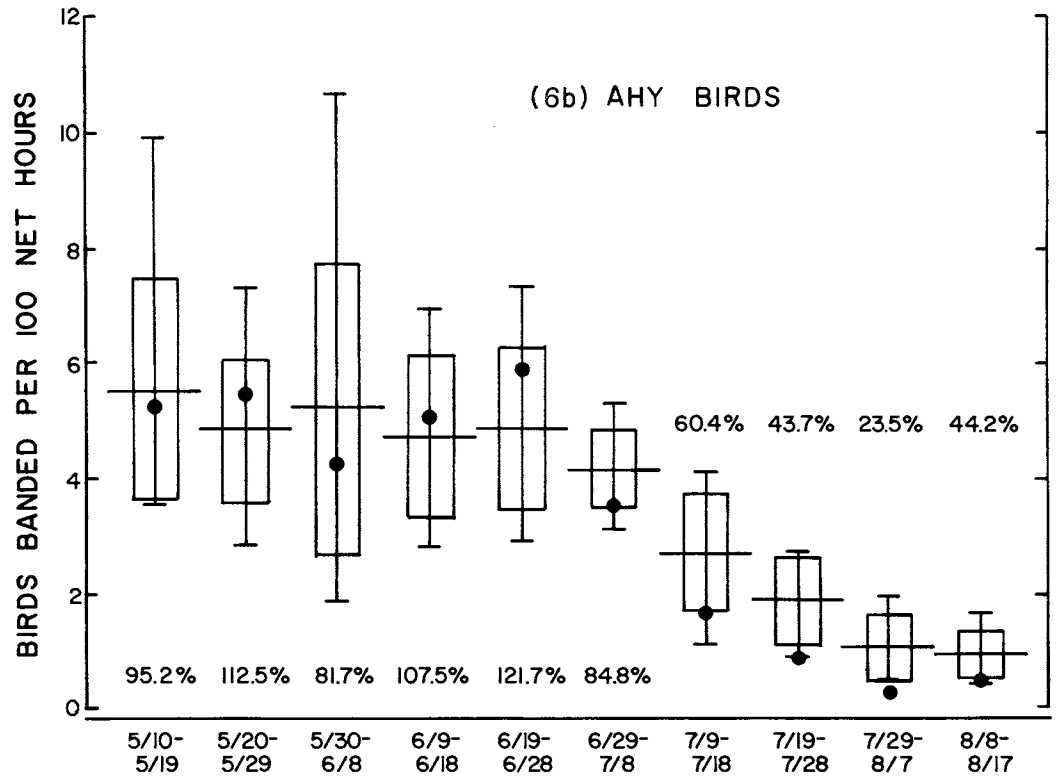


TABLE 3. Adult birds banded at the Palomarin Field Station 9 July to 17 August. Comparison of 1986 with the previous 10 years.

Classification	1976–1985			1986	% 1986[3] / Mean	No. of SE[4]	CI (%)[5]
	Mean[1]	SE[2]	Range				
Long-distance migrants	25.15	2.46	15.95–40.07	11.40	45.3	−5.59	99.9
Short-distance migrants	31.72	3.82	15.01–55.04	13.98	44.1	−4.64	99
Residents	9.84	1.71	3.34–20.03	6.15	62.5	−2.16	90

[1] Birds banded per 1,000 net hr.
[2] Standard error of the mean.
[3] The percentage that the 1986 value was of the previous 10-year mean.
[4] The number of standard errors that the 1986 value was removed from the previous 10-year mean. Calculated as (1986 value − mean value for 1976 to 1985)/SE of the mean for 1976 to 1985.
[5] The largest confidence interval of the 1976 to 1985 mean that the 1986 value was outside of.

care. In this respect, they had been out of their nests for at least 3 weeks and, in many cases, much longer. Thus, if the reproductive failure that we began to detect about 10 June was caused by an unusually high mortality of nestlings, this mortality must have begun to occur sometime between about 10 May and 20 May. If it was caused by the failure of eggs to hatch, this failure must have begun to occur somewhat earlier, about 25 April to 10 May. If it was caused by the failure of birds to breed or of females to lay eggs, it must have begun even earlier, roughly in mid-April.

We also compared 1986 with the previous 10 years for the number of AHY birds banded per 100 net hr during each of these same 10-day periods (Fig. 6b). We found no significant decreases in the number of adult birds during the first 60 days of 1986, but highly significant decreases during the last 40 days of 1986, at the time when the capture rate of adult birds normally begins to drop off. This significant decrease in 1986 could have been caused by an atypical mortality of adult birds. It could also have been caused by an unseasonably early termination of breeding activities in these birds that, in turn, was caused by their prior reproductive failures. Such an early termination of breeding activity would tend to bring about two related events: an early initiation of prebasic molt in adults, and an early initiation of fall migration in adult migrants. Both of these events would tend to lower the capture rates of adult birds because birds are less mobile and thus less likely to be captured during molt, and because adults of migrant species tend to migrate through interior California and are scarce on the coast where Palomarin is located (Stewart et al. 1974). It is of considerable interest, therefore, that the capture rate of adult birds during the last four 10-day periods of 1986 (9 July to 17 August) was significantly less than that for the previous 10 years for both long- and short-distance migrants but not for residents (Table 3). This provides a strong indication that the early termination of breeding and the consequent early initiation of molt and migration, rather than an abnormally high adult mortality, was the cause for the significantly low late season adult capture rate in 1986.

DISCUSSION

The relationship between landbird productivity in central coastal California and annual (winter) rainfall during the previous season appears to be that productivity is low in years of extremely low rainfall, increases to a maximum in years of average or slightly above average rainfall, and decreases substantially in years of very high rainfall. From an evolutionary standpoint, such a relationship may not be unexpected. It suggests that local breeding populations have become adapted to "average" levels of rainfall and produce fewer young during extreme conditions.

How might winter rainfall affect avian productivity? As winter rainfall increases from drought conditions it will bring about an increase in primary vegetative production. This, in turn, will bring about an increase in the food resources available for raising young as well as an increase in the amount of vegetative cover available for hiding nests from nest predators, at least for ground and shrub nesting species. In addition, in a Mediterranean climate, increased winter and spring rainfall will extend the time into the summer that the vegetation stays green and productive and will thus allow for additional broods or renesting attempts later in the season. All of these factors should tend to increase avian production.

Extremely high levels of winter rainfall, however, may tend to cause high winter mortality among both resident and short-distance migrant

species, thus decreasing the size of the breeding populations the following spring. Years of extremely high rainfall are often characterized by inclement spring weather (Figs. 4f, g) that can easily delay the onset of breeding and cause reproductive failures in first brood attempts. It is also conceivable that extremely high rainfall levels could directly impact food resources by negatively affecting the hatching, development, and growth of insects. All of these factors should tend to decrease avian production.

Landbird productivity in 1986, however, did not follow the pattern established over the previous 10 years. Rather, 1986 productivity was 62.3% below the mean for the previous 10 years. In this respect, it is interesting to note that the 1986 rainfall value of 118.97 cm predicts, according to the curve shown in Figure 3, a 1986 productivity value of 10.3 HY birds per 100 net hr, a value that is 110.4% of normal. The actual productivity value for the first 30 days of 1986 in fact averaged 111.7% of normal. Thus, the breeding season of 1986 started out in a perfectly predictable manner until something drastic happened a month or so into the season.

The severity of the factors that brought about the 1986 reproductive failure of landbirds at Palomarin can also be gauged by examination of Figure 3. The most severe drought that occurred in California this century occurred in 1976 and 1977. Accordingly, a drop in productivity of from 19.2% to 32.2% of the 10-year mean occurred during these years. Similarly, one of the highest winter rainfalls in California this century occurred during the Southern Oscillation/"El Niño" year of 1983 and corresponded to a drop in productivity of 20.4% from the 10-year mean. In sharp contrast, the 62.3% decrease in productivity that occurred in 1986 was two to three times as great as those caused by several of the most drastic climatic extremes experienced in California this century. The factors causing the 1986 failure must have been severe indeed.

What then did cause the dramatic decrease in productivity that occurred in most landbird species at Palomarin in 1986? Very simply, we don't know. Additional insight into the situation, however, may be obtained by investigating characteristics of the species that appeared *not* to be affected: the three species of woodpeckers, the swallows (at least the Barn Swallow), and a few other miscellaneous species. It is difficult, at first, to imagine what ecological characteristics swallows and woodpeckers could share that could have prevented them from suffering the reproductive failures that characterized most other species of landbirds in 1986. They both, however, feed their young largely on insects that are produced from detritus- or decomposer-based ecosystems, rather than from ecosystems based on primary production. Woodpeckers, for example, feed largely on grubs and beetles that feed on dying, dead, or decaying wood (Bent 1939). Swallows feed extensively on flying insects, especially Diptera, that often emerge from aquatic ecosystems (Bent 1942). In the neighborhood of the Palomarin Field Station, such aquatic ecosystems occur primarily in the flowing waters of several small, year-round or intermittent creeks, and are almost exclusively detritus-based ecosystems.

Along these same lines, the four flycatcher species partially depend upon flying insects that emerge from aquatic ecosystems. They also take substantial numbers of flying insects that emerge from terrestrial or arboreal primary production-based ecosystems. Nevertheless, their partial dependence upon nonprimary production-based ecosystems may account for their slightly less drastic productivity decline in 1986, as compared to foliage gleaners and ground gleaners (Fig. 5d). These same considerations tend to explain why structure nesters showed a less severe productivity decline in 1986 than species utilizing other nest locations (Fig. 5c): two of the four structure nesters are swallows while a third is a flycatcher.

Vegetation-regurgitating species may also have been slightly less severely affected in 1986 than most other species (Fig. 5d). It would appear that their ability to utilize primary production directly as a food supply for themselves and their young, rather than being entirely dependent upon consumers of primary production, may have helped these species to a small extent. Along these same lines, short-distance migrants seemed to have fared slightly less poorly in 1986 than either long-distance migrants or residents (Fig. 5a). This is readily explainable by the fact that fully 85% of the individual short-distance migrants banded during this study were of the six vegetation-regurgitating species.

Thus, it appears that the birds that were most severely impacted in 1986 were those species that forage and feed their young exclusively on insects that are produced within a primary pro-

duction-based ecosystem. If this were in fact the case, we might expect that species that forage and feed their young extensively on caterpillars or other large larvae that eat new plant growth might be the most severely affected. Indeed, this seems to be the case. We captured *no* HY Warbling Vireos or Black-headed Grosbeaks at Palomarin during the entire 100 days in 1986 and have no indication that any young of these species were produced anywhere in the vicinity of Palomarin. The previous 10-year means for these two species were 24 and six HY birds respectively.

The five miscellaneous species that showed no significant reproductive decline in 1986 warrant some discussion. The House Finch's 1986 reproductive success was only 16.7% of the previous 10-year mean. This drastic reproductive decline was not statistically significant only because in some years the species does not occur or breed at Palomarin at all. Regarding the Steller's Jay, we can offer no comment.

The three remaining species, Rufous-sided Towhee, White-crowned Sparrow, and American Goldfinch, are three of the four latest breeders at Palomarin and regularly fledge young well into August. (The fourth late breeder, interestingly, is the Barn Swallow which also regularly fledges young in August and occasionally even into early September.) The facts (1) that none of these four species showed significantly reduced productivities in 1986, (2) that for each of these species we banded substantial numbers of young during the final two 10-day periods of 1986, and (3) that the 1986 productivity decline during these final two 10-day periods was somewhat less than that of the three immediately preceding 10-day periods indicate that a recovery of reproductive success may have begun during these last two 10-day periods, but that it could only be detected in species whose breeding seasons regularly extend late into the season. If this were indeed the case, then the factors causing the reproductive failure may only have been operative for about 50 days.

The next obvious question is whether or not the phenomenon described here was limited to the immediate vicinity of Palomarin or extended over a greater area of California. Data from the Harvey Monroe Hall Research Natural Area in the subalpine Sierra Nevada suggests that, for Dark-eyed Juncos at least, a major reproductive failure occurred on the west slope of the central Sierra Nevada (D. DeSante, unpubl. data). Nine previous years of data have shown that numerous flocks of from 30 to 150 HY juncos normally move up the west slope of the Sierra into the subalpine in mid- to late summer. In 1986, the largest flock of dispersing juveniles recorded in the Hall Natural Area was only four individuals. Other workers on the west slope of the Sierra also reported extremely low numbers of juvenile juncos as well as a nearly complete absence of juvenile Warbling Vireos and Black-headed Grosbeaks (D. Gaines, pers. comm.).

An intensive study of the nesting of Mountain and Chestnut-backed chickadees at the Blodgett Forest Preserve on the west slope of the northern Sierra Nevada revealed that these species experienced nestling mortality during the last 2 weeks of May 1986 that was very much higher than that of any previous year (D. Dahlston, pers. comm.). Notably reduced reproductive success in 1986 as compared to 1984 and 1985 was reported for *pugetensis* White-crowned Sparrows at the Lamphere-Christensen Nature Preserve on the north coast of California (C. J. Ralph, pers. comm.). Furthermore, preliminary analysis of migrant *pugetensis* White-crowned Sparrows on Southeast Farallon Island indicates that the HY/AHY ratio for fall migrants in 1986 was 0.50 compared to the previous 5-year average of 2.71 (PRBO, unpubl. data). *Pugetensis* White-crowned Sparrows have a limited breeding range from extreme southwestern British Columbia south, west of the Cascade Range in Washington and Oregon, to northern coastal California (AOU 1957). Thus, it appears that the 1986 reproductive failure documented here for Palomarin was not limited to central coastal California but extended widely over northern California to and including the west slope of the Sierra Nevada, and perhaps north through western Oregon and Washington as well.

Interestingly, preliminary results indicate that the productivity of landbirds on the east side of the Sierra Nevada, both in the subalpine (D. DeSante, unpubl. data) and in the sagebrush shrubsteppe near Mono Lake (D. Gaines, pers. comm.), and specifically for Mountain Chickadees in Modoc County (D. Dahlston, pers. comm.), was at relatively normal levels. Similarly, preliminary data on landbirds from the Channel Islands off southern California indicate relatively normal, or even good, reproductive success (C. Collins, pers. comm.). Landbird re-

productive success, therefore, was not uniformly poor throughout all of California but varied geographically. We are currently following up these reports and investigating other reports in order to determine the full extent of the 1986 reproductive failure in western North America and elsewhere.

No obvious explanation, therefore, appears to exist for the unprecedented, drastic decline in the local production of landbirds at Palomarin and elsewhere in California in 1986. Given this situation, we surmise that the reproductive failure must have resulted from either a single very rare event or from a rare combination of not so uncommon events. One rare combination of events occurred during the period 13 to 16 February 1986, when a series of very heavy storms, in conjunction with unseasonably warm weather, deluged central California and caused widespread flooding. Night temperatures during the height of the storms were recorded in excess of 15°C. Nevertheless, it is not at all clear exactly how such a combination of events could have brought on the reproductive failure documented here, especially since the failure did not occur at the start of the breeding season but, rather, part way into it.

A second unprecedented rare combination of events occurred on 6 May 1986, when a rather cold rain coincided with the passage over coastal Washington, Oregon, and northern California of a radioactive "cloud" from the accident at the Chernobyl nuclear power plant in the U.S.S.R. We must stress at this point that there exists absolutely no direct evidence linking the reportedly very small amount of radiation dropped from the Chernobyl cloud to the reproductive failure documented here. Mere coincidence may be a possible explanation for the fact that the timing of the passage of the Chernobyl cloud coincided remarkably well with the timing of the onset of the reproductive failure at Palomarin, and that the geographical area over which substantial rainfall was coincident with the passage of the cloud appears, at first glance, to coincide with the geographical areas that experienced some reproductive failure. Furthermore, the species that tended to be unaffected by the reproductive failure were those that raise their young on insects that tend to be produced in detritus or decomposer, rather than primary production food chains. This suggests that the 1986 reproductive failure could have been caused by radioactivity precipitated from the Chernobyl cloud by rainfall, absorbed and incorporated into the primary production food chain by growing plants, concentrated in the food chain by insect consumers, and fed to nestling birds by their parents that foraged on these insects. Again, however, we must emphasize that this entire scenario is completely hypothetical, that the quantities of radioactivity that were reportedly released from Chernobyl are thought by some experts to be far too small to cause nestling mortalities (I. L. Brisbin, pers. comm.), and that the entire relationship of Chernobyl to the 1986 reproductive failure may be coincidental. Nevertheless, when such an unprecedented and drastic avian reproductive failure occurs without any obvious explanation, as we have documented here, any and all coincidences deserve further investigation.

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APPENDIX

SCIENTIFIC NAMES OF THE SPECIES MENTIONED IN THE TEXT

Band-tailed Pigeon (*Columba fasciata*), Mourning Dove (*Zenaida macroura*), Downy Woodpecker (*Picoides pubescens*), Hairy Woodpecker (*Picoides villosus*), Northern Flicker (*Colaptes auratus*), Olive-sided Flycatcher (*Contopus borealis*), Western Wood-Peewee (*Contopus sordidulus*), Western Flycatcher (*Empidonax difficilis*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Tree Swallow (*Tachycineta bicolor*), Violet-green Swallow (*Tachycineta thalassina*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*), Cliff Swallow (*Hirundo pyrrhonota*), Barn Swallow (*Hirundo rustica*), Steller's Jay (*Cyanocitta stelleri*), Scrub Jay (*Aphelocoma coerulescens*), Mountain Chickadee (*Parus gambeli*), Chestnut-backed Chickadee (*Parus rufescens*), Plain Titmouse (*Parus inornatus*), Bushtit (*Psaltriparus minimus*), Red-breasted Nuthatch (*Sitta canadensis*), Brown Creeper (*Certhia americana*), Bewick's Wren (*Thryomanes bewickii*), Winter Wren (*Troglodytes troglodytes*), Golden-crowned Kinglet (*Regulus satrapa*), Western Bluebird (*Sialia mexicana*), Swainson's Thrush (*Catharus ustulatus*), Hermit Thrush (*Catharus guttatus*), American Robin (*Turdus migratorius*), Wrentit (*Chamaea fasciata*), European Starling (*Sturnus vulgaris*), Hutton's Vireo (*Vireo huttoni*), Warbling Vireo (*Vireo gilvus*), Orange-crowned Warbler (*Vermivora celata*), MacGillivray's Warbler (*Oporornis tolmiei*), Wilson's Warbler (*Wilsonia pusilla*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Rufous-sided Towhee (*Pipilo erythrophthalmus*), Brown Towhee (*Pipilo fuscus*), Rufous-crowned Sparrow (*Aimophila ruficeps*), Black-chinned Sparrow (*Spizella atrogularis*), Savannah Sparrow (*Passerculus sandwichensis*), Grasshopper Sparrow (*Ammodramus savannarum*), Song Sparrow (*Melospiza melodia*), White-crowned Sparrow (*Zonotrichia leucophrys*), Dark-eyed Junco (*Junco hyemalis*), Red-winged Blackbird (*Agelaius phoeniceus*), Brown-headed Cowbird (*Molothrus ater*), Purple Finch (*Carpodacus purpureus*), House Finch (*Carpodacus mexicanus*), Pine Siskin (*Carduelis pinus*), American Goldfinch (*Carduelis tristis*).

SCOTT CASHEN: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE TOWN AND COUNTRY PROJECT

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California Wildlife Habitat Relationships System
California Department of Fish and Game
California Interagency Wildlife Task Group

Coastal Scrub

Sally de Becker

Vegetation

Structure-- Structure of the plant associations that comprise Coastal Scrub is typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system (Harrison et al. 1971, Bakker 1972). Structure differs among stands, mostly along a gradient that parallels the Pacific coastline. Northern Coastal Scrub, from Humboldt County to the San Francisco Bay Area, ranges from a patchy oceanside cover of nearly prostrate subshrubs surrounded by grassland to a dense and continuous cover of two layers: an overstory of shrubs up to 2 m (7 ft) tall and a perennial herb/subshrub understory up to 0.3 m (1 ft) tall. The southern sage scrub form, typical of inland central (around Mt. Diablo) and most southern stands, is made up of a shrub layer up to 2.0 m (7 ft) tall. Canopy cover usually approaches 100 percent in these stands (Mooney 1977), although bare areas are sometimes present. Sufficient light penetrates through the canopy to support an herbaceous understory. Bare zones about 1 m (3 ft) wide may extend from stands dominated by sage species into surrounding annual grasslands (Halligan 1973, Mooney 1977, Westman 1981 a) .

Composition-- No single species is typical of all Coastal Scrub stands. As with structure, composition changes most markedly with progressively more xeric conditions from north to south along the coast. With the change from mesic to xeric sites, dominance appears to shift from evergreen species in the north to drought-deciduous species in the south. Variation in coastal influence at a given latitude produces less pronounced composition changes. Two types of northern Coastal Scrub are usually recognized. The first type (limited in range) occurs as low-growing patches of bush lupine and many-colored lupine at exposed, oceanside sites. The second and more common type of northern Coastal Scrub usually occurs at less exposed sites. Here coyotebush dominates the overstory. Other common overstory species are blue blossom ceanothus, coffeeberry, salal, bush monkeyflower, blackberry, poison-oak and wooly sunflower. Bracken fern and swordfern are dominant in the understory; common cowparsnip, Indian paintbrush, yerba buena and California oatgrass are typically present (Heady et al. 1977). Around Half Moon Bay, western hazelnut, Pacific bayberry, and sagebrush are also present (Mayfield and Shadle 1983).

Southern sage scrub, occurring intermittently over a larger area than the two northern Coastal Scrub types, is subdivided into three main types. Differences in composition of these three types correspond mostly to available moisture. A fairly common species in all

three types is California sagebrush. The most mesic area, from Mt. Diablo south to Santa Barbara, is dominated by black sage and California buckwheat. In the less mesic region from Santa Barbara south to Orange County, purple sage and California buckwheat join black sage in importance. Golden yarrow, isocoma, rolled leaf monkeyflower, and California encelia are typical. Chaparral yucca is found on the slightly drier sites within the region, especially in Ventura County (Kirkpatrick and Hutchinson 1977, Mooney 1977, Westman 1981b, Gray 1982). The southernmost stands are the most xeric of the form. Composition here is characterized by succulent species and a distinct Baja California influence. In addition to the California sagebrush, California buckwheat, and wooly sunflower typical of the stands farther north, California adolphia, coastal agave, and cunyado are present south of San Diego (Mooney 1977, Westman 1981a).

Other Classifications-- The following vegetation types and plant communities defined in the literature fall into WHR's Coastal Scrub habitat: Coyote Brush, Lupine, Salal, Sumac, Ragweed, California Sagebrush, Encelia, Buckwheat and Sage described by Parker and Matyas (1981); the Opuntia series of succulent shrub subformation and the Coastal Sagebrush, Encelia, Baccharis, Salvia, Lupine, and California Buckwheat series of the soft chaparral subformation described by Paysen et al. (1980); Coastal Strand, Northern Coastal Scrub, Coastal Sage Scrub, and Coastal Sagebrush described by Munz and Keck (1973); Coastal Sagebrush, Northern Seashore Communities (Northern Dune Scrub), Southern Seashore Communities (Central Dune Scrub, Southern Dune Scrub), and Coastal Prairie - Scrub Mosaic described by Küchler (1977); and the Northern Coastal Dune Scrub subdivision of Partially Stabilized and Stabilized Coastal Dunes, Coastal Bluff Scrub, Coastal Scrub, and Maritime Cactus Scrub described by Cheatham and Haller (1975).

Habitat Stages

Vegetation Changes-- 1;24:S-D Only tentative conclusions can be drawn from the relatively few studies of vegetation change in Coastal Scrub. Stands in some areas are considered seral stages. But most phases of Coastal Scrub probably change little in composition after the first 10 years following fire or if subjected only to natural, moderate disturbance. In contrast, major or human-caused disturbances often permit Coastal Scrub to invade new areas, or permit invasion by other habitats.

The lupine phase of northern Coastal Scrub appears to be replaced by grasslands under grazing pressure, returning if grazing is halted; when undisturbed, the lupine phase appears to persist in a dynamic equilibrium, patches dying out while new ones become established (Davidson and Barbour 1977). The coyotebush stands in the north have been considered a seral stage in a progression from grassland to forest, though evidence is inconclusive. Elliott and Wehausen (1974) found no significant increase of scrub in a Pt. Reyes coastal prairie grassland/northern Coastal Scrub mosaic when cattle were excluded for six years. Coyotebush was replaced by forest in the Berkeley Hills (by mixed evergreen forest, coast live oak forest and California bay forest) (McBride and Heady 1968, McBride 1974), but this replacement pattern was not observed on the nearby Pt.

Reyes Peninsula (Grams et al. 1977).

Southern Coastal Scrub on some sites is replaced by chaparral types (Mooney 1977, Gray 1983) but the usual trend of vegetation change in undisturbed or naturally disturbed stands is towards shrubs of various ages and size classes. Composition remains constant because recruitment is continual. Seeds germinate and young plants survive and grow under the canopy of mature plants. Southern Coastal Scrub is fire-adapted and most species sprout readily from crowns after burning. Thus, fire temporarily creates an even-aged stand, but reproduction by seed occurs within the second year after fire (Westman 1982).

Disturbances such as road cuts or landslides create areas often invaded by both northern and southern Coastal Scrub. Light, wind-dispersed seed and tolerance of xeric conditions allow Coastal Scrub to establish itself in disturbed areas (Harrison et al. 1971, Malanson and O'Leary 1982). Disturbance caused by oxidants in air pollution may have caused reduced cover by native Coastal Scrub species at certain sites in southern California (Westman 1979).

Duration of Stages-- As discussed, most Coastal Scrub types can probably exist indefinitely and will not change greatly in the absence of disturbance, or when affected only by natural perturbations. Bradbury (1978) observed southern sage scrub surrounded by chaparral types that endured for over 45 years; Westman (1981a) observed healthy stands that had not burned in over 60 years. McBride (1974) estimates that invasion by chamise, chaparral, forest or woodland types would take 50 years.

Biological Setting

Habitat-- At its lowest elevations, Coastal Scrub is associated with Coastal Dunes, Coastal Prairie/Perennial Grassland (PGS), Cropland (CRP) and Pasture (PAS). At its central and highest elevations, it is associated with annual grassland (AGS), Douglas fir-Hardwood (DFR), Coastal Oak Woodland (COW), Montane Hardwood (MHW), Closed-Cone Pine Cypress (CPC), Chamise-Redshank Chaparral (CRC) and Mixed Chaparral (MCH).

Wildlife Considerations-- Little is known about the importance of Coastal Scrub habitat to wildlife. Though vegetation productivity is lower in Coastal Scrub than in adjacent chaparral habitats associated with it (Gray 1982), Coastal Scrub appears to support numbers of vertebrate species roughlyequivalent to those in surrounding habitats (Stebbins 1978). The Federal and State listed endangered peregrine falcon, Morro Bay kangaroo rat and the Santa Cruz long-toed salamander all occur in Coastal Scrub (Jones & Stokes 1981), though not exclusively. A subspecies of the black-tailed gnatcatcher, a California Department of Fish and Game Species of Special Concern (Remsen 1978), is found exclusively in southern sage scrub.

Physical Setting

Coastal Scrub seems to tolerate drier conditions than its associated habitats. It is typical of areas with steep, south-facing slopes; sandy, mudstone or shale soils; and average annual rainfall of less than 30 cm (12 in). However, it also regularly occurs on stabilized dunes, flat terraces, and moderate slopes of all aspects where average annual rainfall is up to 60 cm (24 in). Stand composition and structure differ markedly in response to these physiographic features (Harrison et al. 1971, Bakker 1972, Mooney 1977, Cole 1980, Kirkpatrick and Hutchinson 1980, Parker and Matyas 1981, Westman 1981b).

Distribution

Coastal Scrub occurs discontinuously in a narrow strip throughout the length of California. Latitude ranges from about 32~ to 42 N and longitude ranges between 117 and 124 . Coastal Scrub usually occurs within about 45 km (20 mi) of the ocean; in Riverside County, it extends at least 110 km (50 mi) inland (see map). Elevation ranges from sea level to about 900 m (3000 ft).

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Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California

2011 Annual Data Summary

Prepared for:

San Diego River Conservancy

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
WESTERN ECOLOGICAL RESEARCH CENTER

Distribution, Abundance, and Breeding Activities of the Least Bell's Vireo along the San Diego River, California

By Suellen Lynn and Barbara E. Kus

U.S. GEOLOGICAL SURVEY
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EXECUTIVE SUMMARY

Surveys for the endangered Least Bell's Vireo (*Vireo bellii pusillus*) were conducted along the San Diego River between 4 April and 14 June 2011. Riparian habitat suitable for vireos from Interstate 5 to the El Capitan Reservoir was surveyed three times. Sixty-seven territorial male vireos were detected, 42 (63%) of which were confirmed as paired. Five transient vireos were also detected.

Most (94%) vireo territories occurred in four of six sections surveyed: Santee (27%), Park (27%), Gorge (22%), and Lakeside (18%). The Valley survey section contained four vireo territories (6%) and no vireo territories were detected in the El Capitan survey section. The number of territorial Least Bell's Vireos detected in 2011 decreased 26% from 2010. Vireo numbers decreased in all six survey sections, with the smallest decrease in the Park area (14%).

The majority of vireo territories (57%) occurred in habitat characterized as mixed willow (*Salix* spp.) riparian. Thirty-nine percent of territories occurred in willow habitat co-dominated by cottonwoods (*Populus fremontii*), and one territory each occurred in willow habitat co-dominated by sycamores (*Platanus racemosa*), riparian scrub, and upland scrub.

Of the 117 vireos (males and females) detected in 2011, 18 were color banded prior to 2011, 4 with single numbered bands were recaptured and given color combinations in 2011, and twelve unbanded adult vireos were captured and given color combinations. One other adult vireo was banded with a single numbered light blue metal band indicating that she had been banded as a nestling in the study are in 2008, 2009, or 2010 but we were unable to capture her to determine her identity or give her a color combination. Fifty nestlings were banded in 2011 for the first time with a single numbered federal band.

Forty-one percent (43% of males and 33% of females) of adult vireos banded prior to 2011 returned to the San Diego River in 2011. Four additional adult vireos that were not detected in 2010 were observed in 2011. Three were originally banded on the San Diego River in 2008, one male as a nestling, one male as an adult, and one female as an adult. The fourth vireo, a male, was banded as an adult on the San Diego River in 2006. The detection of these adult vireos increased first-year survivorship for 2008-2009 from 17% to 19% and adult survivorship for the same years to 84%. Four of the 38 hatch-year banded vireos that survived to fledge in 2010 returned in 2011 for a first-year survivorship of 11% (11% for males and 11% for females). Survival rate for adults at the Treatment site was 47% (46% for males and 50% for females) and at the Reference site was 31% (36% for males and 0% for females).

All of the returning adults occupied the same territory that they had occupied in 2010 or the territory adjacent to their 2010 territory. The average distance first-year vireos dispersed from the San Diego River to all sites was 3.9 ± 5.9 km (SD) (n = 4).

A single Willow Flycatcher (*Empidonax traillii*) was detected in the Valley survey area in early June. This bird was only seen once and we were unable to determine whether or not it was banded.

Nesting activity was monitored in 22 territories, 11 within the Treatment site where Brown-headed Cowbirds (*Molothrus ater*) have been trapped for 3 years and 11 within the Reference site, where cowbird trapping began this year. Cowbird traps were open from 1 April through 31 May. A total of 38 nests were monitored during the breeding season; however, four of these were not completed and were excluded from calculations of nest success and productivity. Twenty-four percent of pairs had initiated their first nest by the end of April and two pairs did not initiate nesting until June. No pairs successfully fledged two broods in 2011.

Only one instance of parasitism by Brown-headed Cowbirds was observed in the study area in 2011, in a nest at the Reference site. The rate of cowbird parasitism in the study area has decreased each year from 2008 to 2011 but has been consistently higher at the Reference site than at the Treatment site, where cowbird trapping has occurred annually since 2009. No nests failed as a result of cowbird parasitism. One parasitized nest fledged two young after removal of cowbird eggs by nest monitors.

Forty-four percent of all completed vireo nests in our monitoring sites successfully produced at least one vireo fledgling. If cowbird eggs had not been removed from nests, the nest success rate would have been 41%. Nest success did not differ significantly between Treatment and Reference sites (29% and 15%, respectively). Fifty-six percent of nests were not successful. Predation was believed to be the primary source of nest failure at all sites, accounting for 78% of nest failures. Other causes of nest failure included abandonment after rain, poor nest construction, and unknown reasons. Average clutch size was relatively high across all sites and was not reduced in nests that experienced cowbird parasitism. The number of vireo young fledged per pair was significantly higher at the Treatment site than at the Reference site.

In 2011, successful and unsuccessful nests within Treatment and Reference sites did not differ statistically in nest placement characteristics. There were few differences in nest placement between nests at Treatment and Reference sites, with Treatment site nests placed lower and closer to the edge of the nest clump than Reference site nests. Ten plant species were used as hosts for vireo nests in 2011. Sixty-five percent of all nests were placed in mule fat (*Baccharis salicifolia*), red or arroyo willow (*S. laevigata* or *S. lasiolepis*), or black willow (*S. gooddingii*).

INTRODUCTION

The Least Bell's Vireo (*Vireo bellii pusillus*; "vireo") is a small, migratory songbird that breeds in southern California and northwestern Baja California, Mexico from April through July. Historically abundant within lowland riparian ecosystems, vireo populations began declining in the late 1900's as a result of habitat loss and alteration associated with urbanization and conversion of land adjacent to rivers to agriculture (Franzreb 1989, USFWS 1998, RHJV 2004). Additional factors contributing to the vireo's decline have been the expansion in range of the Brown-headed Cowbird (*Molothrus ater*), a brood parasite, to include the Pacific coast (USFWS 1986; Franzreb 1989; Kus 1998, 1999; Kus et al 2010), and the introduction of invasive exotic plant species, such as giant reed (*Arundo donax*), into riparian systems. By 1986, the vireo population in California numbered just 300 territorial males (USFWS 1986).

In response to the dramatic reduction in numbers of Least Bell's Vireos in California, the California Fish and Game Commission listed the species as endangered in 1980, and the U.S. Fish and Wildlife Service followed suit in 1986. Since listing, the vireo population in southern California has rebounded, largely in response to cowbird control and habitat restoration and preservation (Kus and Whitfield 2005). As of 2006, the statewide vireo population was estimated to be approximately 3,000 territories (USFWS 2006).

The San Diego River has been subject to a number of Least Bell's Vireo surveys and nest monitoring activities over the past 30 years. In 1978, Goldwasser (1978) found 12 vireo territories between Mission Valley and State Route 67. Jones (1985) found 33 vireo territories from just west of the Old Mission Dam to State Route 67 in 1984. Jones assumed that this increase of 21 vireo territories was not an actual increase in vireo numbers but rather an increase in survey effort. This number remained relatively stable through 1988 (SANDAG 1990), and increased to 58 territories by 1997 (Kus and Beck 1998). The increase in vireo numbers occurred concurrently with cowbird control efforts, which were initiated in the Mission Trails Park area in 1984 (Jones 1985).

Natural resource managers on the San Diego River have identified two management activities, giant reed removal and cowbird control, that have been effective in enhancing vireo numbers elsewhere and in the past on the San Diego River (Jones 1985, Kus and Whitfield 2005). Both of these management activities have the potential to be expensive in terms of money (e.g., cost of operating cowbird traps annually in perpetuity) and collateral impacts (e.g., short-term reduction of vegetation cover in vireo habitat). Therefore, our project was designed to allow an experimental determination of the most cost- and biologically-effective means to implement these management activities.

Giant reed is a highly invasive, non-native plant within riparian systems in southern California. Originally introduced for bank stabilization in the 1800's, giant reed has become a major component of many riparian systems, becoming the dominant vegetation within streams and rivers. As part of a riparian restoration effort, large quantities of giant reed have been removed from sections of the San Diego River in the past. Areas that have recently undergone giant reed removal tend to consist of patches of native woody plants surrounded by areas of bare

earth. These open areas are typically populated by native and non-native herbaceous plants until the appropriate conditions arise that allow for the establishment of native woody species, such as mule fat (*Baccharis salicifolia*), sandbar willow (*Salix exigua*), black willow (*S. gooddingii*), arroyo willow (*S. lasiolepis*), and red willow (*S. laevigata*).

As part of our project, giant reed was removed from the eastern reach of the Valley section of the survey area and the western reach of the Santee section along Carlton Oaks Golf Course in late 2008/early 2009. We surveyed for vireos along the San Diego River drainage from Interstate 5 to El Capitan Dam before and after the giant reed removal to determine how vireo distribution and abundance responded to this management activity.

Brood parasitism by Brown-headed Cowbirds has been identified as one of the leading causes of decline in vireo populations (Kus 1999). Cowbird trapping, in addition to nest monitoring to detect and remove cowbird eggs from vireo nests, has the potential to virtually eliminate parasitism in many populations. Cowbird trapping and vireo nest monitoring were first implemented on the San Diego River in 1984 (Jones 1985), and standardized nest monitoring began in 1986 (G. Collier and B. Jones, unpubl. data). Cowbird trapping was conducted annually from 1987 through at least 1996 (Kus and Whitfield 2005), and also in 2001 through 2007 (Varanus Biological Services 2001, 2003; Varanus Monitoring Services 2004, 2007) in Mission Trails Regional Park.

To determine the effectiveness of various potential cowbird trapping regimes, we monitored vireo nesting activity at two monitoring plots according to the following plan: (year 1 - 2008) no cowbird trapping (baseline with no management); (year 2 - 2009) cowbird traps operated at one of two monitoring plots from 25 April through 30 July (contracting constraints delayed intended start date of 1 April); (year 3 - 2010) cowbird traps operated at the same monitoring plot for a shorter period, from 1 April through 31 May; (year 4 – current year) cowbird traps operated at both monitoring plots from 1 April through 31 May; and (year 5) no cowbird trapping but vireo nesting activity will be monitored at both plots. Data from year 2 allowed us to document the effectiveness of cowbird trapping by comparing parasitism in trapped and non-trapped monitoring plots. Year 3 allowed us to explore the efficacy of a shortened trapping period relative to the traditional period employed in year 2. Year 4 demonstrated the response to site-wide cowbird management under the shortened trapping timeframe, while year 5 will allow us to investigate the potential for biannual cowbird control as an effective alternative to the current practice of annual cowbird trapping.

Our objectives in this study were to (1) determine abundance and distribution of vireos along the San Diego River to facilitate population trend analyses and response to management activities, (2) band a subset of vireos to estimate vireo survivorship and movement for the population as a whole and in response to management activities, (3) assess the effect of giant reed removal on vireo abundance and distribution, and (4) assess the short-term effects of varied Brown-headed Cowbird control regimes on vireo fecundity, nest success, and productivity by intensively monitoring vireos within nest monitoring sites. These data, when combined with data from other years, will inform natural resource managers about the status of this endangered species along the San Diego River, and guide modification of land use and management practices as appropriate to ensure the species' continued existence.

This work was funded by the San Diego River Conservancy, San Diego, California.

STUDY AREAS AND METHODS

Natural History

Male vireos arrive on breeding grounds in southern California in mid-March. Male vireos are conspicuous, and frequently sing their diagnostic primary song from exposed perches throughout the breeding season. Females arrive approximately 1-2 weeks after males and are more secretive, but are often seen early in the season traveling through habitat with the male. The female, with the male's help, builds an open cup nest in dense vegetation approximately 1 m above the ground. Clutch size for Least Bell's Vireos average 3-4 eggs. Typically, the female and male incubate the eggs for 14 days and young fledge from the nest at 11-12 days of age. It is not unusual for vireos to re-nest after a failed attempt provided ample time remains within the breeding season. Vireos rarely fledge more than one brood in a season although double-brooding is not uncommon when conditions are favorable (Lynn and Kus 2009, Ferree and Kus 2008). Nesting lasts from early April through July, but adults and juvenile birds remain on the breeding grounds into late September/early October before migrating to their wintering grounds in southern Baja California, Mexico.

Field Surveys

Riparian habitat along the San Diego River from Interstate 5 to El Capitan Reservoir was surveyed for vireos between 4 April and 14 June 2011 (Fig. 1). Field work was conducted by Aaron Gallagher, PJ Falatek, Michael Hague, Alex Houston, Suellen Lynn, Ryan Pottinger, and Sonya Steckler. The survey area was divided into six sections:

1. ***Valley:*** From Interstate 5 upstream 10.2 km to San Diego Mission Road (Fig.1; Appendix A, Fig. 8).

2. ***Gorge:*** From San Diego Mission Road upstream 6.5 km to Jackson Drive (Fig. 1; Appendix A, Fig. 9).

3. ***Park:*** From Jackson Drive upstream 5.1 km to West Hills Parkway (Fig. 1; Appendix A, Fig. 9).

4. ***Santee:*** From West Hills Parkway upstream 8.1 km to Riverford Road (Fig. 1; Appendix A, Fig. 10).

5. ***Lakeside:*** From Riverford Road upstream 3.9 km to Ashwood Street (Fig. 1; Appendix A, Fig. 11).

6. ***El Capitan:*** From Ashwood Street upstream approximately 3.6 km, and from El Capitan Dam downstream approximately 1.2 km. In 2011, we were not able to gain access to the remaining section of this survey area (Fig. 1; Appendix A, Fig. 12).

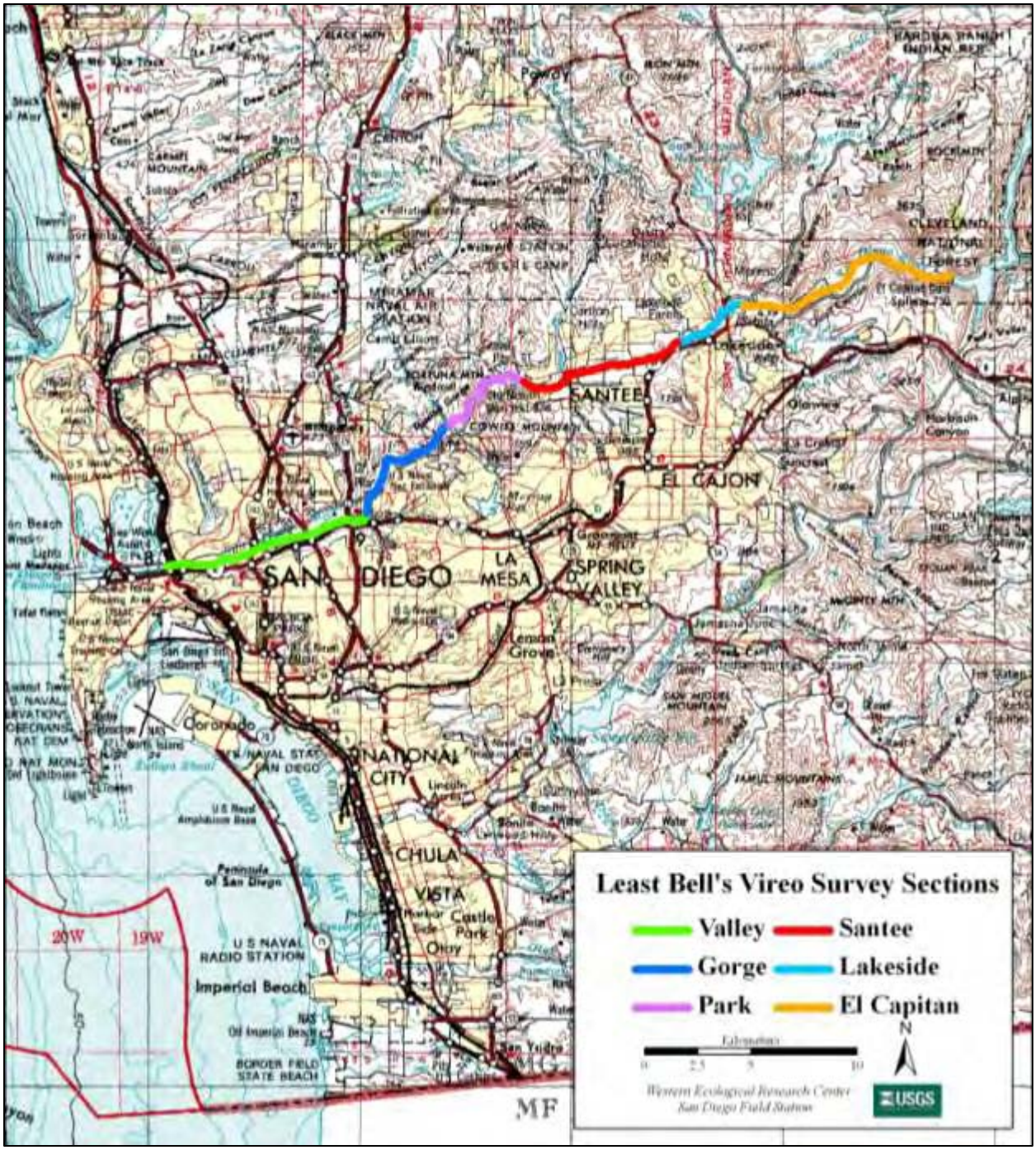

Fig. 1. Least Bell's Vireo survey sections along the San Diego River, 2011.

Giant reed was removed from the eastern part of the Valley survey section beginning in late 2008 and from the western part of the Santee survey section beginning in late 2009 (Fig. 2).

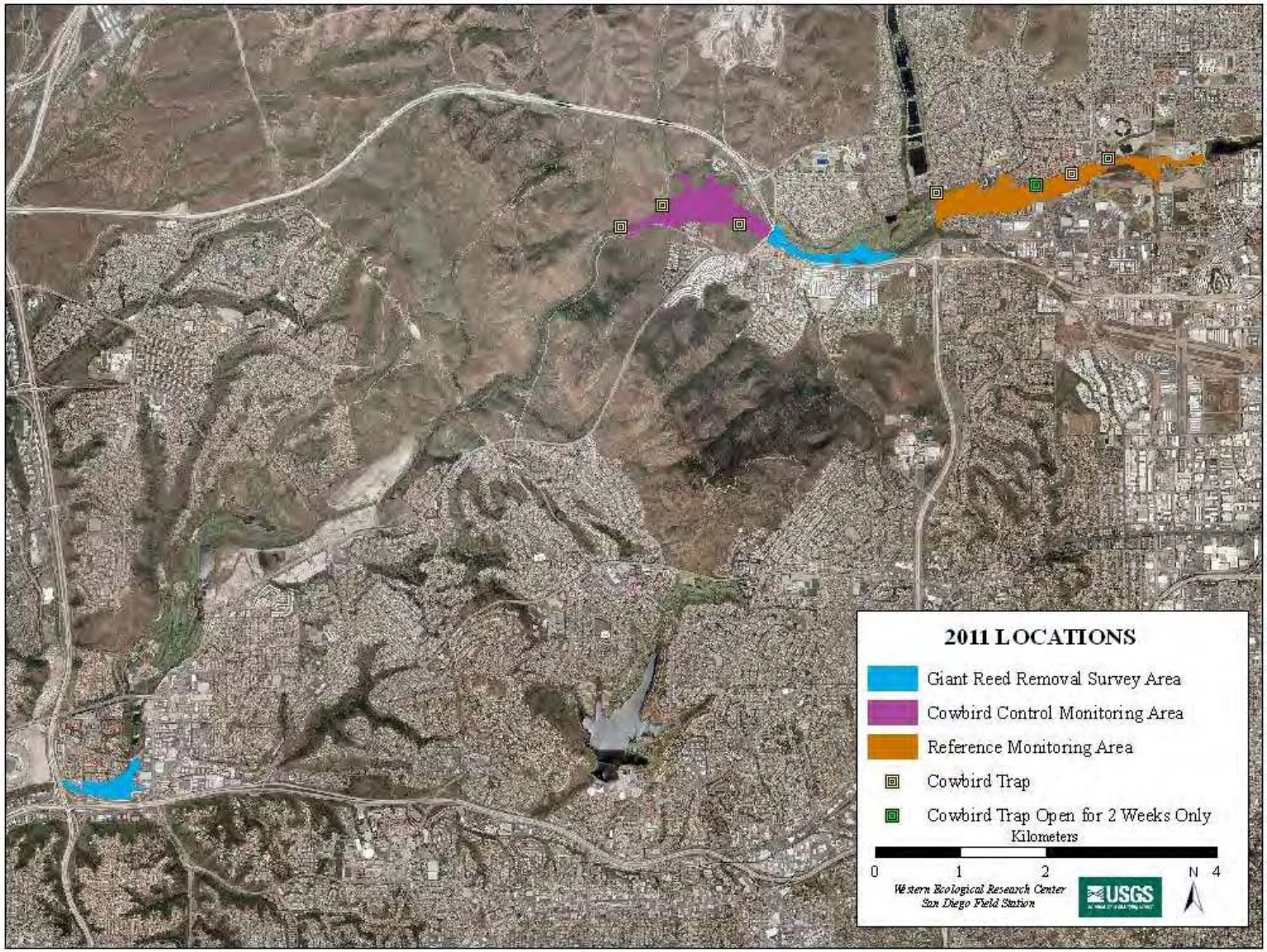

Fig. 2. Location of Least Bell's Vireo nest monitoring areas along the San Diego River, 2011.

Biologists followed standard survey techniques described in the USFWS Least Bell's Vireo survey guidelines (USFWS 2001). Observers moved slowly (1-2 km per hour) through the riparian habitat while searching and listening for vireos. Observers walked along the edge(s) of the riparian corridor on the upland and/or river side where habitat was narrow enough to detect a bird on the opposite edge. In wider stands, observers traversed the habitat to detect all birds throughout its extent. Surveys were conducted between dawn and early afternoon, depending on wind and weather conditions.

All male vireos were detected and confirmed audibly by hearing their diagnostic song. Attempts were made to observe males visually to note banding status but visual identification was not required to confirm the identity of the species as the song was considered the most diagnostic field characteristic. The presence of a female vireo within a territory was confirmed either audibly through the detection of the "pair call" elicited between mated birds, or visually when observed traveling quietly with the male. For each bird encountered, investigators recorded age (adult or juvenile), sex, breeding status (paired, unpaired, undetermined, or transient), and whether the bird was banded. Birds were considered transients if they were not detected again on subsequent surveys after an initial detection. Vireo locations were mapped using a Garmin 12 Global Positioning System (GPS) unit or Garmin GPS 60 unit with 1-15 m positioning accuracy to determine geographic coordinates (WGS84). Dominant native and exotic plants were recorded, and percent cover of exotic vegetation estimated using cover categories of < 5, 5-50, 51-95 and > 95%. The overall habitat type within the territory was specified according to the following categories:

Mixed willow riparian: Habitat dominated by one or more willow species including black willow, arroyo willow, and red willow, with mule fat as a frequent co-dominant.

Willow-cottonwood: Willow riparian habitat in which cottonwood (*Populus fremontii*) is a co-dominant.

Willow-sycamore: Willow riparian habitat in which sycamore (*Platanus racemosa*) is a co-dominant.

Sycamore-oak: Woodlands in which sycamore and oak (*Quercus agrifolia*) occur as co-dominants.

Riparian scrub: Dry and/or sandy habitat dominated by sandbar willow or mule fat, with few other woody species.

Upland scrub: Coastal sage scrub adjacent to riparian habitat.

Non-native: Sites vegetated exclusively with non-native species such as giant reed and salt-cedar (*Tamarix ramosissima*).

Nest Monitoring

We monitored vireos from 4 April through 27 July within two areas, one in which cowbird trapping occurred from 2009 through 2011 (hereafter referred to as "Treatment" site, in the Park survey section) and a paired site in which cowbird trapping began in 2011 (hereafter referred to as "Reference" site, in the Santee survey section; Fig. 2). We attempted to document nesting activity for ten pairs per site throughout the breeding season. Pairs were chosen in order of their detection on-site during the first vireo survey to ensure a complete record of activity within the territory, and attempts were made to monitor the same territories that had been monitored in previous years.

Pairs were observed for evidence of nesting, and their nests were located. Nests were visited as infrequently as possible to minimize the chances of leading predators or Brown-headed Cowbirds to nest sites; typically, there were 3-5 visits per nest. The first visit was timed to determine the number of eggs laid, the next few visits to document hatching and age of young, and the last to band nestlings. Fledging was confirmed through detection of young outside the nest, or rarely, the presence of feather dust in the nest (SUC). Unsuccessful nests were placed into one of four nest fate categories. Nests found empty or destroyed prior to the estimated fledge date and where the adult vireos were not found tending fledgling(s) were considered depredated (PRE). Previously active nests that were subsequently abandoned by adult vireos after one or more Brown-headed Cowbird eggs were laid in the nest were considered to have failed because of nest parasitism (PAR). Any nests that fledged cowbird young without fledging vireo young were also considered to have failed because of nest parasitism (PAR). Nests failing for reasons such as poor nest construction or the collapse of a host plant that caused a nest's contents to be dumped onto the ground, or the presence of a clutch of infertile eggs, were classified as failing because of other causes that were known (OTH). Nests that appeared intact and undisturbed but were abandoned with vireo eggs and/or nestlings were classified as having failed because of unknown causes (UNK).

Characteristics of nests were recorded following abandonment or fledging of young from nests. These data included nest height, host species, host height, and the distance nests were placed from the edge of the host plant, the edge of the vegetation clump in which they were placed, and the riparian/upland edge.

In 2011, three cowbird traps were operated from 1 April through 31 May in the Treatment site at the same locations they were operated in 2009 and 2010 (Sexton 2009, 2010, 2011; Fig. 2). In addition, three new cowbird traps were established in the Reference site and operated for the same dates (1 April through 31 May). We followed our standard protocol for manipulating nest contents in the event cowbird eggs or nestlings were detected in vireo nests. In nests with fewer than three vireo eggs, cowbird eggs were removed no sooner than the seventh day of incubation to minimize the possibility of nest abandonment in response to the removal. Cowbird eggs were removed from nests containing three or more vireo eggs as they were found. Cowbird nestlings were removed immediately from nests. Performed in this way, nest manipulation allows many parasitized nests to remain active and potentially fledge young where they would otherwise fail to fledge vireo young (Kus 1999).

Banding

The primary goals of banding Least Bell's Vireos along the San Diego River were: (1) to better understand adult and juvenile survivorship, site fidelity, and dispersal associated with management actions, and (2) to investigate natal dispersal and the interconnection of vireo populations in San Diego County. Nestlings from monitored nests were banded at 5-7 days of age with a single anodized light blue numbered federal band on the right (or, rarely, left) leg. Adult vireos within Treatment and Reference sites were captured in mist nets and banded with a unique combination of colored plastic and anodized metal bands, including either an anodized light blue or light blue plastic band to designate the San Diego River as the bird's site of origin. Returning adults previously banded as nestlings with a single numbered federal band were target netted to determine their identity, and their original band was supplemented with other bands to generate a unique color combination.

During surveys and nest monitoring activities, we attempted to resight all vireos to determine whether or not they were banded, and if so, to confirm the vireo's identity by reading the unique color band combination or by recapturing birds with single federal bands. We used resighting and recapture data to calculate annual survivorship, or the fraction of all individuals known to be present on the San Diego River in one year that returned the following year. Individuals "known to be present" in a given year included birds observed directly as well as individuals not observed but whose presence was inferred retroactively by their detection in a subsequent year. Imperfect detectability of banded individuals is typical of mark-recapture studies and occurs for various reasons (e.g., females are more cryptic and may be missed on surveys, birds are detected as banded but their full color combinations (and thus identities) are not obtained; birds with single federal bands are not recaptured and thus their identities not determined). Our previous estimates of annual survivorship therefore require adjustment each year to incorporate data for individuals not "seen" previously but known to have been alive.

Survivorship from 2010-2011 was calculated for known individuals that were: (1) adults in 2010 on the San Diego River and were resighted anywhere in 2011; (2) adult vireos that held territories in Treatment or Reference sites in 2010 and were resighted anywhere in 2011; (3) first-year vireos that were banded as nestlings or juveniles anywhere on the San Diego River in 2010 and were resighted anywhere in 2011; and (4) first-year vireos that were banded as nestlings or juveniles in Treatment or Reference sites in 2010 and were resighted anywhere in 2011. Unlike for estimates of overall survivorship of adults and juveniles (i.e., (1) and (3)), we did not adjust survivorship (see above) for analyses involving Treatment and Reference sites because we could not confirm the presence of birds in those specific sites during years that they were not detected.

Site fidelity and movements of vireos were determined by measuring the distance between the center of a vireo's breeding or natal territory in 2010 and the center of the same vireo's breeding territory in 2011. Vireos exhibited site fidelity if they returned to within 100 m of their 2010 territory. Site fidelity and movement were calculated for the same four categories analyzed for survivorship (see above), except that only individuals with known territory locations during the last year they were detected prior to 2011 were included (e.g., juveniles

banded after fledging were excluded because their natal territories could not be confirmed in light of their capacity for substantial movement).

Data Analyses

We summarized the Treatment and Reference monitoring sites separately to allow comparison between the two sites and between years at each site, before and after management actions occurred. We conducted statistical tests to determine whether there were differences in vireo survivorship, nest success, productivity, or vegetation characteristics between monitoring sites. We used the Student's *t*-test (or Mann-Whitney *U*-test when data did not meet assumptions for *t*-tests) to determine if there were differences between sites in number of nests completed, clutch size (for parasitized and non-parasitized nests), number of young fledged per pair, nest height, nest host height, and distance from the nest to the edge of the nest host, the edge of the nest vegetation clump, and the edge of riparian vegetation. We also used Student's *t*-tests to determine if there were differences between successful and unsuccessful nests in nest height, nest host height, distance from the nest to the edge of the nest host plant, the nest vegetation clump, and the edge of riparian vegetation. We used chi-square analysis (or Fisher's Exact Test when numbers weren't sufficient to perform chi-square analyses) to test for differences in adult survivorship and nest fate between monitoring sites and between years. We used Pearson's correlation to determine if annual changes in cowbird parasitism were similar between Treatment and Reference sites. To estimate the potential impact(s) of cowbird parasitism on the San Diego River vireo population, we compared two calculations of nest success and productivity: one set including manipulated nests that were eventually successful and the other treating manipulated nests as failed (their likely fate in the absence of nest manipulation). Data were analyzed using SYSTAT statistical software (SYSTAT Software, Inc. 2005). Tests were considered significant if $P < 0.10$.

RESULTS

Population Size and Distribution

Drainage-wide

A total of 72 male Least Bell's Vireos were identified during surveys (Table 1, Appendix B, Figs. 13-18). This included 67 territorial male vireos, 42 (63%) of which were confirmed as paired, and five transients. Transient vireos were observed at two of the six sections surveyed. Four survey sections contained 94% of all male vireos (27% in Park, 27% in Santee, 22% in Gorge, and 18% in Lakeside; Table 1). Four territorial vireos (6%) were detected in the Valley survey section and no territorial vireos were detected in the El Capitan survey section.

Table 1. Number and distribution of Least Bell's Vireo males along the San Diego River, 2011.

Survey Section	Known Pairs	Single/ Status Undetermined	Total Territorial Males	Transient
Valley	1	3	4	0
Gorge	7	8	15	0
Park	12	6	18	3
Santee	16	2	18	2
Lakeside	6	6	12	0
El Capitan	0	0	0	0
Total	42	25	67	5

The distribution of vireo territories on the San Diego River in 2011 remained similar to the distribution in 2010, with the percent of territories that occur in each section changing by < 5% (Table 2). Overall, the vireo population on the San Diego River decreased by 26% from 2010-2011 (Fig. 3).

Table 2. Number of territorial male vireos and percent of total number that year on the San Diego River, by survey area and year, 2010-2011.

	Number of Territorial Males				Numeric/Percent Change	
Survey Area	2010		2011		2010-2011	
Valley	6	7%	4	6%	-2	-33%
Gorge	20	22%	15	22%	-5	-25%
Park	21	23%	18	27%	-3	-14%
Santee	26	29%	18	27%	-8	-31%
Lakeside	16	18%	12	18%	-4	-25%
El Capitan	1	1%	0	0%	-1	-100%
Total	90		67		-23	-26%

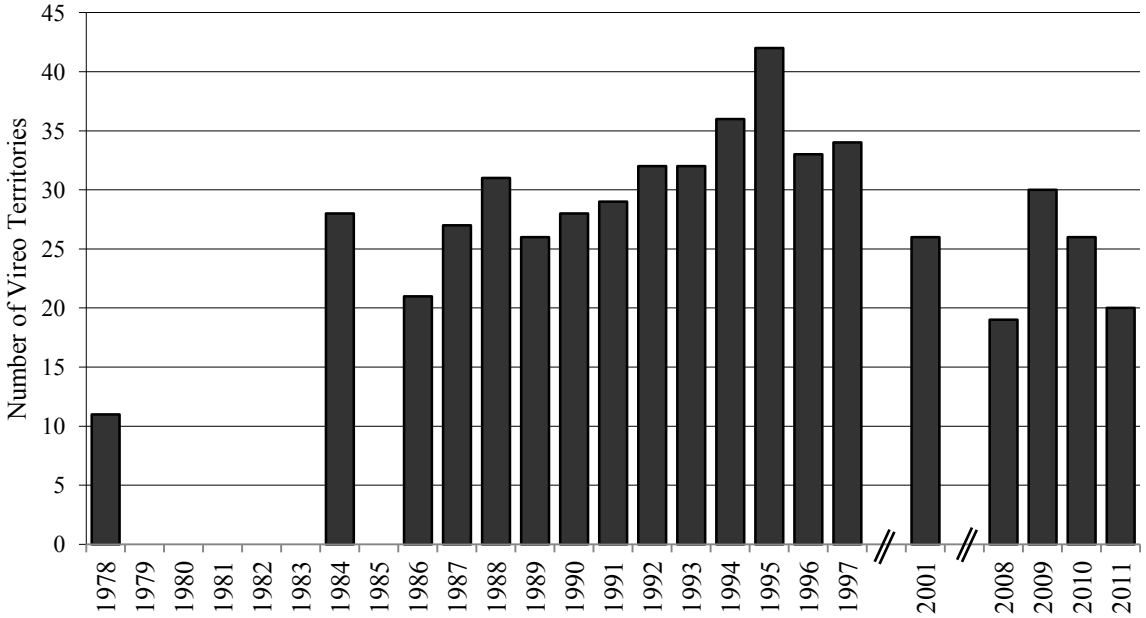

Fig. 3. Number of Least Bell's Vireo territories between Mission Dam and Santee, San Diego River, 1978-2011. Data compiled from Goldwasser 1978; Jones 1985; Kus 1989, 1992, 1994, 1995; Kus and Beck 1998; Wellik et al. 2009; USGS unpubl. data.

Giant Reed Removal Sites

No vireos were detected in the Valley giant reed removal site the year prior to giant reed removal or the first breeding season following weed control (Table 3). However, one vireo and one Willow Flycatcher (*Empidonax traillii*; see Incidental Detections below) were detected using the Valley site during the second breeding season following giant reed removal. During the third breeding season after giant reed removal (2011), once again no vireos were detected using the Valley giant reed removal site.

In the year prior to giant reed removal at the Santee site, three vireos were detected. During the breeding season following giant reed removal at the Santee site, two vireos were present, and during the second breeding season after weed control (2011), three vireos were present.

Table 3. Number of Least Bell's Vireo territories within giant reed removal sites, San Diego River.

Location of Giant Reed Removal	Breeding Season Relative to When Giant Reed Removal Occurred			
	Immediately Prior	One Year After	Two Years After	Three Years After
Valley	0	0	1	0
Santee	3	2	3	-

Habitat Characteristics

Vireos occupied five habitat types along the San Diego River (Table 4). The majority of vireo territories (57%) occurred in habitat characterized as mixed willow riparian, followed by willow habitat co-dominated by cottonwoods (39%). One vireo territory each occurred in riparian scrub, willow habitat co-dominated by sycamore, and upland scrub. Similar to 2008 and 2009, few vireo territories in 2011 contained a large proportion of exotic vegetation (Table 5). These territories contained abundant giant reed, and black mustard (*Brassica nigra*).

Table 4. Habitat types used by Least Bell's Vireos along the San Diego River, 2011.

	Number of Territories			
Habitat Type	**> 50% Native**	**> 50% Exotic**	**Total**	**Percent of Total**
Mixed Willow	36	2	38	57%
Willow/Cottonwood	26	0	26	39%
Riparian Scrub	1	0	1	1%
Willow/Sycamore	1	0	1	1%
Upland Scrub	1	0	1	1%
Total	65	2	67	100%

Table 5. Percent of Least Bell's Vireo territories dominated or co-dominated by exotic vegetation, by survey area, 2008-2011. Numbers in parentheses are the number of territories in the survey area.

	Percent of Territories							
Survey Area	**2008**		**2009**		**2010**		**2011**	
Lakeside	9%	(11)	0%	(14)	19%	(16)	8%	(12)
Gorge	0%	(9)	0%	(12)	15%	(20)	7%	(15)
Park	0%	(18)	0%	(24)	0%	(21)	0%	(18)
Santee	0%	(20)	3%	(30)	12%	(26)	0%	(18)
Valley	0%	(1)	67%	(3)	17%	(6)	0%	(4)
El Capitan	0%	(0)	0%	(0)	100%	(1)	0%	(0)
Total	2%	(59)	4%	(83)	12%	(90)	3%	(67)

Banded Birds

We observed 72 male and 45 female vireos on the San Diego River in 2011, including transients and individuals that were detected in more than one location. We were able to observe 107 adult vireos (71 males, 99% of all males, and 36 females, 80% of all females) well enough to determine banding status in 2011. Twenty-three of these had been banded prior to the 2011 breeding season, 18 of which already had unique color band combinations prior to 2011, 4 of which were "natal" birds, recaptured with a single federal band and given a unique color band combination, and 1 of which was natal and not recaptured (Table 6). The one natal vireo that was not recaptured had a light blue numbered federal band on the left leg indicating that she had been banded as a nestling on the San Diego River during the past 3 years (Tables 5 and 6). Of the 23 known-identity banded birds, 22 were originally banded on the San Diego River and 1 was originally banded on the San Luis Rey River as nestlings (Table 7; Appendix C). One other

vireo that was banded as a nestling on the San Diego River in 2010 was recaptured and banded on the Sweetwater River in 2011 (Table 6). Adult birds of known age ranged from 1-6 years old (Table 7).

Table 6. Banding status of Least Bell's Vireos detected on the San Diego River and those that emigrated to other drainages, 2011.

	Detected on the San Diego River			Emigrants		
Banding Status	**Male**	**Female**	**Subtotal**	**Male**	**Female**	**Total**
Uniquely banded prior to 2011	15	3	18	0	0	18
Natal recaptured in 2011	2	2	4	1[a]	0	5
Natal (Single numbered metal band)	0	1	1	0	0	1
Total	17	6	23	1	0	24

[a] Captured on the Sweetwater River in 2011.

Table 7. Number of banded adult Least Bell's Vireos on the San Diego River in 2011, by original year banded, age, original banding location, and sex.

Year Originally Banded	**Age in 2011**	**Number of Vireos Observed by Origin**				
		San Diego River		**San Luis Rey River**		
		Male	**Female**	**Male**	**Female**	**Total**
2006	≥7 yrs.	1	-	-	-	1
2008	≥4 yrs.	3	1	-	-	4
	3 yrs.	3	-	-	1	4
2009	≥3 yrs.	6	-	-	-	6
	2 yrs.	1	1	-	-	2
2010	≥2 yrs.	1	-	-	-	1
	1 yr.	2	2	-	-	4
Subtotal		17	4	0	1	22
Unknown	≥1 yrs.	-	1	-	-	1
Total		17	5	0	1	23

A total of 62 vireos were newly banded along the San Diego River in 2011. Twelve unbanded adult vireos were captured at their breeding territories in 2011 and given full band combinations (Table 8; Appendix C). Fifty nestlings were banded with a single light blue metal numbered federal band on the right leg.

Table 8. Summary of new Least Bell's Vireos captured and banded along the San Diego River in 2011.

Age Banded	Males	Females	Unknown Sex	Total
Adult	11	1	0	12
Nestling			50	50
Total	11	1	50	62

Survivorship, Fidelity, and Movement

Drainage-wide Survivorship

The recapture and resighting of banded birds allowed us to determine the rate at which vireos previously documented along the San Diego River returned to hold territories or were resighted in 2011. This is the minimum number of vireos known to survive and does not include all birds that dispersed from the San Diego River drainage or that we may have failed to detect/resight. However, this baseline number can be used to calculate minimum annual survivorship for the vireo population along the river and can be adjusted annually to add in individuals that were not identified in a particular year but were detected in subsequent years (see Methods: Banding).

Adult Survivorship from 2010-2011

Of 34 uniquely color banded adult vireos present along the San Diego River during the 2010 breeding season, 41% (14/34) returned to the San Diego River in 2011 (Table 9). Two of the six banded adult female vireos present in 2010 were resighted in 2011, an over-winter survivorship rate of 33%. Twelve of the 28 banded adult male vireos present in 2010 were resighted in 2011, an over-winter survivorship rate of 43%. The remaining 20 vireos that had full color band combinations in 2010 were not resighted in 2011.

Four other vireos (three males and one female) were detected in 2011 that were not detected in 2010, requiring that we adjust our estimates of survivorship to account for these birds (see Methods). Adding these four vireos increased overall survivorship from 2010 to 2011 to 47% (18/38), male survivorship to 48% (15/31), and female survivorship to 43% (3/7). Generally, there is a discrepancy in estimates of sex-related over-winter survivorship attributed to difficulty in resighting females and also the low proportion of females that were banded. In any given year, the proportion of females that are resighted is lower than for males. Therefore, the chances of resighting a particular female are correspondingly smaller.

Table 9. Number of banded adult Least Bell's Vireos detected in 2010 at Treatment sites, Reference sites, and other areas on the San Diego River, and those that were detected in 2011. Numbers in parentheses include the adjustments resulting from vireos that were identified in 2011 but not in 2010.

Year/Sex	Treatment Site	Reference Site	Other Areas	Total
2010				
Male	13	11	4	28 (31)
Female	4	2	0	6 (7)
Total	17	13	4	34 (38)
2011				
Male	6	4	2	12 (15)
Female	2	0	0	2 (3)
Total	8[a]	4[b]	2	14 (18)

[a] All occupied a territory at the Treatment site in 2010.
[b] All occupied a territory at the Reference site in 2010.

First-year Survivorship from 2010-2011

Four of the 38 hatch-year vireos banded in 2010 that survived to fledge were captured and given unique color band combinations on the San Diego River or elsewhere in 2011 (Table 10) yielding a conservative first-year survivorship of 11%. Assuming an equal sex ratio of banded nestlings, first-year survivorship of males was 11% (2/19) and females was 11% (2/19). Because female vireos are elusive and difficult to recapture, the first-year survivorship estimate may be conservative.

Table 10. Number of Least Bell's Vireos banded as nestlings or fledglings at Treatment sites, Reference sites, and other areas along the San Diego River in 2010, and where those that returned were detected in 2011.

Year/Sex	Treatment Site	Reference Site	Other Areas	Total
2010				
Unknown	29	9	0	38
2011				
Male	1[a]	0	1[b]	2
Female	1[a]	0	1[a]	2
Total	2	0	2	4

[a] Banded as a nestling at the Treatment site in 2010, found in 2011 on the San Diego River.
[b] Banded as a nestling at the Reference site in 2010, found in 2011 on the Sweetwater River.

Adjusted Annual Survivorship for Previous Years

Four banded adult vireos were identified in 2011 that were not detected in 2010. Three were originally banded on the San Diego River in 2008, one male as a nestling, one male as an adult, and one female as an adult. The fourth vireo, a male, was banded as an adult on the San Diego River in 2006 (K. Moore, pers. comm.). These detections increase first-year survivorship

for 2008-2009 from 17% to 19%, adult survivorship for the same years from 80% to 84%, and adult survivorship for 2009-2010 from 69% to 73% (Table 11).

Table 11. Adjustments to first-year and adult Least Bell's Vireo survivorship on the San Diego River, 2011. These numbers update survivorship estimates presented in Wellik et al. 2009, Lynn et al. 2010, Lynn and Kus 2010b.

	First-year Survivorship			Adult Survivorship		
Years	Original	Last Year	New	Original	Last Year	New
2008-2009	15%	17%	19%	72%	80%	84%
2009-2010	-	9%	9%	-	69%	73%
2010-2011	-	-	11%	-	-	47%

Survivorship at Treatment and Reference Sites

Of the 17 vireos of known sex (13 males and 4 females) that were detected within the Treatment site in 2010, eight (six males and two females) were resighted in 2011 for a 47% survival rate (46% for males, 50% for females; Table 9). Of the 13 banded adult vireos of known sex (11 males and 2 females) that were detected within the Reference site in 2010, four (all males) were resighted in 2011 for a 31% survival rate (36% for males, 0% for females). Survivorship for adults was not significantly different between the Treatment and Reference sites (Fisher's Exact $P = 0.47$). No adult vireos moved between Treatment and Reference sites between 2010 and 2011. All 38 banded juveniles that were known to fledge in 2010 were banded at Treatment or Reference sites. Four (one male and two females from the Treatment site and one male from the Reference site) were recaptured in 2011 for a first-year survivorship rate of 10% for fledglings from the Treatment site and 11% for fledglings from the Reference site (Table 10).

Drainage-wide Site Fidelity and Movement

Resighting banded birds allowed us to identify individuals that either returned to the same site they used in a previous year (within 100 m) or moved to a different location. Fourteen adult vireos that were identified in 2010 were resighted in 2011, all of which occupied known territories both years (Table 12). Ten adult vireos (71%; all males) that returned in 2011 occupied the same breeding territory that they did in 2010. The remaining four vireos (29%; two males and two females) returned to occupy territories adjacent to their 2010 territories (within 300 m).

Four other vireos were not detected in 2010 but were observed in 2009 and detected on the San Diego River in 2011. One male was banded as a nestling on the San Diego River in 2008 and was detected in 2011 occupying a territory 1.8 km from his natal territory. One female and one male were banded as adults in 2008; the female was detected in 2011 0.2 km from her 2008 territory, and the male was detected in 2011 0.1 km from his 2009 territory. The fourth vireo was a male banded as an adult on the San Diego River and detected in 2011 0.1 km from his 2009 territory (Table 12).

Three of the four first-year vireos that had been banded as nestlings along the San Diego River in 2010 were resighted on the San Diego River 2011 and dispersed an average of 1.0 ± 1.0 km from their natal sites (0.7 km for the one male and 0.2-2.1 km for females; Table 12). The fourth first-year vireo detected in 2011 was found on the Sweetwater River, 12.7 km from his natal territory. Overall, first-year vireos were detected 3.9 ± 5.9 km from their 2010 natal territories.

Table 12. Between-year movement of Least Bell's Vireos along the San Diego River.

Year Last	Drainage[a] / Territory / Treatment		Distance Moved	Band Combination[b]		Age in	
Detected	Last Seen	2011	km	Left Leg	Right Leg	2011	Sex[c]
2010	SDR / SGPP / TMT	SDR / SGPP / TMT	0.02	Mlb	BKBK/pupu	≥ 4	M
2010	SDR / WMB2 / TMT	SDR / WMB2 / TMT	0.02	DPWH/Mlb		≥ 4	M
2010	SDR / JOY / REF	SDR / JOY / REF	0.01	Mlb	BKLB/pupu	≥ 3	M
2010	SDR / SGCA / REF	SDR / SGCA / REF	0.02	BKLB/pupu	Mlb	≥ 3	M
2010	SDR / FJS2 / TMT	SDR / FJS2 / TMT	0.05		BKLB/Mlb	≥ 3	M
2010	SDR / POR / REF	SDR / POR / REF	0.08	YEYE/Mlb		≥ 3	M
2010	SDR / ALT / REF	SDR / MER / REF	0.09		LBBK/Mlb	≥ 3	M
2010	SDR / CCO / TMT	SDR / CCO / TMT	0.20	LBLB/Mlb		≥ 3	M
2010	SDR / EDD / TMT	SDR / EDD / TMT	0.06		DPWH/Mlb	3	M
2010	SDR / PA07	SDR / ORD / TMT	0.06	YEPU/Mlb	pupu	3	M
2010	SDR / TOW / TMT	SDR / HTS / TMT	0.19		BKLP/Mlb	≥ 2	M
2010	SDR / VA03	SDR / VA03	0.01		PUYE/Mlb	2	M
2010	SDR / SGPN / TMT	SDR / PA08 / TMT	0.67	Mlb	WHDP/pupu	1	M
2010	SDR / POR / REF	SWR / SN15	12.71	LPBK/Mlb	pupu	1	M
2010	SDR / HTS / TMT	SDR / ORD / TMT	0.19	BKLB/Mlb	pupu	1	F
2010	SDR / WMB2 / TMT	SDR / PA07	2.10	DPWH/Mlb	pupu	1	F
2010	SDR / SGPN / TMT	SDR / SGPP / TMT	0.11	WHWH/Mdb	LPBK	3	F
2010	SDR / CCO / TMT	SDR / CCO / TMT	0.20		WHDP/Mlb	2	F
2009	SDR / GO01	SDR / GO17	0.05		LPBK/Mlb	≥ 4	M
2009	SDR / SIG	SDR / LA07	0.13		Msi	≥ 6	M
2008	SDR / WMB2 / TMT	SDR / BHV / TMT	1.79	PUPU/Mlb	pupu	3	M
2008	SDR / SGSA / REF	SDR / SGFU[d] / REF	0.21	PUPU/pupu	Mlb	≥ 4	F

[a] Drainage Codes: SDR = San Diego River; SWR = Sweetwater River; Treatment codes: TMT = Treatment site; REF = Reference site.

[b] Band Colors: Mdb = dark blue numbered federal band; Mlb = light blue numbered federal band; Msi = silver numbered federal band; pupu = metal purple; BKBK = plastic black; BKLB = plastic black-light blue split; BKLP = plastic black-light pink split; DPWH = plastic dark pink-white split; LBBK = plastic light blue-black split; LBLB = plastic light blue; LPBK = plastic light pink-black split; PUPU = plastic purple; PUYE = plastic purple-yellow split; WHDP = plastic white-dark pink split; WHWH = plastic white; YEPU = plastic yellow-purple split; YEYE = plastic yellow.

[c] Sex: M = male; F = female.

[d] This female bred at two locations in 2011.

Site Fidelity and Movement at Treatment and Reference Sites

Eight adult vireos (six males and two females) that were identified at Treatment sites in 2010 were resighted in 2011 (Table 12). Four of these (all males) returned in 2011 to occupy the same territory that they did in 2010. The remaining four (two males and two females) returned in 2011 to occupy a territory adjacent to their 2010 territory. All four adult vireos that were

identified at Reference sites in 2010 and were resighted in 2011 returned to occupy the same territory that they did in 2010 (Table 12).

Incidental Detections

On 1 June, during a vireo survey, we detected a single Willow Flycatcher in the Valley survey area (Fig. 12). The flycatcher was not found during subsequent attempts to detect it to determine banding, status, breeding status, or subspecies.

Nest Monitoring

A total of 22 territories were monitored for nesting activity within the Treatment and Reference monitoring sites (Table 13; Figs. 4 and 5; Appendix D). All of territories were "fully" monitored, meaning that all nests within the territory were found and documented during the breeding season. At one fully monitored territory in the Reference monitoring site, the male remained single throughout the 2011 breeding season and therefore no nests were completed in this territory. This territory was excluded from nest monitoring analyses. A total of 38 nests were monitored during the breeding season; however, four of these were not completed (coded as "INC" of "FAL" in Appendix D) and have been excluded from calculations of nest success and productivity.

Table 13. Number of Least Bell's Vireo territories and nests monitored at Treatment and Reference sites on the San Diego River, 2011. Averages presented as mean ± standard deviation.

	Nest Monitoring Site/Type		
	Treatment	**Reference**	**Total**
Territories fully monitored	11	11[a]	22
Nests in monitored territories[b]	23	15	38
Completed nests per pair	1.9 ± 0.7	1.3 ± 0.5	1.6 ± 0.7

[a] Includes one territory with a single male.
[b] Includes incomplete nests (two at the Treatment site and two at the Reference site).

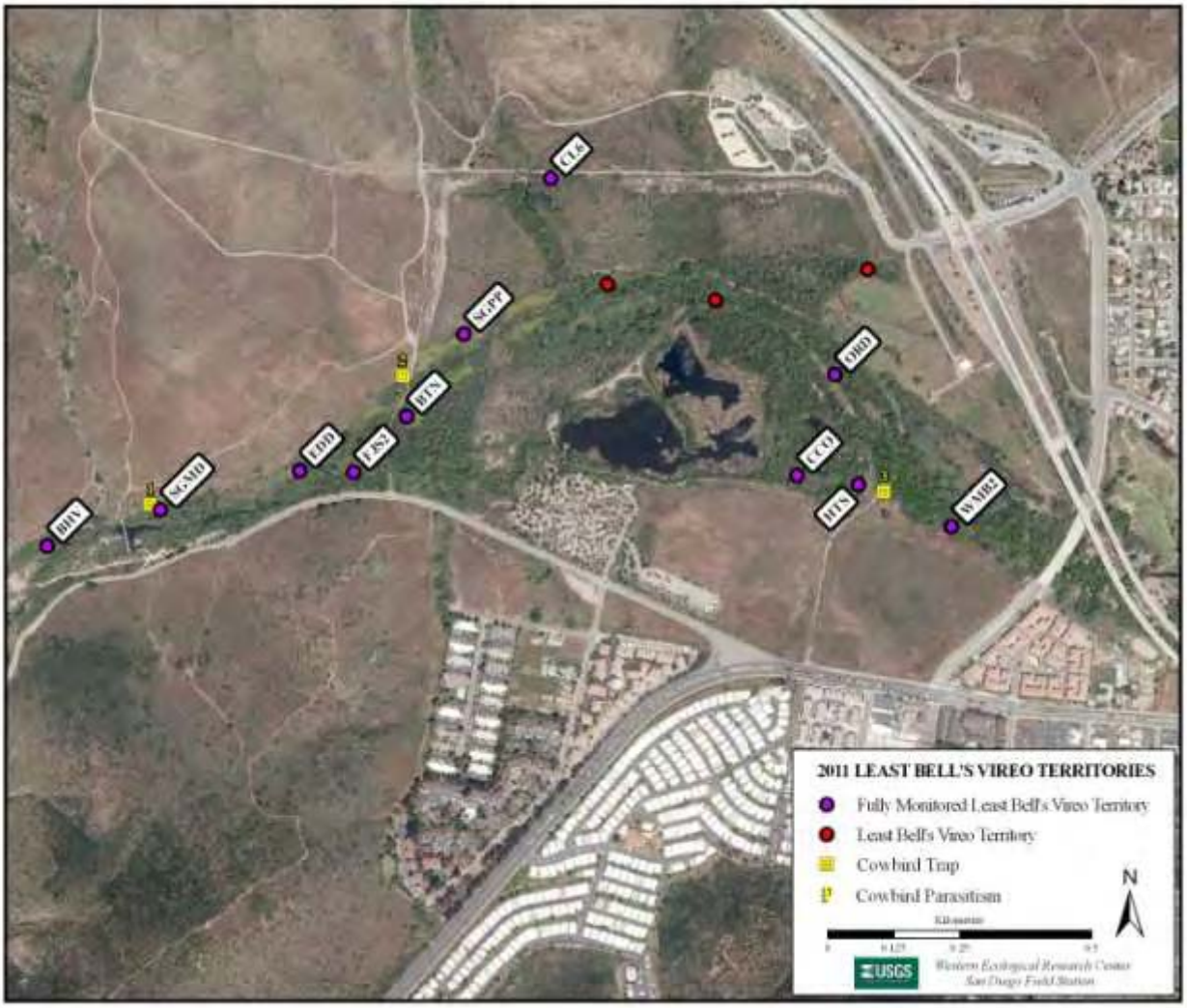

Fig. 4. Locations of monitored Least Bell's Vireo territories at the Park Brown-headed Cowbird removal (Treatment) site, San Diego River, 2011.

Fig. 5. Locations of monitored Least Bell's Vireo territories at the Santee Reference site, San Diego River, 2011. Trap labeled 5a was only operated for 2 weeks at the beginning of the field season.

Nest Initiation

Nesting activity started in mid-April and continued until early July (Fig. 6). Excluding the one territory with a single male, 24% (5/21) of the pairs had attempted nesting by the end of April, and 90% (19/21) by the end of May. Two pairs did not initiate nesting until June.

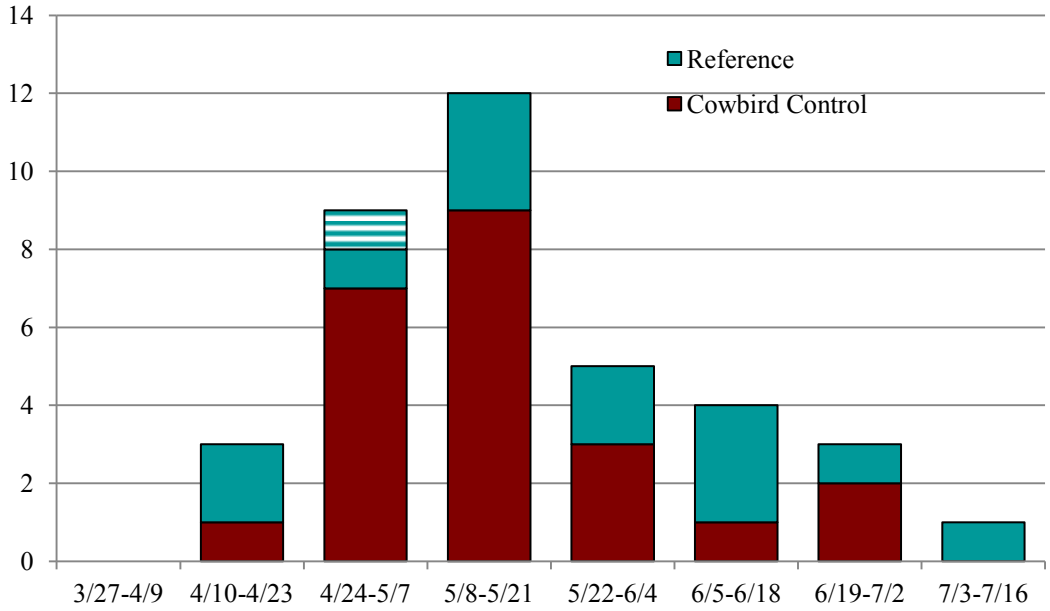

Fig. 6. Number of Least Bell's Vireo nests and those that were parasitized by Brown-headed Cowbirds by 2-week intervals, San Diego River, 2011. Parasitized nests represented by horizontal hatching.

Every fully monitored pair initiated at least one nest in 2011. Of paired males, 11 (52%) re-nested after first attempts. Two pairs (18%) re-nested after a successful first nest, and nine pairs (82%) initiated a second nest after a failed first attempt. Three of the 11 pairs that re-nested after a first attempt (27%) had successful second nests (all after failed first attempts). Four of the 11 pairs (36%) initiated a third nesting attempt, two of which were successful. One pair attempted a fourth nest, successfully fledging young on their fourth attempt. No pairs successfully fledged two broods in 2011. Pairs at the Treatment site completed more nests than pairs at the Reference site (Table 13; $t = 2.30$, $P = 0.03$).

Cowbird Parasitism

A total of 30 cowbirds were captured and removed from the Treatment site (20 males and 10 females) and 21 from the Reference site (11 males and 10 females) in 2011 (Sexton 2011; Fig. 3). No juvenile cowbirds were captured in 2011.

Only one (3%) of all completed vireo nests was parasitized by cowbirds in 2011, a nest at the Reference site initiated during the first week of May (4 May). The cowbird egg was removed on the date it was discovered; one intact vireo egg was found under the nest and a second vireo egg was missing. Parasitism did not cause the nest to fail, and the successful nest was responsible for the production of 5% (2/41) of all vireo young fledged among our monitored pairs. No monitored nests contained cowbird nestlings or fledged cowbird young.

Parasitism at the Treatment site, where trapping began in year 2, was consistently lower than at the Reference site across all four years (Fig. 7). In 2011, cowbird parasitism reached a project-wide low of 3% (1/34 completed nests) when trapping was implemented throughout the entire study site. Parasitism at both the Treatment and Reference sites has declined consistently since 2008, and the decreases at the two sites are highly correlated (Pearson's $R = 0.95$; Fig. 7).

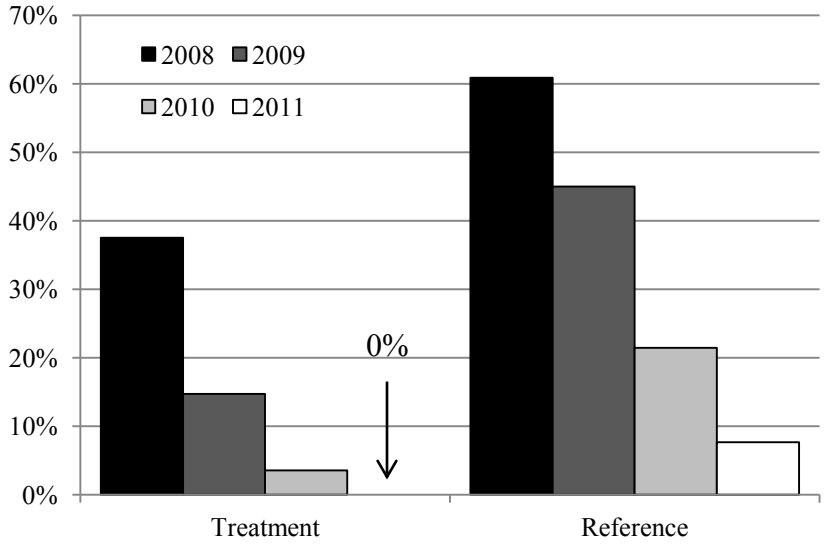

Figure 7. Percent of Least Bell's Vireo nests that were parasitized by Brown-headed Cowbirds at Treatment and Reference sites, 2008-2011, San Diego River, CA.

Fate of Nests

Forty-four percent of the completed nests among our monitored pairs were successful, producing at least one vireo fledgling (Table 14). One of these successful nests fledged young after manipulation to remove cowbird eggs. In the absence of manipulation, the success rate of completed nests along the San Diego River in 2010 would have been reduced by 3%. Nest success did not differ significantly by site (Fisher's Exact $P = 0.73$). Counting all parasitized nests as failed, nest success still did not significantly differ by site (Fisher's Exact $P = 0.48$).

Table 14. Fate of Least Bell's Vireo nests in fully monitored territories, San Diego River, 2011. Numbers in parentheses are percent of total nests.

	Number of Nests					
Nest Fate	**Treatment**		**Reference**		**Total**	
Successful	10	(48%)	5	(39%)	15	(44%)
Failed						
Predation	9	(43%)	6	(46%)	15	(44%)
Parasitism	0	(0%)	0	(0%)	0	(0%)
Other/Unknown	2	(10%)	2	(15%)	4	(12%)
Total Completed Nests	21		13		34	

Fifty-six percent of nests observed were unsuccessful in fledging vireo young (Table 14). Nest failure throughout the monitoring sites was primarily attributed to predation (79% of all nests that failed), although predation events were not observed. Predation was determined based upon circumstantial evidence such as the loss of eggs and/or young from intact nests, partial or complete destruction of nests, and the presence of eggshell fragments in or beneath abandoned nests. Cooper's Hawks (*Accipiter cooperii*) and Red-shouldered Hawks (*Buteo lineatus*) were active in two territories where nests failed as a result of predation. Other potential predators include snakes (Clark 2009), birds such as Western Scrub-jays (*Aphelocoma californica*), small mammals, Virginia opossums (*Didelphis virginiana*), Argentine ants (*Linepithema humile*; Peterson et al. 2004), and alligator lizards (*Elgaria multicarinata*; D. Evans unpubl. data).

Nest failures were not limited to predation. No eggs were seen in one nest at the Treatment site which may have been depredated or abandoned between nest-building and egg-laying. One nest at the Treatment site was abandoned with two cold, wet eggs after a night-time rainstorm. One nest at the Reference site was abandoned with nestlings after the nest came loose from the supporting branch and tilted sideways. One nest at the Reference site was abandoned with vireo eggs for unknown reasons.

Productivity

Reproductive indices for vireos differed between the Treatment and Reference nest monitoring sites. Average clutch size was significantly larger at the Reference site than at the Treatment site (Table 15). Hatching success was high and was similar between sites. We documented at least 41 fledglings in 2011, most of which (68%) came from nests in the Treatment site. The total number of fledglings in 2011 would be reduced by two if parasitized nests had been allowed to fail. The number of fledglings per pair was significantly higher at the Treatment site than at the Reference site, whether or not we assumed that the nest that had been parasitized would have failed if not rescued by removing the cowbird egg (Table 15).

Table 15. Reproductive success and productivity of nesting Least Bell's Vireos, San Diego River, 2011. Averages presented as mean ± standard deviation.

	Total Number		
Parameter	**Treatment**	**Reference**	**Total**
Nests with eggs	20	13	33
Eggs laid	58	46	104
Average clutch size			
Non-Parasitized[a]	3.3 ± 0.8	3.7 ± 0.5	3.5 ± 0.7
Parasitized[b]	0	4	4
Hatchlings	36	31	67
Nests with hatchlings	13	10	23
Hatching success:			
Eggs[c]	62%	67%	64%
Nests[d]	65%	77%	70%
Fledglings	28 (28)[e]	13 (11)[e]	41 (39)[e]
Nests with fledglings	10 (10)[e]	5 (4)[e]	15 (14)[e]
Fledging success:			
Hatchlings[f]	78% (78%)[e]	42% (35%)[e]	62% (58%)[e]
Nests[g]	77% (77%)[e]	50% (40%)[e]	65% (61%)[e]
Fledglings per egg	0.5 (0.5)[e]	0.3 (0.2)[e]	0.4 (0.4)[e]
Fledglings per nest	1.4 (1.4)[e]	1.0 (0.8)[e]	1.2 (1.2)[e]
Average number of young fledged per pair[h]	2.5 ± 1.2 (2.5 ± 1.2)[e]	1.3 ± 1.5 (1.2 ± 1.6)[e]	2.0 ± 1.5 (2.0 ± 2.0)[e]
Pairs fledging ≥1 young	10 / 91% (10 / 91%)[e]	5 / 50% (4 / 40%)[e]	15 / 71% (14 / 67%)[e]

[a] Based on 15 Treatment and 11 Reference non-parasitized nests with a full clutch. $t = -1.84$, $P = 0.08$.
[b] Based on one Reference parasitized nest.
[c] Percent of all eggs that hatched.
[d] Percent of all nests with eggs in which at least one egg hatched.
[e] Number in parentheses is result if parasitized nests had not been manipulated but had been allowed to fail.
[f] Percent of all nestlings that fledged.
[g] Percent of all nests with nestlings in which at least one young fledged.
[h] Based on 11 Treatment and 10 Reference pairs. $t = 2.08$, $P = 0.05$. If parasitized nests were allowed to fail, $t = 2.39$, $P = 0.03$.

Nest Characteristics

In 2011, successful and unsuccessful nests within monitoring sites had similar nest placement characteristics, except successful nests were higher than unsuccessful nests at Reference sites (Table 16). Combining successful and unsuccessful nests within sites, we found

that nests in the Treatment site were significantly lower and closer to the edge of the nest clump than nests in the Reference site (Table 17).

Table 16. Least Bell's Vireo nest characteristics and results of Mann-Whitney *U*-tests of successful vs. unsuccessful nesting attempts at nest monitoring sites along the San Diego River, 2011. Numbers in parentheses represent recalculated figures that consider all parasitized nests to be unsuccessful.

	Nest Fate				
Nest Characteristic	**Successful**	**Unsuccessful**	***n*[a]**	***U*[b]**	***P*[c]**
Treatment Site					
Average nest height (m)	0.61	0.71	9, 13	47.5	0.46
Average host height (m)	3.15	3.58	10, 13	60.5	0.78
Average distance to edge of host (m)	0.73	0.65	10, 13	58.0	0.66
Average distance to edge of clump (m)	1.46	0.96	10, 13	81.5	0.30
Average distance to edge of riparian vegetation (m)	19.10	20.12	10, 13	57.0	0.62
Reference Site					
Average nest height (m)	1.41 (1.20)	0.86 (1.00)	5, 9 (4, 10)	36.5 (27.5)	**0.06** (0.29)
Average host height (m)	5.00 (4.13)	3.86 (4.33)	5, 9 (4, 10)	30.5 (21.5)	0.28 (0.83)
Average distance to edge of host (m)	0.95 (1.05)	0.75 (0.75)	5, 9 (4, 10)	22.5 (18.0)	> 0.99 (0.78)
Average distance to edge of clump (m)	4.74 (4.93)	2.98 (3.08)	5, 9 (4, 10)	23.0 (16.5)	0.95 (0.62)
Average distance to edge of riparian vegetation (m)	27.00 (28.90)	23.38 (22.98)	5, 9 (4, 10)	26.0 (23.0)	0.64 (0.67)

[a] *n* = number of nests in sample (Successful, Unsuccessful).
[b] *U* = Mann-Whitney *U*.
[c] *P* = P-value.

Table 17. Least Bell's Vireo nest characteristics and results of Mann-Whitney *U*-tests between monitoring sites along the San Diego River, 2011.

Nest Placement Characteristic	**Treatment**	**Reference**	***U*[a]**	***P*[b]**
Average nest height (m)	0.67	1.05	76.0	**0.01**
Average host height (m)	3.39	4.27	122.0	0.22
Average distance to edge of host (m)	0.68	0.82	151.0	0.75
Average distance to edge of clump (m)	1.18	3.61	35.0	**< 0.01**
Average distance to edge of riparian vegetation (m)	19.67	24.67	135.0	0.42

[a] *U* = Mann-Whitney *U*.
[b] *P* = P-value.

Ten plant species were used as hosts for vireo nests at monitoring sites in 2011, although not all were used within each site (Table 18). Vireos used eight of the ten at the Treatment site and six of the ten species at the Reference site. Host species selection differed between sites, with only four species used at both sites. At the Treatment site, 64% of vireo nests were placed in willows and mule fat while 78% of the vireo nests at the Reference site were placed in willows and mule fat. Three vireo nests at the Treatment site were built in exotic plant species (two in black mustard and one in thistle; *Cirsium* sp.) and one of these nests was unsuccessful (in black

mustard). One vireo nest at the Reference site was built in an exotic host species (poison hemlock; *Conium maculatum*) and it was successful.

Table 18. Host plant species used by Least Bell's Vireos at monitoring sites along the San Diego River, 2011. Numbers in parentheses are proportions of total nests at that site.

	Number of Nests	
Host Species	**Treatment**	**Reference**
Mule fat	7 (0.30)	5 (0.36)
Arroyo or red willow	7 (0.30)	3 (0.21)
Black willow	1 (0.04)	3 (0.21)
Coast live oak	3 (0.13)	1 (0.07)
Black mustard	2 (0.09)	-
Elderberry (*Sambucus nigra*)	1 (0.04)	-
Thistle	1 (0.04)	-
Toyon (*Heteromeles arbutifolia*)	1 (0.04)	-
Poison hemlock	-	1 (0.07)
California Sycamore	-	1 (0.07)

DISCUSSION

Surveys for Least Bell's Vireos have been conducted along the San Diego River periodically since the mid-1970s. Vireos have been documented within the same general area (Mission Dam to Santee) in 25 of the past 34 years and increased from 11 territories in 1978 to a high of 42 territorial males in 1995 (Fig. 3). By 2008, this number dropped to its lowest point since 1978 (19), then nearly doubled in 2009, then dropped in 2010 and again, to near its lowest point, in 2011.

The number of vireo territories along the San Diego River follows the general trend in vireo numbers throughout southern California, where the vireo population increased dramatically since the mid-1980s (Lynn and Kus 2010a, Ferree et al. 2010). Similar to Marine Corps Base Camp Pendleton and the lower San Luis Rey River, vireo populations peaked in 2009/2010 and then dropped in 2011 (Ferree et al. 2011; Lynn and Kus 2011). The peak and subsequent declines in vireo numbers rangewide appear to be a response to exceptionally high productivity in 2008 and to a lesser extent 2009, followed by years of more typical productivity. Much of the population growth at the San Diego River in 2009 was likely attributable to immigration coupled with high over-wintering survival of both juveniles and adults, as productivity at our study site has differed little over the last 4 years. Since 2009, juvenile and adult survivorship has declined at the San Diego River, consistent with the declining population size.

In addition to providing estimates of juvenile and adult survivorship, our banding studies have allowed us to document immigration and emigration, two important demographic parameters influencing population size. Twenty-three banded vireos were resighted along the San Diego River in 2011. One of these vireos had dispersed from her natal drainage (the San

Luis Rey River; Ferree et al. 2008) to the San Diego River, demonstrating the potential for vireos to move far beyond their natal drainages. Similarly, one male vireo that was banded as a nestling on the San Diego River in 2010 was detected on the Sweetwater River in 2011 (Pottinger and Kus 2011). Vireos in other years have moved from the San Diego River to Marine Corps Base Camp Pendleton (Lynn et al. 2010, Lynn and Kus 2010a,), in further support of the vireos' ability to move between drainages. On the other hand, many of the adult vireos that returned to the San Diego River in 2011 occupied the same territories that they had in 2010, demonstrating strong fidelity to breeding sites once established. Further banding and resighting of vireos within southern California will allow a better determination of the extent of movement between populations and the role such movements play in maintaining genetic diversity and persistence in these populations.

The degradation of suitable vireo habitat by exotic giant reed has been identified as a management issue for vireos in many riparian areas in southern California. Marine Corps Base Camp Pendleton has been removing giant reed from the Santa Margarita River (the most extensive habitat for Least Bell's Vireo on Base) since 1996, and the lower San Luis Rey River is also being managed to control giant reed and protect Least Bell's Vireo habitat. Such programs have been sporadic and widely spaced along the San Diego River. Large stands of giant reed were present in sections of the river in 2008 and 2009, and removal had begun in the eastern extent of the Valley survey section in late 2008/early 2009. Removal of giant reed also occurred in the Santee section, along the Carlton Oaks Golf Course, starting in November 2009. To date, we have not seen a significant increase in vireo or flycatcher use of areas where giant reed has been removed, however, vireos are beginning to use these areas. In 2010, we detected a pair of vireos using the periphery of the Valley clearing and a single Willow Flycatcher within the clearing using dead stalks of giant reed as foraging perches (Lynn and Kus 2010b). However, in 2011, no vireos or flycatchers were observed using the Valley cleared area. No new vireo territories were detected in the giant reed removal area in the Santee section in 2010. In 2011, a vireo territory at the eastern edge of this clearing shifted westward to include a larger proportion of the removal area. Colonization of restored riparian vegetation by vireos is dependent on the proximity to mature, occupied habitat and the development of suitable nesting habitat structure within the site, which may take 3-5 years, depending on rainfall and other conditions (Kus 1998). Although we have seen little response to giant reed removal thus far, we expect that vireos and flycatchers will begin using these areas as the native vegetation recovers and the habitat becomes more suitable.

We did not sample vegetation in areas unoccupied by vireos to quantify the extent of exotic vegetation throughout the drainage; however, vireos may expand into these areas when population numbers are high. In 2010, when the vireo population peaked, 12% of vireo territories were placed in non-native vegetation, while only 2-4% of territories were placed in non-native vegetation in 2008, 2009, and 2011, when the vireo population was smaller. The Valley survey section continued to contain extensive patches of giant reed which were not occupied in 2008, 2009, 2010, or 2011, although vireos continued to occupy more suitable habitat in 2011.

In addition to habitat loss and degradation, cowbird parasitism is a major determinant of vireo productivity and abundance (Kus and Whitfield 2005). Cowbird trapping has been shown

to decrease the incidence of cowbird nest parasitism; for example, at Marine Corps Base Camp Pendleton and the lower San Luis Rey River, intensive programs to control Brown-headed Cowbirds have virtually eliminated cowbird parasitism of Least Bell's Vireo nests and facilitated vireo population growth. Parasitism was relatively high at the San Diego River in the absence of trapping during the first year of our study (2008), when over half the vireo nests (34/65) were parasitized. Since this baseline year, experimentally controlled trapping in a portion of the study area has allowed us to document consistently lower rates of parasitism of vireo nests in the Treatment area relative to the untrapped Reference area. Shortening the trapping period by 2 months did not diminish the effectiveness of trapping, and there has been no parasitism in the Treatment site since 2010. In 2011, we deployed traps in the Reference site, and although one instance of parasitism was observed there, our prediction that parasitism rates would decline relative to previous untrapped years was upheld. Our observations that parasitism rates have declined over the course of the study at both sites suggests that the radius of effectiveness of Treatment site traps may extend into the Reference site; this warrants further examination through spatial modeling of parasitized nests relative to distance from traps.

Although cowbird trapping in 2011 reduced parasitism and associated failure of vireo nests in the Reference site, it did not result in an increase in productivity of Reference pairs to match that of Treatment pairs. Treatment pairs fledged over twice as many young on average as did Reference pairs (2.5 versus 1.2 young per pair, respectively), as has been the case during previous years of the study. Because most nest site characteristics did not differ between Treatment and Reference sites, or between successful and unsuccessful nests either at the Reference site or at the Treatment site, it is evident that habitat characteristics alone were not responsible for differences in vireo breeding success and productivity. Similarly, Kus et al. (2008) found that fine-scale and intermediate-scale nest placement factors were not significantly related to nest survival along the San Luis Rey River. Human disturbance in the Reference site may be contributing to damage and abandonment of vireo nests and may represent an additional source of nest failure not common in the Treatment site; this possibility warrants further examination.

In 2011, we detected a single Willow Flycatcher on the San Diego River. This bird was only observed once and we were unable to ascertain whether it was banded or what subspecies it was. In 2010, a banded Southwestern Willow Flycatcher was detected 8 km upstream and remained in the same area for approximately 3 weeks, although it was not paired. In 2009, a different banded single flycatcher was detected on the San Diego River, approximately midway between the 2010 flycatcher and the 2011 flycatcher. The movement of the 2009 and 2010 birds, both of which had been banded as nestlings at Marine Corps Base Camp Pendleton (Howell and Kus 2009, 2010), and the discovery of another flycatcher in the same general area in 2011 demonstrate the ability of this species to colonize new areas, and further suggest that areas on the San Diego River contain suitable habitat to attract this species. No formal Southwestern Willow Flycatcher surveys were conducted on the San Diego River during 2011, so it is possible that other individuals were present but undetected. Three pairs of Southwestern Willow Flycatchers were detected on the San Diego River in 2001, two above El Capitan Reservoir (Kus et al. 2003) and one at William Heise County Park near Julian, California (J. Barth, unpubl. data). While these records are well upstream of the flycatchers that we found in 2009, 2010, and 2011, the San Diego River was identified as a potential drainage for establishing a flycatcher population (part

of the Coastal California Recovery Unit) in the Southwestern Willow Flycatcher final recovery plan (USFWS 2002). Future surveys and observations should determine whether or not the recent detections represent the re-establishment (or new establishment) of a population of this species on the San Diego River.

FUTURE DIRECTIONS

In 2012 (year 5 of our study), following our experimental design, cowbird traps will not be operated along the San Diego River but we will continue to monitor vireo nests to assess the effect of intermittent trapping on parasitism rates, and to determine whether vireo population goals can be maintained with trapping every other year. Future aspects of the study will also include adjusting the number and placement of cowbird traps based on spatial analysis of cowbird parasitism and cowbird abundance in prior years. Ultimately, the results of this study will be useful in expanding cowbird trapping to a larger study area to identify areas that warrant cowbird control and determine the number, location, and period of operation of cowbird traps to achieve objectives of cowbird control relative to management goals of protecting and enhancing the San Diego River vireo population.

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APPENDIX A

LEAST BELL'S VIREO SURVEY AREAS ALONG THE SAN DIEGO RIVER, 2011

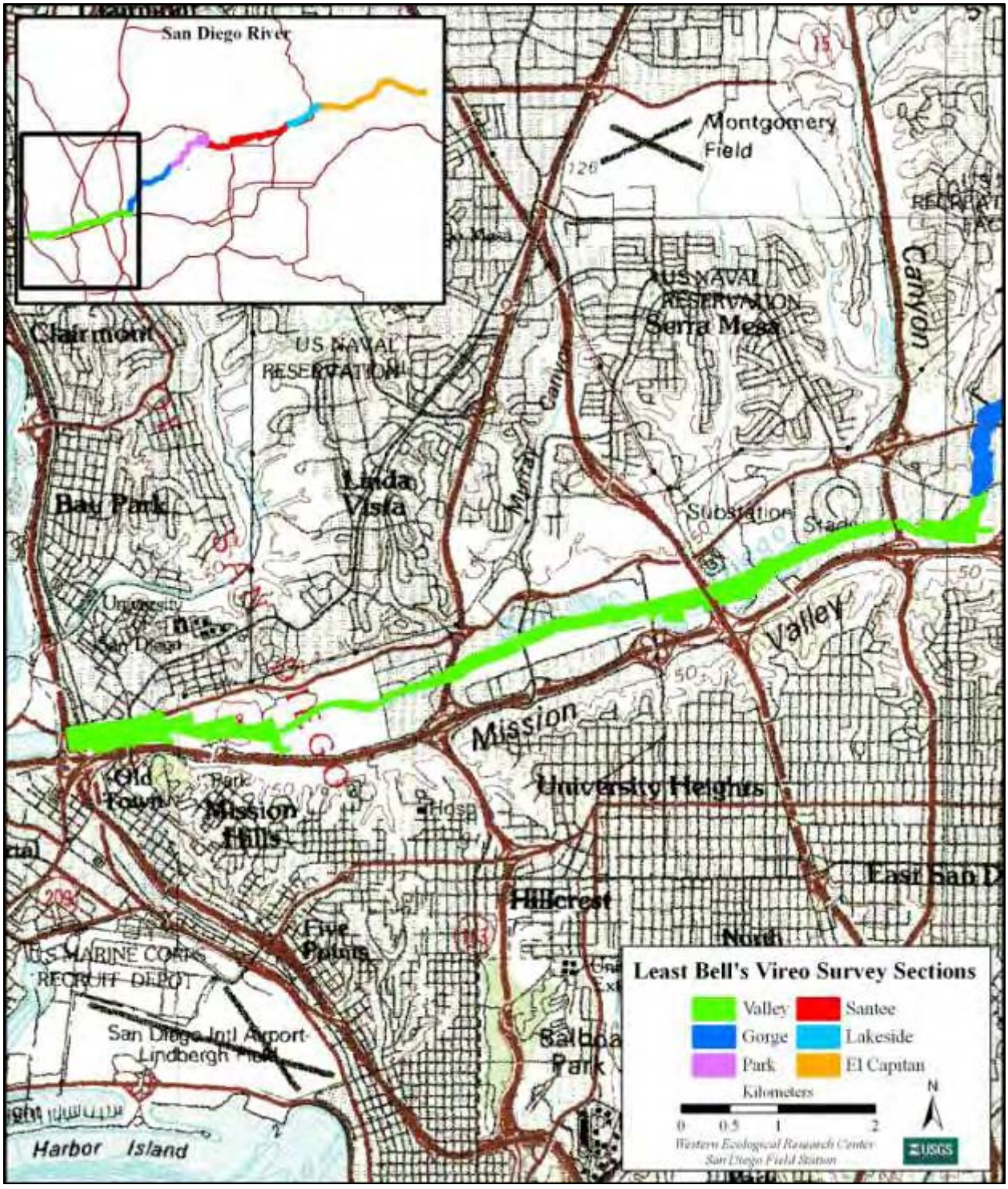

Fig. 8. Least Bell's Vireo survey areas along the San Diego River, 2011: Valley.

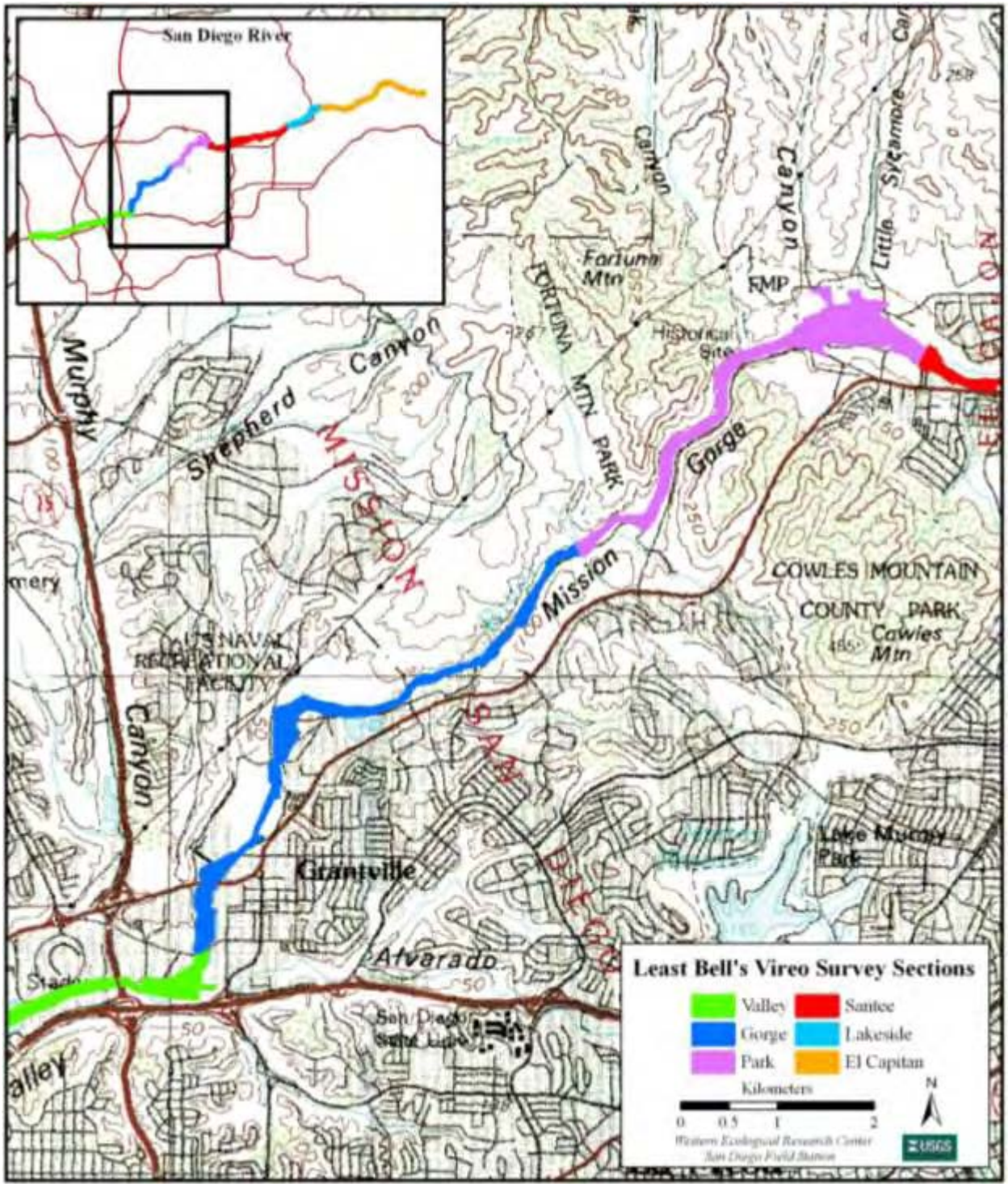

Fig. 9. Least Bell's Vireo survey areas along the San Diego River, 2011: Gorge and Park.

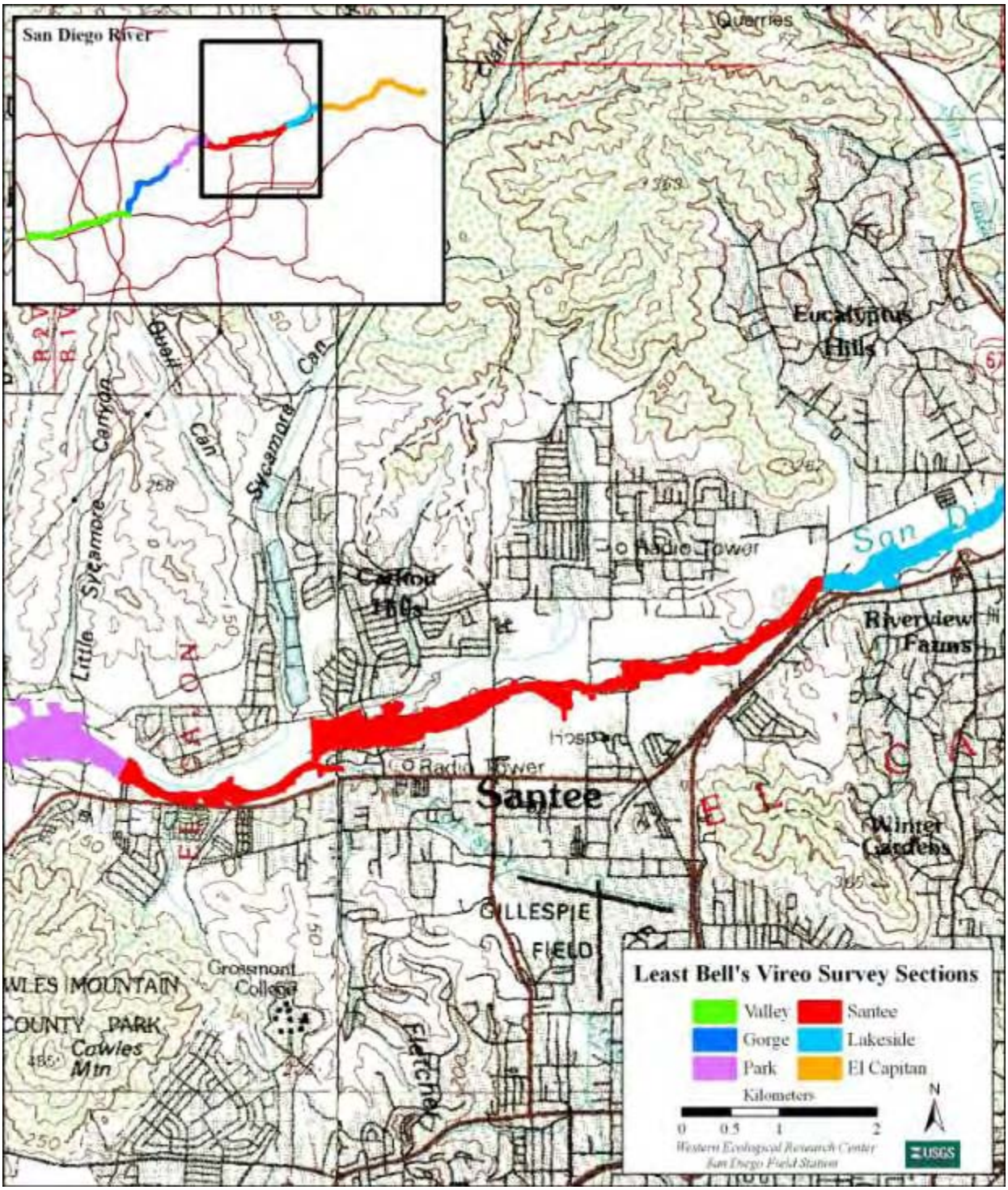

Fig. 10. Least Bell's Vireo survey areas along the San Diego River, 2011: Santee.

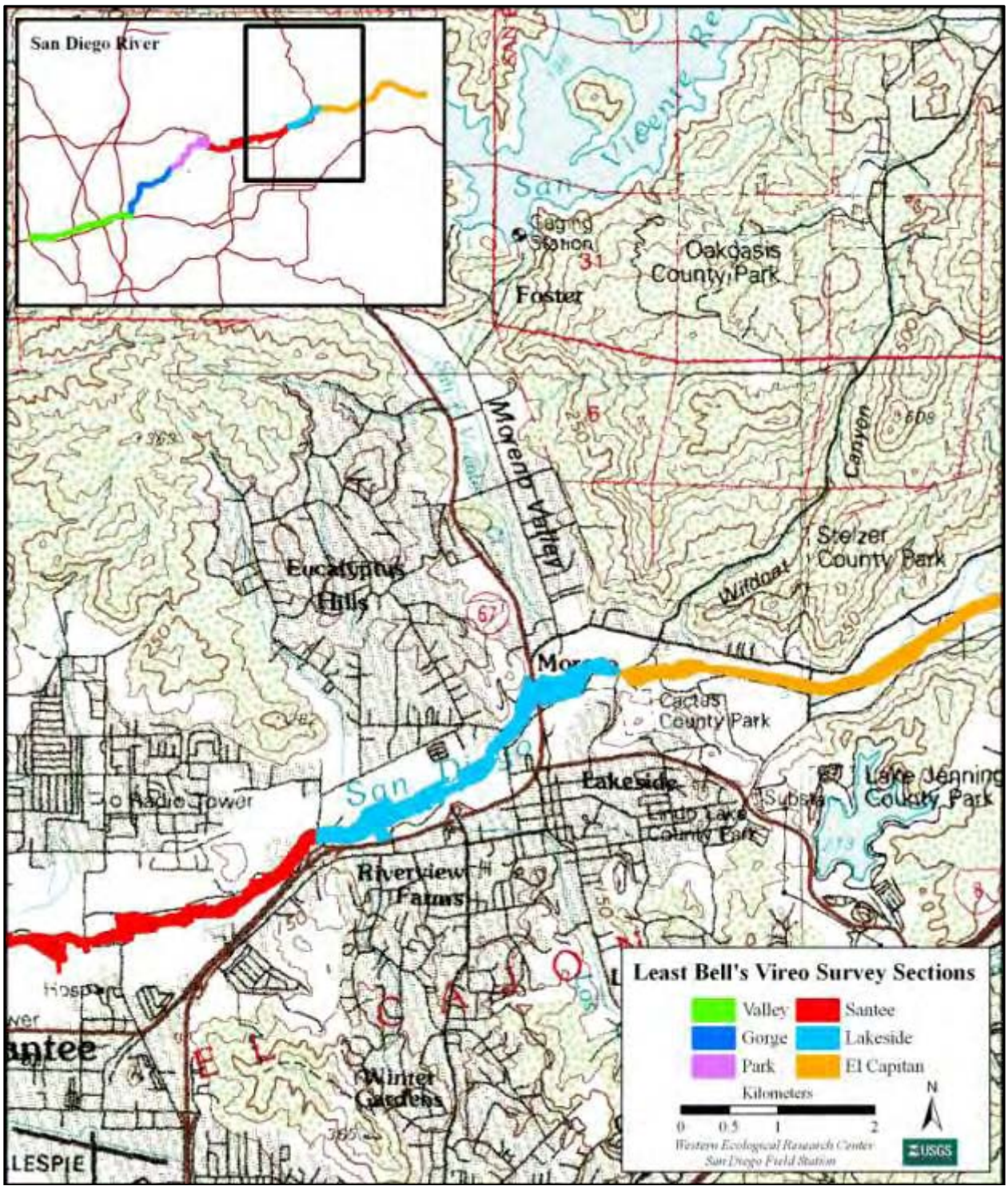

Fig. 11. Least Bell's Vireo survey areas along the San Diego River, 2011: Lakeside.

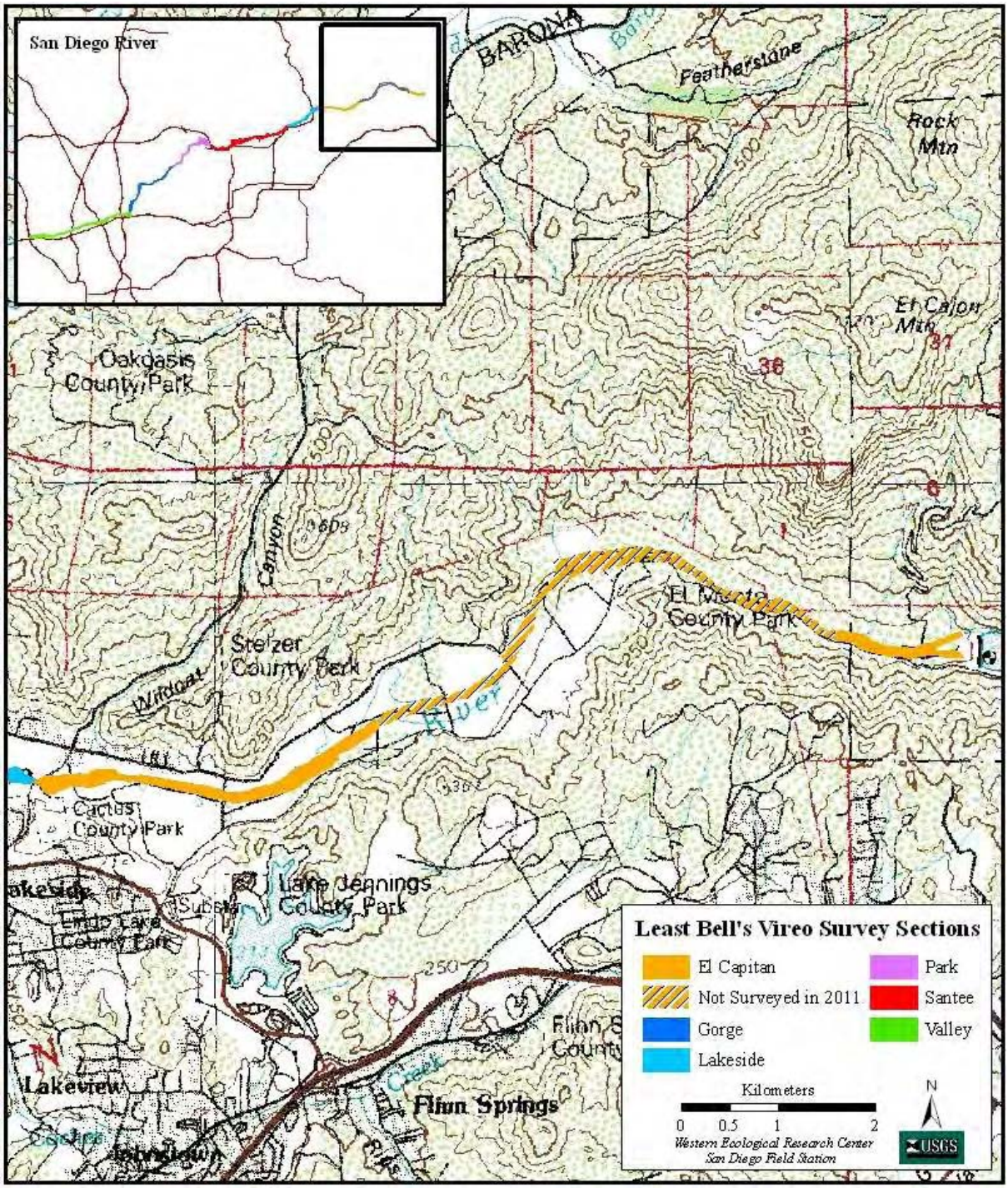

Fig. 12. Least Bell's Vireo survey areas along the San Diego River, 2011: El Capitan.

APPENDIX B

LOCATIONS OF LEAST BELL'S VIREOS ALONG THE SAN DIEGO RIVER, 2011

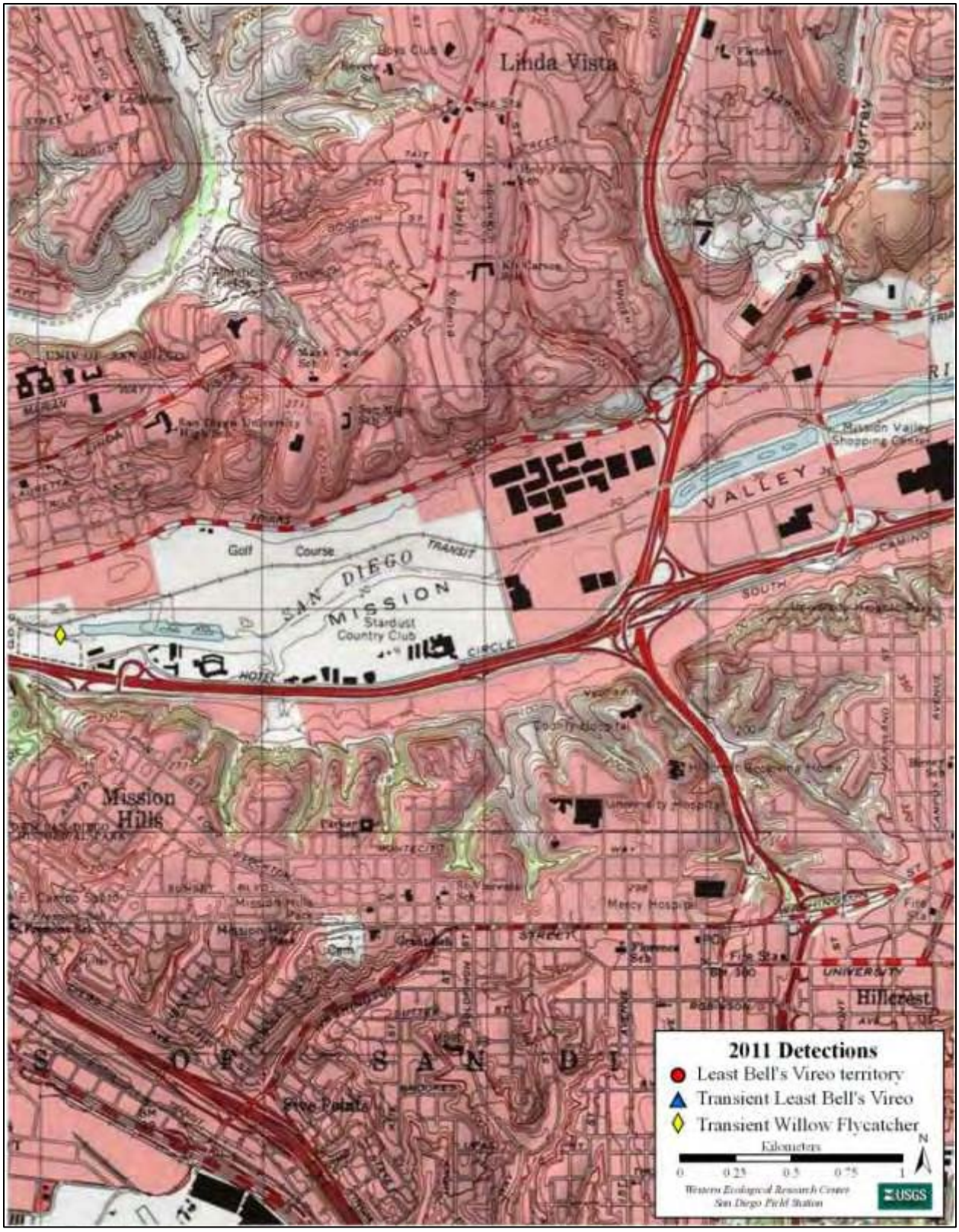

Fig. 13. Locations of Least Bell's Vireos along the San Diego River, 2011: middle section of Valley.

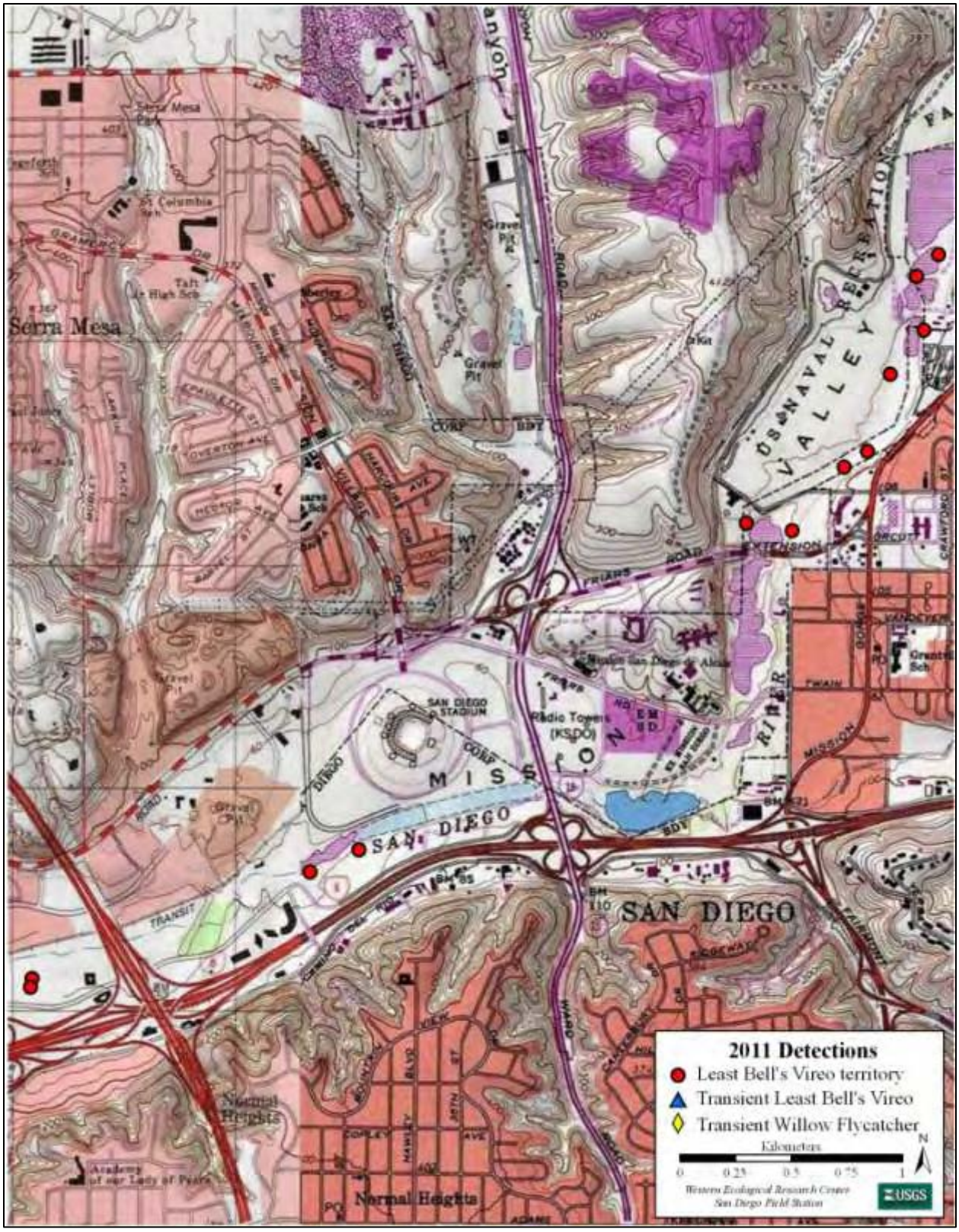

Fig. 14. Locations of Least Bell's Vireos along the San Diego River, 2011: east Valley and west Gorge.

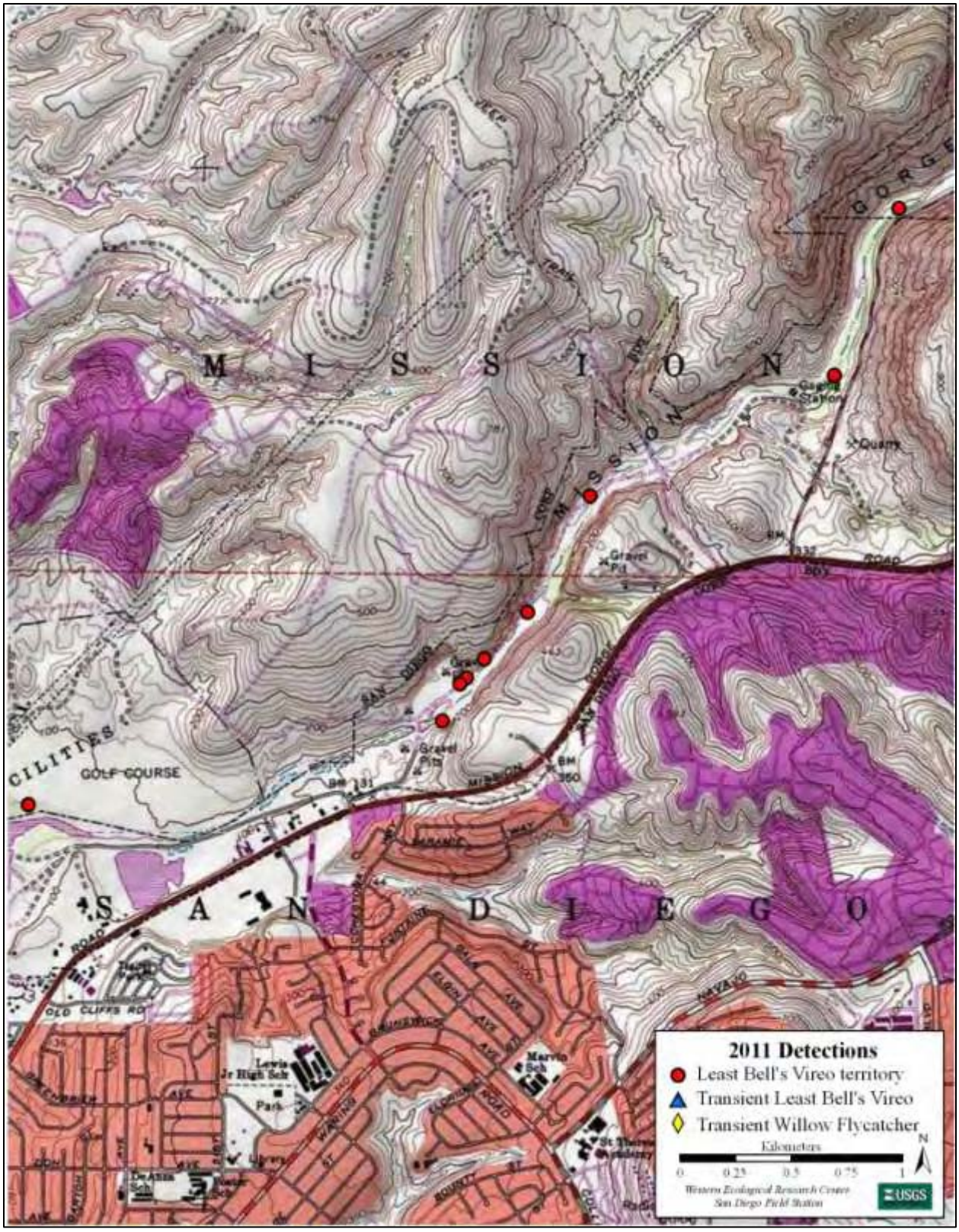

Fig. 15. Locations of Least Bell's Vireos along the San Diego River, 2011: middle Gorge.

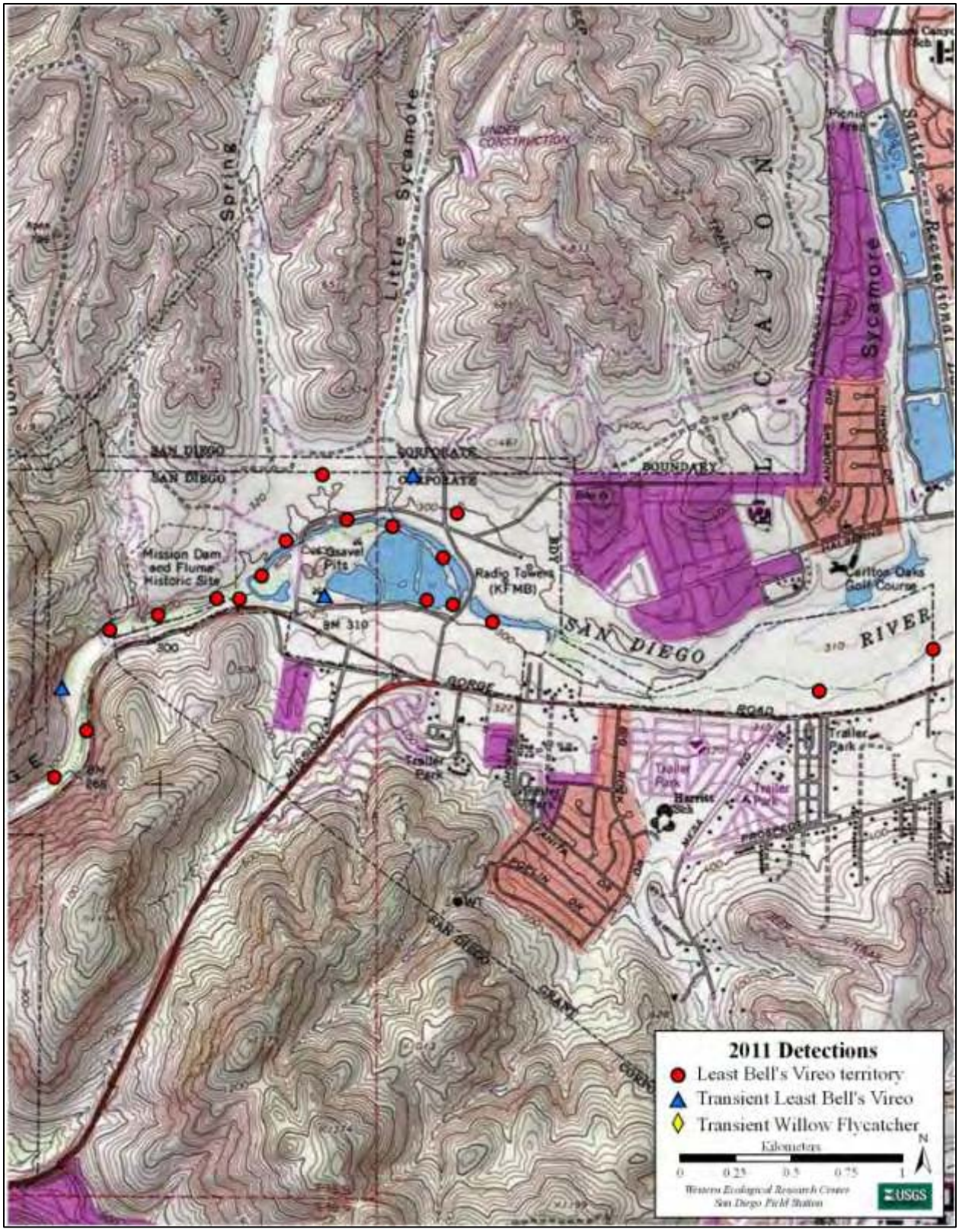

Fig. 16. Locations of Least Bell's Vireos along the San Diego River, 2011: Park and west Santee.

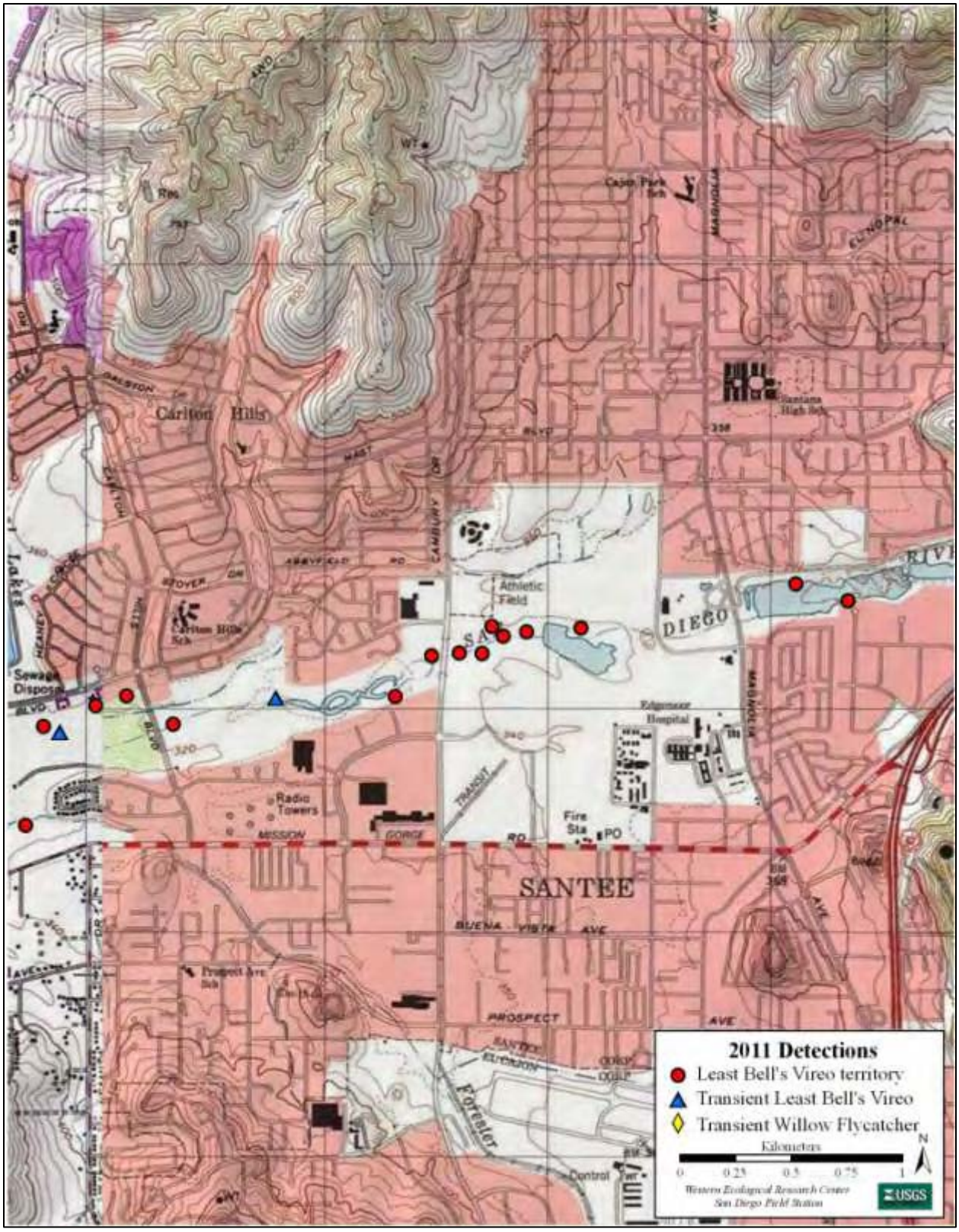

Fig. 17. Locations of Least Bell's Vireos along the San Diego River, 2011: Santee.

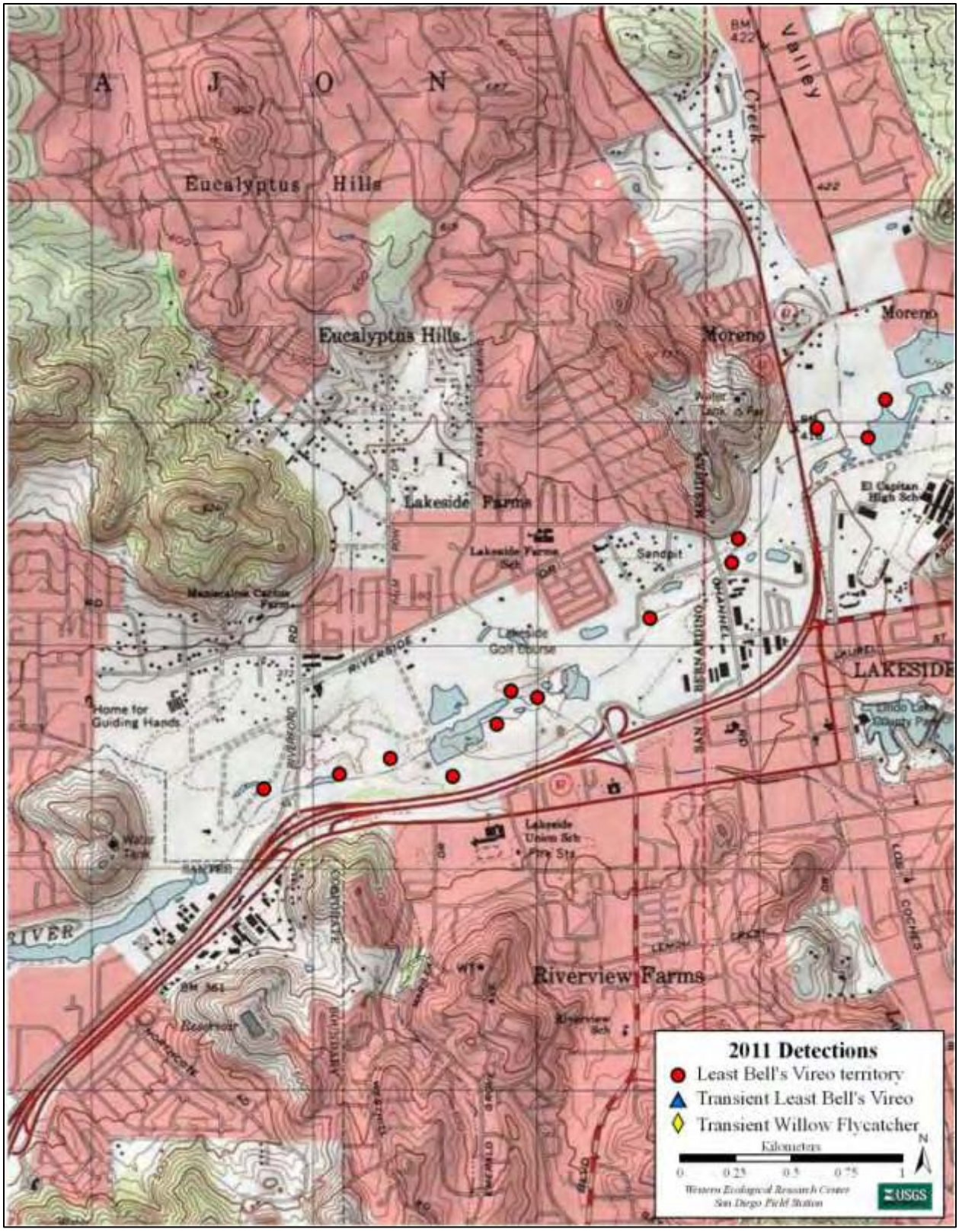

Fig. 18. Locations of Least Bell's Vireos along the San Diego River, 2011: Lakeside..

APPENDIX C

BANDED LEAST BELL'S VIREOS ON THE SAN DIEGO RIVER, 2011

Yr. Last Seen	Drainage / Terr. in 2011 / Treatment	Band Combination[a]		Age in 2011 (yrs.)	Sex[b]	Comments[c]
		Left Leg	Right Leg			
2011	SDR / SGMD / TMT	pupu	YEYE/Mlb	≥ 1	M	Banded as an adult at SGMD in 2011.
2011	SDR / CL6 / TMT	pupu	LBLB/Mlb	≥ 1	M	Banded as an adult at CL6 in 2011.
2011	SDR / SGSA / REF	WHWH/gogo	Mlb	≥ 1	M	Banded as an adult at SGSA in 2011.
2011	SDR / OSA / REF	DPDP/gogo	Mlb	≥ 1	M	Banded as an adult at OSA in 2011.
2011	SDR / FUZ / REF	Mlb	PUWH/pupu	≥ 1	M	Banded as an adult at FUZ in 2011.
2011	SDR / ALT / REF	Mlb	BYST/gogo	≥ 1	M	Banded as an adult at ALT in 2011.
2011	SDR / SPT / REF	pupu	WHDP/Mlb	≥ 1	M	Banded as an adult at SPT in 2011.
2011	SDR / PA07	YEPU/pupu	Mlb	≥ 1	M	Banded as an adult at PA07 in 2011.
2011	SDR / SGFU / REF	Mlb	LPBK/pupu	≥ 1	M	Banded as an adult at SGFU in 2011.
2011	SDR / SGBT / TMT	BYST/pupu	Mlb	≥ 1	M	Banded as an adult at SGBT in 2011.
2011	SDR / SGPP / TMT	BKBK/gogo	Mlb	≥ 1	M	Banded as an adult at SGPP in 2011.
2011	SDR / SGPP / TMT	LBBK/Mlb	pupu	≥ 1	F	Banded as an adult at SGPP in 2011.
2011	SDR / EDD / TMT	Mlb		≥ 1	F	Banded as a nestling on the SDR before 2011. This female also paired with FJS2 in 2011.
2010	SDR / VA03		PUYE/Mlb	2	M	Banded as a nestling on the SDR in 2009.
2010	SDR / JOY / REF	Mlb	BKLB/pupu	≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / SGPP / TMT	Mlb	BKBK/pupu	≥ 4	M	Banded as an adult on the SDR in 2008.
2010	SDR / WMB2 / TMT	DPWH/Mlb		≥ 4	M	Banded as an adult on the SDR in 2008.
2010	SDR / SGCA / REF	BKLB/pupu	Mlb	≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / FJS2 / TMT		BKLB/Mlb	≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / EDD / TMT		DPWH/Mlb	3	M	Banded as a nestling on the SDR in 2008.
2010	SDR / ORD / TMT	YEPU/Mlb	pupu	3	M	Banded as a nestling on the SDR in 2008.
2010	SDR / POR / REF	YEYE/Mlb		≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / MER / REF		LBBK/Mlb	≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / HTS / TMT		BKLP/Mlb	≥ 2	M	Banded as an adult on the SDR in 2010.
2010	SDR / CCO / TMT	LBLB/Mlb		≥ 3	M	Banded as an adult on the SDR in 2009.
2010	SDR / PA08 / TMT	Mlb	WHDP/pupu	1	M	Banded as a nestling at SGPN in 2010.
2010	SDR / SGPP / TMT	WHWH/Mdb	LPBK	3	F	Banded as a nestling on the SLR in 2008.
2010	SDR / ORD / TMT	BKLB/Mlb	pupu	1	F	Banded as a nestling at HTS in 2010.
2010	SDR / CCO / TMT		WHDP/Mlb	2	F	Banded as a nestling on the SDR in 2009.
2010	SDR / PA07	DPWH/Mlb	pupu	1	F	Banded as a nestling at WMB2 in 2010.
2009	SDR / GO17		LPBK/Mlb	≥ 4	M	Banded as an adult on the SDR in 2008.
2009	SDR / LA07		Msi	≥ 7	M	Banded as an adult on the SDR in 2006.
2008	SDR / BHV / TMT	PUPU/Mlb	pupu	3	M	Banded as a nestling on the SDR in 2008.
2008	SDR / SGFU / REF	PUPU/pupu	Mlb	≥ 4	F	Banded as an adult on the SDR in 2008. This female also paired with SGCA in 2011.

[b] Band colors: Mdb = dark blue numbered federal band; Mlb = light blue numbered federal band; gogo = metal gold; pupu = metal purple; BKBK = plastic black; BKLB = plastic black-light blue split; BKLP = plastic black-light pink split; BYST = plastic black-yellow striped; DPDP = plastic dark pink; DPWH = plastic dark pink-white split; LBBK = plastic light blue-black split; LBLB = plastic light blue; LPBK = plastic light pink-black split; PUPU = plastic purple; PUWH = plastic purple-white split; PUYE = plastic purple-yellow split; WHDP = plastic white-dark pink split; WHWH = plastic white; YEPU = plastic yellow-purple split; YEYE = plastic yellow.

[c] Sex: F = female; M = male.

[d] SDR = San Diego River, SLR = San Luis Rey River.

APPENDIX D

STATUS AND NESTING ACTIVITIES OF LEAST BELL'S VIREOS ALONG THE SAN DIEGO RIVER, 2011

TREATMENT SITE TERRITORIES

Territory	Nest	Nest Fate[a]	# Cowbird Eggs	# Fledged	Comments
BHV	1	UNK			Nest abandoned, no eggs observed.
BHV	2	SUC		4	
BTN	1	SUC		3	
CCO	1	SUC		4	
CL6	1	SUC		3	
EDD	1	PRE			
EDD	2	SUC		3	
FJS2	1	PRE			
FJS2	2	INC			Nest not completed.
FJS2	3	SUC		3	
HTS	1	PRE			
HTS	2	PRE			
SGMD	1	PRE			
SGMD	2	INC			Nest not completed.
SGMD	3	PRE			
SGMD	4	SUC		2	Same location as Nest 2.
ORD	1	PRE			
ORD	2	SUC		1	
SGPP	1	PRE			
SGPP	2	UNK			Nest abandoned with wet, cold eggs after rainfall.
SGPP	3	SUC		2	
WMB2	1	SUC		3	
WMB2	2	PRE			

REFERENCE SITE TERRITORIES

Territory	Nest	Nest Fate[a]	# Cowbird Eggs	# Fledged	Comments
ALT	1	FAL			Bachelor male building nest, not completed.
ALT	2	PRE			
SGCA	1	SUC		4	
SGCA	2	OTH			Nest came loose from support branches. Nestlings died from a combination of starvation/abandonment and ant depredation.
SGFU	1	PRE			
SGFU	2	PRE			
GOL	1	PRE			
JOY	1	SUC		2	
MER	1	PRE			
MER	2	INC			Nest not completed.
MER	3	UNK			Nest abandoned with eggs. Female missing.
OSA	1	SUC	1	2	
POR	1	SUC		3	
SGSA	1	SUC		2	
SPT	1	PRE			

[a] Nest Fate: INC = nest never completed; SUC = fledged at least one Least Bell's Vireo young; PRE = nest failure caused by predation; OTH = reason for nest failure known, such as substrate failure; UNK = reason for nest failure/abandonment unknown.

SCOTT CASHEN: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE TOWN AND COUNTRY PROJECT

CITED REFERENCE

Martin TE, GR Geupel. 1993. Nest-Monitoring Plots: Methods for Locating Nests and Monitoring Success. J. Field Ornithol. 64(4):507-519

J. Field Ornithol., 64(4):507–519

NEST-MONITORING PLOTS: METHODS FOR LOCATING NESTS AND MONITORING SUCCESS

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Abstract.—Attention to long-term declines in populations of Neotropical migratory birds has generated increased interest in how to monitor and manage them. Measurement of nesting success provides information on trends in recruitment, and measurement of vegetation associated with nests may identify habitat influences on breeding productivity. Examination of nests also allows collection of life history data (e.g., clutch size, numbers of broods, numbers of nesting attempts, nesting success), which provide important insight into vulnerability of species to decimation or perturbations. Comparisons of nesting success and habitat use across the geographic range of a species can determine local habitat effects on population recruitment and historical constraints on habitat use and species distributions. In this paper, standardized methods and cues are described that aid in locating and monitoring nests to allow comparisons across studies in space and time.

MÉTODOS PARA LOCALIZAR NIDOS Y MONITOREAR EL ÉXITO DE ESTOS

Sinopsis.—El decrecimiento progresivo de las poblaciones de aves que migran al neotrópico ha generado gran interés en cómo monitorear y manejar a éstos. El medir el éxito de anidamiento provee información en relación a las tendencias en el reclutamiento poblacional y las medidas de la vegetación asociada a nidos puede ser importante en identificar aspectos de ésta que influyan en la productividad. El examen de nidos también permite recopilar datos sobre ciclos de vida (ej. tamaño de la camada, número de camadas por año, número de intentos de anidamiento, y éxito de anidamiento) el cual provee información importate en referencia a la vulnerabilidad de la especie a perturbaciones. La comparación del éxito de anidamiento de una especie en diferentes habitats a lo largo de extensiones geográficas puede determinar el efecto de habitats locales en el reclutamiento poblacional y restricciones históricas en el uso de habitat y la distribución de la especie. En este trabajo, se describen métodos estandarizados y pistas que pueden ayudar a localizar y monitorear nidos de tal manera que se puedan hacer comparaciones entre estudios y lapsos de espacio y/o tiempo.

Habitat features that influence breeding productivity of birds are poorly known (Martin 1992). Measurement of nesting success and associated vegetation allows identification of such habitat features and also provides greater insight into evolution of habitat requirements and species coexistence than traditional metrics such as presence or abundance (Martin 1986, 1988a, 1992). Data on nest sites and mortality also improve understanding of ecological and evolutionary influences on life history traits

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(Lack 1968; Martin 1988b, 1993a, b; Martin and Li 1992), which can give insight into the abundance and vulnerability of species to population decimation (Martin 1993a, Pimm et al. 1988). Knowledge of life history traits taken together with data on breeding productivity can also provide information on demographic trends and warn of population problems before declines in density actually occur (Martin 1992, 1993a; Pienkowski 1991; Temple and Wiens 1989). Many life history traits, however, are unknown or poorly known for many species in North America; breeding biology studies are poorly represented among species and geographic locations (Martin 1992, 1993a; Ricklefs 1969). The paucity of studies exists in part from a misconception that nests are too difficult to find. Yet, cues and techniques for finding nests can be learned, as we describe here, thereby providing the vital information needed to curb long-term population declines of many species (see Robbins et al. 1989).

Nest record programs, where volunteers turn in records of nest attempts, have been in existence for years in both the United Kingdom (Ballie 1990) and United States (Bart 1977). These programs obtain data for broad geographic regions from volunteers who often locate nests incidental to other activities. Sample sizes for many geographic regions and habitat types are minimal and consistency in monitoring nests once they are found is poor. Thus, these programs suffer from several potential biases and require careful interpretation (Ballie 1990). In contrast, studies that focus on nest monitoring on long-term plots can provide data on breeding productivity for entire collections of species to allow comparisons within and among species in space and time (e.g., Martin 1992, 1993a; Martin and Li 1992; Sherry and Holmes 1992). Moreover, broad-scale deterioration of environmental conditions from habitat degradation or global warming can be detected if such studies are distributed across local microclimatic gradients and broad geographic regions (Martin 1992, Temple and Wiens 1989). Additionally, if vegetation is measured, habitat features that influence nesting success can be compared across the geographic ranges of species to provide insight into habitat requirements and distribution of species (see James et al. 1984, Knopf et al. 1990). Effective comparisons among species and locations, however, depend on standardization of sampling protocols.

In this paper we describe aids and standardized techniques for locating and monitoring success of nests. These methods are provided to standardize data collection to allow comparisons across investigators and in the hope of increasing both sample sizes and numbers of studies of breeding biology.

NEST LOCATION

Nest finding is labor intensive (DeSante and Geupel 1987), but most observers can improve their ability to locate nests in a matter of days with training and practice. The behavioral observations and clues described below work effectively for a variety of species. Our experience includes only a small subset of species and habitats available in North America,

however, and is largely restricted to wooded (scrub and forest) habitats. Other methods may be more effective in other habitats. For example, cable-dragging (Higgins et al. 1969) and rope-dragging (Labisky 1957) may be more effective methods for many grassland species. The patience and alertness of observers and their familiarity with the habitat and behavior of species are the most important influences on effectively locating nests.

We have successfully used these techniques to train individuals who even lack experience at bird identification. For example, a crew of four assistants initiated a study in Arkansas in 1991 where nesting behaviors of species were unstudied; this crew was provided only the general nest-finding guidelines given below. The crew included one experienced nest-finder, one person experienced at identifying birds and two people without experience at either. These workers found over 300 nests of open-nesting birds (Table 1). A crew of seven assistants that included two experienced nest-finders found more than 800 open-cup and cavity nests on Arizona sites in the same year (Table 1). In general, about 20 nests are needed for an adequate estimate of nesting success (Hensler and Nichols 1981), and such sample sizes were obtained for most species (Table 1). Moreover, species with small sample sizes can be compiled across years.

We recommend that two study plots be established for each person searching for nests and he or she should work on these two plots for the entire nesting season. Nest-searching should be alternated between plots between days. This schedule allows consistent monitoring and allows the person to become familiar with the plot and identify "hot spots." In general, eight plots, each 40 ha in size, should be established in forest habitat to find adequate numbers of nests for most species coexisting in any given forest, but smaller plots can be established if studying habitats with higher densities. This design fits in the national Breeding Biology Research and monitoring Database (BBIRD) administered by Martin.

Nest finding should begin early, as soon as territories are established. Non-migratory species generally are more variable than migrants and may initiate breeding considerably earlier in some years (e.g., Geupel and DeSante 1990). Visits prior to nesting are recommended to ensure early nests are not missed in 'unusual' years. Once general chronology of nest initiation is known (after the first year), a general description of this chronology helps assistants to know species on which to focus early in the season.

Nest location during nest construction.—Nests located during construction provide the best estimates of nest success. Permanent residents and many ground-nesting species often begin the earliest. Only the female constructs the nest and incubates for most small terrestrial bird species in North America (Kendeigh 1952, Silver et al. 1985). Exceptions include woodpeckers (Picidae), vireos (Vireonidae), and wrens (Troglodytidae). Thus, the most effective way of finding nests is by locating and following females, although males may provide some cues (see later), and some nests in the shrub layer can be found by random search. Ground nests

TABLE 1. List of species and numbers of nests found in a single field season in Arkansas and Arizona using teams of four and seven field assistants, respectively.

Arkansas		
Yellow-billed Cuckoo	*Coccyzus americanus*	13
Acadian Flycatcher	*Empidonax virescens*	51
Wood Thrush	*Hylocichla mustelina*	40
Red-eyed Vireo	*Vireo olivaceus*	51
Black-and-white Warbler	*Mniotilta varia*	19
Ovenbird	*Seiurus aurocapillus*	14
Worm-eating Warbler	*Helmitheros vermivorus*	16
Hooded Warbler	*Wilsonia citrina*	67
Indigo Bunting	*Passerina cyanea*	30
Arizona		
Acorn Woodpecker	*Melanerpes formicivorus*	8
Red-naped Sapsucker	*Sphyrapicus varius*	30
Williamson's Sapsucker	*Sphyrapicus thyroideus*	32
Hairy Woodpecker	*Dendrocopus villosus*	10
Downy Woodpecker	*Dendrocopos pubescens*	8
Northern Flicker	*Colaptes auratus*	26
Cordilleran Flycatcher	*Empidonax difficilis*	36
Mountain Chickadee	*Parus gambeli*	45
Pygmy Nuthatch	*Sitta pygmaea*	24
Red-breasted Nuthatch	*Sitta canadensis*	26
White-breasted Nuthatch	*Sitta carolinensis*	14
Brown Creeper	*Certhia familiaris*	22
House Wren	*Troglodytes aedon*	83
Hermit Thrush	*Catharus guttatus*	74
American Robin	*Turdus migratorius*	24
Ruby-crowned Kinglet	*Regulus calendula*	14
Warbling Vireo	*Vireo gilvus*	58
Orange-crowned Warbler	*Vermivora celata*	71
Virginia's Warbler	*Vermivora virginiae*	34
Yellow-rumped Warbler	*Dendroica coronata*	45
MacGillivray's Warbler	*Oporornis tolmiei*	9
Red-faced Warbler	*Cardellina rubrifrons*	21
Western Tanager	*Piranga ludoviciana*	39
Black-headed Grosbeak	*Pheucticus melanocephalus*	7
Green-tailed Towhee	*Pipilo chlorurus*	24
Dark-eyed Junco	*Junco hyemalis*	46

in forests are usually the most difficult to find and ground-nesting species are poorly studied (Martin 1992, 1993a). Yet, this group is thought to be particularly area-sensitive and good indicators of habitat disturbance (Martin 1993a, Whitcomb et al. 1981). Thus, special efforts should be made at locating and monitoring ground-nesting species.

Females tend to be extremely furtive during nest building. Mated females may be recognized by copulation events during latter stages of building or by observing that they move about the territory unharassed by the male. Any non-mated bird, especially an intruding male, is normally attacked immediately. Any female observed should be checked with

binoculars, especially after long flights across the territory, to determine whether nesting material is being carried. Nest material may not be obvious. For example, species such as Yellow-rumped Warblers (*Dendroica coronata*) and Wrentits (*Chamaea fasciata*) collect spider webbing, which is only observable as a small white spot after careful examination of the bill (Martin and Geupel, pers. obs.). Similarly, many birds carry fine materials for lining nests, and these materials are not obvious upon casual inspection.

Sitting near sources of nesting material (i.e., failed nests, thistles) or open areas with a good view of the territory can help detection of nest-building females. Different paths across plots should be used on each visit to increase the probability of randomly encountering females near undiscovered nests. Follow a bird carrying nesting material from a distance to avoid disturbance. Do not interrupt a long flight. If the bird disappears, begin to scan for potential nest sites. Be patient and wait for another visit, being careful not to interfere with her behavior. If the female disappeared near the nest, she will spend time in the area. Remain aware, however, that she may also move out of the back side of the patch to a different patch that contains the nest.

Some birds tolerate nearby observers and behave normally, but most are very wary of observers. If the observer is too close to the nest, the bird often will sit on a perch and eventually drop the nesting material if the observer does not move away. The observer should move quickly and quietly in the opposite direction from which the bird came. Obtain a new hiding position at least 15 m away and watch the female take nesting material several times and leave without it. Stay alert to the possibility that the female may enter one patch and then surreptitiously move among patches only to return the same way to give the appearance of nesting in the first patch. Some species such as MacGillivray's Warblers (*Oporornis tolmiei*), Hooded Warblers (*Wilsonia citrina*) and Sage Sparrows (*Amphispiza belli*) will walk on the ground for several meters to approach the nest secretly. Species that nest off the ground can often be detected as they move through a thick patch of vegetation by watching the vegetation move. Verify the nest status and location a few hours later, being careful to make sure the female is not present. Later visitation is recommended because usually the female has become aware of observers during their nest-finding activities.

Nest location during egg-laying.—The most difficult stage for finding nests is during egg-laying because the female may visit the nest only when she lays an egg and most songbirds lay one egg per day. In cold climates, the female will sometimes sit on the nest during egg-laying when weather is particularly harsh. Also, nest visitation becomes more frequent with increases in numbers of eggs laid (Kendeigh 1952, Zerba and Morton 1983). One means of finding nests during egg-laying is by carefully observing female and male behavior. When either parent gets near the nest, it will look at the nest. If an egg-laying female detects a predator in the area, such as an observer following her, she will sometimes check

the nest by looking down at it repeatedly. A good cue is a female staying in an area without actively feeding.

Finally, copulatory behavior can be used to detect nests during both nest-building and egg-laying. Copulation often occurs in the same tree above a nest, on the same branch, or in the next tree. Carefully examine the area immediately adjacent to any copulatory activity observed.

Nest location during incubation.—When females suddenly "vanish" and males increase the frequency of singing, females have probably initiated incubation. An increase in female foraging speed also indicates the onset of incubation. Females forage at slower speeds prior to incubation (during pre-construction, nest construction, and egg-laying) than during incubation and nestling stages. Females that are moving obviously fast (e.g., rapid hops, quick short flights, rapid wing flicks) should be carefully followed because they will return to the nest soon; on average, female passerines stay off the nest for 6–10 min and on for 20–30 min at a time across species (e.g., Nice 1937, Southern 1958, Zerba and Morton 1983).

Detection of incubating females can be accomplished in two ways. First, females can be encountered by constantly moving through the study plot, but constant alertness is imperative. Sometimes, sitting down in a spot for 20–30 min is useful because incubating females will leave the nest in that period. Second, females can be detected by call notes. Females of many taxa (e.g., Silviidae, Parulinae, Emberizinae) chip or call when they are off the nest. The female begins chipping just prior to leaving the nest or as soon as she is off it. Some taxa such as emberizid finches and icterines give a unique nest departure call when leaving the nest (McDonald and Greenberg 1991). If a vocalizing female is detected and then lost during the course of following her, immediately return to the point of original detection because it is often near the nest and the female can often be relocated before getting back on the nest.

Males can also be of some help. First, males often will respond to females when they leave the nest and either quietly guard the nest (e.g., Gray Catbird, *Dumetella carolinensis*; Slack 1976), or the female. Detection of a quiet male may indicate presence of a foraging female or a nest somewhere near him. Second, males will feed incubating females for a great array of species, particularly cavity-nesting birds, but for many open-nesting birds as well (Lyon and Montgomerie 1987, Silver et al. 1985, Martin and Geupel, unpubl. data). Any birds (male or female) observed should be checked for material in their bills because they potentially could be building nests, feeding females or feeding young. Finally, males of some species (e.g., Chestnut-sided Warbler, *Dendroica pensylvanica*) use favorite singing perches that are in direct view of the nest (Martin, pers. obs.). The nest can be located by following his line of sight.

Females are fairly tolerant of people following while they forage. The female is more cautious as she returns to the nest. A relatively long flight after foraging is probably a return to the nest and is often along the same route. Quickly running in her direction for about 25 m may often allow

resighting because the disturbance will keep her from returning to the nest. If she is near the nest, but cautious about approaching, she will display nervous displacement behavior. This "nest dance" involves bouncing back and forth between a few trees or substrates, and in some cases also includes very rapid foraging. Eventually, she will start to move down toward the nest and then suddenly fly back up. This behavior will be repeated several times in the course of a few minutes. If the observer is too close to the nest, the bird will continue to bounce back and forth between substrates and will sometimes fly off for a short time, only to return within a few minutes. The observer should back off and watch her with binoculars and she will then return to the nest. If the work is being conducted in cold conditions, do not keep her off the nest for more than 15 min because the eggs can chill to lethal levels. If the female has been followed for more than 30 min and has not disappeared or exhibited displacement behavior, then she probably does not have a nest. Of course this "30-min rule" does not apply to species where both sexes incubate.

If a female disappears into a tree or shrub, memorize the area where the female disappeared and choose potential nesting sites before approaching. Moving quietly, begin tapping potential nest shrubs in this area with a stick. Listen for the flush of the female off the nest. Watch for the female or the "nest dance." Note that spotting the female will confirm that the nest is nearby. If the nest is not found and the female is not observed leaving, then there is no confirmation that a nest is in the area. Because the nest is in a fixed location, the site can be revisited for careful searches in the future.

In many species, nest site preference seems to be an evolutionarily conservative trait (Martin 1988a, 1992, 1993c). Many birds prefer to nest in or under certain plant species or patch types that differ among bird species (Geupel 1993, Martin 1993c, Martin and Roper 1988). Familiarity with nest substrate and patch preferences can help in finding nests. Describe and visit nest locations from previous years to aid new observers in finding nests.

Nest location during the nestling stage.—Finding nests during the nestling period is easiest because both males and females commonly bring food to the nestlings and remove fecal sacs. Males are normally the easiest to follow because they are generally less cautious than females in approaching nests. Nests can usually be found from a greater distance using binoculars because of the constant activity of the parents.

Knowledge of the nesting cycle allows an observer to anticipate when to start looking for a new nest. Most species will renest following a nesting failure, although the number of nesting attempts or renesting intensity varies within and among species (Geupel and Desante 1990, Martin and Li 1992). Reconstruction begins almost always at a new site within 10 d and the new nest is likely to be farther away from the previous nest the earlier in the nesting cycle that failure occurred (citations in Martin 1992). Multi-brooded species may begin another nest in as little as 8 d

after fledging a prior nest. Sometimes the female will begin nesting while the male is still tending the fledglings of the previous brood (Burley 1980, Smith and Roff 1980).

Nest finding can be a difficult and frustrating task; patience is the most important asset. An observer should set a goal of trying to find at least one nest every day. More than one nest will be found on many days, but if at least one nest can be found each day the numbers of nests obtained over the season will accumulate and frustration will be minimized.

NEST MONITORING

Each nest found should be checked every 3–4 d to determine if it is still active (with eggs or young) or has failed. Except just after egg-laying and near hatching and fledging events, it is not necessary to check the nest contents. Instead, check the nest from a distance; if an adult is on the nest, do not flush it. Careful and highly conscientious attention to checking nests is critical for data quality because the number of days that nests are observed with eggs or young is used to calculate daily mortality rates, the most effective measure of nest success (Hensler and Nichols 1981; Mayfield 1961, 1975). Moreover, nesting outcome is difficult to determine with increasing length of time between nest checks and variation at this stage can bias estimates of nest success. The fledging date should be identified as the date of the last visit on which nestlings were observed in the nest. Do not extrapolate past the last date that young were observed except when the average nesting cycle duration is used to determine the fledging date from the known initiation date. Otherwise, an upward bias on Mayfield estimates occurs. Prior to the field season, a sheet of information that summarizes the general clutch size, length of the incubation period, and length of the nestling period for every species that occurs on the study sites should be prepared. This information aids anticipation of hatching and fledging events.

Flagging or other visible markers can increase risk of predation (Picozzi 1975) and, hence, should be used with caution. When possible, memorize the area and write a description of how to find the nest using compass bearings and distance estimates (paces) from obvious landmarks or flagging placed greater than 10 m from the nest. Another solution is to grid permanently all study plots with numbered stakes at 25 or 50 m intervals depending on the density of the vegetation; 25 m intervals are usually best (see Ralph et al. 1993 for information on establishing permanently marked plots). Nest location can be described from these permanent markers.

Nest cards are used to record data about the nest site and nest activity. The Cornell Laboratory of Ornithology (159 Sapsucker Woods Rd., Ithaca, New York 14850) maintains a national nest card database and, thus, their card or some similar variant should be used. All observations of nests should be recorded on the nest card, including visits when no activity was noted. Noting lack of adult activity is particularly critical for canopy or cavity-nests where nest contents cannot be checked. All this

information is needed for calculating nesting success (see also Bart and Robson 1982). Recorded information should include date, time, presence of adults and activity of adults (e.g., incubating, feeding young, flushed from nest). Also, any time the nest is approached close enough to see the contents, they should be noted on the nest cards (number of eggs, or number and age of nestlings). Age of the nestlings helps determination of nest fate in some cases by providing information on length of time that nests were active. Also, data should be summarized by success at each nesting stage (egg-laying, incubation and nestling) and, thus, accurate records of these stages are needed. When possible, data should include date of first egg, clutch completion date, hatching date, day of banding (if banded) and fledging date. Careful and detailed observations should be recorded if a nest predation event is observed in action. If the nest appears inactive based on observations from a distance, it should be approached to verify mortality. In the case of canopy nests, mirrors attached to telescoping poles (we use window-washing poles) can be used to check nest contents of nests up to 10 m off ground. If the nest appears depredated (eggs or young removed) then check the nest structure and immediate area around and under the nest for evidence of predation. Look for holes in the bottom of the nest cup. Any evidence (e.g., shell fragments, hole in nest, nest torn up) should be fastidiously noted on the card. When the young fledge, they commonly perch on the side of the nest thereby flattening the nest and they leave fecal droppings in the nest or on the edge or ground and such should be noted as possible evidence of successful fledging. When a nest is thought to have fledged, however, observers should try to verify by watching for fledglings or parents feeding fledglings or by hearing parents giving alarm or distress calls or young begging. This activity usually occurs near the nest site because fledglings often do not move very far in the first couple of days. Some species such as Rufous-sided Towhees (*Pipilo erythrophthalmus*), however, may move as far as 100 m in less than a few hours. Care must be exercised in classifying nest fate because some species or individuals may carry food up to 24 h or longer after predation of their nest. This behavior may be exacerbated by unrelated fledgings from neighboring territories. Descriptive confirmatory evidence of fledging should be noted on the nest cards.

PRECAUTIONS FOR MINIMIZING HUMAN-INDUCED MORTALITY

Locating and monitoring nests have the potential to reduce nest success (Gotmark 1992) but with proper precautions such biases can be eliminated or minimized (Martin and Roper 1988, Nichols et al. 1984, Willis 1973). Some investigators use camouflage netting over their heads or attached to camouflaged hats to reduce disturbance to birds. Initial location of the nest normally creates the most distress to adult birds and disturbance to the nest site because subsequent visits are brief. Some evidence suggests that predation rates are higher on the first or early visits than subsequent visits (Bart 1977, Nolan 1978, but see Bart and Robson 1982), perhaps caused by the disturbance during locating the nest. Therefore the following

guidelines are suggested when attempting to locate nests. (1) Distress calls by adults should be minimized and never allowed to continue for over 5 min. (2) Do not approach a nest when any potential nest predator, particularly a visually-oriented predator (e.g., corvid) is present. (3) Minimize disturbance to the area around the nest. (4) Do not get close to nests during nest building; birds will abandon if disturbed prior to egg-laying, particularly during the early part of a season.

To lower the probability of predation or brood parasitism during checks, we recommend the following precautions. (1) Check the nest from as great a distance as possible. Use binoculars to see the female or contents of the nest or get on logs and look from above into the nest when possible to minimize proximity and disturbance near the nest. (2) Disturb the birds and area as little as possible. Move to nests in different paths on subsequent visits and use a path that is quick, quiet and that minimizes disturbance to the vegetation; paths in the vegetation from broken stems or smashed grass/forbs can cue possible predators. Never leave a dead end trail to the nest. Do not return on the same path but continue walking in a different direction away from the nest. If avian predators are common, check other bushes without nests. Always assume a predator is watching. (3) Be quick and accurate during nest checks and nestling banding. If the nest must be approached, minimize the amount of time spent near the nest examining the contents because the more time spent at nest the more scent that is left for olfactory predators. (4) Minimize the number of observers visiting the nest (no photographers). (5) Use a pen or stick to check nests to prevent human scent from being left on or near a nest.

VEGETATION MEASUREMENT

As soon as a nesting attempt terminates (successful or unsuccessful), complete the nest card and then measure the vegetation associated with the nest. Be careful at the beginning of the season (May to early June), as an empty nest may not have had eggs laid yet; some species or individuals will delay as long as 8 d between completing nests and laying eggs. Do not bother nests at this stage, unless it is certain a nesting attempt was made and failed.

Vegetation should be measured for the nest substrate and surrounding patch. Vegetation in the patch surrounding the nest can provide information on microhabitat choices. Species that choose the same plant species as a nest substrate may choose different microhabitat types (Martin 1993c, unpubl. data). Moreover, vegetation in the habitat patch surrounding a nest may exert a strong influence on probability of mortality. For example, numbers of potential nest sites (stems of the same size and plant species as used for the nest) in the patch surrounding the nest may affect predation risk (Martin 1988c, 1992, 1993c; Martin and Roper 1988). Hence, determination of habitat patch preferences is important for developing land management guidelines and testing habitat selection theories. Comparisons of nest patch characteristics to unused patches or to patches used across the range of species may provide important insight into habitat

preferences (e.g., see James et al. 1984; Knopf et al. 1990; Martin 1988c, 1992, 1993c; Martin and Roper 1988). Standardized vegetation sampling methods should be used to allow comparisons among locations and investigators. Details of the vegetation sampling protocols used by the national BBIRD program are available from Martin upon request.

In conclusion, nest-monitoring plots can provide valuable data on the habitat influences on nesting productivity and possible causes underlying population trends. Constant-effort mist-netting schemes can provide an index of annual productivity (Ballie et al. 1986, DeSante and Geupel 1987) and also some information on adult and juvenile survivorship. These methods, however, do not necessarily provide information on the types of habitat conditions that facilitate increased nesting productivity. Nest-monitoring is more labor-intensive but provides direct information on both productivity and habitat conditions that facilitate maintenance of viable populations, thereby providing direct land management information. Moreover, nest-monitoring is the only way to ascertain the rate and consequences of cowbird parasitism. Finally, nest-monitoring provides badly needed data on life history traits of species, which allows identification of bottlenecks in the demography of species and, also, when taken together with nesting success may provide important insight into vulnerability of populations to disturbance (see Martin 1993a).

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SOCIETY FOR ECOLOGICAL RESTORATION

Wildlife Restoration

TECHNIQUES FOR HABITAT ANALYSIS AND ANIMAL MONITORING

MICHAEL L. MORRISON

FOREWORD BY PAUL R. KRAUSMAN

INTRODUCTION

> The restorationist who sees himself . . . as the practical arm of some abstract, academic discipline is not likely to give great thought to the theoretical aspects of the restoration process. . . . He will probably view his failures as a result of personal ignorance of the received wisdom. [Gilpin 1987:305]

Much of restoration involves improving the conditions for native species of wildlife. To be ultimately successful, our restoration plans must be guided by the needs of the wildlife in the project area. We need information on species abundances and distribution, both current and historic. We need details on habitat requirements, including proper plant species composition and structure. We need to understand niche relationships, especially constraints on resource acquisition. We need to know food requirements and breeding locations. We need to understand the role that succession will play in species turnovers. We need to know the problems associated with exotic species of plants and animals, the problems of restoring small, isolated areas, and more. In short: understanding wildlife is a complicated process that demands our careful consideration during all stages of restoration.

Moreover, the success of a restoration project should be judged by how wildlife species respond to it. Monitoring gives us feedback that allows us to modify the specific project and refine future projects. Restoration should include applications at all spatial scales—from broad-scale (landscape) projects, down to small, site-specific projects. Throughout, however, I emphasize an integrated ecosystem approach: a holistic approach.

This book provides ecologists, restorationists, administrators, and other professionals with a basic understanding of the fundamentals of wildlife populations and wildlife/habitat relationships. It covers the types of information you will need in planning as well as the basic tools you will need to

develop and implement a rigorous monitoring program. The primary monitoring themes covered here are experimental design and statistical analysis, including the sampling of rare species and populations. With this knowledge, restorationists will be equipped to discuss their needs with professional wildlife biologists. Although no special training or education is necessary, a knowledge of basic ecological concepts and basic statistics is helpful. The book addresses wildlife restoration by:

- Exploring the concepts of habitat and niche, their historic development, components, and spatial-temporal relationships, and their role in land management
- Explaining how wildlife populations are identified and counted
- Reviewing the practice of captive breeding, reintroduction, and translocation of animals
- Detailing techniques for measuring wildlife and wildlife habitat, including basic statistical techniques
- Discussing how wildlife and their habitat needs can be incorporated into restoration planning, especially concerning size of preserves, fragmentation, and corridors
- Outlining a holistic approach to the restoration of large landscapes (an integrated ecosystem approach)
- Examining how exotic species, competitors, predators, disease, and related factors influence restoration planning
- Developing a solid rationale for monitoring and good sampling design in restoration projects
- Analyzing the development and critique of individual monitoring projects
- Presenting case histories of restoration projects
- Pointing out further sources on wildlife/habitat relationships and monitoring

The book tackles the conceptual and practical problems involved in sampling wildlife populations and explains what wildlife biologists can, and cannot, achieve. I do not take a cookbook approach. Applying general prescriptions most often leads to unpredictable results, some of which may cause more harm than good (such as attracting unwanted exotic species). This book simply presents the basic tools you will need to *understand* ecological concepts that can be used to design restoration projects with specific goals for wildlife.

In this book you will learn the fundamental principles and practices for evaluating wildlife present in an area and determining their relationship with

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the habitat. Ecology is complicated. Thus there are many topics to be mastered: species lists, habitat use, ecological processes, monitoring, study design, statistical analyses, population processes, exotic species, disease, and parasites. Understanding these topics is essential if you wish to pursue restoration plans, endangered species recovery, population monitoring, impact assessment, reserve design, habitat conservation plans, and basic ecological relationships. Apart from covering these topics, this book indicates where you can find more advanced and detailed information.

It is not my purpose here to define the conditions—"historic conditions," for instance—that a restoration project should try to replicate. There is no end to debate over what the desired or "natural" time period should be—in effect, a debate over the *target* of restoration. My purpose is different: to help restorationists understand ecological processes as they relate to wildlife and their habitat. Nevertheless, there are basic ecological principles that suggest what is possible (and impossible) with regard to restoration. Just as there is no reason to undertake a research study that has no chance of success (because of time, funding, or logistical constraints), there is no reason to attempt to restore that which cannot be restored. Although I strongly support efforts to place restoration plans in the context of historic conditions (see Chapter 3), ecological reality must guide what we can and cannot achieve.

Generally I refrain from using the term "natural" or "natural community." Many restorationists think the baseline for natural conditions is a world without human impacts. Some take this notion further and include environmental impacts caused by the region's indigenous peoples under the rubric of "natural." Anderson (1996), for example, has depicted the ways in which an "ecosystem" could be viewed with and without various human impacts (Figure I.1). But those planning a restoration project must identify their own operating principles. In any event, achieving ecological conditions entirely free from human impacts is impossible due to local plant and animal extinctions, introduced species, migration and dispersal of plants and animals, and ecological processes. Developing a restoration plan requires a prioritization of goals based on knowledge of historic conditions, understanding of current regional conditions, knowledge of species-specific requirements, evaluation of legal requirements, and political reality. Regardless of its specific goals, every restoration project must consider the ecological processes operating in the area of concern.

The management of wildlife has recently been evolving along scientific, social, cultural, legal, ethical, and aesthetic dimensions. Traditionally wildlife

SCOTT CASHEN: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE TOWN AND COUNTRY PROJECT

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TERRESTRIAL HABITAT USE BY PACIFIC POND TURTLES IN A MEDITERRANEAN CLIMATE

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ABSTRACT—The Pacific pond turtle (*Clemmys marmorata*) is a widespread aquatic turtle in the Pacific states, yet relatively little is known about its ecology. We radio-tracked 34 individuals during an 8 year period in 4 small coastal creeks in central California to determine their use of terrestrial upland habitats. Most of our turtles left the drying arroyos during late summer and returned after winter floods. Turtles spent an average of 111 days at these land refuges, which were located in woodland and coastal sage scrub habitats an average of 50 m from arroyos. Most gravid females left the creeks during June to oviposit in sunny upland habitats with low vegetation structure, such as grazed pastures. Nest sites were an average of 28 m from creeks. Terrestrial basking sites averaged 4.5 m from streams, but were only used for a few days. We believe the use of terrestrial upland sites was related to the Mediterranean climate and the resulting unique hydrodynamics of the small coastal arroyos (dry in summer and flooding in winter).

RESUMEN—La tortuga *Clemmys marmorata* es una tortuga acuática ampliamente dispersa en los estados del Pacífico, sin embargo, se sabe muy poco acerca de su ecología. Equipamos a 34 individuos con radios durante un período de 8 años en 4 pequeños riachuelos costaneros en el centro de California para determinar el uso de hábitats terrestres tierra arriba. La mayoría de las tortugas abandonó los arroyos casi secos a fines de verano y regresaron después de las inundaciones de invierno. Las tortugas pasaron un promedio de 111 días en estos refugios terrestres, los cuales estaban localizados en hábitats como bosques y matorrales de artemisa costaneros a un promedio de 50 metros de los arroyos. Las hembras grávidas dejaron los arroyos durante junio para desovar en hábitats asoleados tierra arriba con poca vegetación tales como pastos cortos. Los nidos estuvieron a un promedio de 28 metros de los arroyos. Los sitios terrestres para asolearse promediaron 4.5 metros de los arroyos, pero fueron usados solamente por pocos días. Creemos que el uso de hábitats terrestres tierra arriba se relaciona al clima mediterráneo y a la peculiar hidrodinámica resultante de los pequeños arroyos costaneros (secos en el verano e inundados en el invierno).

The Pacific pond turtle (*Clemmys marmorata*) is distributed along the Pacific coast of North America west of the Cascade Mountains and Sierra Nevada, from Washington south to Baja California Norte (Stebbins, 1985). The major portion of the distribution is in California, in a climate characterized by long, warm, dry summers and short, mild, wet winters (Dallman, 1998). The predictable yearly wet-dry cycle is further characterized by large variations in the amount of rainfall within and between winters (Gasith and Resh, 1999) that can be rigorous for an aquatic vertebrate. Indeed, climatic adversity may partially explain why the Pacific pond turtle is the only native freshwater chelonian in this Mediterranean region (Stebbins, 1985).

These features of *C. marmorata* offer unique research opportunities. Early accounts (e.g., Storer, 1930) were followed by ecological field studies in northern California (Bury, 1972, 1986) and central California (Holland, 1985, 1994). When the Pacific pond turtle became a candidate for federal listing as threatened or endangered, resource managers and biologists realized how little information was available on

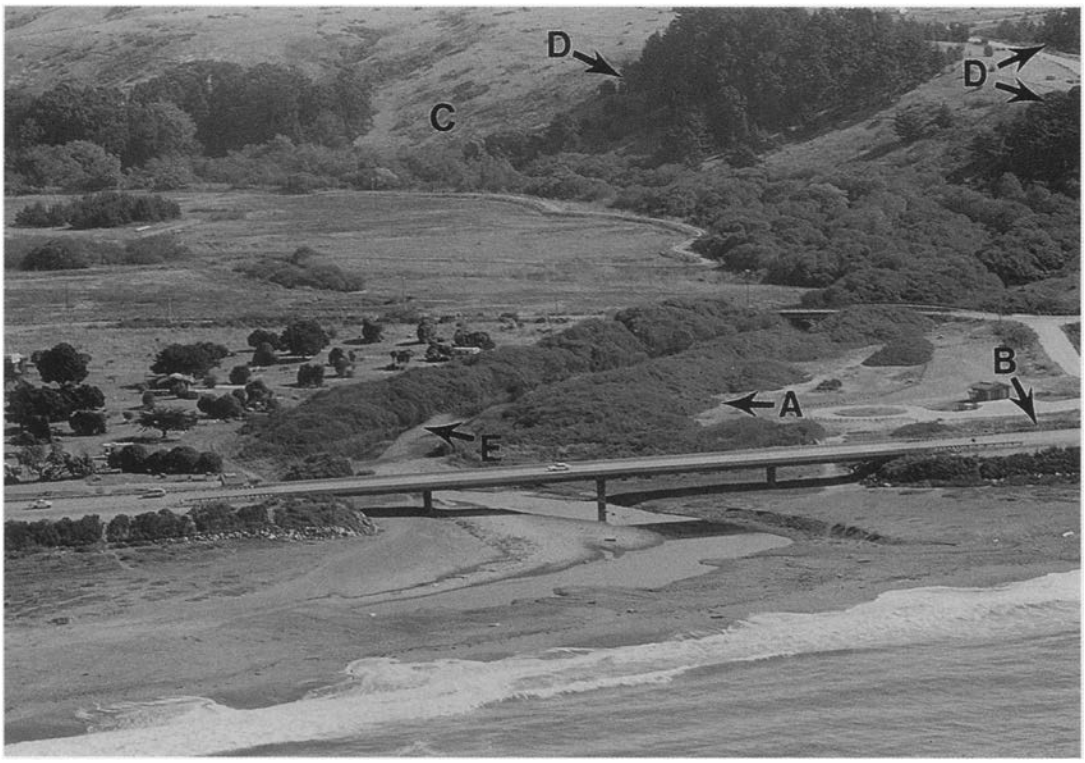

FIG. 1—Aerial photograph (November 1993) of the mouth, lagoon, and lower riparian corridor of San Simeon Creek. Riparian vegetation is dominated by willows. The northern (left) side of the riparian corridor has been highly modified by a public campground (foreground) and the Cambria wastewater spray field. The southern side is a relatively undisturbed mosaic of grassland, coastal sage scrub, and Monterey pine woodland. Terrestrial refuges of Pacific pond turtles were located at ecotones between grassland and willow thickets (site A), and grasslands and Monterey pine woodlands (D). Nesting sites were located in open grasslands (C) and in coastal sage scrub on the shoulder of State Highway 1 (B). Terrestrial basking sites were located on sandbanks on each side of the creek and lagoon (E).

this species (United States Fish and Wildlife Service, 1989, 1993). We initiated our studies in the coastal creeks and lagoons of central California in 1991 with the objective of learning more about the ecology of the Pacific pond turtle. Here, we report the results on the use of terrestrial habitats by radio-tagged *C. marmorata*.

METHODS—*Study Area*—Our research was done in the lower portions of 4 creeks along a 12 km stretch of coast north of the town of Cambria (35°32′N, 121°04′W) in northern San Luis Obispo Co., California. Arroyo Laguna–Oak Knoll Creek, Little Pico Creek, Pico Creek, and San Simeon Creek (north to south) drain the Santa Lucia Mountains, which are part of the Coast Range. These mountains rise from a 2 to 3 km wide coastal terrace to 3,264 m, about 12 km inland from the coast. As is typical of streams in regions with a Mediterranean climate, the riparian corridors are well defined (Gasith and Resh, 1999) by thickets dominated by willows (*Salix*), alder (*Alnus rhombifolia*), and blackberry (*Rubus*). A mosaic of annual exotic grasslands, oak (*Quercus agrifolia*) or pine (*Pinus radiata*) woodlands, and coastal sage scrub (Fig. 1) dominate the surrounding uplands. Near the mouths of the creeks, the woody riparian vegetation changes to herbaceous wetland plants dominated by bulrushes (*Scirpus*), cattails (*Typhus*), sedges (*Juncus*), pickleweed (*Salicornia virginica*), saltgrass (*Distichlis spicata*), and cinquefoil (*Potentilla*) that are associated with lagoon-estuary systems.

Pico Creek is unique among the 4 streams in that it has a permanent 0.16–0.25 ha man-made, freshwater pond in the flood plain next to the lagoon at the mouth. The pond is 2 to 3 m deep with a margin dominated by bulrushes. Our study focused on the

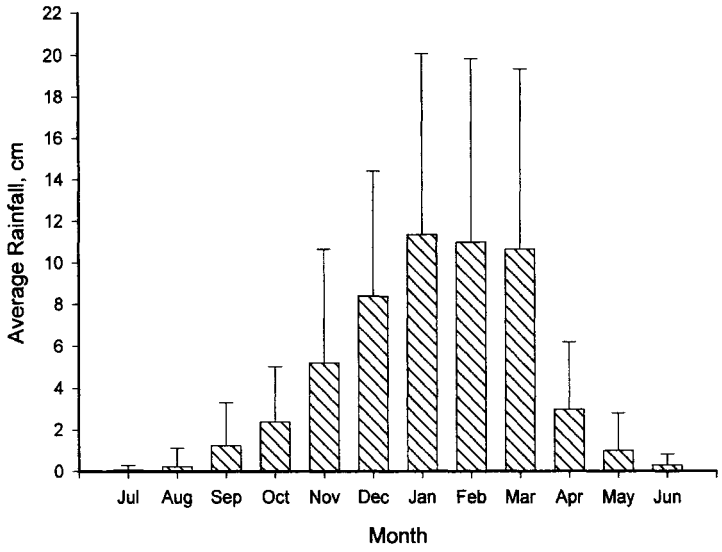

FIG. 2—Mean (bars) and standard deviation (lines) rainfall at the mouth of Santa Rosa Creek (3.5 km south of San Simeon Creek) for 25 years (1973–1997). Yearly mean = 55.52 ± 22.76 cm. Data courtesy of the Cambria Community Services District.

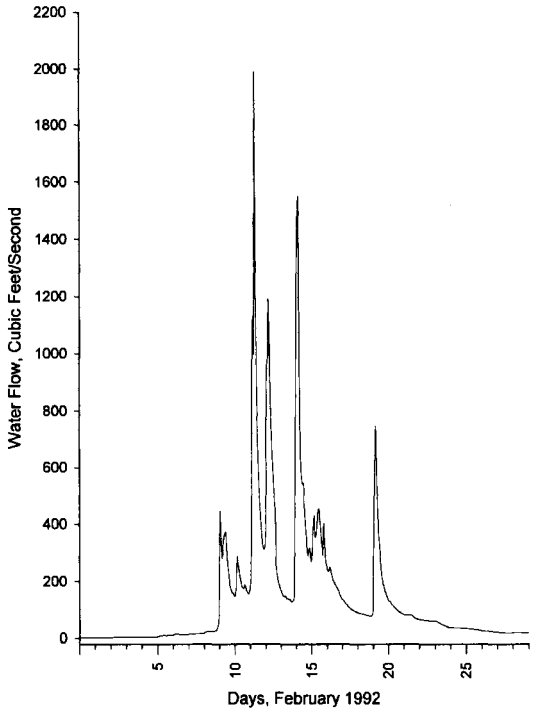

FIG. 3—Instantaneous hourly water flows (cubic ft/sec) in San Simeon Creek during February 1992. Measurements were recorded at a gauging station (#22) 1.8 km upstream from the mouth. Data courtesy of the San Luis Obispo Co. Department of Engineering.

lower parts of the 4 streams, including the lagoons and Pico Pond, and spanned 8 years (1991–1998).

Average annual precipitation in the area is nearly 56 cm (22.0 in), with 75% of this falling from December through March (Fig. 2). This pattern, typical of Mediterranean climates (Gasith and Resh, 1999), results in highly seasonal creek flows. By October, our creeks often stopped flowing and only scattered pools remained until the winter runoff, which usually started in December. During consecutive years of below average precipitation, even isolated pools in the creeks disappeared. Another characteristic of these streams was winter flow prone to unpredictable and abrupt change. Often, flows would jump 2 orders of magnitude within several hours (Fig. 3) when strong Pacific storms moved through the region. Air temperatures in our area were also typical of a Mediterranean climate, with the buffering effects of nearshore ocean upwellings and currents maintaining air temperatures between freezing and 20°C year around (Dallman, 1998).

Capture and Radiotagging—We set commercial turtle traps baited with canned sardines each spring and fall in likely turtle habitat in each creek during 4 consecutive days. We also opportunistically captured by hand any turtles seen in the creeks or on land. The sex of all turtles was determined based on morphological traits, and during the breeding season from late April through June, all females were palpated for shelled eggs, and those that were gravid were X-rayed. We marked each turtle for individual identification with a passive integrated transponder (PIT) tag injected intra-abdominally (Elbin and Bur-

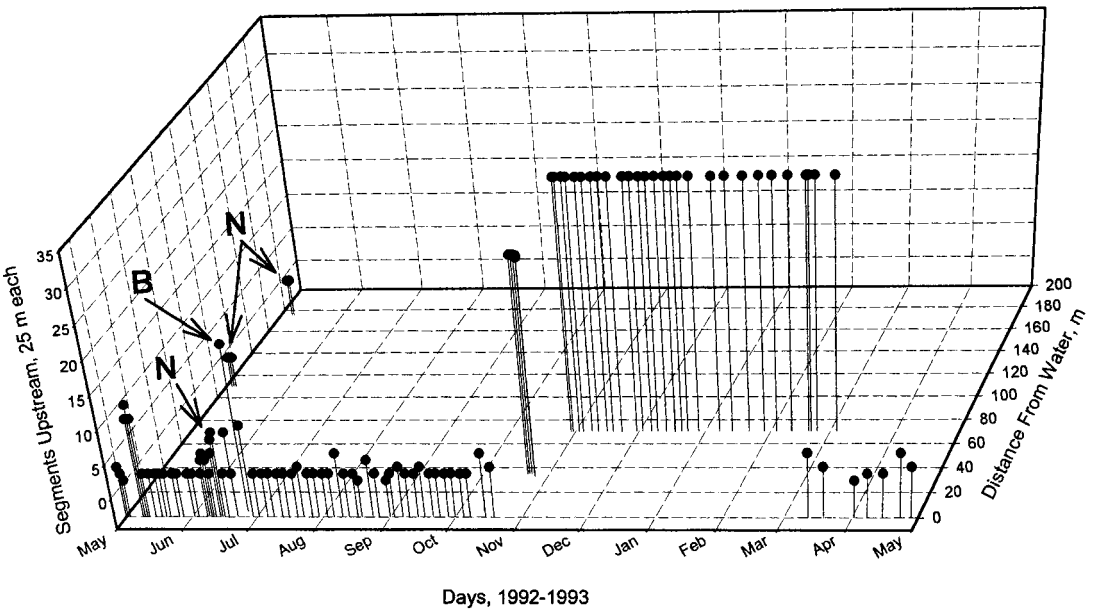

FIG. 4—Three dimensional plot of the spatial and temporal locations of radio-tagged female Pacific Pond Turtle # 93D20 in San Simeon Creek from May 1992 through April 1993. Each black dot, with a drop-line to the X-axis, represents a single radiolocation. From mid-October 1992 through early March 1993 the turtle occupied 2 terrestrial refuges, about 35 m and 75 m from the creek bed, and about 25 and 35 stream segments (1 segment = 25 m) upstream. The turtle made 3 terrestrial excursions to nest (N) and one to bask (B).

ger, 1994). All animals with PIT tags were notched on the left femoral scale of the plastron. Some individuals also were marked with unique patterns of notches on the marginal scales of the carapace.

We attached radio transmitters to some adult turtles (carapace lengths > 14 cm). The transmitters measured 4.5 cm by 2.0 cm by 1.0 cm, weighed about 15.0 g and had an internal helical antenna. Predicted battery life was about 175 days. Radio packages were glued onto the middle of the carapace with Devcon 5-min epoxy, and then contoured to the shell with dental acrylic colored black with copy machine toner. We used a receiving system composed of a directional "H-style" antenna attached to a 164 MHz wildlife radio receiver. Under good field conditions the transmission range was at least 1.0 km.

We divided each creek into 25-m-long segments, starting from the mouth, and each side within a segment was further divided into quarters. We used standard homing techniques (as opposed to triangulation; Kenward, 1987) to locate our radiotagged turtles about every 2 weeks, although many, including some gravid females, were followed more intensively—sometimes nearly continuously. We recorded turtle identity, date, time, location to the nearest quarter segment (e.g., within ca. 6 m), and associated habitat on field data sheets and maps based on aerial photographs. These data were managed and analyzed on personal computers with EXCEL and SPSS software. Statistical probabilities less than 0.05 were considered significant.

We present data from 34 turtles (23 females and 11 males) that each had records of at least 11 months and included the period July through the following February. Only 2 turtles had records less than 12 months long. Although we tracked 1 female turtle for 5 consecutive years, 18 of the 34 were only followed for 1 year, 7 for 2 consecutive years, and 2 for 3 consecutive years. This gave us a pooled sample of 43 turtle-years. Three of our turtles were in Arroyo Laguna, 2 in Little Pico Creek, 12 in Pico Creek, and 17 in San Simeon Creek. For some analyses, we censored the number of radiomarked turtles used, which we detail where appropriate.

RESULTS—Our radiotagged turtles made 3 types of terrestrial excursions. They took refuge on land when aquatic conditions became particularly adverse (e.g., flooding), they nested on land, and they sometimes rested on land well away from water. These 3 patterns were distinct from each other, as illustrated by the spatio-temporal data over a year for a female in San Simeon Creek (Fig. 4). Details of the

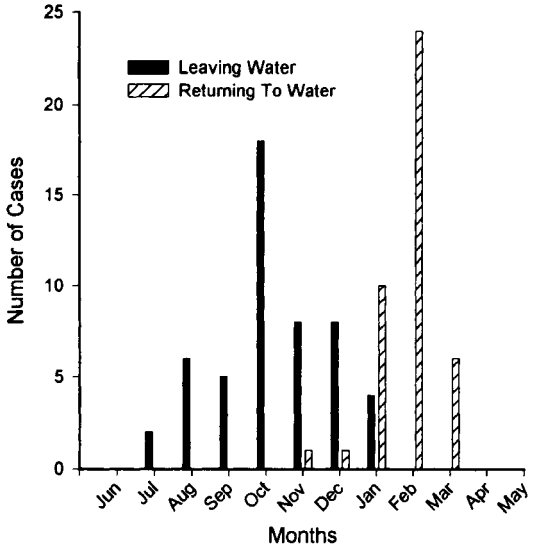

FIG. 5—Frequency distribution of Pacific Pond Turtles leaving water for, and returning from, terrestrial refuges along coastal creeks of central California, 1991–1998. The number of turtles leaving and returning are different because of predation while on land (see text).

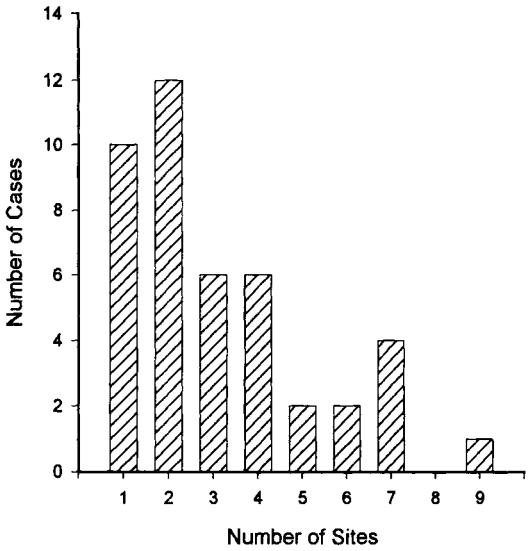

FIG. 6—Frequency distribution of the number of multiple terrestrial refuges used by Pacific pond turtles within a season in coastal creeks of central California, 1991–1998.

characteristics of each of these patterns of land use follow:

Refuge Sites—Turtles did not show any pattern from year to year on the dates they started or finished using terrestrial refuges. For example, the female (# 21B38) that we radiotracked for 5 consecutive years left creek water as early as 31 October and as late as 9 January, and the range of her land-use was 34–133 days. The pooled average duration of terrestrial refuging for 28 individuals (43 turtle-years) was 111 days ($SD = \pm 44.3$ days, range = 34 to 191 days), with no significant difference between the sexes (t-test, $P > 0.3$). The distribution of the number of turtles leaving and returning by month (Fig. 5) shows that October was the modal month for leaving water, and February was the modal month for returning. The pooled average exit day was 25 October ($SD = \pm 52$ days), and the mean return day was 21 February ($SD = \pm 25$ days). Although the distribution by month for leaving water spans 7 months from July through the following January, the spread for returning is tighter, ranging 5 months from November through March (Fig. 5).

The difference in the sample size (Fig. 5) for leaving turtles ($n = 51$) and returning turtles ($n = 43$) is due to deaths while on land. For example, of the 34 radio-tagged turtles, 13 were found dead on land and of these, 8 showed obvious signs of predation, probably by raccoons (*Procyon lotor*). We lost track of 9 radio-tagged turtles, most likely because of predation and radio failure. We believe it is unlikely that any of the missing turtles moved outside of our search area. We removed the transmitters from 10 *Clemmys,* and 2 were still radiotagged at the end of 1998.

The mean perpendicular distance from the edge of creek beds to the furthest refuge site for the 43 turtle-year cases was 49.7 m ($SD = \pm 54.8$ m, range = 8 to 280 m). There was no difference between the sexes (t-test, $P < 0.5$). Although we did not routinely determine elevation of land sites above creek beds, all sites were outside of areas that would be expected to flood during normal winter rains and many were in upland habitats. The maximum elevation of a refuge site was about 38 m above the creek bed.

Turtles did not always remain at the same refuge site during the same excursion. For example, 22 of the 43 cases (51%) involved only 1 or 2 sites. At the other extreme, one turtle used 9 different sites (Fig. 6). The 23 turtles that we tracked for 2 or more consecutive years showed some season-to-season site fidelity. Six-

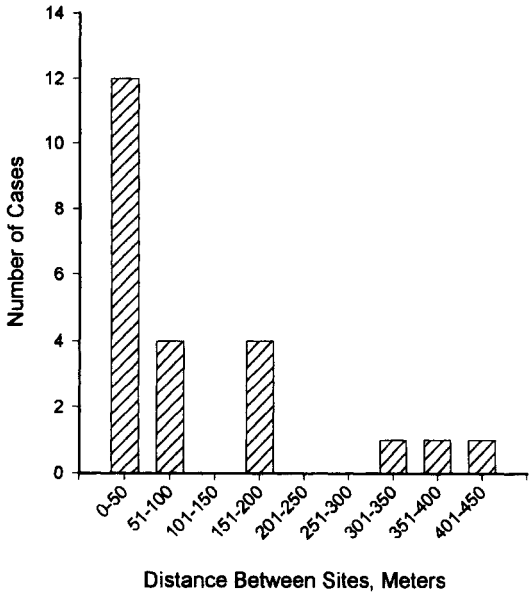

FIG. 7—Frequency distribution of the distances (in 50 meter increments) between terrestrial refuges used by Pacific pond turtles in consecutive seasons in coastal creeks of central California, 1991–1998.

teen (70%) returned to within 100 m of their previous season's first land site, and 12 of these (52%) within 50 m (Fig. 7). In several cases, turtles returned to within centimeters of a previous location. At the other extreme, 425 m separated land sites between consecutive seasons for 1 turtle (Fig. 7).

Not all of the radio-tagged turtles left their aquatic habitats for terrestrial refuges. Only 6 of 12 turtles in the Pico Pond–Pico Creek system left water, but at San Simeon Creek, which has no permanent pond, all 17 turtles used terrestrial refuges ($P = 0.004$, Fisher Exact Test).

The ground at refuges was typically covered with dense leaf litter produced by an overstory of woody vegetation. For the vegetation type at refuges, we used only the first land site per year for each turtle ($n = 28$) to avoid auto correlation biases. Riparian areas accounted for 18 of the 28 sites (64%). We subdivided these into 2 subtypes. Dense riparian thickets of willow that were about 5 to 7 m high and supported a dense understory of blackberry, poison oak (*Toxicodendron diversilobum*), and Cape ivy (*Delaria odorata*), were used by 16 turtles. Riparian vegetation dominated by large, widely spaced sycamore (*Platanus racemosa*) and alder trees that were 10 to 15 m high and had a sparse understory of blackberry and poison oak were used by 2 turtles. Woodlands accounted for 5 of the 28 sites (18%), which we also divided into 2 subtypes. Three turtles used sites under coast live oaks that were 8 to 10 m high, and had an understory dominated by toyon (*Heteromeles arbutifolia*), monkey flower (*Mimulus*), and poison oak. Two turtles used sites that were under Monterey pine trees that reached 15 to 20 m in height and had a dense understory similar to that found in the oak woodland. Coastal sage scrub accounted for 5 sites (18%). This last category was 1 to 2 m high and was dominated by coyote brush (*Baccharis pilularis*), California sagebrush (*Artemesia californica*), and poison oak.

We often did not actually see our radio-tagged turtles because we did not want to continually disturb them, especially at their terrestrial refuges. But in several cases we found alert turtles in direct sunlight with their head and legs extended and eyes open, as if basking. When we recaptured turtles to replace their transmitters, however, we sometimes excavated them from beneath 5 to 10 cm of leaf litter and duff. Some of these buried animals seemed to be dormant, with their eyes sealed shut with dried fluid. Whether buried or not, turtles at refuges were situated so that they could be exposed to direct sunlight during part of the day, although we did not collect data on basking frequency. In dense riparian vegetation and thick coastal sage scrub, refuges were located at the ecotone between dense woody vegetation and more open habitats. These edges were often well defined by edaphic factors, vehicle or foot paths, or fenced grassland pastures used for livestock grazing (Fig. 1).

Nesting Sites—In 1992 and 1993, between 4 May and 30 June, we radiotracked 10 gravid females during 15 terrestrial excursions to lay eggs. Also, tourists showed us a nest where they accidentally discovered a female laying eggs, and we found nests with fresh egg fragments that had been recently eaten, probably by a raccoon or striped skunk (*Mephitis mephitis*). However, because of the wariness of nesting females, we do not have complete records for all these animals; some are missing starting or finishing times to their excursions, and we never discovered the exact nesting sites for others (Table 1).

TABLE 1—Summary of nesting data for radio-tagged Pacific pond turtles during 1992 and 1993 in central coastal California.

ID	Creek[1]	Nest[2]	Start date of nesting excursion	Finish date of nesting excursion	Start time	Finish time	Maximum distance (m) from water	Elevation above creek bed (m)	Slope[3] (degrees)
15913	SS	E	28 May 92	31 May 92	—	—	75.0	12.5	20
85715	PC	P	—	8 Jun 92	—	—	27.5	1.3	0
95161	SS	A	5 Jun 92	5 Jun 92	1700	2000	16.0	3.5	30
95161	SS	A	6 Jun 92	6 Jun 92	0955	1135	15.0	3.0	0
95161	SS	A	8 Jun 92	8 Jun 92	0745	0953	18.0	4.4	30
21B38	SS	A	11 Jun 92	11 Jun 92	1735	—	35.0	3.0	0
21B38	SS	N	14 Jun 92	14 Jun 92	1630	1915	9.5	1.5	0
22857	SS	E	12 Jun 92	13 Jun 92	1415	—	35.0	3.0	0
2441D	PC	A	24 Jun 93	24 Jun 93	1700	1830	35.0	17.5	10
57D59	SS	N	13 Jun 92	13 Jun 92	1615	1917	15.0	1.0	10
62E4C	PC	N	30 Jun 93	1 Jul 93	—	—	80.0	0.5	0
85715	PC	A	28 Apr 92	28 Apr 92	1740	—	35.0	1.3	0
93D20	SS	E	4 May 92	8 May 92	—	—	170.0	11.0	10
93D20	SS	N	13 Jun 92	13 Jun 92	1615	1720	17.0	3.5	30
93D20	SS	A	7 Jun 93	7 Jun 93	—	—	33.0	1.0	0
—	AL	P	—	10 Aug 92	—	—	6.0	3.0	30
—	SS	N	– Jun 92	– Jun 92	—	—	30.0	5.2	10

[1] SS = San Simeon Creek, PC = Pico Creek, AL = Arroyo Laguna.

[2] E = nest location estimated ± 10 m, N = nest located, A = aborted nest, P = predated nest with egg shells.

[3] To nearest 10° from horizontal, which = 0°.

Of the 10 females that we radiotracked (those with identification numbers in Table 1), 7 successfully laid eggs on their first nesting trip, but 2 each abandoned at least 1 site before nesting, and 1 left at least 3 sites on 3 different days before successfully laying. Three of the 10 radio-tagged females (# 15913, # 22857, and # 93D20 in Table 1) spent 1 to 3 days traveling in upland areas, and we did not locate their exact nesting sites, but we know from palpation that they successfully oviposited. These 3 females moved a maximum of 35, 75, and 171 m perpendicular from water during their excursions (mean = 93.7 m). Five of the 10 radio-tagged females completed their land forays in less than 24 h and successfully nested. The average perpendicular distance from water for these females was 29.8 m (*SD* = ±28.8, range = 9.5 to 80.0 m).

In 10 cases, we had accurate times when females left the water to nest: 2 were in the morning, 1 was in the early afternoon, and 7 were in the evening (Table 1). We know that some of the animals that we radiotracked evaded us by nesting after dark (e.g., # 95161 in Table 1). In 7 of the 15 nesting excursions we obtained duration of turtles on land; 3 lasted about 1.5 h, 1 was about 2 hours long, and 3 were each about 3 h long. Four of these 7 excursions included successful nesting, and these lasted 1 to 3 h (Table 1).

Based on the 12 successful or abandoned nest sites by 8 different females that we radiotracked (nest cases N and A in Table 1), the average perpendicular distance from the nearest water was 28.2 m (*SD* = ±18.9, range = 9.5 to 80 m), the average elevation from nearest water was 3.8 m (*SD* = ±4.6, range = 0.5 to 17.5 m), and the average slope (measured to the nearest 10 degrees) was 10.0 degrees (*SD* = ±12.8, range = 0 to 30 degrees).

There was no evidence of strong nest-site fidelity. One female (# 95161 in Table 1) attempted to nest 3 times; after her first attempt she moved 50 m across the creek the next day, and then 2 days later returned to a site within about 3 m of her first excavation. Another female (# 21B38) moved about 200 m downstream between her first attempt and her successful nest 3 days later. A third female (# 93D20) successfully nested twice in 1 season, about 36 days and 500 m apart, and then the following year she nested about 50 m from her last site from the previous year.

Although it was not clear why some sites were abandoned, 1 female aborted her excavation because a rock prevented her from digging deep enough to complete a nest hole. We suspect that we inadvertently disturbed 1 or 2 females while they excavated their nests, causing them to abandon their partially dug holes.

All the successful and attempted nest sites were located on compact and hard soils in habitats that provided little vegetative cover and allowed long exposures to direct sunlight. These habitats included coastal sage scrub, exotic annual grasslands, and weed patches on disturbed soils (Fig. 1).

Resting Sites—During spring and summer months, when turtles were not at their land refuges, both sexes occasionally left the water. These locations were usually on dry sandbars and sandbanks near water, and typically were exposed to sunlight with some protective plant cover (Fig. 1). The sand at these sites was often warm to the touch, presumably due to heating from solar radiation. The turtles at these terrestrial basking sites were typically inactive, and did not take flight when disturbed, as did turtles basking on floating logs, emergent vegetation over water, or banks next to water. In 1992, we radiolocated 9 individuals (6 females and 3 males) at 28 different terrestrial basking sites. The average distance from water was 4.5 m (*SD* = ±3.0, range = 0.5 to 12.0 m), and the average elevation above water was 1.5 m (*SD* = ±0.7, range = 0.5 to 4.5 m). Because of the relatively long interval between radiolocations, we could not determine precisely how long turtles occupied these sites, but we estimate from 1 to 5 days.

Disturbances—While females were on land searching for oviposition sites, or even in the process of excavating a nest, they were exceptionally wary. The slightest unusual visual disturbance or sound by people in the general area usually caused them to cease their activity and return to water. While the turtles were at terrestrial refuges or terrestrial basking sites, they were not easily disturbed, and they were not noticeably vigilant.

We recaptured for radio replacement 17 of our turtles (27 total captures) while they were at land refuges. After re-tagging the turtles, they were usually released on the same day,

and always by the next day. In 14 cases, our records are not clear whether the turtles were released at their land capture site or in the nearest water. Sometimes we released turtles in water with the hope that terrestrial predators would not find them after we disturbed their habitat on land.

In 13 of the 27 captures, our release data are unequivocal. Four were released into the nearest creek water, and all were next radiolocated back on land. Two of these 4 returned to within centimeters of their capture sites, one moved to a site about 90 m from its capture location, and the last was tracked to a new refuge about 150 m from its original location. The average change in location for these 4 turtles was 60.0 m, $SD = \pm 73.5$. Seven of the 13 turtles were released at their land capture sites after re-tagging, and by their next radiolocation they had moved an average of 57.0 m ($SD = \pm 85.4$ m, range = 2 to 248 m). One of the 13 turtles did not move from its release site, and another moved to the nearest water.

DISCUSSION—The importance of Mediterranean climates on the abiotic features of streams, and in turn, the influence of these traits on aquatic animals, especially macroinvertebrates, has been the focus of numerous studies over the last 2 decades (reviewed by Gasith and Resh, 1999). However, effects of this highly seasonal and distinctive regime on lotic aquatic vertebrates, especially amphibians and reptiles, has not been well documented. This is not surprising, because the diversity of vertebrates that occupy aquatic habitats in this relatively adverse climate is low. Indeed, *Clemmys* is the only native turtle found in the Mediterranean climate of North American, and unfortunately there are few comparative data available on turtles that occupy the other regions of the world with this type of climate.

Some aquatic turtles in eastern North America spend long periods of time on land, but apparently this activity is related to foraging, or physiological states of dormancy—either aestivation or brumation (e.g., Gibbons, 1970; Bennett, 1972; Litzgus et al., 1999). We have used refuging to describe the extensive land excursions by our turtles because *C. marmorata* apparently does not forage while on land, and not all of our turtles routinely aestivated or brumated. We believe that our radio-tagged animals took refuge on land to avoid the back-to-back combination of late summer drought and winter flooding. However, our turtles exhibited flexibility in this behavior, as shown by the refuging habits of the turtles in the creeks compared to those in Pico Pond. Similar behavioral plasticity in land-use has been found throughout the distribution of *C. marmorata,* from Oregon (Holland, 1994; Holte, 1998) through northern and central California (Reese and Welsh, 1997; Davis, 1998) to southern California (Goodman, 1997; Lovich and Meyer, in press).

The best comparative data on terrestrial habitat use are from the Trinity River in northern California (Reese and Welsh, 1997). Compared to our turtles, these animals left the water earlier (September compared to October) and over a more concentrated period of time, and they returned to the river over a later and wider period of time (February through June compared to November through March). Reese and Welsh (1997) suggest that the timing of this overwintering by turtles in the Trinity River is related to avoiding high flows. We believe the difference in refuging patterns between these 2 populations is related to the frequent subzero winter temperatures in the Trinity River, and the more stable aquatic habitat of the Trinity River. For example, spring snow melt, a very large drainage basin, and regulated water flows from an upriver dam resulted in perennial flow in the river compared to our highly seasonal coastal streams.

The Trinity River turtles refuged an average of 203 m from water (Reese and Welsh, 1997), which was about 4 times greater than the ca. 50 m average distance for our coastal animals. We suspect that this relates to climatic, geographical, and habitat differences at the 2 study sites. Turtles travel inland to find suitable refuges (or nesting or basking) sites, which probably includes a complicated interaction of factors such as elevation, slope, moisture, solar exposure, and vegetative cover. This complexity, coupled with their behavioral flexibility, highlights the problem that resource managers face when they try to develop standardized distances from water for protecting upland turtle habitats. We believe that each site must be assessed individually, rather than trying to apply a standard formula to all aquatic systems.

Because our turtles used terrestrial refuges

on average for nearly 4 months a year, and we observed them basking at these locations, we suspect that they changed sites to remain in suitable thermal locations, as the trajectory of the sun changed through time. It is not clear whether turtles in the Trinity River area basked while at refuge sites (Reese and Welsh, 1997, 1998), but their use of multiple locations suggests that they did.

Our observations have not changed the overall description of the nesting habits of this turtle (see Rathbun et al., 1992). However, our larger sample sizes show that there is considerable variation in diel timing and site selection of nesting. Our radio-tagged turtles also demonstrated that multiple clutches per year, and nestling overwintering, are common in central coastal California (G. Rathbun, pers. obser.).

The use and importance of basking sites in the Pacific pond turtles have been discussed by Bury and Wolfheim (1973), Holland and Goodman (1996), and Reese and Welsh (1998). Similar to these studies, we often observed our turtles basking in full sun on banks, floating logs, and low vegetation overhanging water. However, the Mediterranean climate and coastal location of our study site resulted in cool and windy springs, and cool and foggy summers (Dallman, 1998), with daytime air temperatures rarely exceeding 20°C. This climate limited the opportunities for basking, compared to inland areas where the daytime air temperatures often exceed 25°C for much of the summer. We speculate that the short-term use of sandy land sites that were several meters from water was related to the thermal requirements of the turtles, especially gravid females. These sites probably provided wind-sheltered locations that were warmer than sites next to or over water. These inland locations did not provide escape into water, and the turtles did not try to flee when disturbed. Rather, they remained motionless after withdrawing their head and legs. Reese and Welsh (1998) observed similar terrestrial basking behavior near the Trinity River, but only by gravid females.

Recent phylogenetic studies (Bickham et al., 1999) suggest that *C. marmorata* is probably not closely related to the 3 species of *Clemmys* from eastern North America. Also, the habitats of these eastern *Clemmys,* and the continental weather patterns of eastern North America (long periods of subfreezing temperatures during the winter, followed by hot and humid summers) are very different than the habitats and climate found in California. An ecological equivalent is the European pond turtle, *Emys orbicularis,* which not only lives in a Mediterranean climate in southern Europe (Dallman, 1998), but also is phylogenetically close to *C. marmorata* (Bickham et al., 1999). Unfortunately, most studies have focused on the basking and mating behaviors of *Emys* in aquatic habitats (e.g., Capula et al., 1994; Di Trani and Zuffi, 1997; Rovero et al., 1999), and relatively little is known about its use of terrestrial habitats. However, there is some indication that it may use land sites in the Mediterranean region in similar ways to what we found for the Pacific pond turtle (Naulleau, 1992).

In conclusion, on the coast of central California the Pacific pond turtle occurs in a Mediterranean climate with a highly seasonal climatic regime. The behavioral flexibility of *C. marmorata* in its use of terrestrial habitats in space and time has allowed it to occupy relatively small, ephemeral creeks in this region.

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Recommendations for protecting raptors from human disturbance: a review

Cary T. Richardson and Clinton K. Miller

In a survey of resource managers, LeFranc and Millsap (1984) identified human-associated disturbance as a primary threat to raptor populations. Several studies have demonstrated declines in raptor populations resulting from human-associated disturbance (Voous 1977, Swenson 1979, Craighead and Mindell 1981). Resource managers can successfully use spatial and temporal buffer zones in concert to protect raptors from the effects of recreational activity (Swenson 1979, Knight and Skagen 1988, Holmes et al. 1993), human development (Ramakka and Woyewodzic 1993), and oil development (Squires et al. 1993). Spatial and temporal restrictions (buffer zones) are useful tools for resource managers to protect raptors during periods of extreme sensitivity (Knight and Skagen 1988, Knight and Temple 1995). We present information relevant to the establishment of buffer zones and the guidelines for assessing spatial and temporal buffer zones for a variety of raptors in North America. This review may serve as a general guideline for resource managers and others interested in protecting raptors.

The need for nest site protection

Human activities are known to impact raptors in at least 3 ways: (1) by physically harming or killing eggs, young, or adults; (2) by altering habitats; and (3) by disrupting normal behavior (Postovit and Postovit 1987). Due to the broad range of direct and indirect human-associated impacts and the fluctuating levels of sensitivity for individual raptors, depending on life stage and time of year, buffer zones are most effective when spatial and temporal restrictions are congruent.

The direct effects of human disturbance may seem inconsequential to uninformed or unconcerned outdoor recreationists. Activities like rock-climbing, can have severe impacts on nesting raptors, even when climbers do not have direct contact with eggs, young, or adults (Lanier and Joseph 1989, Kelly 1996). This sport often involves shouting and other noises which are disturbing enough to raptors to keep them away from their nests (Call 1979, Ratcliffe 1980). Even brief absence by parent birds can lead to missed feedings, predation on eggs or young, or to overheating, chilling, or desiccation of eggs or young (Call 1979, Suter and Joness 1981). Rock-climbing near peregrine falcon (*Falco peregrinus*) eyries during the nesting season can cause nest abandonment; some peregrine falcons are extremely sensitive and refuse to breed if humans have been in the vicinity of their eyries (Snow 1972, Olsen and Olsen 1980). Ferruginous hawks (*Buteo regalis*) tend to desert their nests if adults are exposed to human activity during incubation (White and Thurow 1985). Van Daele and Van Daele (1982) found that incubation at successful osprey (*Pandion haliaetus*) nests occurred durring 99.5–100% of daylight hours. Human disturbance during the critical periods of incubation and the early nesting stages can be fatal to embryos and nestlings.

The presence of humans detected by a raptor in its nesting or hunting habitat can be a significant habitat-altering disturbance even if the human is far from an active nest. Impacts of human activities on wild animals are often reduced when animals are shielded visually from such activities (Postovit and Postovit 1987, Knight and Temple 1995). A clear line of sight is an important factor in a raptor's response to a par-

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ticular disturbance (Suter and Joness 1981). A Geographic Information System-assisted viewshed approach combined with a designated buffer zone distance was found to be an effective tool for reducing potential disturbance to golden eagles (*Aquila chrysaetos*) in Northern Colorado (R. L. Knight, Colo. State Univ., Fort Collins, pers. commun.).

Human disturbance was listed as the cause of 85% of all known nest losses occurring during Boeker and Ray's (1971) study of golden eagles. Disturbance of wintering bald eagles (*Haliaeetus leucocephalus*) resulted in both increased energy expenditures due to avoidance flights and decreased energy intake due to interference with feeding activities (Stalmaster 1983). The enforcement of spatial and temporal buffer zones can protect raptors from the effects of visual disturbances (e.g., human development or recreation), audible disturbances, and direct disturbances (e.g., shooting, recreational rock-climbing).

Determining adequate protection

Several authors have provided general recommendations for determining adequate site-specific buffer zones (Postovit and Postovit 1987, Pomerantz et al. 1988, Holmes et al. 1993). Postovit and Postovit (1987) detailed steps for mitigation planning. Pomerantz et al. (1988) gave a useful set of guidelines that could be used to determine the compatibility of recreational activities in sensitive resource areas. In designing appropriate buffer zones the most important factors are: site-specific information on the horizontal and vertical proximity of a nest to a potential disturbance, source or duration of disturbance, and disturbance history of the individual raptors (Suter and Joness 1981, Postovit and Postovit 1987, Knight and Skagen 1988, Holmes et al. 1993).

Site-specific information

Physical characteristics (i.e., topography, vegetation) are important variables to consider when establishing buffer zones based on raptors' visual-and auditory-detection distances. Horizontal spatial restrictions can be shortened or lengthened depending on the height of perching or nesting sites (Holmes et al. 1993). Given variable nesting phenology of different species and regional climatic variation, exact dates of nest-site closures should be modified according to local situations (U.S. Fish and Wildl. Serv. 1984). White and Thurow (1985) recommend that the degree to which a nest is exposed or concealed should be considered when designing buffers for ferruginous hawks. They also suggested that information on the general health and status of individual populations be considered. For example, in years of food scarcity, spatial buffers should be expanded substantially.

Source or type of disturbance

Management plans should be tailored to each species, habitat, season, and source of disturbance. For example, Holmes et al. (1993) argued that, because humans in vehicles are less disruptive to raptors than pedestrians, management plans should offer different restrictions based on disturbance type. Squires et al. (1993) suggested that prairie falcons (*Falco mexicanus*) could cope with limited development on their foraging areas if their nest sites were secure from direct human disturbance. Nonthreatening activities, such as those occurring on recreational trails, may be compatible with a nest or perch location in close proximity if that activity is visually or audially buffered by vegetation or topography (Knight and Temple 1995).

Prior disturbance history of individual raptors

Due to variation of tolerance between bald eagle populations, Stalmaster and Newman (1978) suggested monitoring adult behavior prior to the establishment of management recommendations and buffer zones to determine to what extent the individuals had been sensitized to human disturbance. They noted that although a single direct disturbance may have insignificant impacts, repeated direct disturbances may cause abandonment of a nest or perch location.

Spatial and temporal buffer recommendations

Spatial buffers

Spatial buffer-zone recommendations depend on site specific considerations, and vary considerably for species such as osprey, Cooper's hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*), sharp-shinned hawk (*Accipiter striatus*), golden eagle, red-tailed hawk, (*Buteo jamaicensis*), ferruginous hawk, bald eagle, prairie falcon, peregrine falcon, and American kestrel (*Falco sparverius*; Table 1). Median distances recommended for buffer zones for nesting raptors (based on the information summarized in Table 1) are as follows: osprey = 1,000 m (range = 400–1,500 m, n = 3), Cooper's hawk = 525 m (range = 400–600 m, n = 2), northern goshawk = 450 m (n = 1), sharp-shinned hawk = 450 m (n = 1), golden eagle = 800 m (range = 200–1,600 m, n = 3),

Table 1. Summary of recommendations for spatial and temporal buffer-zones for nesting raptors.

Species	Spatial (m)	Temporal	Reason for closure	Source
osprey	1,500	not discussed	human activity	Van Daele and Van Daele 1982
	400	Apr 1–Aug 31	no explanation	Colo. Div. Wildl. 1995
	1,000	during incubation	recreational disturbance	Swenson 1979
Cooper's hawk	600	not specified	habitat alteration	Bosakowski et al. 1993
	400–500	not specified	unspecified disturbance	Jones 1979
northern goshawk	400–500	not specified	unspecified disturbance	Jones 1979
sharp-shinned hawk	400–500	not specified	unspecified disturbance	Jones 1979
golden eagle	200 from cliff tops; 400 from base	Mar 1–Jun 30	human disturbance	M. Ball, U.S. For. Serv., Fort Collins, Colo., pers. commun.
	800	Feb 1–Aug 1	noise	Call 1979
	200–1,600	Mar 1–Sep 1	visual, audible	Suter and Joness 1981
	800	Feb 1–Jul 15	no explanation	Colo. Div. Wildl. 1995
red-tailed hawk	800	Feb 1–Aug 1	noise	Call 1979
ferruginous hawk	200–800	arrival–post fledging	visual, audible	Suter and Joness 1981
	250	during incubation	human activity	White and Thurow 1985
	800	Feb 1–Jul 15	no explanation	Colo. Div. Wildl. 1995
bald eagle	400	Feb 1–Aug 15	human disturbance	D. Flath, Mont. Dep. Fish, Wildl. & Parks, Bozeman, pers. commun.
	800	Feb 1–Aug 1	noise	Call 1979
	500	not discussed	human disturbance	Fraser 1983
	250	prior to egg laying through incubation	human activity	Grier et al. 1983
	800	Nov 15–Jul 31	no explanation	Colo. Div. Wildl. 1995
prairie falcon	200 from cliff tops; 400 from base	Mar 1–Jun 30	human disturbance	M. Ball, U.S. For. Serv., Fort Collins, Colo., pers. commun.
	800	Feb 1–Aug 1	noise	Call 1979
	200–800	arrival-post fledging	visual, audible	Suter and Joness 1981
	800	Mar 15–Jul 31	no explanation	Colo. Div. Wildl. 1995
	50	Mar 15–post fledging	visual	Natl. Park Serv. 1995
peregrine falcon	800	Feb 1–Jul 15	climbing disturbance	S. Johnson, Natl. Park Serv., pers. commun.
	800–1,500	not discussed	recreational disturbance	Windsor 1975
	800	Feb. 1–Aug. 1	noise	Call 1979
	1,600	Feb 1–Aug 31	human activity	U.S. Fish and Wildl. Serv. 1984
	800	Mar 15–Jul 31	no explanation	Colo. Div. Wildl. 1995
American kestrel	200 from cliff tops; 400 from base	Mar 1–Jun 30	human disturbance	M. Ball, U.S. For. Serv., Fort Collins, Colo., pers. commun.
	50	Mar 15–post-fledging	visual	Natl. Park Serv. 1995

red-tailed hawk = 800 m (n = 1), ferruginous hawk = 500 m (range = 200–800 m, n = 3), bald eagle = 500 m (range = 250–800 m, n = 5), prairie falcon = 650 m (range = 50–800 m, n = 4), peregrine falcon = 800 m (range = 800–1,600 m, n = 5), and American kestrel = 50–200 m (n = 2). Several studies have recorded flushing distances for raptors resonding to disturbances from pedestrians and vehicles (Table 2).

Table 2. Flushing distances (m) for raptors in response to disturbance by pedestrians and vehicles.

Species	Pedestrian disturbance	Vehicle disturbance	Source
golden eagle	105–390	14–190	Holmes et al. 1993
ferruginous hawk	13–165	110–280	Holmes et al. 1993
	136.4 (range = 29–291)	117.2 (range = 24–316)	White and Thurow 1985
rough-legged hawk	55–900	9–170	Holmes et al. 1993
bald eagle	50–990	50–990	Fraser 1983
	57–991 (91% > 200 m)	not studied	Fraser et al. 1985
prairie falcon	24–185	18–200	Holmes et al. 1993
American kestrel	10–100	12–115	Holmes et al. 1993
merlin	17–180	44–85	Holmes et al. 1993

Temporal buffers

For temporal restrictions to be effective, they must be tailored to individual populations. In addition, temporal restrictions need only be in effect when raptors are using a critical resource such as a nest site or foraging area (Knight and Skagen 1988). Temporal buffers should encompass all nesting activities and extend at least from the arrival of the adult birds in the nesting area through the first few weeks of nestling development (Fyfe and Olendorff 1976, Suter and Joness 1981, Grier et al. 1983, White and Thurow 1985). Adult birds often sit tightly on eggs or young nestlings, and when adults flush abruptly due to disturbances, there is increased liklihood of their ejecting the contents of their nests (Grier and Fyfe 1987).

Summary

Several studies have documented flushing distance responses of raptors to a variety of activities during breeding and nonbreeding seasons (Table 2); however, except for anecdotal and incidental reports, few studies have experimentally documented disturbance distances for use in buffer-zone recommendations (White and Thurow 1985, Holmes et al. 1993). The wide range of recommendations (Table 1) probably reflects site-specific anthropogenic and environmental conditions (Suter and Joness 1981, Fraser 1983). To be effective, buffer zones should be based on empirical evidence of wildlife responses to disturbance (Knight and Skagen 1988). Several authors suggest the need for further disturbance studies to determine flushing responses among different species (White and Thurow 1985, Postovit and Postovit 1987, Knight and Temple 1995).

The City of Boulder Open Space Department and Mountain Parks Division have used spatial and temporal buffer zones successfully for a number of years to protect cliff-nesting peregrine falcons, prairie falcons, and golden eagles. Closures are in effect from February through July annually and vary in distance by 50–400 m depending on topography, nest location, and species. Extensive public education accompanies the closures, including direct mailings to outdoor recreation shops in the area, closure signs at trailheads, press releases, and access to a 24-hour telephone information line and a site on the World Wide Web. In addition, nest sites are monitored weekly by trained volunteers. With proper planning, extensive observations of target individuals and groups, and aggressive public education, spatial and temporal buffer zones provide a useful tool for protecting raptors to resource managers.

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A strategy for reversing the decline of riparian associated birds in California

A project of California Partners in Flight and the Riparian Habitat Joint Venture

The Riparian Bird Conservation Plan

A strategy for reversing the decline of riparian associated birds in California

Version 2.0

2004

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Executive Summary

This Riparian Bird Conservation Plan is a collaborative effort of the Riparian Habitat Joint Venture (RHJV, all acronyms are defined in Appendix C on page 144 and California Partners in Flight (CalPIF) and has been developed to guide conservation policy and action on behalf of California's riparian habitats and wildlife. The Conservation Plan focuses on data concerning bird species associated with riparian habitat, but conservation recommendations, if implemented, should benefit many riparian associated species. The plan, which includes both this written document and an associated web site, is intended to provide a source of information on riparian bird conservation for managers, agencies, landowners, academic institutions and non-governmental organizations. This Conservation Plan "takes a heroic step forward in tightening the link between science and on-the-ground management" (Golet 2001). This is not a regulatory document, nor does it represent the policies of any agency or organization.

This Conservation Plan, along with the associated Geographic Information System (GIS) database of riparian monitoring projects maintained by PRBO Conservation Science (PRBO), is the second iteration of a continuing process of updating habitat conservation recommendations based on the latest scientific data. This Conservation Plan, combined with the associated RHJV Strategic Plan, provides the foundation for adaptive conservation planning in California's riparian habitats (RHJV 2003[a]). The plan applies broadly to many of the conservation efforts now underway in the state, including, but not limited to: the California Bay-Delta Program (CALFED); the California Biodiversity Council; California Legacy Project, all habitat-based Joint Ventures (i.e., Central Valley, Intermountain West, Pacific Coast, San Francisco Bay, and Sonoran); the Sacramento and San Joaquin River Basins Comprehensive Study of the U.S. Army Corps of Engineers (Corps); the SB 1086 Program; programs of the Natural Resources Conservation Service; US Fish and Wildlife Service refuges and 'Partners for Wildlife' program; The Nature Conservancy Ecoregion Plans; the California Wildlands Project; and updates to resource management plans (RMPs) and environmental assessments of the USDA Forest Service and Bureau of Land Management.

An important extension of this Conservation Plan is the on-line GIS database of riparian monitoring projects and focal species breeding status available through the CalPIF section of PRBO's website at http://www.prbo.org/calpif/htmldocs/riparian.html (Ballard et al. 2003a). Contributing to and managing data in this database is accomplished through a web interface, to which access is available by request. This database is used for cataloguing new information and new analysis and for updating conservation recommendations and goals. Bird and study site data will be posted on this website, periodically updated, and made available for use by the public. Therefore, this Conservation Plan is a "living" document.

Biological Need

More than 225 species of birds, mammals, reptiles, and amphibians depend on California's riparian habitats. Riparian ecosystems harbor the most diverse bird communities in the arid and semiarid portions of the western United States (Knopf et al. 1988, Dobkin 1994, Saab et al. 1995). Riparian vegetation is critical to the quality of in-stream habitat and aids significantly in maintaining aquatic life by providing shade, food, and nutrients that form the basis of the food chain (Jensen et al. 1993). Riparian vegetation also supplies in-stream habitat when downed trees and willow mats scour pools and form logjams important for fish, amphibians, and aquatic insects. The National Research Council (2002) concluded that riparian areas perform a disproportionate number of biological and physical functions on a unit area basis and that the restoration of riparian function along America's waterbodies should be a national goal.

Riparian vegetation in California makes up less than 0.5% of the total land area, an estimated 145,000 hectares (CDF 2002). Yet, studies of riparian habitats indicate that they are important to ecosystem integrity and function across landscapes (Sands 1977, Johnson and McCormick 1979, Katibah 1984, Johnson et al. 1985, Faber 2003). Consequently, they may also be the most important habitat for landbird species in California (Manley and Davidson 1993). Despite its importance, riparian habitat has been decimated over the past 150 years. Today, depending on bioregion, riparian habitat covers 2% to 15% of its historic range in California (Katibah 1984, Dawdy 1989).

Due to their biological wealth and severe degradation, riparian areas are the most critical habitat for conservation of Neotropical migrants and resident birds in the West (Miller 1951, Gaines 1974, Manley and Davidson 1993, Rich 1998, Donovan et al. 2002). California's riparian habitat provides important breeding and over wintering grounds, migration stopover areas, and corridors for dispersal (Cogswell 1962, Gaines 1977, Ralph 1998, Humple and Geupel 2002, Flannery et al. 2004). The loss of riparian habitats may be the most important cause of population decline among landbird species in western North America (DeSante and George 1994).

Photo by Eric Preston, ericxpreston.com

Riparian areas provide habitat for numerous birds, including Song Sparrows.

Mission and Objectives

The mission of Partners in Flight (PIF) is to stop the decline of, and maintain or increase, healthy populations of landbirds in North America. This mission translates into identification of habitat conservation and management priorities for bird species at risk in California. By developing the Riparian Bird Conservation Plan, CalPIF seeks to promote conservation and restoration of these habitats to support long-term viability and recovery of both native bird populations and other native species. The goals of the Riparian Bird Conservation Plan are:

- Emphasize what is needed to conserve both populations of species, and species assemblages, which are defined here as groups of naturally co-occurring bird species.

- Synthesize and summarize current scientific knowledge of the requirements of birds in riparian habitats.

- Provide recommendations for habitat protection, restoration, management, monitoring, and policy to ensure the long-term persistence of birds and other wildlife dependent on riparian ecosystems.

- Support and inform efforts to increase the overall acreage and effectiveness of riparian habitat conservation efforts in California by funding, and promoting on-the-ground conservation projects.

This Conservation Plan concentrates on a subset of riparian bird species, with the aim of contributing to the conservation of riparian ecosystems as a whole. By focusing appropriate conservation efforts on well-chosen "focal" riparian bird species, many other animals and plants may also benefit (Lambeck 1997). For example, demographic monitoring of bird species is especially valuable if those species serve as indicators of the presence of a threatened biological community (Chase et al. 2000), or are sensitive to a particular type of environmental change, such as habitat fragmentation (Noss 1990). Other species, especially those with large area requirements, may qualify as "umbrella species;" those whose protection will result in the protection of many other species (Noss 1990).

The RHJV and CalPIF recognize that the subject of land managment and land use, whether on private or public lands, can be contentious. Because many California riparian areas are on private lands, the RHJV and CalPIF supports the need for land managers and landowners to have flexibility to develop systems that accommodate their needs while seeking to achieve the desired habitat characteristics that will maximize benefits to wildlife. CalPIF supports and will seek to maximize the benefits of new and ongoing efforts to ensure a critical level of riparian habitat is protected, monitored, and properly managed for future generations of Californians and wildlife.

Findings and Recommendations

This Conservation Plan has been developed collaboratively by the leading bird researchers in California through a process designed to:

- Capture the conservation needs for the complete range of riparian habitat types throughout the state.
- Develop biological conservation objectives using current data on riparian-associated focal species.

At more than 520 monitoring sites throughout California, researchers have been collecting data on riparian songbirds and are contributing to the CalPIF songbird monitoring database (http://cain.nbii.gov/prbo/calpifmap/index.html). Some of these data have contributed to the focal species accounts and recommendations presented in this plan. This document emphasizes a suite of 17 bird species chosen because of their conservation interest and as focal species representative of riparian habitats in the state. Preliminary analyses of the 17 focal species habitat requirements reveal:

- Eleven of these species have suffered reductions in a significant portion of their former breeding range and eight of 17 continue to decline. Extirpation appears to have resulted primarily from historical loss and fragmentation of riparian habitat throughout the state.

- Loss of appropriate habitat condition also often contributes to the decline or extirpation of a population. Ten of the focal species depend upon shrub cover and early successional habitat for successful nesting. These species particularly rely upon willow/alder shrub habitats with dense understory cover, which in turn require natural hydrological processes for establishment. Four of the focal species depend on late successional high canopy tree species. Cottonwood and willow tree regeneration is often compromised in riparian systems with altered hydrological processes such as peaks and timing of flows. The extensive alteration of California's streams and hydrological processes by humans contributes significantly to this habitat loss and degradation.

- Current restoration and rehabilitation efforts throughout the state need to be assessed with sound research and monitoring techniques (see Appendix B for more information). Many projects aim to increase riparian habitat by restoring natural hydrological processes or by managing dam releases. While these are excellent first steps in riparian restoration, success can only be gauged by observing their effects on wildlife.

- Riparian restoration and protection sites should be prioritized by:

    1. The ability to restore the natural hydrology of the area.

    2. Location of sites within potential dispersal range of existing "source" populations, which will maximize the potential for range expansion.

    3. The ability to protect and manage adjacent upland habitats for foraging, flood refugia, and/or nesting habitat.

    4. The extent to which land use within 7-12 kilometers from the riparian corridor (or even better, throughout the watershed) can be protected, influenced or is likely to remain under management that is beneficial to birds.

- High levels of brood parasitism by Brown-headed Cowbirds and high predation rates by native and nonnative predators significantly reduce the reproductive success of many species of birds. The structure and diversity of riparian vegetation heavily influence both factors. The size and isolation of remnant riparian patches, coupled with landscape-scale factors such as the type and configuration of surrounding land use, further influence avian productivity. Conservation efforts must initiate protection, management, and development of riparian and surrounding upland areas from a landscape-scale perspective. This will include promoting compatible types of agriculture, grazing, and recreation management, as well as comprehensive land use planning by local governments.

- Seven specific recommendations to increase the benefits of cultivated riparian restoration for landbirds are offered. Most of these recommendations will add little to the cost of restoration, but will significantly enhance benefits to songbirds in riparian habitats.

- Numerous specific recommendations concerning land management practices are offered that will benefit birds. Many recommendations can be implemented on farms and rangelands in California either to protect and enhance riparian habitats or to provide a beneficial buffer to riparian zones and reduce the impacts that negatively affect bird populations.

- The cost-effectiveness of many habitat restoration, management, and mitigation projects can be maximized by incorporating elements from this Conservation Plan, even if the project does not expressly aim to restore bird populations.

California Partners in Flight and Riparian Habitat Joint Venture Partners

California Department of Fish and Game
California Department of Water Resources
California State Lands Commission
Ducks Unlimited
Kern River Research Group (now defunct)
Klamath Bird Observatory
National Audubon Society
National Fish and Wildlife Foundation
National Park Service
Natural Resources Conservation Service
PRBO Conservation Science
River Partners
The Nature Conservancy
The Trust for Public Land
The Resources Agency State of California
U.S. Bureau of Land Management
U.S. Bureau of Reclamation
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S.D.A. Forest Service
Wildlife Conservation Board

Photo by Peter Knapp.

Common Yellowthroat, a riparian focal species.

Chapter 1. Introduction

Updates to Version 2.0

This document represents the second iteration of the Riparian Bird Conservation Plan. A review of the original focal species list revealed the need to add three new species to better capture the diversity of habitat niches found in California riparian systems and to account for species which are experiencing range reductions in the state. Following the same criteria established in the selection of the original 14 focal species, Spotted Sandpiper, Tree Swallow, and Tricolored Blackbird were added. Species accounts for these new additions are currently in preparation and will be available at http://www.prbo.org/calpif/htmldocs/riparian.html. Their summary information has been added to this document. Static range maps of all 17 focal species, with 2004 data incorporated, are included in this version of the Plan (Figures 5-2 through 5-18). As always, the most recent updates for these maps can be viewed on the web site.

Photo by James Gallagher, Sea and Sage Audubon

Tree Swallow, a new focal species to Version 2.0.

In spring of 2001, the RHJV, the Wildlife Society and sponsors and supporters from numerous state, federal, and private entities hosted the Riparian Habitat and Floodplains Conference in Sacramento, California. This meeting was the largest one-time gathering of wildlife biologists and managers in the western United States in several years. Approximately 400 scientific papers were presented and more than 1,500 people attended. The proceedings derived from this conference were published in 2003 and present results from several projects that have been implemented since Version 1.0 of the Riparian Bird Conservation Plan (Faber 2003). References from these proceedings and other recent scientific publications have been incorporated into this revision of the Plan and added to the already extensive Literature Cited section.

Also new to this version is a description of a process for setting population objectives for select focal species using current monitoring data and GIS data layers (Chapter 6). In this version, examples from Central Valley Basins are used to estimate current and potential population size. Potential populations or "targets" are estimated using GIS data layers based on the historical extent of riparian forests, corrected for permanent habitat loss (urbanization). Densities estimated (using the values for the top 25% of surveyed sites currently available) are extrapolated to provide a target population. Target values for key demographic parameters (primarily nest success and survival) also are provided to evaluate and project a population's viability ('health'). In Chapter 7, we refined the definition of a Portfolio Site, and invited experts from each bioregion to supplement the existing list with new sites. In Chapter 8, we incorporated the most current riparian songbird data from several California bioregions into the Conservation Recommendations section and included the latest topical references from the scientific literature. Tables reflecting bird and habitat associations, estimates of nest success, and riparian songbird nesting seasons by bioregions have been added to better assist land managers with data pertaining to their specific area. In Chapter 9, we provided updates on the North American all-bird initiatives and the recent activities of the RHJV. In Chapter 10, we identified more opportunities for private citizens to be involved in bird

conservation and to help enhance bird populations. Finally, we added a new chapter (Chapter 3) with information pertaining to landscape-scale factors that affect riparian birds.

As always, this Plan is a "living document" which will constantly be revised to best fit the needs of the land management, research, education, policy and conservation communities. Perhaps one of the most essential uses of this document is to demonstrate where information gaps exist, or where existing information has been overlooked. For this reason, and with the spirit of the RHJV in mind, we encourage you, the reader, to provide us with your feedback, data, and experiences. Version 3.0 is planned for release in September of 2006.

Riparian Habitat Joint Venture

Following a series of strategic meetings with members of the CalPIF Management Committee in 1993, the Riparian Habitat Joint Venture project was launched in a public ceremony along the American River in Sacramento in September 1994. The RHJV, modeled after the successful Central Valley Habitat Joint Venture project of the North American Waterfowl Management Plan, reinforces other collaborative efforts currently underway that protect biodiversity and enhance natural resources and the human population they support. The RHJV seeks to restore, enhance, and protect a network of functioning riparian habitat across California to support the long-term viability of birds and other species. The RHJV will provide leadership and guidance to promote effective riparian conservation from the local to state level. This will be accomplished by the following goals:

- **Identify and develop technical information for a strategic approach to riparian conservation in California.** To develop a strategic statewide approach to riparian conservation, the initial step is to assess the extent and condition of riparian habitat in California. In addition, the latest riparian management and scientific information must be continually assessed to refine and update RHJV conservation goals.

- **Promote and support riparian conservation on the ground by providing guidance, technical assistance and a forum for collaboration**. Through meetings, workshops, and technical assistance the RHJV provides a forum where members, as well as other organizations, can develop new collaborative opportunities for planning, funding and implementing riparian conservation projects.

- **Guide and promote riparian conservation policy through outreach and education.** The RHJV can raise the awareness of local constituents and state policy makers to the critical importance of riparian habitat for wildlife and plants as well as to the many benefits and services it provides to human society.

Partners in Flight

This Conservation Plan is one of many to be created under the aegis of the national movement known as Partners in Flight (PIF), which seeks to protect North American landbirds throughout their ranges by reversing species declines, stabilizing populations, and "keeping common birds common." PIF is an international cooperative endeavor initiated in 1990 in response to alarming population declines noted among species of Neotropical migratory birds. The program encourages conservation through partnerships before species and their habitats become threatened or endangered and provides a constructive framework for guiding nongame landbird conservation activities throughout the United States, Canada, Mexico, and Central America.

California Partners in Flight (CalPIF) was formed in 1992 with the full participation of the state's land and wildlife managers, scientists and researchers, and private organizations interested in the conservation of nongame landbirds. Noting that the major cause of population declines in California appeared to be habitat loss, CalPIF began identifying critical habitats important to birds and worked cooperatively to protect and enhance remaining habitat fragments. Recognizing their critical importance, CalPIF initially focused on riparian zones throughout the state. However, CalPIF has developed plans for several other ecosystems, including oak woodlands, coastal scrub and chaparral, grasslands, coniferous forests, shrubsteppe, and the Sierra Nevada. Visit http://www.prbo.org/calpif/plans.html for more information and current versions of these plans.

Photo by James Gallagher, Sea and Sage Audubon

The international initiative Partners in Flight strives to keep common birds common, such as this Black-headed Grosbeak.

Justification for the Conservation Plan

The justification for conservation can be articulated from various philosophical perspectives:

- An ecological perspective
- A perspective that emphasizes intrinsic value
- A primarily utilitarian or humanist perspective

Ecological Perspective

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

-Aldo Leopold, *The Sand County Almanac.*

The ecological arguments for conserving birds as a component of biodiversity emphasize the critical role that birds play in ecological systems. A conservation plan based on the needs of birds makes sense for a number of reasons. Birds are critical components of natural ecosystems, and they occupy an extremely diverse range of niches within riparian systems. A large number of bird species breed in riparian habitat in California; many others use riparian areas during some portion of their life cycle. By managing for a diversity of birds, we will also protect many other elements of biodiversity and the natural processes that are an integral part of the riparian ecosystem (e.g., Bank Swallows depend upon regular high-water events to create exposed riverbank sites that they use for nesting). Also, because of their high metabolic rate, their relatively high position in the food chain and their distribution across a wide variety of habitats, birds are sensitive indicators of environmental conditions (Temple and Wiens 1989, Uliczka and Angelstam 2000, Bryce et al. 2002). Finally, birds are relatively easy and cost effective to monitor and they provide an excellent means by which to track larger changes in natural systems. Our rapidly expanding capacity to monitor demographic processes in birds (reproduction and survivorship) provides us with the ability to proactively address root causes of population declines and increases (Pienkowski 1991, DeSante and Rosenberg 1998).

Intrinsic Perspective

Modern philosophers and environmental leaders have increasingly recognized the intrinsic value of plants, animals, and even the inanimate physical environment (Callicott 1986, Sober 1986). Throughout human history, many cultural belief systems have greatly valued birds and other elements of the natural world for reasons other than materialistic needs. This tradition continues today and is meeting with broader acceptance in political and public life.

Utilitarian or Humanist Perspective

A strictly utilitarian or humanist argument for conservation of bird species focuses on the direct, tangible benefits that people and society derive from their "services." For example, many passerine species (including Neotropical migrants) play an indispensable role in control of forest and agricultural insect pests, saving millions of dollars in the application of deleterious pesticides. Additionally, bird watching is a popular outdoor recreation and is currently enjoyed by an estimated 67.8 million Americans according to the 2000-2002 National Survey on Recreation and the Environment (NSRE 2000-2002). Non-consumptive bird use contributes 16,000 jobs and more than $622 million in retail sales annually to the California economy, which leads the nation in economic benefits derived from "birders." Ecotourism, with bird watching as a primary component, is increasingly seen as the best new source of income that can cushion resource based economies as they transition to a sustainable level of resource use.

Objective of the Riparian Bird Conservation Plan

The Riparian Bird Conservation Plan seeks to synthesize and summarize the current state of scientific knowledge concerning the requirements of birds in riparian habitats. It provides recommendations for habitat protection, restoration, management, research, monitoring, and policy to ensure the long-term persistence of birds dependent on riparian ecosystems. This Conservation Plan is complemented by the RHJV Strategic Plan and the RHJV Annual Operating Plan (RHJV 2003a, 2003b) that will guide the RHJV in accomplishing its objectives. Both the Conservation and Strategic plans are "living" documents; new information and data analysis will be incorporated into the recommendations and conservation targets regularly.

Photo by Steve Zack, WCS

Yellow-breasted Chats nest in early successional riparian habitats.

Chapter 2. Riparian Vegetation in California

Riparian vegetation in California makes up less than 0.5% of the total land area, an estimated 145,000 hectares (CDF 2002, Table 2-1, Figure 2-1). Yet, riparian habitats have long been recognized as important to ecosystem integrity and function across landscapes, and have received much attention at scientific conferences and symposia (Sands 1977, Johnson and McCormick 1979, Warner and Hendrix 1984, Johnson et al. 1985, Faber 2003).

Riparian habitats have been identified as the most important habitats to landbird species in California (Manley and Davidson 1993, Davidson 1995), yet they have been decimated over the past 150 years. Reservoir construction, levee and channelization projects, livestock grazing, timber harvest, water pollution, introduction of non-native species, gravel and gold mining, and clearing for agricultural and domestic uses have all contributed to riparian destruction (see Knopf et al. 1988 for review). While no estimates exist for the total historical extent of riparian habitat in California, there were at least 600,000 miles of streams in the state that were capable of supporting this type of vegetation (Warner and Hendrix 1984). Current estimates of remaining riparian habitat in the state range from 2% to 7% for the Central Valley and desert areas and approximately 15% for the northern coastal streams (Katibah 1984, Dawdy 1989).

Table 2-1. Approximate extant hectares of riparian habitat in each California bioregion. Derived from composite 100-m pixel landcover GIS data compiled by the California Department of Forestry's Fire and Resource Assessment Program, 2002 (CDF 2002). CWHR codes are given in parentheses.

Bioregion	Aspen (ASP)	Montane Riparian (MRI)	Valley Foothill Riparian (VRI)	Desert Riparian (DRI)	Palm Oasis (POS)	Wetland Meadow (WTM)	Freshwater Emergent Wetland (FEW)
North Coast / Klamath	6	15,230	552	0	0	5,162	374
Modoc	1,345	1,609	12	0	0	22,570	93
Sacramento Valley	0	112	8,015	0	0	43	12,585
Bay Area / Delta	0	568	3,102	0	0	20	6,626
San Joaquin Valley	0	2	2,596	0	0	12	11,627
South Central Coast	0	3,454	2,925	0	0	3	83
South Coast	0	2,874	6,496	12	0	1,116	461
Sierra	5,252	10,620	68	0	0	14,884	794
Colorado Desert	0	46	220	826	15	47	55
Mojave	0	210	187	2,827	0	109	5
Total in California	**6,603**	**34,725**	**24,173**	**3,665**	**15**	**43,966**	**32,703**

Riparian Habitat

NRCS photo

The word *riparian* is derived from the Latin word *ripa*, meaning bank or shore (as of a stream), and this meaning remains intact today. Warner and Hendrix (1984) define *riparian* as pertaining to the banks and other adjacent terrestrial environs of freshwater bodies, watercourses, estuaries, and surface emergent aquifers (springs, seeps, and oases). These areas can be perennial, intermittent, or ephemeral, and include estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, providing linkages between waterbodies and adjacent uplands and include portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (NRC 2002). The available water provides soil moisture in excess of that typically available through local precipitation and potentially supports the growth of mesic vegetation. Here, *vegetation* refers to all the plant species in a region and the way they are arranged (i.e., plant assemblages Sawyer and Keeler-Wolf 1995).

The terms *riparian habitat* and *riparian vegetation* represent broad physiographic units and may include areas with few or no plant species in common. This is especially true in California, where differences in species diversity, topography, biogeography, climate, and geology are great. The California Wildlife Habitat Relationships (CWHR) system of classification provides general descriptions of wildlife habitats in California. The following brief descriptions of the major riparian habitats in California offer a window into the diversity of riparian vegetation. CWHR codes are given in parentheses. For complete accounts see Mayer and Laudenslayer (1988), updated periodically by the CA Department of Fish and Game (http://www.dfg.ca.gov/whdab/html/wildlife_habitats.html). For Latin names of species, please refer to Appendix D.

Montane Riparian (MRI)

Montane riparian habitats (elevation = sea level to 2,440 m) are found in the Klamath, Cascade, Coast, Transverse, and Peninsular ranges and in the Sierra Nevada south to Kern and Northern Santa Barbara counties. Associated with lakes, ponds, seeps, bogs, meadows, rivers, streams, and springs, they are structurally diverse with variable vegetation. The composition of montane riparian zones varies widely by region. In northwestern California, west of the Klamath mountains, black cottonwood is the dominant species, sometimes codominant with bigleaf maple, and often associated with dogwood and boxelder. In northeastern California, black cottonwood, white alder and thinleaf alder are dominant, with Oregon ash and willow associates. Characteristic species of Sierra Nevada montane riparian zones include thinleaf alder, aspen, black cottonwood, dogwood, wild azalea, willow and water birch, white alder, and dogwood. Bigleaf maple and California bay are dominant in the southern Coast Ranges, the Transverse Ranges, and the Peninsular Range. Along the immediate coast, from San Luis Obispo to Del Norte counties, red alder is the dominant species in the coastal subtype of montane riparian.

Valley Foothill Riparian (VRI)

Valley foothill riparian habitats (elevation = sea level to 1,000 m) occur in the Central Valley and the lower foothills of the Cascade, Sierra Nevada, and Coast ranges. These habitats are associated with variable flow velocities and topographies, ranging from swift rapids and waterfalls of steep canyons to slow moving water in floodplains of gentle topography. They comprise a complex structure with a canopy, subcanopy, and understory shrub layer (usually impenetrable). Wild grape festoons trees and shrubs and constitutes a high percent of the groundcover. Dominant trees include valley oak, cottonwood, California sycamore, white alder, box elder, and Oregon ash, and California bay. Shrub layer plants include wild grape, wild rose, California blackberry, blue elderberry, poison oak, buttonbush, and willows. The herbaceous layer is diverse.

Desert Riparian (DRI)

Desert riparian habitats (elevation < 900 m) are found in scattered locations throughout the 1.4 million hectares of the Mojave, Colorado, and Great Basin deserts and in the desert canyons of the Peninsular ranges along permanent streams, seeps, and springs. They are often characterized by dense groves of low trees and tall shrubs; other patches are sparser, with medium-sized trees. The dominant canopy species vary but often include velvet ash, mesquite, Fremont cottonwood, willows and tamarisk (an invasive non-native species also known as Salt Cedar). The shrub layer comprises smaller individuals of canopy species as well as quailbush, Mojave seablight, desert lavender, seep willow, and arrowweed. Cattail and common reed are also important components of the understory.

Palm Oasis (POS)

Palm oasis habitats (elevation < 1,066 m) are found around the Salton Sea basin, especially along the San Andreas Fault zone, and are restricted to areas with permanent water of seeps, springs, and streams. Density of vegetation varies from sparse, scattered trees to dense, closely packed vegetation. The California fan palm frequently dominates the vegetation, but the habitat may also include coyote willow, velvet ash, California sycamore, naturalized date palms, Fremont cottonwood, mesquite, and tamarisk. Alkali sacaton and wiregrass dominate the herb layer. The understory also includes young individuals of canopy species and arrowweed, squaw waterweed, and alkali goldenbush.

Freshwater Emergent Wetland (FEW)

Fresh emergent wetland is found throughout California (most prevalent at elevation < 2,270 m) with the bulk of acreage in the Klamath Basin, Sacramento Valley, San Joaquin Valley, Delta, and Imperial Valley/Salton Sea. It primarily occurs at the edges of rivers and lakes. All emergent wetlands are flooded frequently. Dominant plant species include common cattail, tule bulrush, sedge, river bulrush, and baltic rush. Fresh emergent wetlands are an extension of many riparian areas, often grading into land with nonhydric soils.

Wetland Meadow (WTM)

Wet meadows (elevation = 1200-2400 m) usually occur in ecotones between fresh emergent wetlands and perennial grasslands. Where wet meadows merge with fresh emergent wetlands, slight differences in water depth significantly contribute to the animal species composition of the area. At all elevations, wet meadows generally have a simple structure consisting mainly of a layer of herbaceous plants. Trees and shrubs are an important part of the meadow, usually occurring around the edges. Wet meadows occur with a great variety of plant species, but several genera, including bent grass, oat grass, and rushes, occur commonly throughout the state.

Aspen (ASP)

Most aspen habitats (elevation = 2,000-3,000 m) in California are found within 80 km of the Nevada border from Mono County to Modoc County. Aspen habitats are found near seeps and streams on both the eastern and western slopes of the Sierra Nevada and eastern slope of the Cascade Range. East of the Sierra crest, aspens are found in the Carson and Monitor ranges and the Sweetwater and White mountains. Aspen stands tend to become more extensive in the north and east of their range. They comprise relatively open canopies associated with willows, alders, black cottonwoods, lodgepole pines, Jeffrey pine, ponderosa pine, red fir, and white fir. Important understory shrubs include sagebrush, roses, snowberry, chokecherry, and serviceberry with an extremely rich herbaceous layer. Additional aspen habitats are found on upland sites with increased associations with sagebrush and western juniper.

Photo by Eric Preston, ericxpreston.com

Aspens in Mono County, California.

A Standardized California Vegetation Classification

Recognizing the importance of broad, habitat-based classification schemes (e.g., CWHR), a detailed floristic system of California vegetation classification has been developed by Sawyer and Keeler-Wolf (1995). Their Manual of California Vegetation (MCV) provides a system of classification at a more specific level; floristically based on lower units of plant associations (referred to as series). With a standardized classification system one can describe vegetation associated with many aspects of bird biology and conservation across space and time. A single, widely accepted terminology provides land managers, natural resources specialists, and conservationists with a common language that promotes clear communication and hence better-informed decisions. CalPIF has adopted the Sawyer and Keeler-Wolf/MCV system of vegetation classification as the standard used for all CalPIF objectives. The Sawyer and Keeler-Wolf system ties in with continental planning efforts of The Nature Conservancy and is compatible with most previous schemes used in California, such as that of the California Biodiversity Council (see Chapter 7, Bioregional Conservation Objectives). As of 2004, the

second edition of the Manual of California Vegetation, a new hierarchical vegetation classification system consistent with the National Vegetation Classification Standard (NVCS), is being developed by Sawyer and Keeler-Wolf, in coordination with a statewide committee (Sawyer and Keeler-Wolf *in prep*). In the NVCS, there are several upper levels of classification (currently six, may be reduced to three) representing growth form, leaf characters, hydrology, and environment and two lower levels, representing floristics (Alliance, Association). Alliances are defined by the dominant one to three species, while Associations are distinguished by secondary associated species, usually in the understory. Appendix E contains descriptions of riparian and semi-riparian alliances identified by the 2004 California Vegetation classification by Sawyer and Keeler-Wolf.

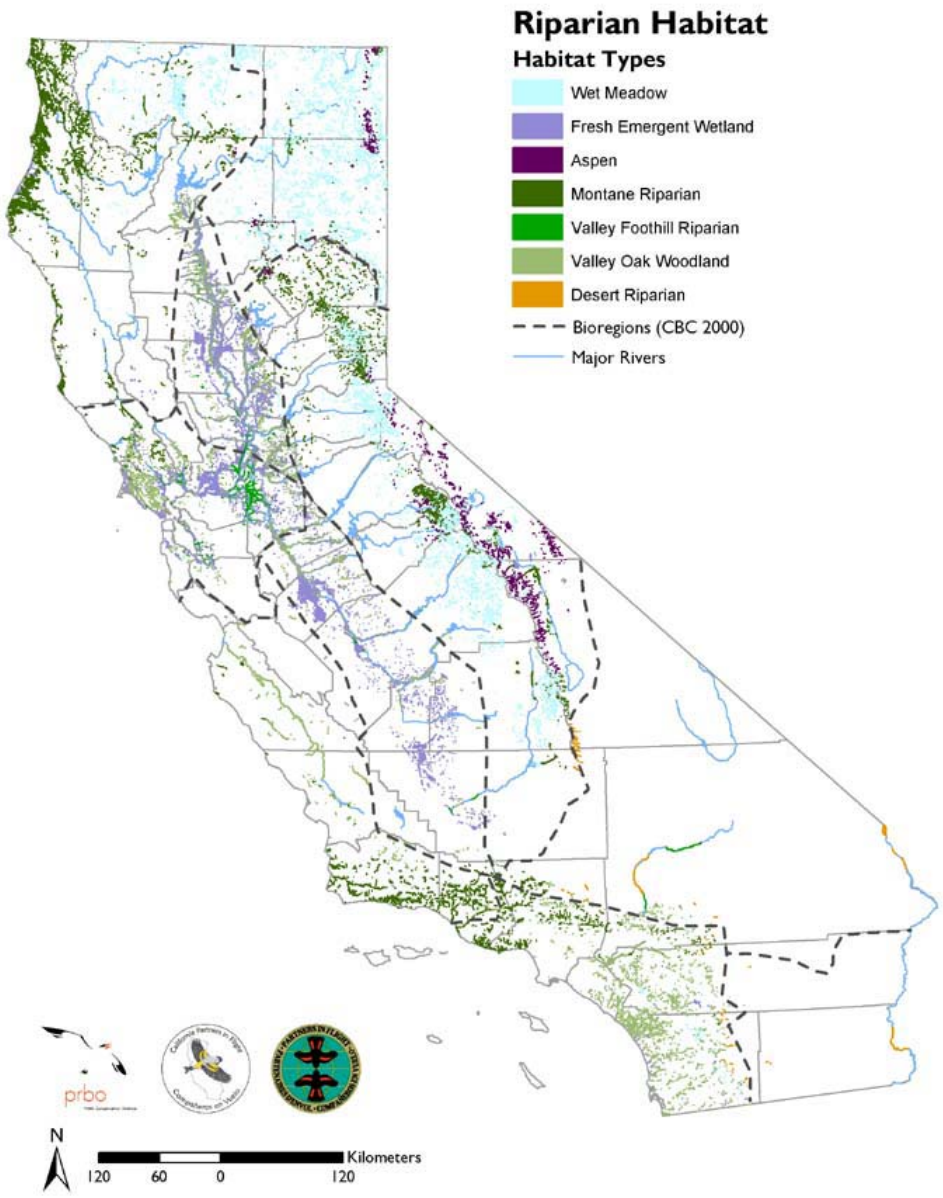

Figure 2-1. Approximate current coverage of riparian habitats throughout California.

Chapter 3. Riparian Habitat Conservation at the Landscape Scale

A number of issues covered in this Conservation Plan are united by the fact that they must be addressed on a relatively large spatial scale. When targets are set for restoring healthy population sizes of a given species (Chapter 6), researchers and land managers have to consider habitat at the scale of many hectares or square kilometers, and prioritizing land parcels for conservation and habitat restoration (Chapter 8) usually occurs at similar scales. Agricultural development in California's Central Valley, for example, has left remnant patches of riparian forest that measure from a few to a few hundred hectares (Hunter et al. 1999), and the conservation and restoration of this habitat involves consideration of the ecology of entire landscapes in which remnants are situated (Figure 3-1). Ecological conditions required for healthy wildlife populations in riparian habitats, such as complex vegetation structure that provides birds with nesting sites, are often measured at the scale of square meters (Kareiva and Andersen 1988); but additional conditions exist at much larger scales, and managers must also provide for these.

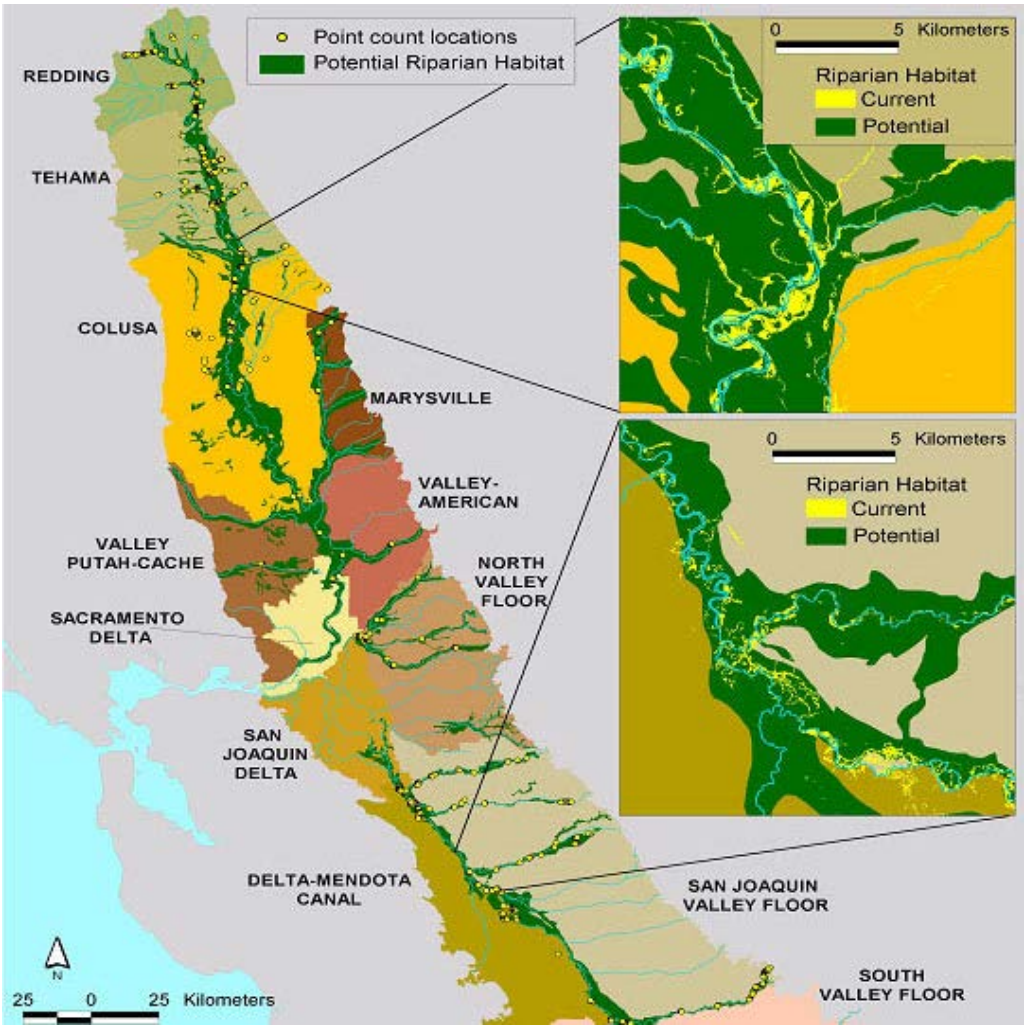

Figure 3-1. Point count locations and riparian data layers of the Central Valley basins.

The need for research focused on large-scale issues has been stressed in bird conservation initiatives (Ruth et al. 2003) and other conservation efforts partly because this is the scale at which parcels of land are owned and managed, and partly because many important ecological processes occur, and can only be studied, at large scales. Since the emergence of landscape ecology, research has increasingly been directed toward understanding the consequences for wildlife of alterations to, and the potential restoration of, natural habitats at large scales.

What is Landscape Ecology?

Landscape ecology takes into consideration the large-scale heterogeneity of areas containing species or natural communities that might be targeted for conservation. Although the size of a landscape is not strictly defined and can vary widely, landscapes typically exist at the general scale of a vista that can be seen in all directions around an observer from a single point. Such a landscape is normally a complex mosaic of multiple component areas (landscape elements or *patches*) under varying management practices or natural succession regimes (Forman and Godron 1986). Different patches may have different values for wildlife; some may be largely unoccupied by a given species while other areas are densely occupied, and occupied areas may be sites of largely successful or largely unsuccessful breeding and reproduction (i.e., population sources and sinks—Pulliam 1988, With and King 2001).

Landscape ecology, then, is concerned with interactions among these patches, in terms of the flow of species, materials, and energy among them. It also focuses on the ways that the specific shapes and spatial arrangements of landscape elements affect their interactions. That is, landscape ecology is a spatially explicit science (Forman and Godron 1986, Wiens et al. 1993, Forman 1995). While patches can be defined at nearly any scale, landscape ecology often investigates interactions of biological populations or communities with relatively large-scale environmental features and processes, such as regional topography, the expansion of urban areas into wildlands, and forest fragmentation. The growth of landscape ecology as a discipline has been paralleled by growing recognition that conclusions drawn from ecological investigations can depend upon the scale at which a system is studied (Wiens 1989, Riitters et al. 1997, Saab 1999, Wiens 1999, Schneider 2001). Environmental factors may affect bird populations differently at different scales, may only have important effects at certain scales, and may affect different species at different scales. For example, Hochachka et al. (1999) found for sites across the western U.S. that, while rates of songbird nest parasitization by Brown-headed Cowbirds decreased with increasing forest cover within 10 km of nesting sites, the relationship reversed when forest cover within 50 km was considered. Thus, the explicit consideration of scale has become an important aspect of ecological investigations, with consequences for conservation activities (Schneider 2001).

Landscape-scale factors that affect riparian birds

Many environmental factors can affect riparian bird populations at large scales. We mention here some of the more important ones that are of immediate conservation relevance.

Altered hydrology

Little research has investigated the impacts of California's large-scale alteration of natural hydrologic regimes to bird communities. Artificial flow regulation with local or upstream dams and diversions, as well as channel alteration and containment with levees and channelization, can alter plant communities at watershed scales (Ohmart 1994, Hunter et al. 1999). Vegetation, and therefore vegetation-dependent wildlife, can be dramatically affected by distant upstream water management practices (Ohmart 1994), so that restoration efforts at specific sites may depend ultimately on the cooperation of partners managing water in the wider landscape.

Habitat fragmentation and landscape condition

More attention has been paid to the topic of habitat fragmentation because fragmentation has been perhaps the most apparent human-caused transformation of natural systems, aside from their outright reduction in size (Meffe and Carroll 1997). As riparian forests have been converted to agricultural fields, for example, remnant undeveloped habitat has been left as a disconnected series of fragments of varying size and shape. Such habitat fragments have been likened to islands in a "sea" of inhospitable habitat. The Theory of Island Biogeography (MacArthur and Wilson 1967) maintains that smaller, more isolated islands (or fragments) support fewer species, due to a higher likelihood of local population extirpation. This general property of small populations results from numerous ecological mechanisms working at relatively small scales within islands or fragments, as well as at larger scales around them. For example, small remnant patches of breeding bird habitat in urban areas may contain such low numbers of a particular species that small increases in predation rates can cause extirpation. In such cases, increased densities of cats and other predators subsidized by the surrounding urban landscape can be sufficient to cause the loss of several songbird species (Soulé et al. 1988, Bolger et al. 1991, Crooks and Soulé 1999, Crooks et al. 2001). Donovan et al. (1997) found that in Midwestern forest habitats, nest predation was higher on habitat edges within moderately and highly fragmented landscapes, compared to unfragmented landscapes. Chalfoun et al. (2002) found that edge effects on nest predators were stronger in agricultural landscapes than in more heavily forested landscapes. In western riparian habitats, which are more naturally fragmented than eastern deciduous forests, densities of both nest predators and nest parasites (Brown-headed Cowbird) in forest fragments may depend more on surrounding land use, such as the prevalence of agriculture in the landscape, than on fragment size or amount of edge (Tewksbury et al. 1999). Nest parasitism by Brown-headed Cowbirds can affect the reproductive success of songbirds (Chapter 4), so landscape features that influence cowbird abundance are an important consideration.

Barriers to Movement

In addition to affecting habitat patch quality, surrounding landscape conditions can also affect wildlife movement among habitat patches. In naturally patchy systems such as desert riparian woodland, and possibly in artificially fragmented systems, it may be appropriate to consider bird populations in patches as parts of a metapopulation, or group of interconnected populations (Hanski and Gilpin 1997). In this framework, the probability of a local population's extirpation is reduced by occasional immigration from other patches, so that the long-term stability of the entire metapopulation depends on some minimum level of patch interconnectivity. In other words, a particular habitat fragment may be too small to meet minimum requirements for a stable population of a given species, but effective movement of individuals (such as dispersing juveniles or adults seeking mates) among multiple fragments can render each fragment a functioning component of the whole population. Movement among fragments may be hindered by hostile conditions in developed areas around fragments, and such movement can become increasingly unlikely with increasing distance between fragments (e.g., Norris and Stutchbury 2001, Cooper and Walters 2002).

Conservation Approaches

Clearly, the quality of remnant habitat fragments can depend not only on their size and internal characteristics, but also on their configuration relative to one another and the characteristics of the surrounding landscape (Andren 1992, 1994; Sisk et al. 1997; Tewksbury et al. 1998; Saab 1999; Tewksbury et al. 2002). Prioritization of sites for bird conservation should therefore consider surrounding landscape conditions, such as the proximity and prevalence of other natural areas, urban areas, agricultural areas, or Brown-headed Cowbird foraging areas. Managing for healthy wildlife populations in remnant natural areas may entail developing cooperative relationships with the managers of adjacent lands.

Wcavilhead.org photo.

Female Brown-headed Cowbird.

Fragmentation vs. natural patchiness

The fragmentation of formerly contiguous habitat can reduce the usefulness of remaining habitat for wildlife conservation in some cases, so preservation and restoration efforts should in these cases prioritize large contiguous blocks of habitat and connectivity among those blocks. However, many natural systems are patchy or heterogeneous at large scales, and organisms can be adapted to naturally patchy environments. For example, desert riparian gallery forests often occur naturally as discreet patches along river stretches where conditions are favorable. This contrasts with the riparian forests of California's Central Valley, which were historically relatively wide, contiguous stands following river courses for long distances. Natural patchiness generates habitat heterogeneity that single organisms may use, as when bird species nest in one habitat and forage in another. In desert riparian systems, many riparian woodland-dependent species also forage in surrounding scrub habitat (Szaro and Jakle 1985). Thus, efforts to restore natural conditions must be tailored to the needs of specific systems, with consideration for the natural large-scale heterogeneity of many systems. In extreme cases of critical habitats that are very patchy, such as freshwater wetlands, conservation efforts may be best directed towards multiple small reserves where remnant habitat exists (Haig et al. 1998).

The landscape paradigm

It is increasingly recognized that viewing habitat remnants as islands embedded in a sea of unsuitable habitat is an oversimplification of reality, and conservation planning should not necessarily follow this model. Each of the patches that compose a landscape is more accurately seen as falling somewhere along a continuous gradient of habitat quality, and quality varies depending on what particular wildlife species or community one considers as well as the scale at which patches are defined (Wiens 1995). As discussed above, habitat quality is also mediated by landscape composition and interactions among patches.

Advances in landscape ecology have therefore generated a framework for conservation planning within which the structure and function of all elements of a landscape can be considered together in a spatially explicit, scale-explicit manner. Resulting conservation approaches might identify priority areas for strict preservation of remnant and restored natural systems, surrounding areas for less strict forms of mixed-use conservation management, and management applications in permanently degraded areas that will minimize their adverse impacts on the broader landscape.

"Placing the conservation reserves firmly within the context of the surrounding landscape and attempting to develop complementary management strategies seems to be the only way to ensure the long term viability of remnant areas… This has important implications for land managers since it involves a radically new way of viewing management and requires that neighboring land uses, and hence neighboring landowners, interact in a positive way. This is difficult, but not impossible…"(Saunders et al. 1991).

Chapter 4. Problems Affecting Riparian Birds

Riparian areas are the most critical habitat for conservation of Neotropical migrant and resident birds in California (Miller 1951, Gaines 1974, Manley and Davidson 1993) and throughout the west (Rich 1998). Riparian ecosystems harbor the highest number of bird species found in the arid and semiarid portions of the western United States (Knopf et al. 1988, Dobkin 1994, Saab et al. 1995). Consequently, the loss of riparian habitats may be the most important cause of population decline among landbird species in western North America (DeSante and George 1994). In addition to providing important breeding grounds, riparian habitat offers vital overwintering and migration stopover areas and corridors for dispersal (Gaines 1977, Ralph 1998, Humple and Geupel 2002).

Habitat loss and degradation are probably the most important factors causing the decline of riparian bird populations. Alteration of riparian landscapes narrows or destroys important population dispersal corridors. Disruption of natural hydrological conditions by dams, levees and diversions, clearing associated with farming and development, overgrazing, and invasion by exotic species have all contributed to degradation of riparian zones. Nest predation and parasitism by the Brown-headed Cowbird may reduce the reproductive success of many riparian birds in California (Gaines 1977, Harris 1991, Geupel et al. 1997b, Laymon and Williams 1997, Gardali et al. 1998, USFWS 1998). Long-term studies of migrant landbirds in California suggest that reproductive success on the breeding grounds is the primary factor limiting populations (Johnson and Geupel 1996, Chase et al. 1997, Gardali et al. 2000). However, the situation is complex and it is likely that many factors, in and across all stages in the annual cycle, are operating to influence population dynamics (Martin 1993, Rappole and McDonald 1994, Sherry and Holmes 1995, Faaborg 2002, Ballard et al. 2003b).

Nest Parasitism

Local habitat features around the nest, such as vegetation composition and structure, as well as habitat configuration and landscape context, have been shown to affect levels of nest parasitism and predation (Freemark et al. 1995, Larison et al. 1998, Hochachka et al. 1999, Tewksbury et al. 2002, Chapter 3). As a result of the conversion of native habitats to farms and pastures, the Brown-headed Cowbird has undergone a population explosion and range expansion during the twentieth century (Rothstein et al. 1980, Laymon 1987, Lowther 1993). Agriculture and livestock grazing near riparian zones provide Brown-headed Cowbirds with ample foraging habitat close to songbird breeding grounds (Mathews and Goguen 1997, Tewksbury et al. 1998). Cowbird parasitism contributes to lowered productivity in host species through direct destruction of host eggs; through competition between cowbird and host chicks, resulting in increased mortality; and through nest abandonment in some species, thus lowering overall fecundity within a season.

Nest Predation

In addition, the expansion of agricultural and urban land conversion tends to enhance favorable conditions for native and non-native predators that can decimate bird communities. The elimination of top predators, such as mountain lions and wolves, often results in an increased population of midlevel predators (Soule et al. 1988, Crooks et al. 1999). Raccoons, skunk and domestic cats, for example, are well-documented avian predators (Winter 1999, Pietz and Granfors 2000, Thompson and Burhans 2003, Sawin et al. 2003). Land conversion can also favor nest predators such as jays, crows and magpies (Andren 1992).

The identification and protection of source populations (production of young exceeds adult mortality) is vital to bird conservation. By recognizing those habitat and landscape factors that exist in these healthy (i.e., source) populations, conservation efforts can increase and enhance favorable conditions for birds (Martin 1995). To identify source populations, scientists must gather specific demographic information on the productivity, survivorship and dispersal rates of the bird community. Determination of these variables for every species breeding in riparian habitat is not currently feasible; however, recent advances in the monitoring demographic parameters of bird populations (Martin and Geupel 1993, DeSante 1995, DeSante and Rosenberg 1998) have allowed biologists to model a population's potential health at specific sites (e.g., Robinson et al. 1995, Tewksbury et al. 1998). In general, nest success rates of 20% or less, for most species, indicate unsustainable or "sink" populations (Martin 1992, Robinson et al. 1995, Trine 1998, Budnik et al. 2000). The number of young produced in a bird community is probably the most important factor influencing many species' occurrence and persistence (Martin 1992, Martin and Geupel 1993) and may be the easiest way to identify a healthy population. Table 4-1 provides an example of how productivity can vary among riparian sites among California's bioregions.

Photo by Ian Tait

Western Scrub-Jay, a common nest predator.

However, nest success alone cannot entirely substitute for an actual measure of annual productivity that takes into account re-nesting attempts after nest failure, double brooding, and the number of young fledged per successful nest (Thompson et al. 2001). Several recent studies have demonstrated that the Mayfield method underestimates population productivity (summarized in Anders and Marshal *in press*). Intensive studies that follow color-marked birds throughout the breeding season are feasible, and yield the most accurate productivity data. Powell et al. (1999) describe a model that may be used to predict breeding-season productivity as a function of adult survival, juvenile survival, nesting success, season length, re-nesting interval, and juvenile care intervals. For species with nests that are difficult to find or monitor, or when logistical constraints prohibit locating every nest on a study plot, nest monitoring may be supplemented by color-marking breeding adults and counting fledglings on breeding territories to measure annual productivity (Porneluzi and Faaborg 1999).

Many of California's riparian birds face potential population declines and local extirpations. Of these, Least Bell's Vireo, Yellow-billed Cuckoo, and Willow Flycatcher have suffered the most drastic reductions in their overall populations and breeding ranges (Laymon and Halterman 1985, USFWS 1998), resulting in state or federal listing for each. Habitat loss, in concert with brood parasitism and nest predation, affects most open cup nesting species throughout the state. Events in California may be illustrated by the demise of Yellow Warbler populations along the Colorado River. There, a combination of massive habitat loss, breeding failure in "replacement" habitats and, finally, high cowbird pressure in remaining habitat patches resulted in near extirpation of the species (Rosenberg et al. 1991).

Table 4-1. Mayfield (1975) estimates of nest success for select species among riparian songbird monitoring sites by California bioregion, using same data collection and analysis methods.

Species	Sacramento Valley	Bay-Delta	Modoc	Sierra Nevada
Black-chinned Hummingbird	0.44[3]	--	--	0.39[6]
Western Wood-Peewee	--	0.64[4]	0.17[5]	0.63[6]
Warbling Vireo	--	0.06[1]	--	0.09[6]
Bushtit	--	0.44[4]	--	0.44[6]
Swainson's Thrush	--	0.29[1]	--	--
American Robin	--	0.21[1]	--	0.49[6]
Yellow Warbler	0.32[2]	--	0.89[5]	0.30[7]
Wilson's Warbler	--	0.05[1]	--	--
Common Yellowthroat	--	0.63[4]	--	--
Spotted Towhee	0.28[3],0.05[2]	0.43[4]	--	0.24[6]
Song Sparrow	0.28[8]	0.58[4],0.24[1]	0.59[5]	0.29[7]
Black-headed Grosbeak	0.27[3], 0.33[2]	0.27[1]	--	0.57[6]

[1] Gardali et al. 1999, [2] Wood et al. 2001, [3] Small et al. 1999, [4] Haff et al. 2001, [5] King et al. 2001, [6] Heath et al. 2001, [7] Heath et al. 2002b, [8] Hammond and Geupel 2000

Least Bell's Vireo: An Example of Conservation Need and Action

The Least Bell's Vireo provides an excellent example of the problems facing riparian birds in California and how adaptive management and restoration efforts can reverse population declines. Historically, the Least Bell's Vireo was one of the most common breeding birds in riparian habitat in California (Grinnell and Miller 1944). In 1973, extensive searches of their former breeding grounds between Tehama and San Joaquin counties failed to detect any Least Bell's Vireos (Gaines 1974). By 1980, the species was extirpated from the entire Central Valley (USFWS 1998). Once characterized as abundant (for review see USFWS 1998), there remained only about 300 pairs of breeding birds when the species received federal listing as endangered in 1986 (RECON 1989). Today, the Least Bell's Vireo remains absent from the bulk of its historical range and is restricted to eight southern counties, with the majority of birds occurring in San Diego County (Figure 5-7).

Habitat destruction and degradation have severely reduced the range of Least Bell's Vireo in California. Agricultural land uses and water projects have not only actively destroyed riparian habitat, but have reduced water tables to levels that inhibit the growth of the dense vegetation the vireos prefer. The remaining vireo populations cling to small, increasingly isolated patches of habitats; as such, populations are more vulnerable to catastrophic events, demographic failure and loss of dispersal corridors. Dams, levees and other flood control structures hinder riparian reestablishment, creating more "old-growth" conditions (dense canopy and open understory) that are unfavorable to breeding vireos. Finally, habitat degradation encourages nest predation and parasitism.

Photo by Big Sur Ornithology Lab

Cowbird parasitism of Least Bell's Vireo nests further encourages their decline. Livestock grazing has reduced and degraded the lower riparian vegetation favored by the Least Bell's Vireo (Overmire 1962) and provided foraging areas for the Brown-headed Cowbird. Row crops and orchards also provide feeding grounds for the parasite. By as early as 1930, nearly every Least Bell's Vireo nest found in California hosted at least one cowbird egg (USFWS 1998). Since a parasitized nest rarely fledges any vireo young, nest parasitism of Least Bell's Vireo results in drastically reduced nest success (Goldwasser 1978, Goldwasser et al. 1980, Franzreb 1989, Kus 1999, Kus 2002).

Since federal listing and concordant restoration and management activities, the population increased dramatically up until 1998 (USFWS 1998). The Camp Pendelton population increased from 15 males in 1980 (Salata 1980) to 1011 in 1998 (Griffith 1999). In addition to population growth, observations indicate that the species is expanding its range northward. Currently, Least Bell's Vireos are recolonizing areas unoccupied for decades and may potentially reestablish breeding populations in the central and northern portions of their historic range (USFWS 1998). Since the peak in 1998, however, the Camp Pendelton population has declined to 757 in 2002 (W. Berry pers. comm.).

Chapter 5. The Conservation Planning Process

The national Partners in Flight program requested that state working groups define and prioritize the most threatened habitat types in each region, weighted by their importance to birds. In California, riparian habitats were unanimously chosen as the top priority because they provide the richest habitats for both breeding and wintering birds (Miller 1951, Cogswell 1962, Gaines 1977, Manley and Davidson 1993). Thus, California Partners in Flight formed the Riparian Habitat Joint Venture to spearhead the conservation planning process.

Prioritization schemes developed for the state's Neotropical migrants consistently ranked riparian as the most important habitat type (Davidson 1995). California's riparian habitats have many endemic species and subspecies that are known as riparian-obligate species. In addition to high species richness, riparian areas during the breeding season can harbor individuals at densities up to ten times greater than surrounding upland habitats. Although riparian habitat is recognized as extremely important, the magnitude of its destruction and degradation has been greater than for any other habitat in California, with the possible exception of perennial grassland.

The Riparian Bird Conservation Plan has been developed cooperatively by leading bird researchers in California through a process designed to:

- Capture the conservation needs of the complete range of riparian habitat types throughout the state.
- Develop, by consensus, biological conservation objectives for selected riparian bird species.

Photo by Kevin McKeeghan

Song Sparrow, a riparian focal species.

Criteria for Selecting Riparian Focal Species

The majority of the PIF planning efforts use the national PIF database (Carter et al. 2000) to prioritize species in need of conservation attention and then select focal species by region for conservation plans. The RHJV elected against this method for the Riparian Bird Conservation Plan for a number of reasons. The national PIF prioritization scheme relies heavily on BBS trend estimates that likely do not adequately monitor riparian birds in California. Additionally, the PIF database does not yet recognize many subspecies including the Western Yellow-billed Cuckoo, a California endangered species. These factors render such a "priority" species list less representative than the RHJV preferred. Instead, the RHJV chose to emphasize the ecological associations of individual species *as well as* those of conservation concern (Chase and Geupel *in press*). In doing so, the RHJV included a suite of focal species whose requirements define different spatial attributes, habitat characteristics, and management regimes representative of a "healthy" system (Table 5-2). Additionally, the RHJV decided that some of the most useful indicators were those with populations and distributions large enough to be easily monitored and to provide sufficient sample sizes for statistical analysis across sites and/or regions.

The RHJV included species in the conservation planning process based on five factors (although not all species meeting these criteria were selected, and species selected did not necessarily meet all criteria, note: most are not special management species; see Table 5-1). The species considered:

- Use riparian vegetation as their primary breeding habitat in most bioregions of California.
- Warrant special management status—endangered, threatened, or species of special concern on either the federal or state level.
- Have experienced a reduction from their historical breeding range.
- Commonly breed throughout California's riparian areas—allowing adequate sample sizes for statistical comparisons and therefore the ability to rapidly assess responses to changes in management (such as restoration).
- Have breeding requirements that represent the full range of successional stages of riparian ecosystems—to assess the success of restoration efforts.

Because birds occupy a wide diversity of ecological niches in riparian habitat (Figure 5-1), they serve as useful tools in the design of conservation efforts. Birds are relatively easy to monitor in comparison with other taxa and can serve as "focal species," whose requirements define different spatial attributes, habitat characteristics and management regimes representative of a healthy riparian system (Chase and Geupel *in press* for review of CalPIF's strategy of choice and use of focal species). For example, the bird that requires the largest area to survive in a certain habitat will determine the minimum suitable area for that habitat type. Likewise, the requirements of non-migratory birds that disperse short distances to establish new territories will define the attributes of connecting vegetation. The species with the most demanding or exacting requirements for an ecological characteristic, such as stream width or canopy cover, determines its minimum acceptable value. Therefore, the assumption is that a landscape designed and managed to meet the focal species' needs encompasses the requirements of other species (Lambeck 1997).

Figure 5-1. A healthy system needs diverse vegetative structure to best support birds. Illustration by Zac Denning.

Focal Species

The following were selected as focal species for preparing the Conservation Plan. They are listed below followed by the species account author and any special-status designations. Latin names are given in Appendix D. New for this version are: Spotted Sandpiper, Tree Swallow, and Tricolored Blackbird.

Swainson's Hawk: California listed as threatened. Brian Woodbridge, U.S. Fish and Wildlife Service

Spotted Sandpiper: Chris McCreedy and Nils Warnock, PRBO Conservation Science

Western Yellow-billed Cuckoo: California listed as endangered. Steve Laymon, Bureau of Land Management

Willow Flycatcher: California listed as endangered, USFS Region 5 sensitive species; the Southwestern Willow Flycatcher subspecies is federally listed as endangered. Mary Whitfield, Southern Sierra Research Station; Diana Craig, USDA Forest Service and Pamela Williams, Kern National Wildlife Refuge

Warbling Vireo: Tom Gardali, PRBO Conservation Science

Least Bell's Vireo: Federally listed as endangered. Barbara Kus, San Diego State University

Bank Swallow: California listed as threatened. Barry Garrison, California Department of Fish & Game

Tree Swallow: David Winkler, Cornell University

Swainson's Thrush: Jennifer White and Stacy Small, University of Missouri, Columbia

Yellow Warbler: California species of special concern for species and Sonoran subspecies. Sacha Heath, PRBO Conservation Science

Common Yellowthroat: California listed as species of special concern for San Francisco subspecies. Tina Menges, U.S. Fish and Wildlife Service

Wilson's Warbler: Chris Otahal, U.S. Fish and Wildlife Service

Yellow-breasted Chat: California species of special concern. Matt Ricketts, LSA Associates and Barbara Kus, San Diego State University

Song Sparrow: Diana Humple and Geoff Geupel, PRBO Conservation Science

Black-headed Grosbeak: Stacy Small, University of Missouri, Columbia and Mike Lynes, Hastings University

Blue Grosbeak: Jeanne Hammond, Humboldt State University

Tricolored Blackbird: Bill Hamilton, UC Davis

Key findings from the species accounts are available at http://www.prbo.org/calpif/htmldocs/riparian.html. These findings and the detailed information found in each species account provide the basis for the conclusions and conservation recommendations presented in this Conservation Plan. Account authors and other conservation and land management experts gathered to discuss and synthesize their results into a summary of concerns, habitat requirements, conservation objectives, and action plans (or recommendations). The species accounts and the results from this meeting form the backbone of this Conservation Plan.

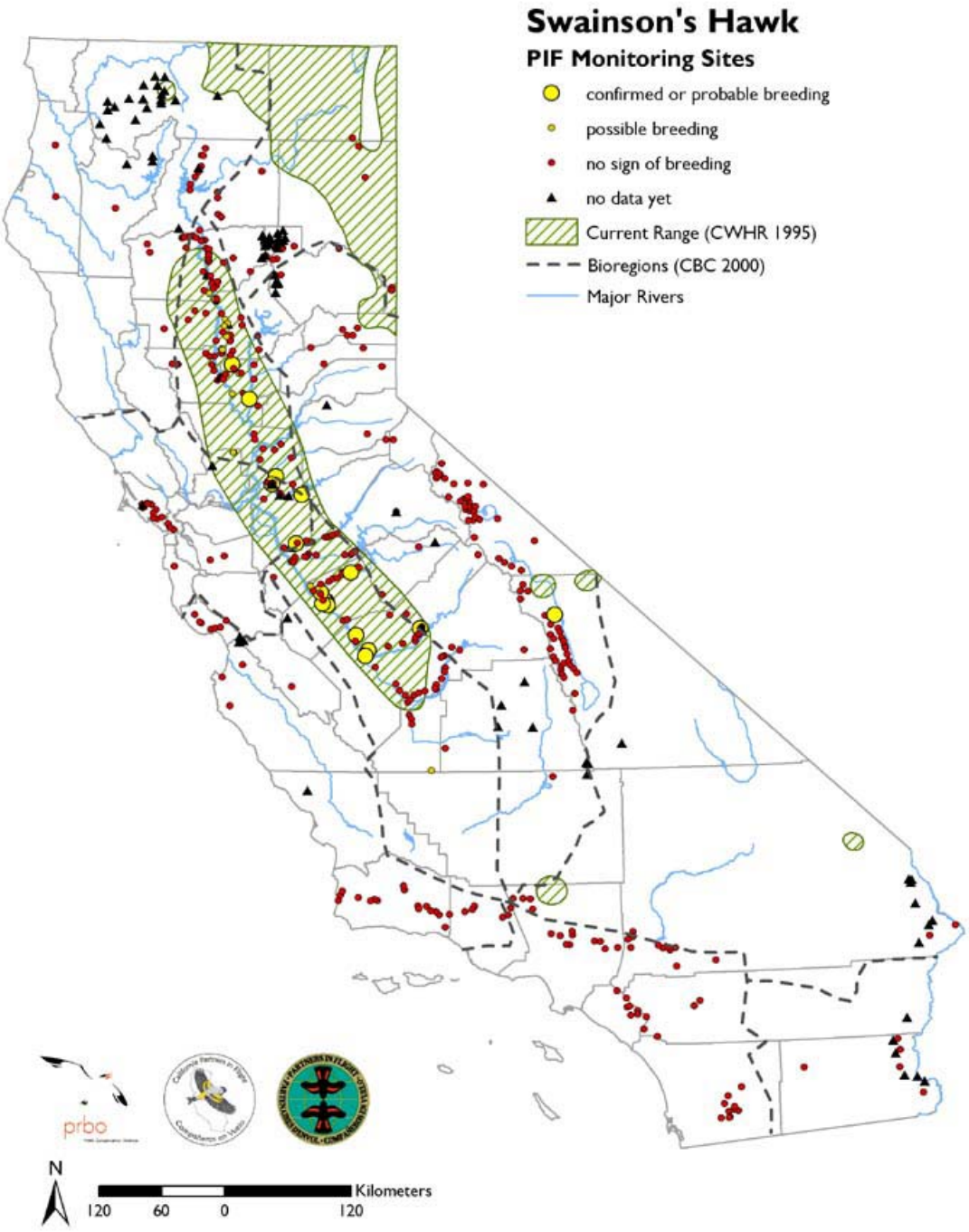

Figure 5-2. CalPIF monitoring sites, breeding status, and current range for the Swainson's Hawk in California.

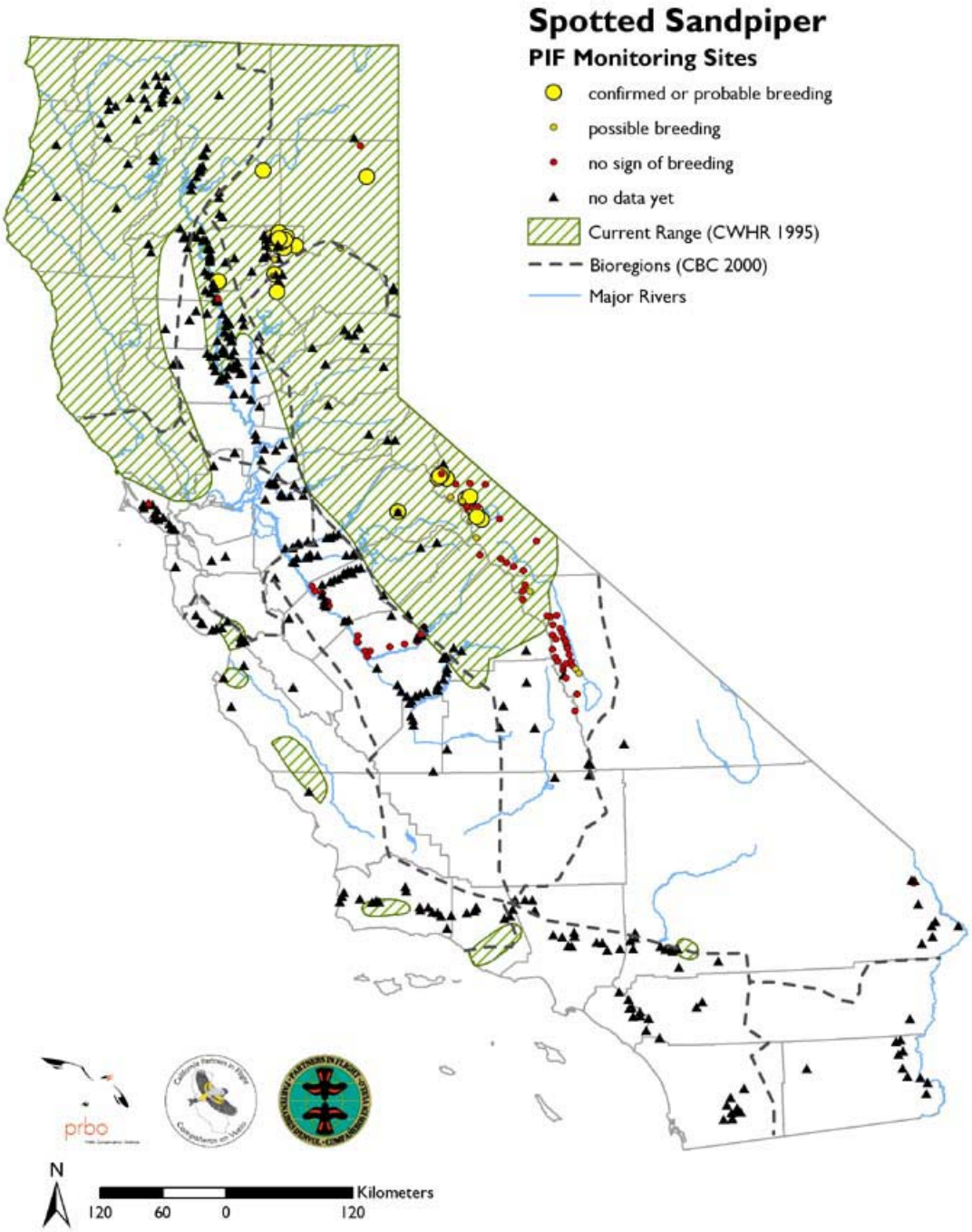

Figure 5-3. CalPIF monitoring sites, breeding status, and current range for the Spotted Sandpiper in California.

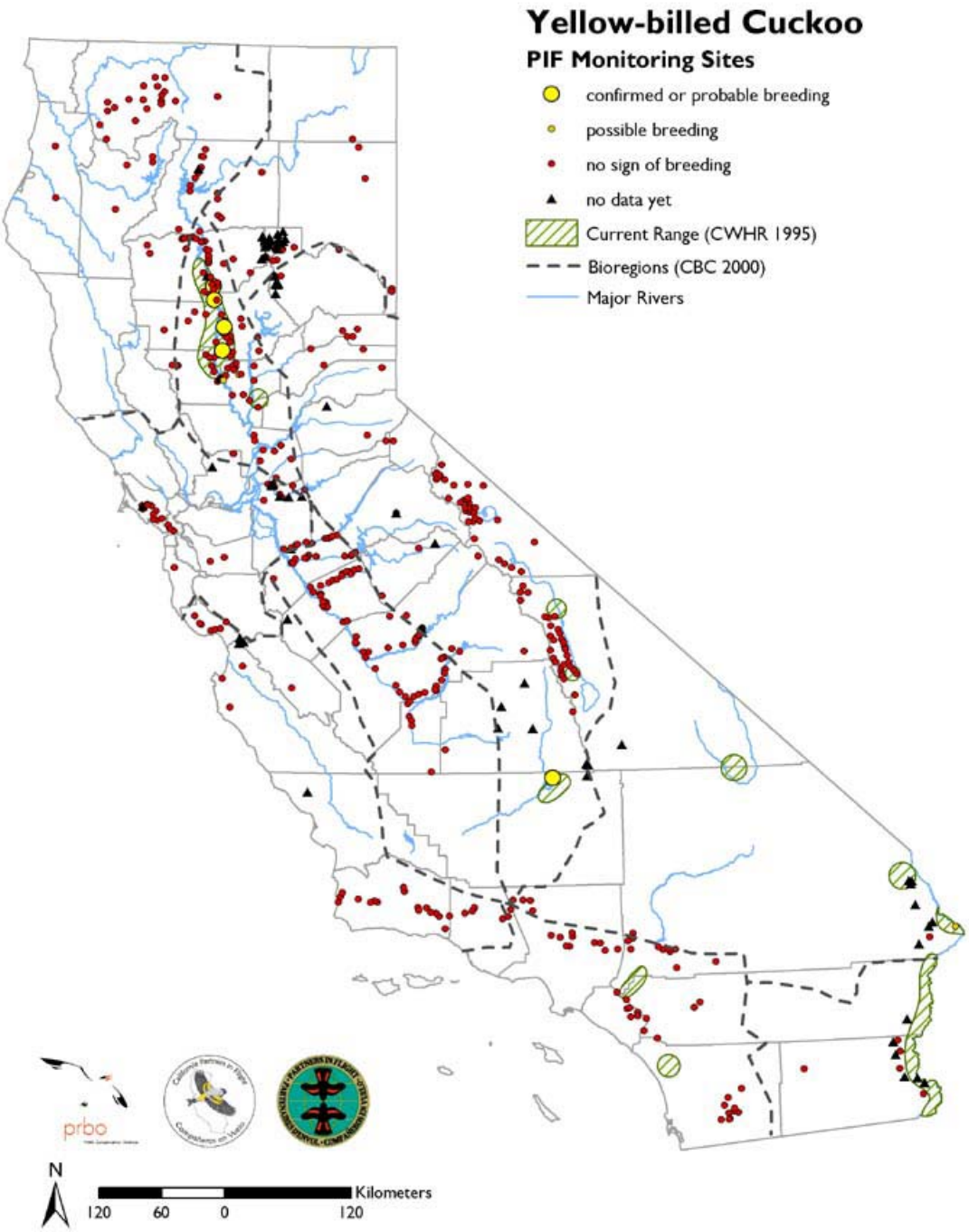

Figure 5-4. CalPIF monitoring sites, breeding status, and current range for the Western Yellow-billed Cuckoo in California.

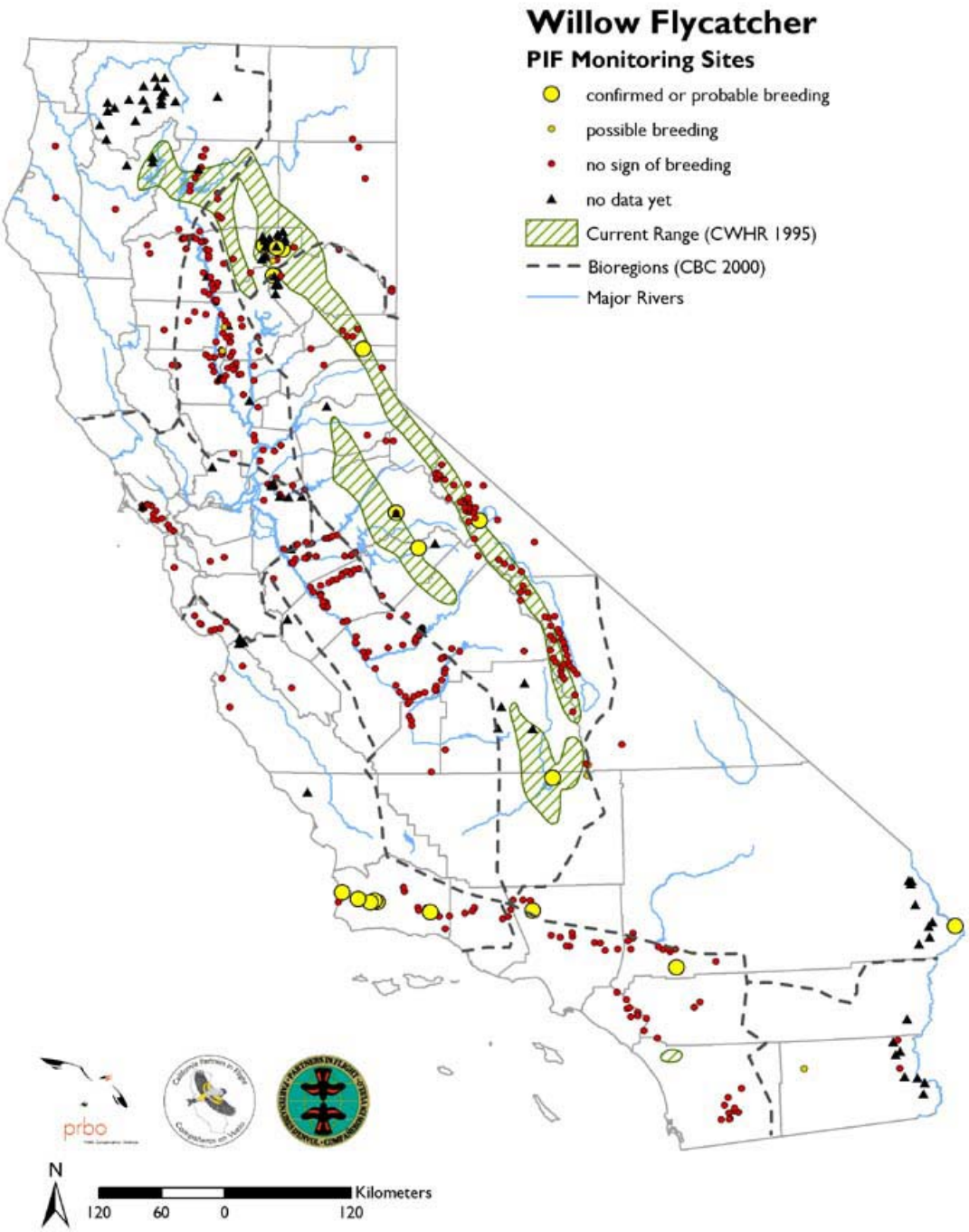

Figure 5-5. CalPIF monitoring sites, breeding status, and current range for the Willow Flycatcher in California.

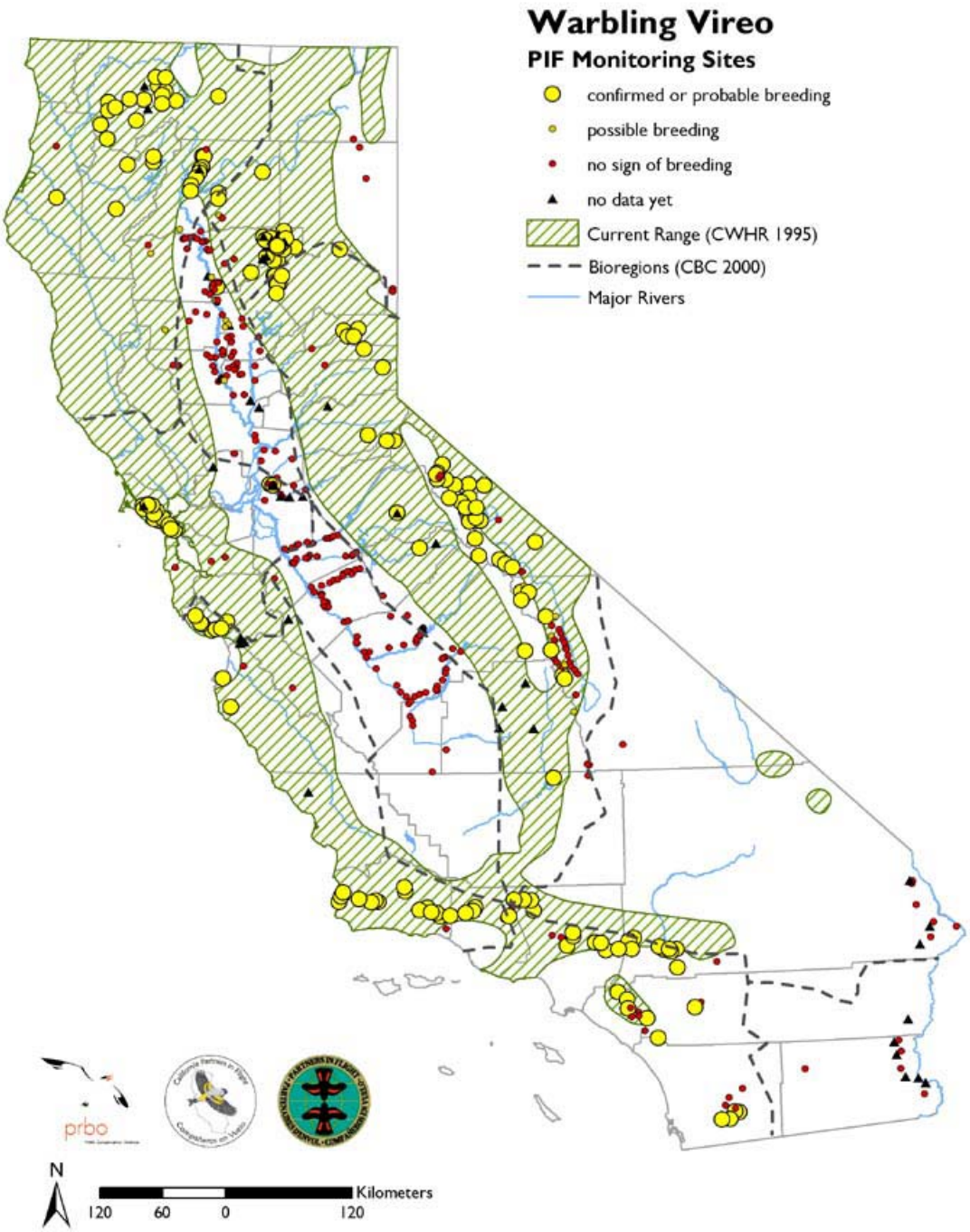

Figure 5-6. CalPIF monitoring sites, breeding status, and current range for the Warbling Vireo in California.

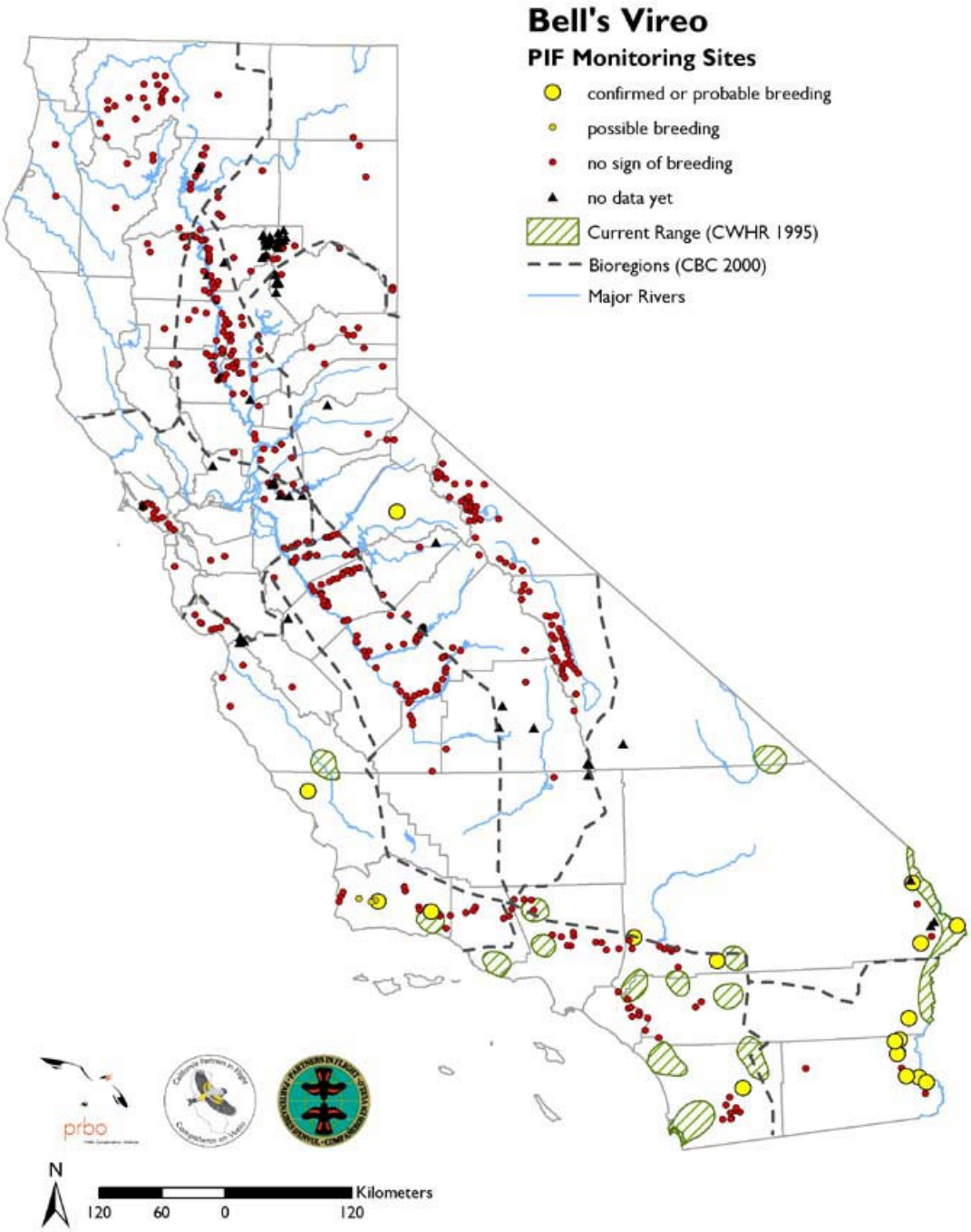

Figure 5-7. CalPIF monitoring sites, breeding status, and current range for the Least Bell's Vireo in California.

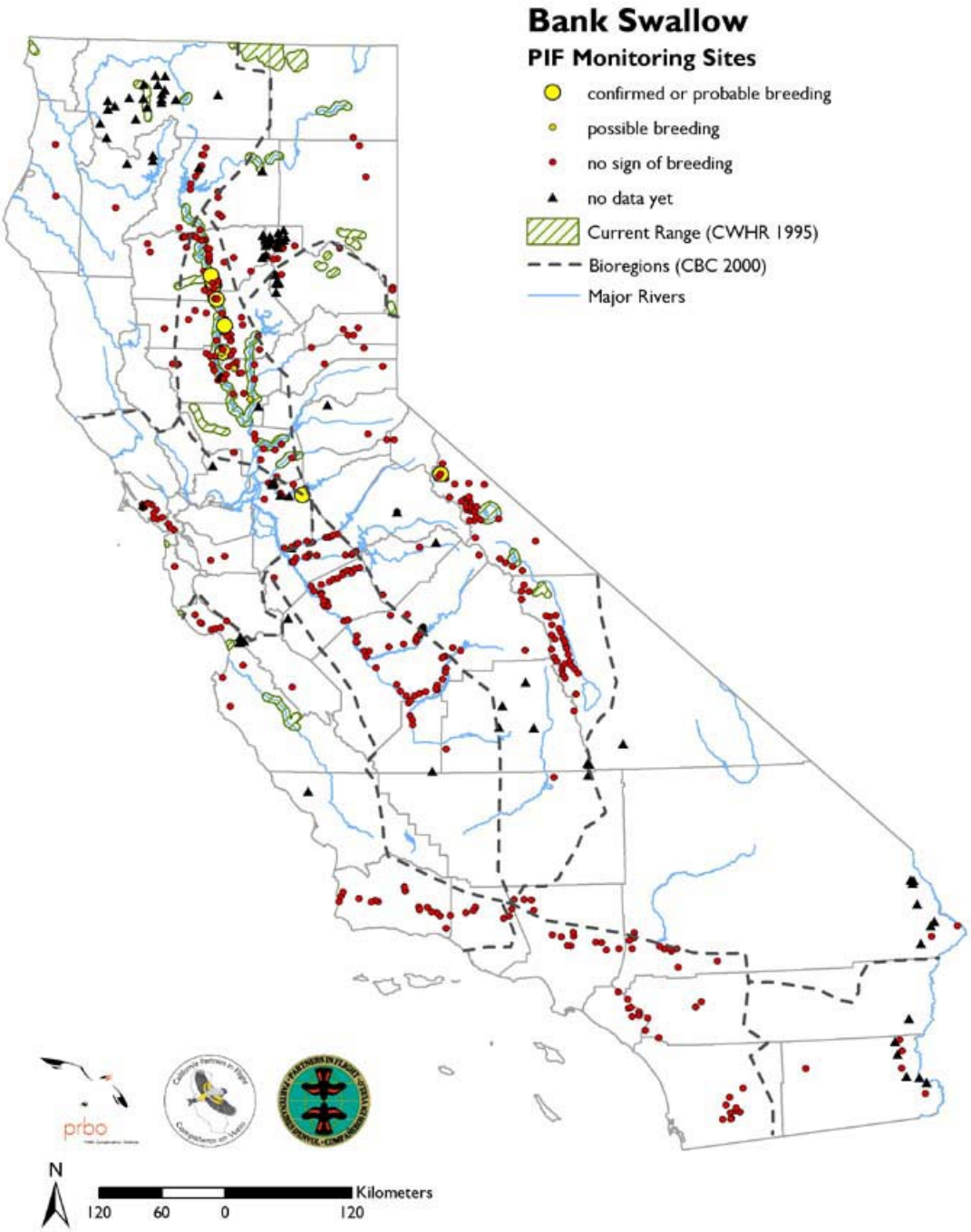

Figure 5-8. CalPIF monitoring sites, breeding status, and current range for the Bank Swallow in California.

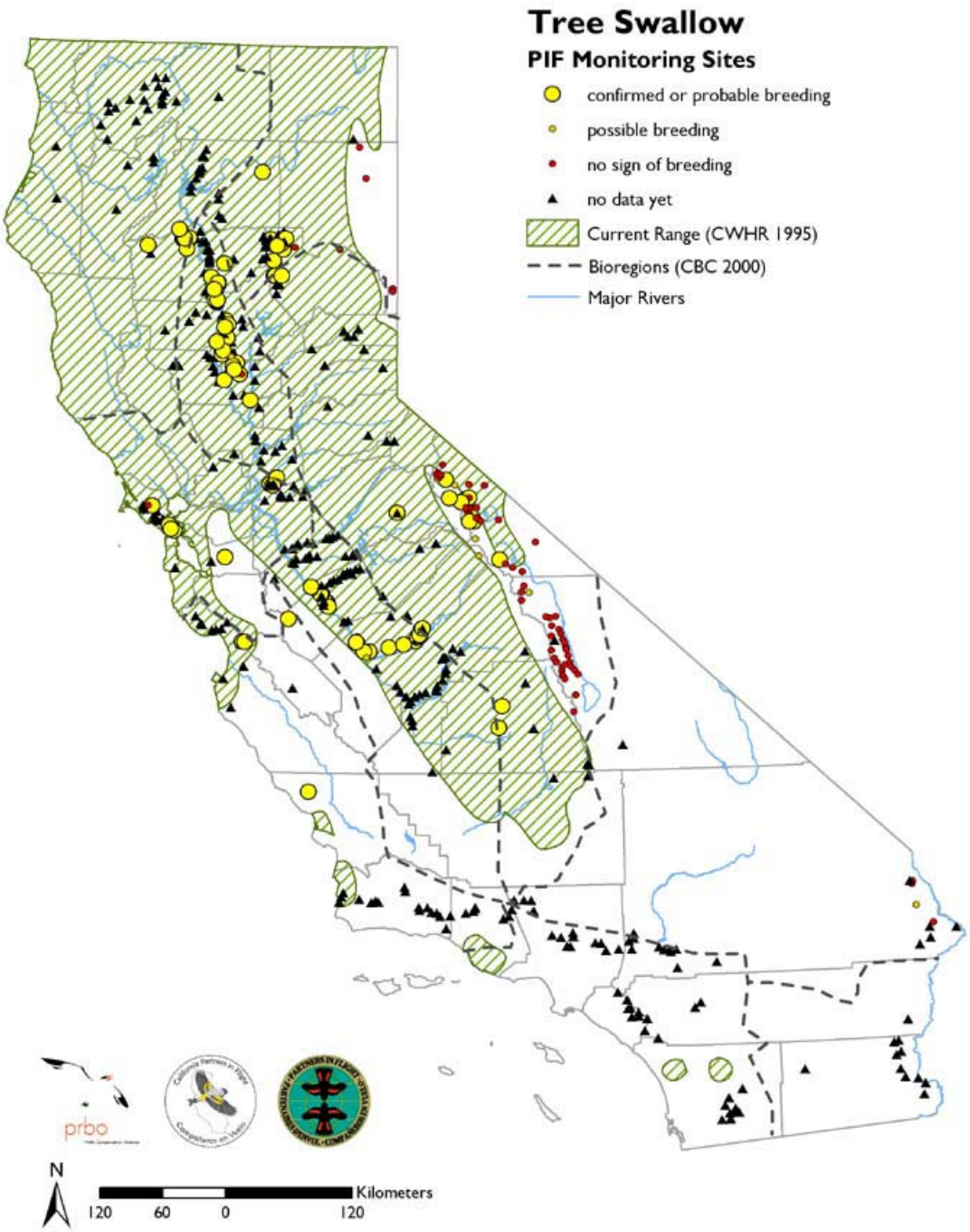

Figure 5-9. CalPIF monitoring sites, breeding status, and current range for the Tree Swallow in California.

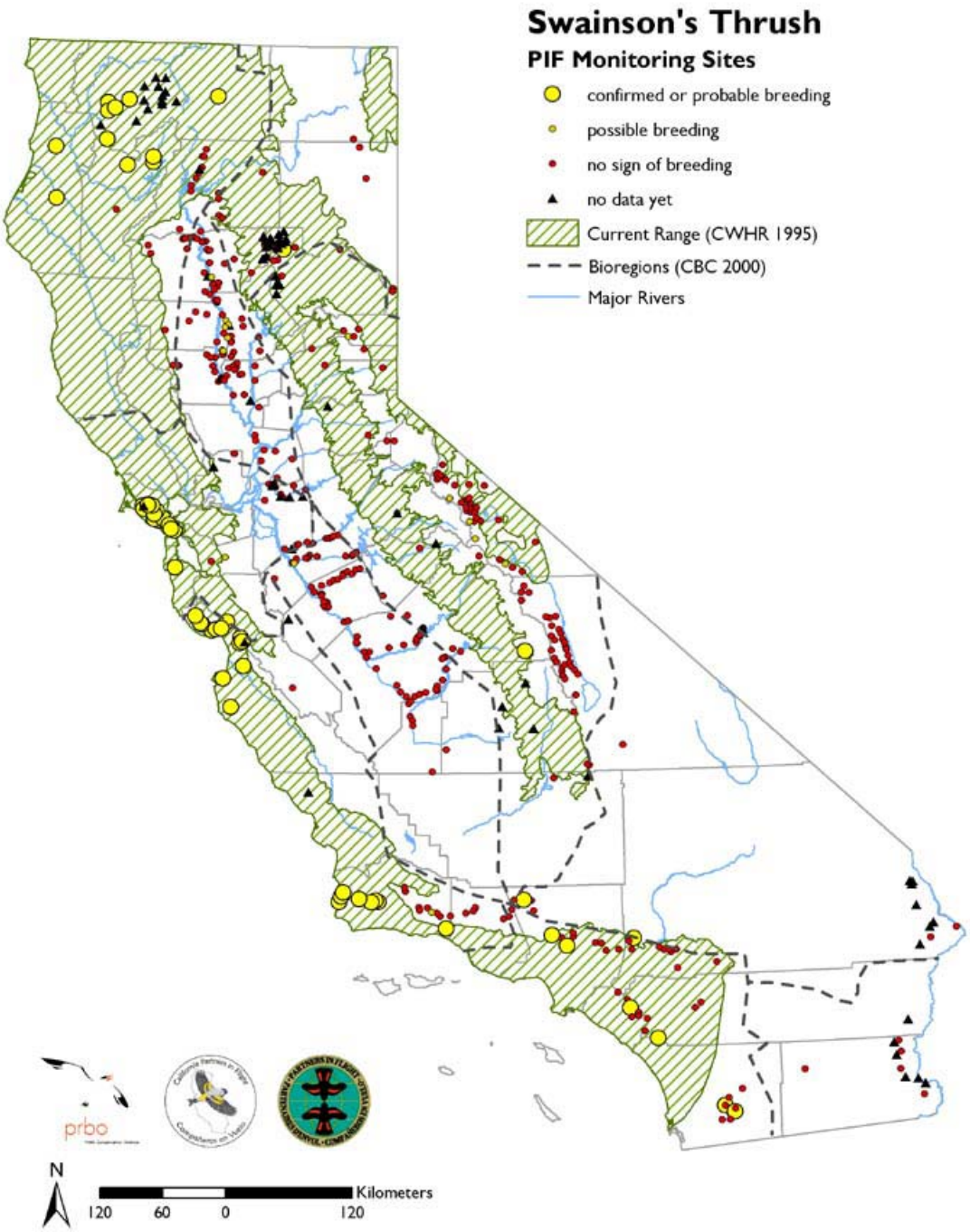

Figure 5-10. CalPIF monitoring sites, breeding status, and current range for the Swainson's Thrush in California.

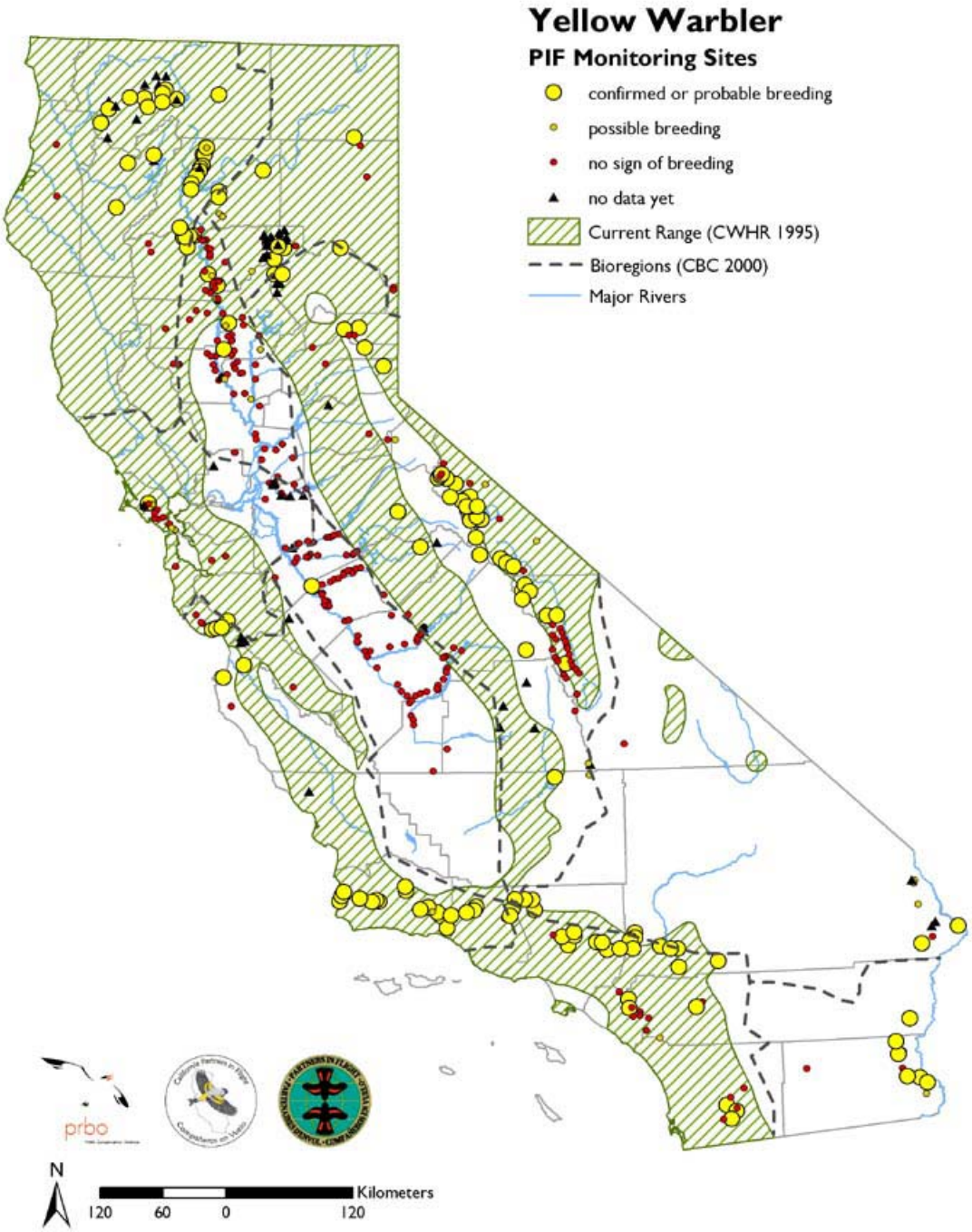

Figure 5-11. CalPIF monitoring sites, breeding status, and current range for the Yellow Warbler in California.

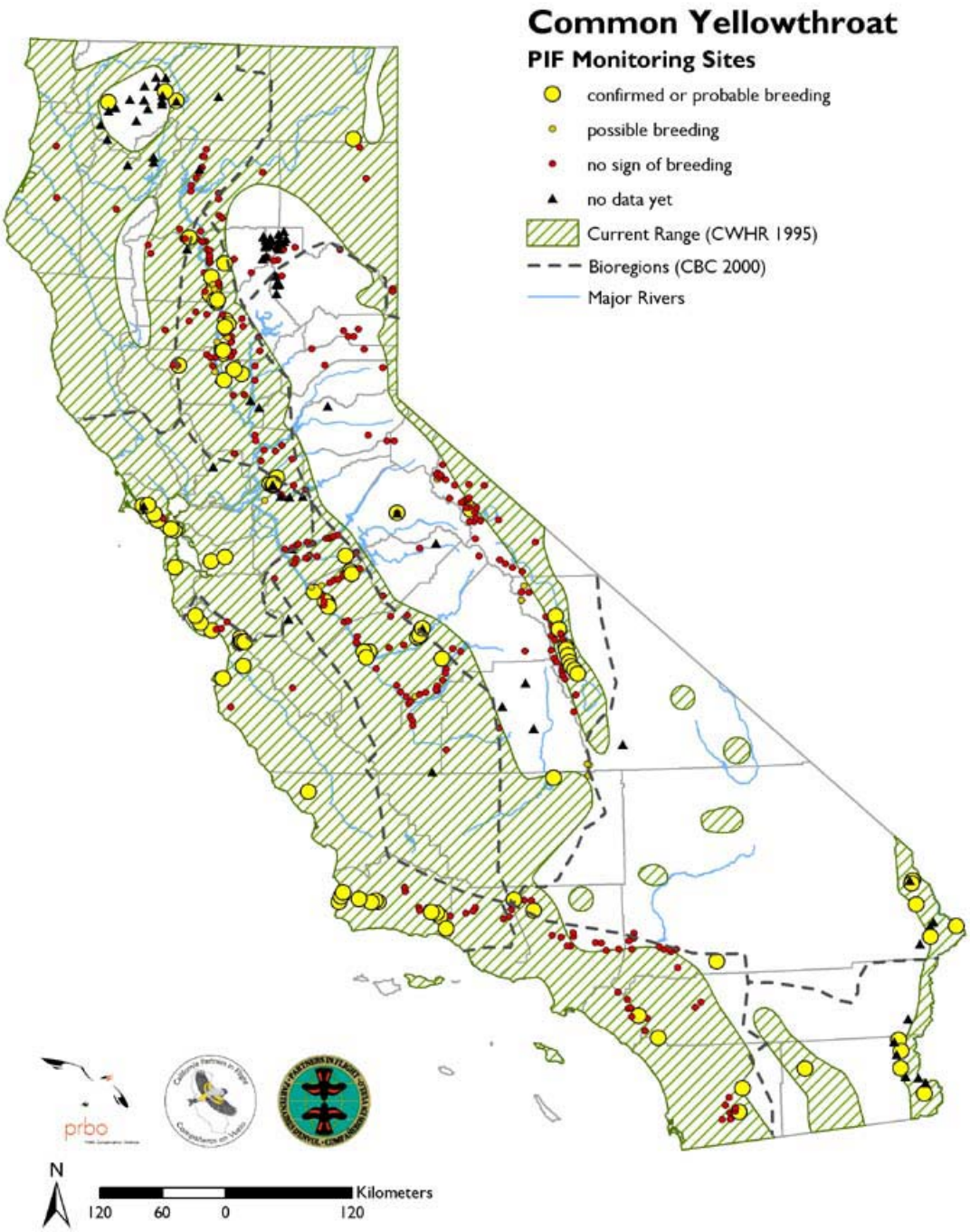

Figure 5-12. CalPIF monitoring sites, breeding status, and current range for the Common Yellowthroat in California.

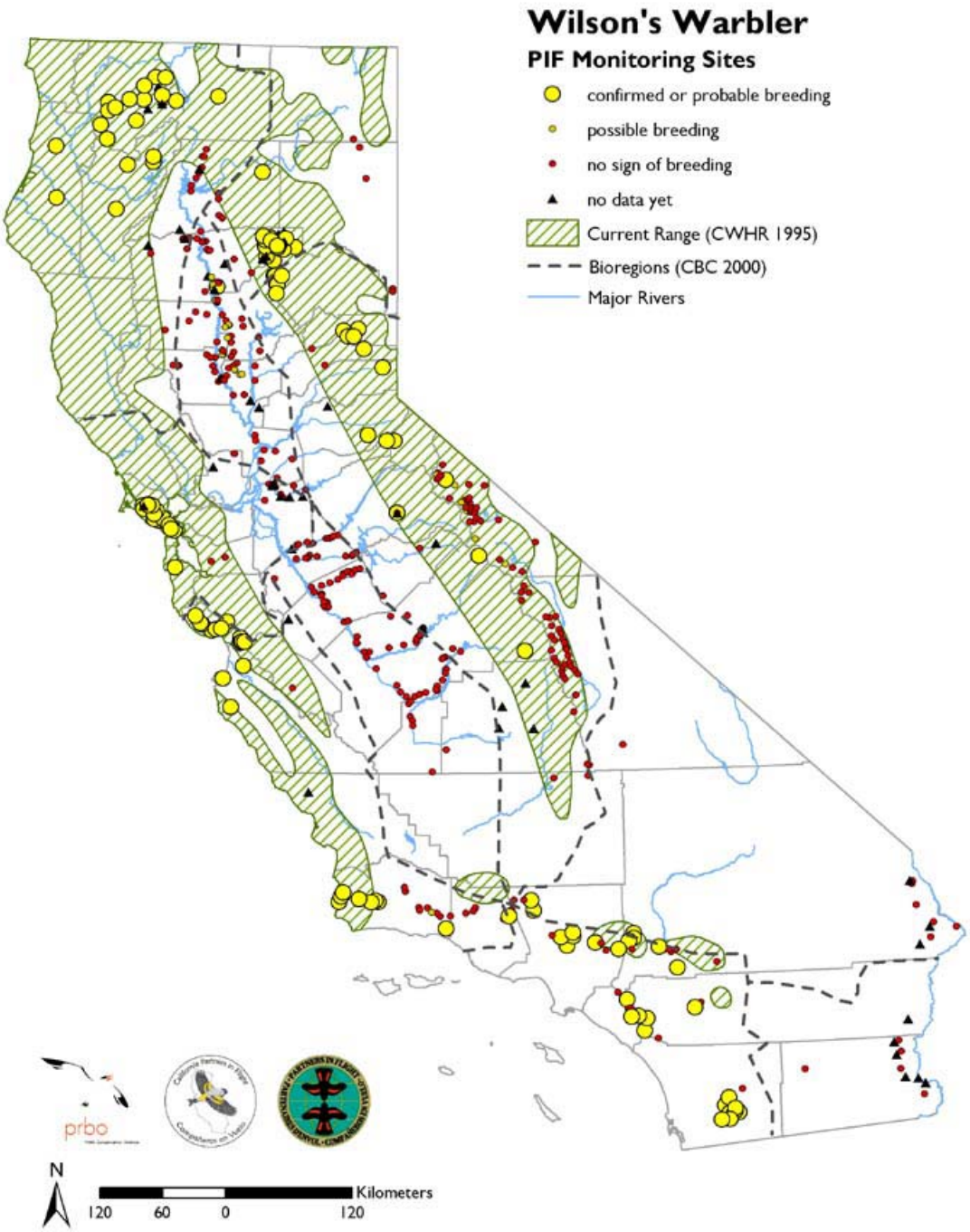

Figure 5-13. CalPIF monitoring sites, breeding status, and current range for the Wilson's Warbler in California.

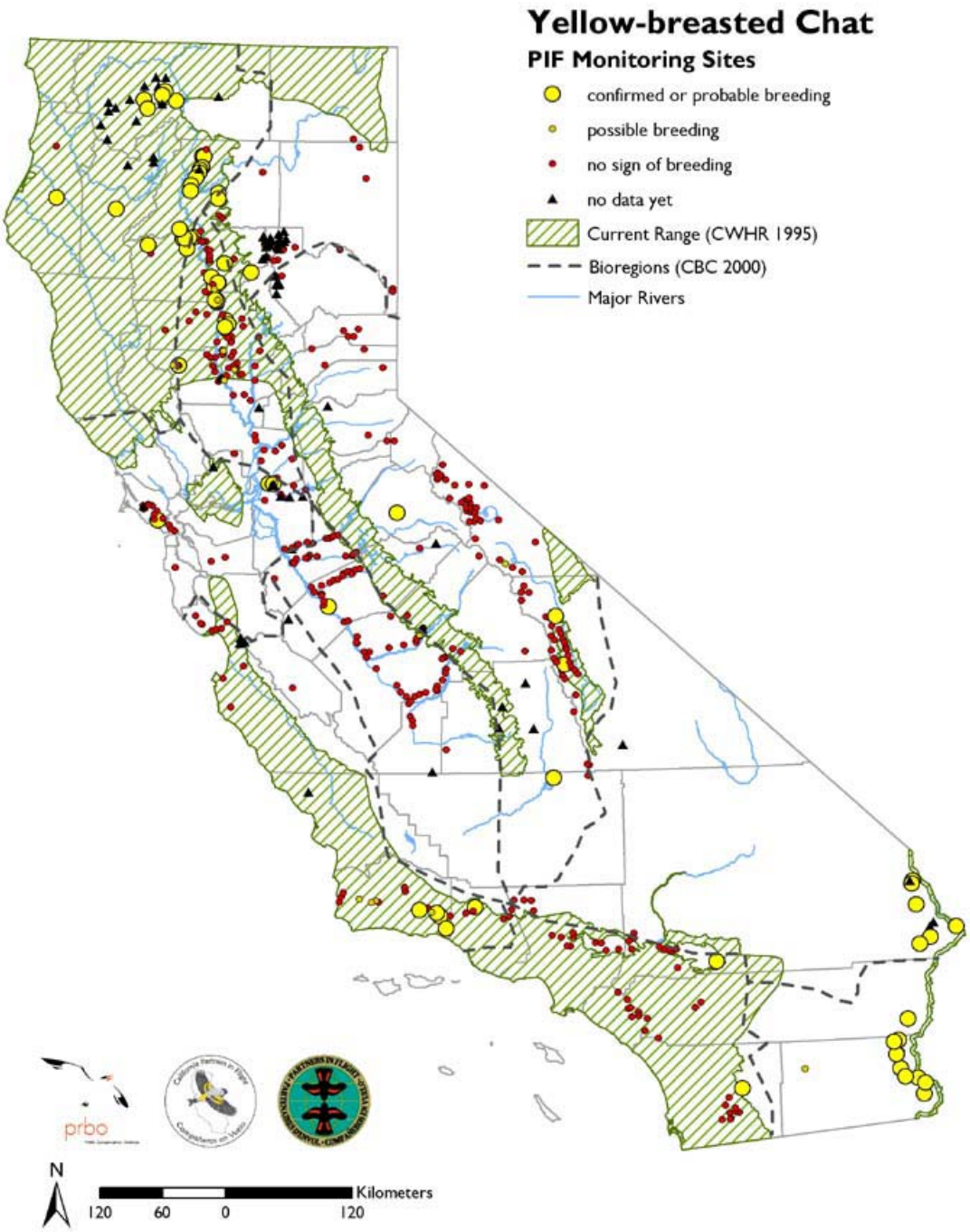

Figure 5-14. CalPIF monitoring sites, breeding status, and current range for the Yellow-breasted Chat in California.

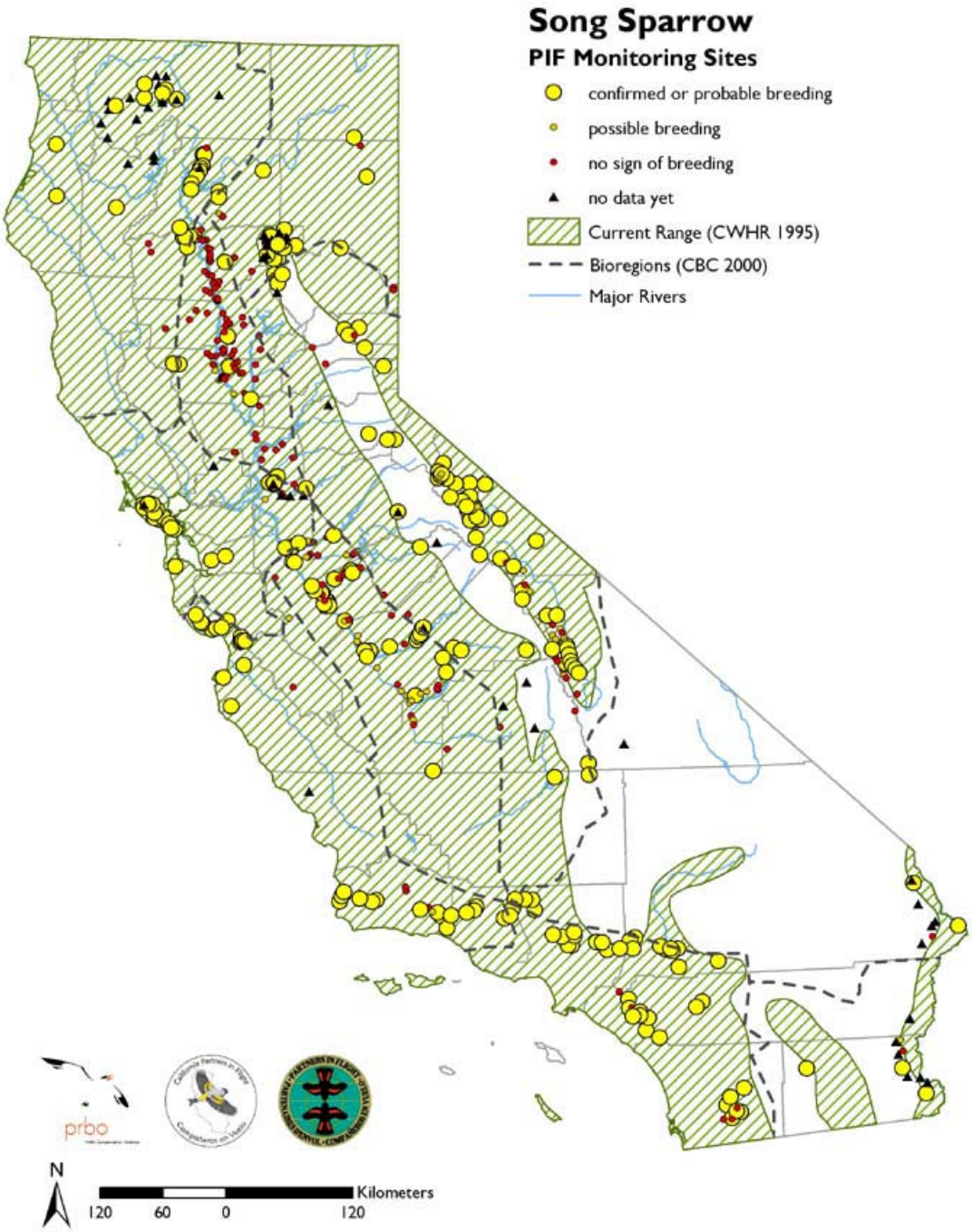

Figure 5-15. CalPIF monitoring sites, breeding status, and current range for the Song Sparrow in California.

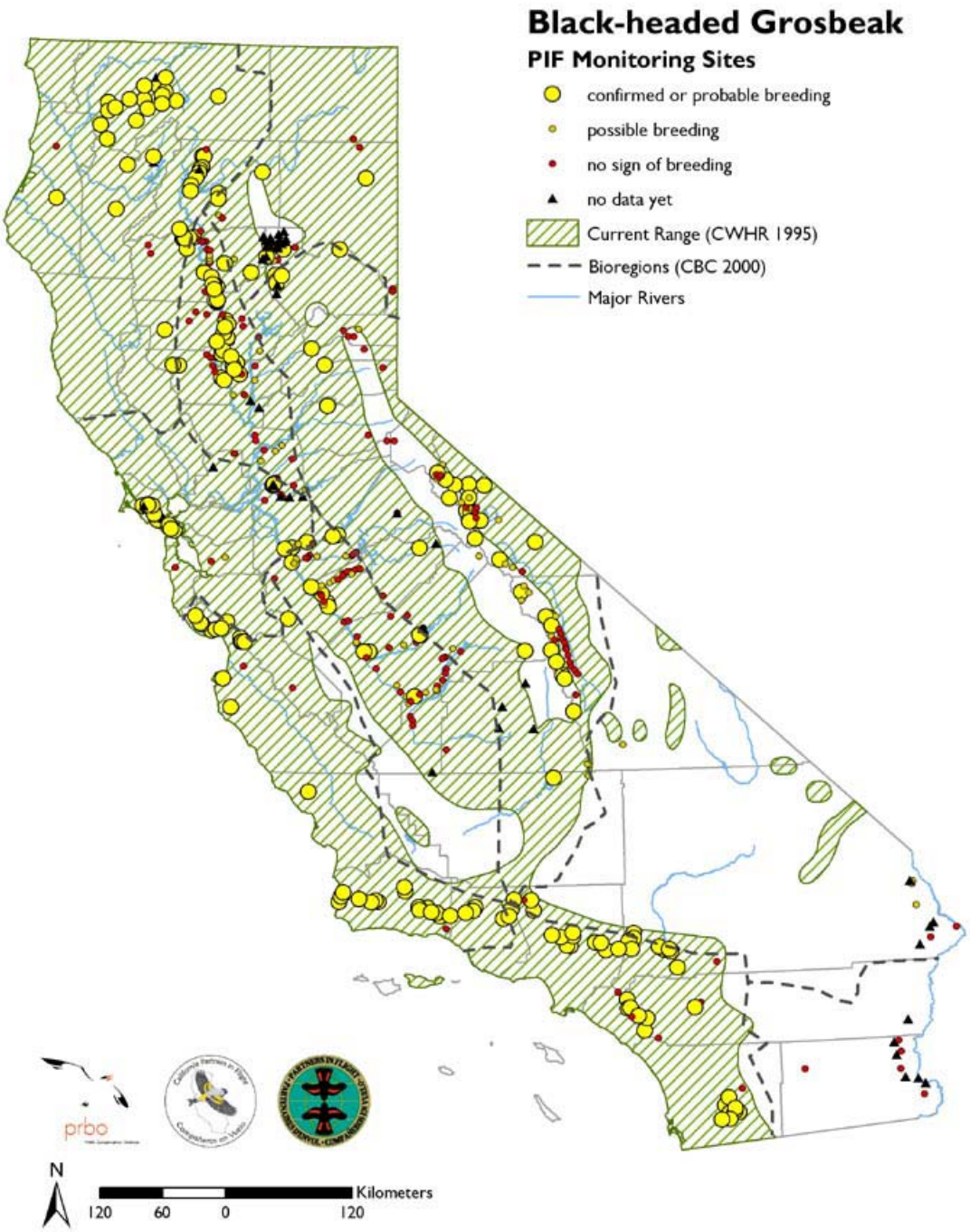

Figure 5-16. CalPIF monitoring sites, breeding status, and current range for the Black-headed Grosbeak in California.

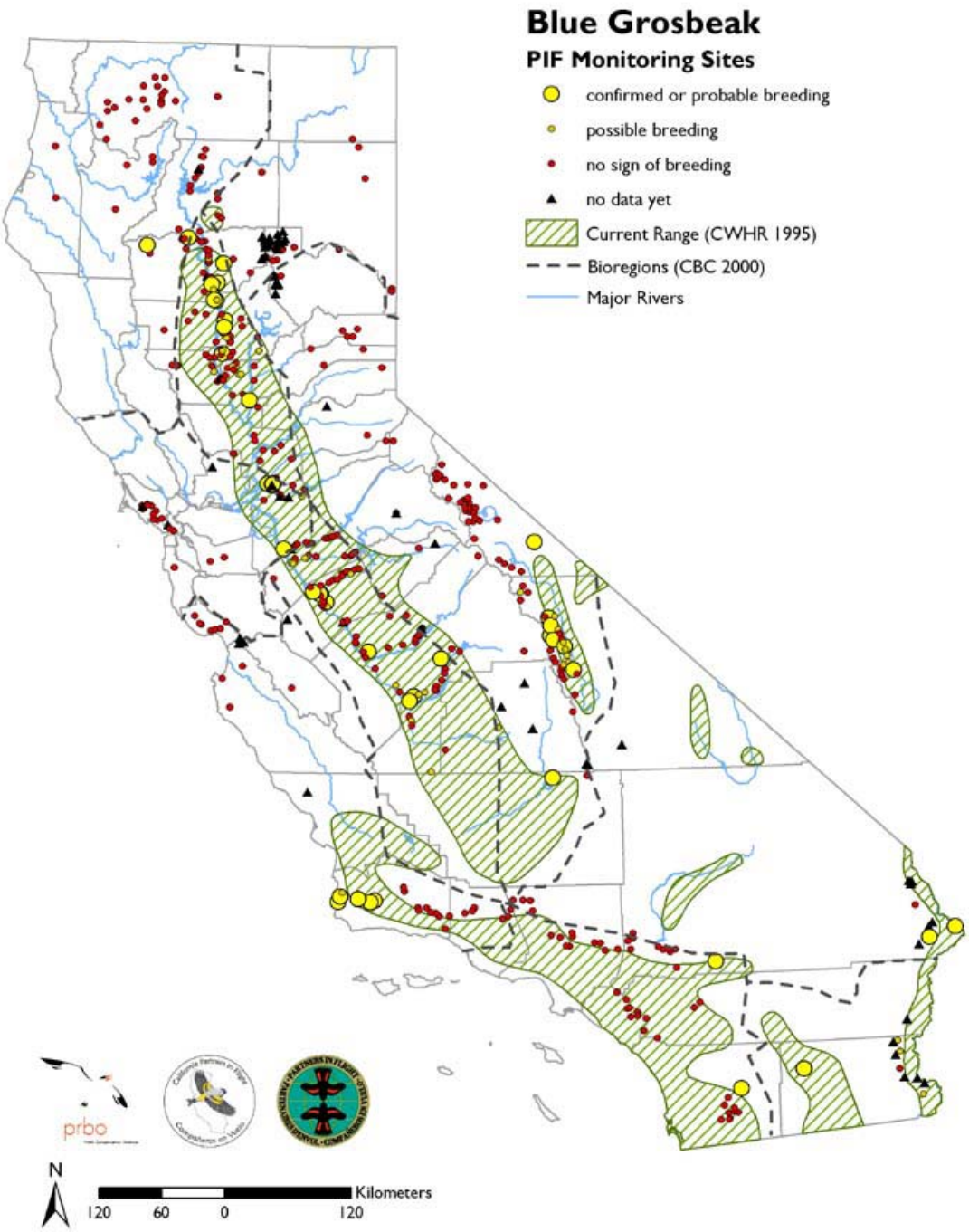

Figure 5-17. CalPIF monitoring sites, breeding status, and current range for the Blue Grosbeak in California.

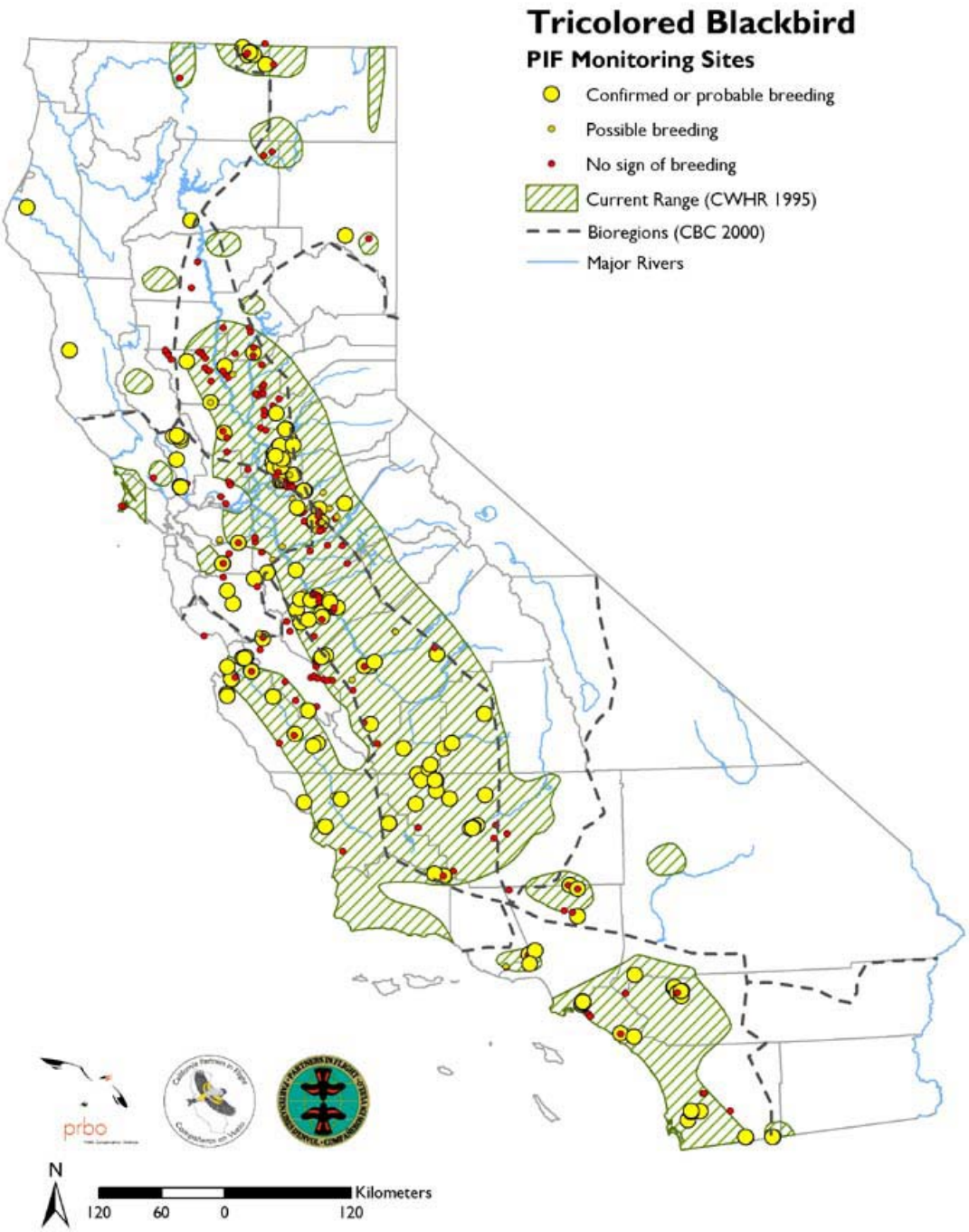

Figure 5-18. CalPIF monitoring sites, breeding status, and current range for the Tricolored Blackbird in California.

Table 5-1. Criteria for selecting the Riparian Bird Conservation Plan focal species.

Focal Species	Riparian Breeder	Special status	Reduction in breeding range	Abundant breeder in CA	Nest Site Location
Swainson's Hawk	X	X	X		Canopy
Spotted Sandpiper	X			X	Gravel Bar
Yellow-billed Cuckoo	X	X	X		Midstory to Canopy
Willow Flycatcher	X	X	X		Understory
Warbling Vireo	X		X	X	Canopy
Bell's Vireo	X	X	X		Understory
Bank Swallow	X	X	X		Sandy banks
Tree Swallow	X			X	2º Cavity
Swainson's Thrush	X		X	X	Understory
Yellow Warbler	X	X	X	X	Midstory
Common Yellowthroat	X	X	X	X	Understory
Wilson's Warbler	X			X	Understory
Yellow-breasted Chat	X	X	X		Understory
Song Sparrow	X		X	X	Understory
Black-headed Grosbeak	X			X	Midstory
Blue Grosbeak	X	X	X		Understory
Tricolored Blackbird	X	X	X		Understory

Data-Gathering Effort

Identifying the causes of population fluctuations requires an understanding of how demographic and physiological processes—annual survival, reproductive success, dispersal, and recruitment—vary across habitats, landscapes, and management practices. This information must be gathered using scientifically sound research and monitoring techniques (see Appendix A for a summary, Ralph et al. 1993, Bonney et al. 2000 for review). The Breeding Bird Survey (BBS), coordinated by the USFWS and the Canadian Wildlife Service, produces most of the available information regarding changes in the sizes and ranges of landbird populations in North America (Sauer 2003). These roadside counts provide an excellent baseline by which to assess long-term population trends, but they do not identify factors contributing to these changes (e.g., habitat and landscape variables) and may fail to adequately monitor bird populations away from roads and human disturbance (Peterjohn et al. 1995). In the West, Breeding Bird Surveys cover riparian habitat poorly because most survey routes occur on public lands and along roads, whereas riparian habitat tends to occur on private lands and/or away from roads. Furthermore, the inability of BBS data to detect trends within certain habitats, particularly patchily distributed habitats such as riparian, contributes to the need for more intensive, site-specific monitoring techniques.

Biologists throughout California have contributed data to this document. They have sent information garnered from constant-effort mist netting, nest searching, point counts and other standardized techniques. The locations of study areas, contact information, types of data collected, and breeding status information for all focal species are stored and updated in real time via an interactive map interface to a relational database system (Ballard et al. 2003a). In some cases, more extensive data will be linked to this interface, allowing for calculations of population estimates and demographic parameters. Figure 5-19 provides a map of riparian bird data showing biodiversity "hotspots" in California riparian habitats as defined by the richness of 16 of the 17 focal species.

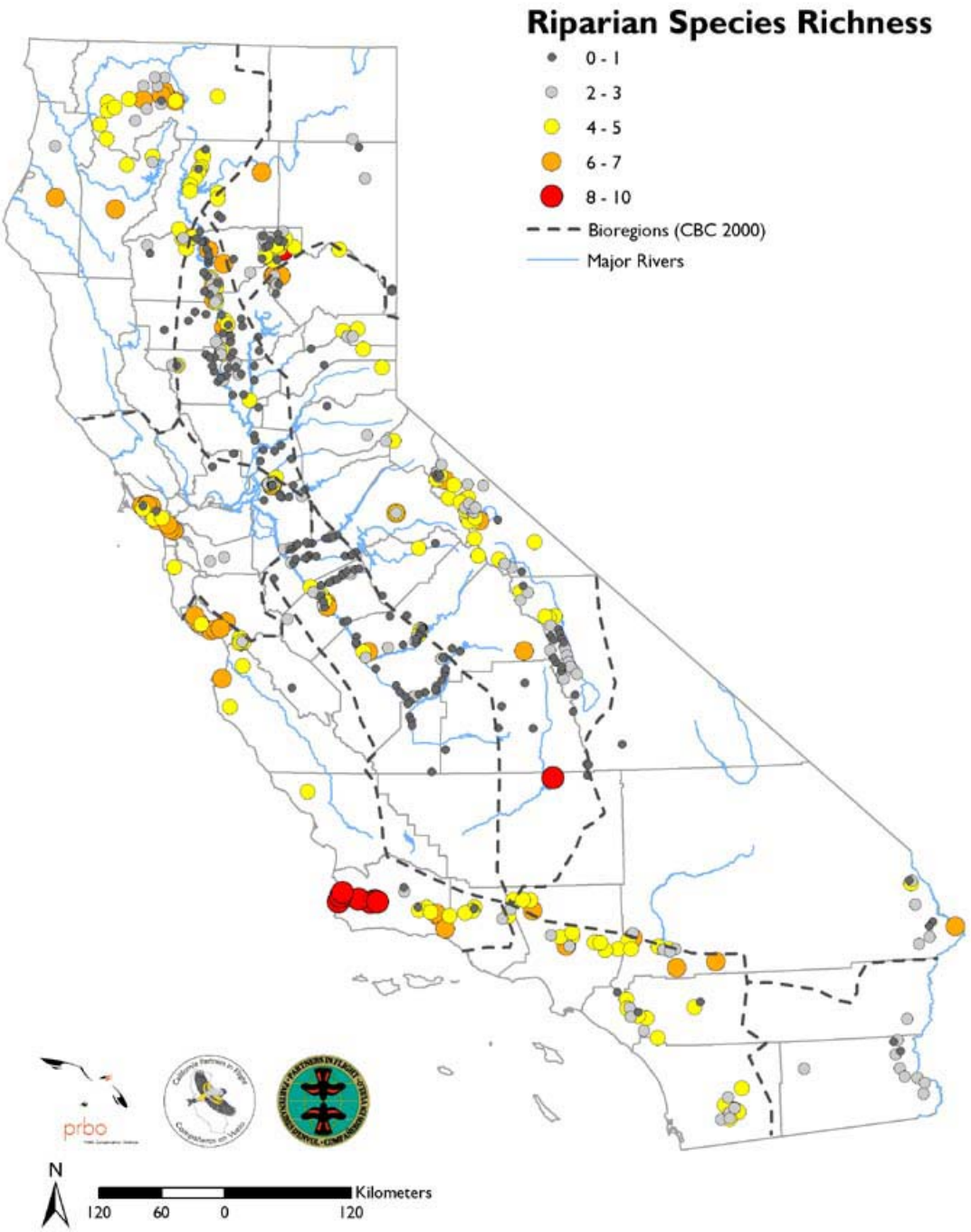

Figure 5-19. Species richness for 16 of the 17 focal riparian species at census sites throughout California. Data were collected and submitted by CalPIF contributors.

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Swainson's Hawk	• CA Threatened species • CA may have declined by as much as 90%.	SACR, BA/DE[2], SAJO, CECO[2], SINE, MOJA[2], COLD[2]	• Disturbance can lead to nest abandonment. • Poisoned by pesticides during migration and over winter.	Varied. Constructs nests in wide variety of trees.	Occupy a wide variety of open habitats with suitable nest trees, typically riparian forest or remnants.	Variable. Home range varies from 69-8,718 ha. Depends on availability of nest trees.
Spotted Sandpiper	• None	KLAM[2], MODO[2], BA/DE[2], SINE, SOCO[2], CECO[2], MOJA[2]	• Loss of nesting habitat from flood control projects and water diversions. • Abrupt changes in water level from human management or recreation during breeding season can cause nest failure. • Responds quickly to restoration efforts. • Benefits from healthy riparian systems in which flooding, and thus early successional vegetation and exposed gravel are prevalent.	Exposed gravel bars along streams, lakes and reservoirs. Often utilizes slight vegetative cover and litter.	Prefers early successional riparian.	Polyandrous. Sierra Nevada: 0.10 – 0.39 nest/ha found and 0.19 – 0.50 females/ha (PRBO data).

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Willow Flycatcher	• All three subspecies in CA listed as State Threatened and USFS Region 5 Sensitive Species. *E.t. extimus* is federally listed as Endangered. • Extirpated from much of historical breeding range.	KLAM[2], MODO, BA/DE[2], SAJO[2], SINE, CECO, SOCO, COLD (AZ).	• Negatively affected by livestock grazing, which changes riparian hydrology and vegetation composition, and damages nests. • Common Brown-headed Cowbird host. Trapping at South Fork Kern River reduced parasitism by 30-50%. • Recreational activities in riparian areas can reduce the quality of habitat for WIFL. • Not adequately monitored by many multispecies census	Generally in willows, alders, and cottonwoods or other riparian deciduous vegetation. Will also nest in non-native vegetation, such as tamarisk.	Varies by subspecies. Please refer to species account. Typically prefers dense patches and early successional riparian areas.	Varies by subspecies and region. *E.t. brewsteri* in eastern Fresno Co.; territories averaged 0.18 ha, and in Sierra Co. averaged 0.34 ha. *E.t. extimus* averaged 0.06-1.5 ha in Arizona and 0.6-1.1 ha on South Fork Kern River.
Warbling Vireo	• Declining in CA.	KLAM, MODO, SACR[2], BA/DE, CECO, SAJO[2], SINE, SOCO	• Common Brown-headed Cowbird host; parasitism in Sierra Nevada may be severe enough to depress population • Sensitive to loss of deciduous trees. • Population size likely limited primarily on breeding grounds from Brown-headed Cowbird parasitism and nest predation.	Nests high in deciduous trees. In Marin County, prefers willows and red alders.	Prefers large deciduous trees associated with streams, semi-open canopy. Shrub layer seems unimportant.	1.2 ha according to only reported account. Density: 1.1 pairs/ha in Bay-Delta. In AZ, densities were 0.52-0.63 pairs/ha in unlogged forests although they were 0.88-1.1 pairs/ha in selectively logged areas
Least Bell's Vireo	• Federal Endangered species. • Extirpated from or reduced in much of historical range.	SACR[2], SOJA[2], BA/DE[2], SINE[2], SOCO, MOJA, COLD, CECO	• Common Brown-headed Cowbird host. • Benefits from Brown-headed Cowbird control efforts.	Nests typically within 1 m of the ground in dense vegetation.	Prefers early successional riparian areas.	Territory size ranges from 0.2-3.0 ha; averages 0.6 (SD=0.3) to 1.1 (SD=0.6) ha.

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Bank Swallow	• California Threatened Species. • Nesting populations appear to be declining.	KLAM, MODO, SACR, CECO, SINE, SOCO[2]	• Loss of nesting habitat from bank protection and flood control projects. • Abrupt changes in water level from human management or recreation during breeding season can cause nest failure.	Burrows in vertical faces of bluffs or banks higher than 1 meter tall. Requires friable soils.	Variable. Requires vertical banks and bluffs, often from flooding and associated erosion events.	NA. Nest burrows are placed 1-59 cm apart. Varies from solitary to 1,500 pairs in a colony.
Tree Swallow	• None	KLAM, MODO, SACR, BA/DE, SAJO[2], SINE, GRBA, CECO, SOCO	• Natural nests require trees of considerable trunk diameter (>13cm), but nest-boxes can provide habitat in the absence of large trees. • Requires open areas for coursing feeding flights. • Eggs are vulnerable in shrubby habitats to puncturing by male House Wrens. • Nests near livestock can be subject to intense nest site competition from House Sparrows, sometimes resulting in the death of the defending swallows.	Uses cavities in the range of heights that are available, but appears to prefer sites 1.5-6.1 meters above the ground. Natural cavities in cis-montane California likely in cottonwoods or sycamore. In mountain and Great Basin habitats, often nests in aspen.	Without nest-boxes, prefers edges of riparian areas with large trees for nesting. Nest-boxes encourage this species to nest in a wide variety of habitats, from upland areas to sewage ponds. All foraging is done in open areas, preferably near water, and not in dense riparian forest.	Territory limited to immediate vicinity of nest-cavity. Fighting over nest-cavities, with own and other species, can be quite intense. Territory is not defended more than a few yards away from the nest. Nest densities depend on availability of nesting cavities, and nearest neighbor distances of 15 meters or less are not uncommon if cavity availability is high.

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Yellow Warbler	• CA Species of Special Concern (both as species and as subspecies *D. p.sonorana*). • Extirpated or declining in much of historical breeding range.	KLAM, MODO, SACR?, BA/DE, SAJO[2], SINE, GRBA, CECO, MOJA, SOCO, COLD	• Common Brown-headed Cowbird host. • Needs more subspecies-specific information in regards to Brown-headed Cowbird parasitism and habitat needs. • More data on productivity needed in CA. • Grazing reduces quality of nesting habitat. • Species seems to respond quickly to management actions such as restoration and Brown-headed Cowbird control.	Varies by bioregion. Often nests in deciduous riparian plant species, such as willows and cottonwoods, but also breeds locally in wild rose and more xeric plant species and habitats.	Generally found in wet areas with early successional riparian communities, or in remnant or regenerating canopy species stands. Will also breed locally in xeric shrub fields.	In early successional restored habitats in the eastern Sierra Nevadas, density ranged from 0.4 – 2.74 territories/ha. Territory sizes ranged from 0.06 – 0.75 ha.
Wilson's Warbler	• Shows significant decline in CA from 1966-1996 according to BBS data.	KLAM, MODO, BA/DE, SINE, GRBA, CECO, SOCO.	• Common Brown-headed Cowbird host. Abundance negatively correlated with abundance of Brown-headed Cowbird. • Loss of herbaceous cover during breeding season may reduce nest success. • Grazing may result in increased frequency of above points. • Loss of nesting habitat and pressure from Brown-headed Cowbird has resulted in reduction of breeding range.	Nests in riparian deciduous plants as well as grass, nettles, and ferns. Nest height from 0.3-3.0 meters, but mostly below 0.9 meters.	Prefers willows, alders, and shrub thickets and areas with tall trees and moderate to thick canopy cover.	In the Bay-Delta region: 0.57/ha (range 0.2-1.3 ha)

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Yellow-breasted Chat	• California Species of Special Concern. • Appears to be reduced in much of historical range.	KLAM, MODO, SACR,COLD BA/DE, SAJO?, SINE[2], CECO, MOJA, SOCO .	• Common Brown-headed Cowbird host[5]. • Any activity, such as grazing, that leads to the disappearance of dense, shrubby areas will be detrimental[5].	Nests in low, dense shrubs 0.3-2.4 meters high.	Prefers riparian habitat and marsh margins[5]. Often found in early successional riparian habitat.	In California riparian habitat, densities ranged from 6.5-27 males/100 ha[5].
Black-headed Grosbeak	• Population appears stable.	KLAM, MODO, SACR, BA/DE, CECO, SINE, SOCO	• Vulnerable to loss of riparian habitat for nesting. • Highest quality territory of males are where densities of Western Scrub-jays are low. • Responds quickly to restoration efforts.	Highly variable. In riparian, nests in willow, alder, and ash with fairly high nest cover.	Prefers semi-open canopy with moderate shrub cover and vertical stratification of vegetation layers. Often nests in early to mid-successional riparian areas.	No data for California. 1.9-3.9/ha in n. Utah.
Blue Grosbeak	• Appears to be reduced in much of historical range.	SACR, BA/DE, CECO, SINE, MOJA, COLD, CECO	• Common Brown-headed Cowbird host, but can raise both parasite and own young. • Benefits from a healthy riparian system where herbaceous annuals and early successional plant species are abundant. • Patch size and fragmentation seem unimportant to this species.	Nests in vertical forbs, young willows and cottonwoods, and herbaceous annuals.	Riparian edge species, preferring the annual forbs, young deciduous plants, and low canopy cover found in early successional riparian habitat.	No data for California. 1.2-6.2/ha in southeast U.S.
Song Sparrow	• *M.m.mailliardi* subspecies is a California Species of Special Concern[4].	KLAM, MODO, SACR, SINE, SAJO,COLD CECO, SOCO	• Common Brown-headed Cowbird host. • Responds quickly in many areas to restoration efforts (PRBO data).	Varies by bioregion.	Varies by bioregion. Breeds in early successional riparian, wetlands, coastal scrub, and marshes (PRBO data).	Bay Delta Coastal Scrub: 0.88 terr./ha. Bay Delta Salt Marsh: 14.9 detected per hectare (PRBO data).

Table 5-2. Status, special factors, and nesting requirements of riparian focal species.

Species	Statewide Status	Historical Breeding Range	Special Factors	Nest Site	Breeding Grounds Description	Territory Size and Breeding Density
Tricolored Blackbird	• California Species of Special Concern.	KLAM, MODO, SACR, BA/DE, SAJO, SINE[2], CECO, SOCO	• Loss of nesting and foraging and habitat due to agricultural and urban development[3]. • Significant reproductive losses annually due to crop harvesting activities[3]. • Failure of entire nesting colonies due to pesticides and other contaminants[3].	Dense patches of cattails and/or bulrushes. Blackberry[3].	Prefers freshwater wetlands and weedy, fallow fields[3].	Male territory size ranges from 1.8m^2 to 3.25m^2

1. Bioregions included in historical breeding range as estimated from Grinnell and Miller 1944: KLAM=Klamath; MODO=Modoc; SACR=Sacramento; BA/DE=Bay-Delta; SAJO=San Joaquin; SINE=Sierra Nevada; CECO=Central Coastal; GRBA=Great Basin; MOJA=Mojave; SOCO=South Coastal; COLD=Colorado Desert. See the range maps and species accounts at http://www.prbo.org/calpif/data.html.for more information.

2. Not recently detected and/or extirpated from this bioregion.

3. Beedy and Hamilton 1999.

4. CDFG and PRBO 2001.

5. Eckerle and Thompson 2001.

Chapter 6. Population Targets

California Partners in Flight and the Riparian Habitat Joint Venture seek to develop population targets that will guide avian and habitat conservation efforts and provide them with a gauge of success. Although ambiguous and based on assumptions difficult to test, numerical population targets provide a compelling means of communicating with the public and policy makers. Furthermore they provide: 1) monitoring objectives and an evaluation procedure of project success ('accountability'); 2) ranking criteria for project proposals that allow reviewers to determine which sites or projects will be more advantageous for a particular species or suite of species; 3) current data for scientifically sound biological objectives; and 4) integration and comparison with population objectives of larger regional, national, and international schemes (e.g., Rosenberg and Blancher *in press*).

In this document, two approaches for deriving population targets of riparian focal species are examined. The first approach provides estimates of population size, where data exists, from two avian monitoring techniques (point counts and spot mapping) for the 17 focal species in each bioregion (Table 6-1). These density estimates are to be used with caution and are provided as a reference for comparison when collecting similar data. In general, these estimates are taken from the highest recorded density in regions where populations are believed to be viable as estimated from demographic monitoring (Sherry and Holmes 2000). The second approach is a process still in development that has been completed for six species in the 12 basins of the Central Valley (Figure 3-1). The following six species were used primarily because of data availability and distribution in the Central Valley: Yellow Warbler, Common Yellowthroat, Yellow-breasted Chat, Spotted Towhee, Song Sparrow, and Black-headed Grosbeak. Other species estimates and more detailed descriptions may be found on the CalPIF website. The description as follows has been presented and critiqued at various meetings (Geupel et al. 2003) and incorporated into the Strategic Plan of the RHJV.

Photo by James Gallagher, Sea and Sage Audubon

Population targets will help guide avian and habitat conservation efforts.

Table 6-1. Estimates of maximum breeding abundance by species and bioregion[a].

Species	Bay-Delta		South Coast		Sierra		San Joaquin		Central Coast	
	Point Count[b]	Spot Map[b]	Point Count	Spot Map[c]	Point Count[d]	Spot Map[e]	Point Count[b]	Spot Map	Point Count	Spot Map
Swainson's Hawk	-	-	-	-	-	-	-	-	-	-
Spotted Sandpiper	-	-	-	-	-	-	-	-	-	-
Yellow-billed Cuckoo	-	-	-	-	-	0.85	-	-	-	-
Willow Flycatcher	-	-	-	-	-	9.6	-	-	-	-
Warbling Vireo	1.30	18.0	-	-	1.20	-	-	-	0.54[b]	-
Bell's Vireo	-	-	-	-	-	-	-	-	-	-
Bank Swallow	-	-	-	-	0.56	-	-	-	-	-
Tree Swallow	0.16	-	-	-	0.20	-	1.50	-	-	-
Swainson's Thrush	1.90	322.2	-	-	0.04	-	-	-	0.56[b]	-
Yellow Warbler	-	-	-	0.20	2.50	-	-	-	0.30[b]	-
Common Yellowthroat	0.42	-	-	-	0.83	-	0.53	-	0.10[b]	-
Wilson's Warbler	1.69	288.6	-	-	-	-	0	0	1.20[b]	-
Yellow-breasted Chat	-	-	-	-	0.40	-	-	-	0.15[b]	-
Black-headed Grosbeak	0.91	117.6	-	-	0.17	-	0.43	-	0.72[b]	-
Blue Grosbeak	-	-	-	-	0.05	-	0.33	-	0.07[b]	-
Song Sparrow	3.10	509.6	-	-	1.20	-	3.00	-	1.53[b]	-
Tricolored Blackbird	-	-	-	-	-	-	-	-	-	-

Notes:

[a]Numbers provided from point counts are the average number of detections within 50 meters of the observer during five minute counts. Numbers from spot mapping are pairs per 40 hectares during the breeding season. Reference populations are cited and may not be representative of healthy populations. Point count data provide an *index* of abundance, generally thought to be conservative. Spot mapping numbers are probably closer to true abundance. Dashes represent "no data." Zeroes indicate the species probably never bred in that bioregion.

[b]PRBO unpublished data: Bay Delta data are from Point Reyes Nat'l Seashore; Central Coast data from Salinas River, Scott Creek and Moore Creek.

[c]Cardiff (1996).

[d]Heath and Ballard (1999).

[e]Shaver and Kern River.

Table 6-1. Estimates of maximum breeding abundance by species and bioregion[a].

Species	Klamath		Sacramento Valley		Modoc		Mojave		Colorado Desert	
	Point Count[b]	Spot Map[b]	Point Count[b]	Spot Map[f]	Point Count[b]	Spot Map[b]	Point Count	Spot Map	Point Count	Spot Map[g]
Swainson's Hawk	-	-	-	-	-	-	-	-	-	-
Spotted Sandpiper	-	-	-	-	0.25[h]	-	-	-	-	-
Yellow-billed Cuckoo	-	-	-	-	-	-	-	-	-	-
Willow Flycatcher	-	-	-	-	0.45	7.9	-	-	-	-
Warbling Vireo	0.41	-	-	-	1.30	33.2	0	0	0	0
Bell's Vireo	0	0	-	-	0	0	-	-	-	-
Bank Swallow	-	-	0.04	-	-	-	-	-	-	-
Tree Swallow	0.50	-	0.98	-	1.20	-	-	-	-	-
Swainson's Thrush	-	-	-	-	0.06	-	0	0	0	0
Yellow Warbler	1.60	16.0	0.13	0.13	1.10	33.2	-	-	-	-
Common Yellowthroat	-	-	1.0	-	-	-	-	-	-	-
Wilson's Warbler	-	-	0	0	0.95	33.2	0	0	0	0
Yellow-breasted Chat	1.20	25.0	0.32	-	-	-	-	-	-	-
Black-headed Grosbeak	0.87	32.0	1.80	-	1.0[h]	-	-	-	-	-
Blue Grosbeak	0	0	0.19	-	0	0	-	-	-	5.0
Song Sparrow	0.79	16.8	1.33	-	1.80	77.6	-	-	-	-
Tricolored Blackbird	-	-	-	-	-	-	-	-	-	-

[a]Numbers provided from point counts are the average number of detections within 50 meters of the observer during five minute counts. Numbers from spot mapping are pairs per 40 hectares during the breeding season. Reference populations are cited and may not be representative of healthy populations. Point count data provide an *index* of abundance, generally thought to be conservative. Spot mapping numbers are probably closer to true abundance. Dashes represent "no data." Zeroes indicate the species probably never bred in that bioregion.

[b]PRBO unpublished data: Sacramento Valley data are from Sul Norte, La Baranca, Dye Creek, Llano Seco, Ohm, and Kopta Slough. Modoc data are from Lassen Volcanic NP and Lassen Volcanic NF. Klamath data are from Lower Clear Creek Floodway Restoration Project.

[f]Gaines (1974).

[g]Rosenberg (1991).

[h]Humple et al. (2002).

Population Size Estimates

Estimates of current population sizes were calculated for select species using mean values from current point count data (1994-2002) for each basin. As a first step, density was calculated using the number of detections within 50 meters x 1/detectability coefficient. Because of variation of species detectability using the point count method, coefficients were derived from sites where point count surveys overlaid spot mapping plots. Spot map data was used for density estimates for species whose populations were rare and patchily distributed (Song Sparrow and Yellow Warbler). Density estimates were then extrapolated across basins using current riparian habitat data layers as determined (Figure 3-1).

Population Target Estimates

Estimates of target populations were calculated with the median of the top 50% (75th percentile) of corrected density estimates from current point count data. This correction of 75% was used in preference to the true mean due to the assumption that most current populations were degraded but could be enhanced. Spot map data also were used from the nearest suspected viable population when point count data were not available (normally due to lack of detections). A riparian data layer based on historical extent of riparian forests and/or the current extent of soil types (The Bay Institute 1998) was used and corrected for permanent habitat loss (urbanization) to extrapolate the 75th percentile density. The amount of current and potential riparian habitat as determined from the GIS data (Table 6-3) was used to calculate population targets in each basin for two select species: Black-headed Grosbeak (Figure 6-1) and Song Sparrow (Table 6-2).

Demographic data (primarily nest success) also may be used to qualify density estimates (see Small and Gardali *in prep*, Sherry and Holmes 2000). The range of nest success observed for Song Sparrow in the Central Valley of 5% to 24% does not allow the growth rate to be positive (lamda > 1). This suggests that populations of Song Sparrows are not viable and will decline in the absence of immigration. Based on the information presented, a minimum target value for nest success of Song Sparrows in the Central Valley should be at least 27%.

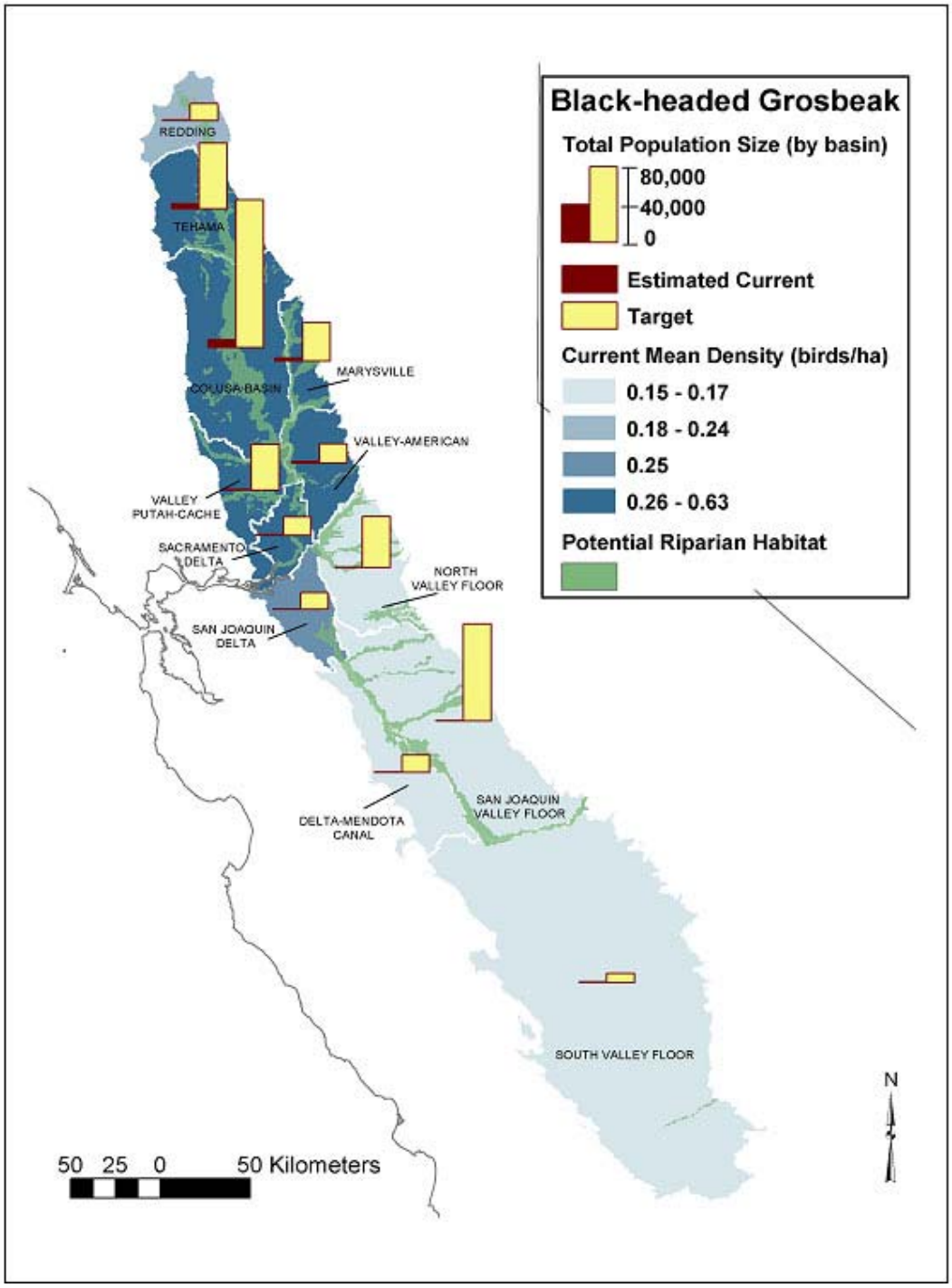

Figure 6-1. Black–headed Grosbeak current population estimates and targets for 12 basins in the Central Valley.

Table 6-2. Song Sparrow current population estimates and targets for 12 basins in the Central Valley.

Basin	Current Birds/Ha, Riparian Point Counts	±SE**	Current Population Size	±SE**	Target Birds/Ha	Target Population Size
Colusa Basin	0.09	±0.06	1128	±750	0.99 (1)	112,360
Marysville*	0.10	na	617	na	0.99 (1)	29,550
North Valley Floor*	0.90	na	2581	na	2.65 (2)	103,937
Redding	0.33	±0.12	1297	±448	0.99 (1)	13,132
Sacramento Delta*	0.10	na	168	na	0.99 (1)	14,279
Tehama	0.01	±0.004	39	±30	0.99 (1)	50,012
Valley Putah-Cache*	0.10	na	122	na	0.99 (1)	34,771
Valley-American*	0.10	na	280	na	0.99 (1)	14,747
Delta-Mendota Canal	1.24	±0.22	1949	±356	2.65 (2)	35,319
San Joaquin Delta	1.22	±0.24	2180	±420	2.65 (2)	33,894
San Joaquin Valley Floor	0.70	±0.16	3403	±788	2.65 (2)	198,253
South Valley Floor	0.93	±0.30	4440	±1444	2.65 (2)	18,805

* If a basin contained less than 30 point count stations, current density estimates were derived from all stations in the respective valley (Sacramento or San Joaquin) and standard errors are not presented (because sample size is not specific to basin). (1) In the Sacramento Valley, spot map densities from known source populations were used as target densities for *Melospiza melodia mailliardi*. (2) In the San Joaquin Valley point counts (75th percentile) were used *for Melospiza melodia heermani*.

** Estimates of population sizes are the product of: a) estimate of number of detected birds per ha for each basin (N); b) inverse of the detectability coefficient; and c) estimate of the number of ha of riparian habitat. There was uncertainty, and thus error, associated with each component. As a first approximation to estimating overall error in population size, we assumed the contribution of the latter two factors to the overall standard error was equal in magnitude to the standard error associated with estimation of N (which could be directly assessed). We thus used the standard error obtained in estimating N and multiplied by 2 to yield a rough estimation of the overall standard error.

Table 6-3. Amount of riparian habitat by Central Valley basin.

Basin	Current Riparian Hectares	Potential Riparian Hectares	Proportion Currently Forested	Number of Riparian Point Counts
Colusa Basin	12,380	113,610	0.11	139
Marysville	6,041	29,879	0.19	16
North Valley Floor	2,880	39,175	0.07	22
Redding	3,903	13,278	0.25	108
Sacramento Delta	1,647	14,438	0.10	9
Tehama	8,131	50,568	0.15	199
Valley Putah-Cache	1,199	35,158	0.03	8
Valley-American	2,746	14,911	0.11	6
Delta-Mendota Canal	1,578	13,312	0,12	90
San Joaquin Delta	1,787	12,775	0.13	46
San Joaquin Valley Floor	4,884	74,724	0.06	166
South Valley Floor	4,751	7,088	0.57	56
Central Valley Totals	51,927	418,916	0.12	865

Species-Specific Objectives

Although the RHJV strongly endorses the concept of multiple species management, it recognizes that special-status species often receive more careful management than non-listed species due to legal mandate. Special status species are those whose populations have been reduced or are in decline, the magnitude of which warrants more immediate conservation action relative to other taxa. Therefore, more information on listed species exists and the species-specific objectives offered in this plan reflect that special knowledge. However, conservation actions must include efforts to monitor their effects on multiple species, not only those on special-status lists. What positively affects one species may have a negative impact upon another. Minimal adjustments to conservation efforts targeting single species may positively impact multiple species, thereby greatly increasing the effectiveness of conservation dollars. Finally, conservation planners must bear in mind that population dynamics are influenced by many factors other than breeding habitats (e.g., over wintering survival) and may result in population declines even as efforts increase available habitat.

Data and figures presented in this section are from the species accounts developed by the authors listed on pages 22-23. Species accounts are an electronic appendix to this document and may be found at http://www.prbo.org/calpif/htmldocs/riparian.html.

Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis)*

Population:

The current Western Yellow-billed Cuckoo population is about 60 to 100 pairs statewide (Halterman et al. 2001; see Figure 5-4 for statewide range). The RHJV recommends restoring habitat in 25 locations to support 625 pairs (25 pairs per location). Simulation modeling indicates that populations of less than 10 pairs are very unstable, becoming extinct in a short period of time. Current predictions suggest that a minimum of at least 25 pairs in a subpopulation with interchange with other subpopulations should be reasonably safe from extinction by stochastic events. Given that presumably stable populations are at least 25 pairs and that territory size averages 20 to 25 hectares (a minimum of 10 hectares), the optimal goal for each population is to protect and restore habitat in minimum 20-hectare patches that collectively total 500 hectares within a watershed or river reach. The statewide habitat restoration and protection target, in addition to that currently managed for the cuckoo, equals approximately 21,000 hectares statewide, including areas in Arizona along the Colorado River. See Table 6-4 for a summary of the recommended habitat restoration sites.

Table 6-4. Minimum management goals for subpopulations, pairs, and reforestation of suitable habitat, based on 40 hectares per pair, for Western Yellow-billed Cuckoos.

Locality	Subpopulation	Number of Pairs	Current Suitable (hectares)	Reforestation Suitable (hectares)
		Northern California		
Sacramento R.	6	150	2,370	3,700
Feather R.	1	25	240	770
Stanislaus R.	1	25	240	770
Cosumnes R.	1	25	0	1,010
Merced R.	1	25	0	1,010
Kings R.	1	25	0	1,010
Mendota	1	25	0	1,010
Subtotal	**12**	**300**	**2850**	**9,280**
		Southern California		
Kern R.	1	25	400	610
Prado Dam	1	25	240	770
Mojave R.	1	5	80	930
Owens R.	1	25	0	1,010
Subtotal	**4**	**100**	**720**	**3,320**
		Colorado River		
Needles-Parker	4	100	670	3,380
Parker-Blythe	2	50	0	2,020
Blythe-Yuma	3	75	0	3,040
Subtotal	**9**	**225**	**670**	**8,440**
TOTAL	**25**	**625**	**4,240**	**21,040**

MANAGEMENT

Habitat patch size:

Restoration to benefit the Western Yellow-billed Cuckoo requires patches be a minimum of 20-40 hectares, with a minimum width of 100 meters. Optimal habitat for a pair would be 75 hectares or more in length, with a width of more than 600 meters. Research by Laymon and Halterman (1989) led to the development of these parameters based on occupancy rates of existing habitat patches along the Sacramento River. Additionally, higher canopy closure, higher foliage volume, intermediate basal area, and intermediate tree height relative to random sites are preferred by cuckoos for nesting. The best habitats for nesting are therefore at large sites with high canopy cover and foliage volume and moderately large and tall trees. The cuckoo's primary food source, katydid and sphinx moth larvae, hibernate underground and are therefore not available in lowland floodplains in wet years with late-spring flooding. Therefore, upland refugia habitats for foraging in wet years should also be a component of Western Yellow-billed Cuckoo habitat protection and restoration projects.

Pesticide use:

Occasionally, cuckoos nest or forage in orchards adjacent to riparian areas. Pesticide use by farmers may deter cuckoos from more frequent use of these crops. More research is needed as to whether or not Western Yellow-billed Cuckoos more readily use orchards grown with integrated or organic pest management techniques.

Other factors:

Areas of apparently suitable habitat are unoccupied by Western Yellow-billed Cuckoos every year (e.g., Kern River Preserve). Other factors (e.g., over winter survival, juvenile survival and dispersal) should therefore be addressed (M. Halterman pers. comm.).

Photo by Claire DeBeauvoir, Sea and Sage Audubon

Least Bell's Vireo *(Vireo bellii pusillus)*

Photo by James Gallagher, Sea and Sage Audubon

Population:

Grinnell and Miller (1944) once characterized Least Bell's Vireo as one of the most common birds found in riparian habitat throughout the state (Figure 5-7). Over the past sixty years, destruction of riparian habitat and the invasion of California by the parasitic Brown-headed Cowbird have contributed to a steep decline in the vireo's population. Currently, Least Bell's Vireos are restricted to approximately eight counties in southern California and are on the federal Endangered Species List (USFWS 1998).

To be reclassified as "threatened," the Least Bell's Vireo population must achieve one of the following criteria for at least a period of five consecutive years (taken from USFWS 1998):

- Stable or increasing populations/metapopulations, each consisting of several hundred or more breeding pairs, are protected and managed at the following sites: Tijuana River, Salzura Creek/Jamul Creek/Otay River, Sweetwater River, San Diego River, Camp Pendelton/Santa Margarita River, Santa Ana River, an Orange County/Los Angeles County metapopulation, Santa Clara River, Santa Ynez River, and an Anza Borrego Desert metapopulation.

- Stable or increasing Least Bell's Vireo populations/metapopulations, each consisting of several hundred or more breeding pairs, become established and are protected and managed at the following sites: Salinas River, a San Joaquin Valley metapopulation, and a Sacramento Valley population.

- Threats are reduced or eliminated so that Least Bell's Vireo populations/metapopulations listed above are capable of persisting without significant human intervention, or perpetual endowments are secured for cowbird trapping and exotic plant control in riparian areas occupied by least Bell's Vireos.

MANAGEMENT

Habitat enhancement:

Riparian habitat creation and restoration is underway throughout the state. Much of this effort in southern California has been propelled by the need for more Bell's Vireo habitat. Bell's Vireos have responded favorably to restoration efforts, demonstrating increases in occupation at restored sites, and nest success rates similar to non-restored natural habitat (Kus 1998).

The Santa Clara River Enhancement and Management Plan:

This plan seeks to protect the ecological integrity of the longest, unchannelized river in the South Coast bioregion. Current efforts to develop along the Santa Clara and its tributaries may endanger the integrity of the plan.

Brown-headed Cowbird control:

In the short-term, trapping of cowbirds is one of the most effective ways to increase the reproductive success of Least Bell's Vireo on a local scale. At Camp Pendelton, nest parasitism dropped from 47% to less than 1% in less than 10 years (USFWS 1998). However, cowbird trapping is only a temporary remedy to be used in emergency situations. The population cannot be considered healthy until it can survive without significant human intervention.

Monitoring and research:

Research elucidates the habitat variables required to re-establish healthy populations. Monitoring provides important information on population trends, allowing for the employment of appropriate adaptive conservation techniques.

Willow Flycatcher (*Empidonax traillii*)

Photo by James Gallagher, Sea and Sage Audubon

Population:

Willow Flycatchers historically nested throughout California, preferring riparian deciduous shrubs, particularly willow thickets. Currently, three subspecies of the Willow Flycatcher breed in California (Figure 5-5). Each has been listed as state endangered and US Forest Service Region 5 Sensitive in California. The USFWS designated the Willow Flycatcher as a sensitive species in Region 1 (Washington, Oregon, Idaho, California and Nevada). Furthermore, the Southwestern Willow Flycatcher *(Empidonax traillii extimus*) is federally listed as endangered.

Management:

Sierra Nevadan populations have dropped precipitously in the last 50-60 years. Most Sierran meadows are already publicly owned, but many are grazed under permit. Goals for increasing Willow Flycatcher populations focus on increased monitoring, improving management and restoration of habitat, and where necessary, through proper grazing management.

Southwestern Willow Flycatcher:

These flycatchers are concentrated in lowland habitats. The UFWS has recently released a Southwest Willow Flycatcher Recovery Plan (http://ifw2es.fws.gov/Library/ListDocs.cfm) that details management recommendations for this imperiled subspecies. Managers should prioritize the protection and restoration of riparian deciduous shrub vegetation and address the problem of cowbird parasitism, which has severely affected populations in southern California. For example, at the South Fork Kern River Preserve, an average of 63.5% of nests were parasitized from 1989 to 1992, with a range from 50% in 1989 to 80% in 1991. However, Brown-headed Cowbird trapping at the South Fork Kern River Preserve has resulted in a decreased rate of parasitism, "buying time" for this population as riparian habitat restoration proceeds.

Tricolored Blackbird (*Agelaius tricolor*)

Population:

Photo by James Gallagher, Sea and Sage Audubon

The Tricolored Blackbird is largely endemic to California and has been listed as a state Species of Special Concern. Surveys indicate that populations have been rapidly declining for decades, probably due to water diversion, land conversion and heavy predation by mammals, corvids and Black-crowned Night Herons (Beedy and Hamilton 1997, Hamilton et al. 1999). Tricolors are colonial breeders, nesting mainly in wetlands or in dense vegetation near open water. No population targets have been established for this species.

Management:

Hamilton et al. (1999) outlines many specific recommendations for conserving Tricolored Blackbird populations in California. Included are:

Protect existing colonies: Managers must seek to protect existing tricolor colonies and nesting sites (Figure 5-18). Adequate tricolor habitat needs to be designated in Habitat Conservation Plans (HCPs). Managers also need to reduce predation pressure to allow populations to expand. Problem species such as ravens, night herons, and coyotes should be properly managed whenever possible (Hamilton *in press*).

Proper water management can enhance their natural nesting habitat and reduce depredation rates (nest predation by mammals increases when water levels around nesting sites drop). If feasible, a simple water level management strategy is to maintain the level present when initial tricolor settlement occurred.

Consider disturbance effects: Private landowners must be encouraged to consider the needs of tricolors and to avoid harvesting, pesticide application and other disturbances to the species during the breeding season.

Provide suitable nesting habitat: Tricolors will often use exotic plants, such as Himalaya blackberry, as nesting substrates. Efforts that remove shrubs used by tricolors should include plans to replant a suitable alternative. Restoration efforts should emphasize native plants.

Public education: Conservation efforts must educate the public about the species' status and needs (Beedy and Hamilton 1997). Managers should encourage development of colonies in conspicuous urban environments where their educational value will be useful (Hamilton *in press*).

Research and Monitoring: Further research will indicate the variables affecting their reproductive success, outline the threats posed to colonies and monitor population changes over time. For a more extensive review of monitoring needs, see Beedy and Hamilton (1997) and Hamilton et al. (1999).

Chapter 7. Bioregional Conservation Objectives

California harbors more naturally occurring species of plants, insects, vertebrates, and other life forms than any comparable area north of the subtropics (Biosystems Analysis 1994). Isolation by the Sierra Nevada mountain range and southern deserts fostered the evolution of more endemics than any other state in the United States except Hawaii. The great diversity of plants and animals renders conservation planning for the entire state more difficult.

Numerous authorities have divided the state into discrete geographical sections, or bioregions, based on natural communities, climate, topography, and soils. The California Biodiversity Council (RAC 1998) divided the state into 10 bioregions (Figure 7-1) while others, including Biosystems Analysis (1994) and Sawyer and Keeler-Wolf (1995) recognize 11 discrete regions. California Partners in Flight followed the Biodiversity Council's 10-region scheme for the purposes of the bird conservation plans.

Figure 7-1. Bioregions of California. From the Biodiversity Council (2003).

Many organizations have embraced planning on a bioregional basis because bioregions facilitate an adaptable, site-specific focus for projects. Setting and achieving conservation goals by bioregion will:

- Ensure that a suite of ecological communities representative of California's diversity will be conserved.
- Ensure the broadest range of biodiversity and locally adapted races of species will be conserved.
- Facilitate action at the local level.

This chapter introduces each of the 10 bioregions considered in this plan (the Sacramento and San Joaquin are discussed together). These descriptions are offered as an overview; the issues and needs vary depending on particular sites within a bioregion. For more information on each, consult the Resource Agency of California's (1998) *Preserving California's Natural Heritage.*

Portfolio Sites

For each bioregion, we list regional Portfolio Sites. These sites stand out for their significance and contribution to conservation, either through management practices or their value as a reference site. CalPIF and the RHJV are constantly seeking to expand this list of portfolio sites in California. Inquiries concerning the suitability of an area for recognition as a portfolio site should be directed to the RHJV coordinator (http://www.prbo.org/calpif/htmldocs/rhjv/). A specific project, geographic area, or discrete patch of habitat may be designated as a Portfolio Site if:

- It has been recognized as a "flagship project" by the RHJV for outstanding riparian habitat management and restoration activities.

- It implements adaptive management strategies by "closing the feedback loop," i.e., gathering data that provides information about wildlife responses to management practices, then incorporating such data into future management decisions.

- RHJV science partners recognize that the site merits long-term monitoring of avian populations. Long-term data collection provides an important baseline against which to measure short-term changes in regional bird populations and reproductive success. Such projects can serve as reference sites when comparing avian response to management or restoration in other areas with similar habitat and climate. Only through long-term data collection will conservation biologists and ecologists avoid the ongoing pitfall of "shifting baselines," i.e., the phenomenon whereby slowly deteriorating conditions over time can become the norm or standard against which to measure healthy ecological systems.

Sacramento and San Joaquin Valleys

California's Great Central Valley provides breeding, migratory stopover and wintering grounds to millions of birds annually. Though seriously degraded due to human disturbance, the Valley still contains vital riparian habitat, freshwater wetlands and seasonally flooded agriculture, vernal pools, and naturalized annual grasslands. Most think of the Central Valley only in terms of its robust agricultural industry. Yet, the Valley once hosted an extensive network of riparian forests with a rich shrub and herbaceous understory, wetlands, and adjacent upland habitats. However, development pressure from a rapidly expanding population and an increasing demand for water threaten the remnants of the once vast riparian system. Without prompt action, the opportunity to restore critical habitat may be lost.

Portfolio Sites

Lower Clear Creek supports the largest breeding population of Yellow Warbler and Song Sparrow in the region. Priority should be given to ensuring a continuous riparian corridor from Clear Creek to the main stem of the Sacramento River and improving habitat quality through restoration and restoring natural processes.

The Lower Feather River, which includes the Audubon Bobelaine Sanctuary, provides important breeding and migratory stopover habitat for numerous songbird species and has high potential for range expansion of riparian birds.

The Sacramento River continues to provide nesting habitat for many species, including Bank Swallow, Swainson's Hawk and Western Yellow-billed Cuckoo. Many species once common in the area, including the Least Bell's Vireo, have been extirpated while the Yellow Warbler, Song Sparrow, Yellow-breasted Chat, and Blue Grosbeak are missing locally (Nur et al. 1996). Protection efforts include the extensive Sacramento River National Wildlife Refuge Complex. The largest river system in the state, the Sacramento has great potential to support vast expanses of riparian habitat. We recommend focusing restoration efforts in areas where dynamic fluvial processes are still intact, and where connectivity can be established with adjacent intact habitat. Examples of ongoing riparian restoration projects include the Rio Vista Unit owned by the USFWS and CDFG's Pine Creek Unit. These sites can be found at the following web sites: http://www.sacramentoriver.org; http://www.riverpartners.org.

Cottonwood Creek is the largest undammed tributary to the Sacramento River in the Central Valley. The hydrology of Cottonwood Creek still resembles a historical flow regime with high stream flows during rainy winter months and very low flows during dry summer months. With natural flow regimes fairly intact, extensive wildlands in the upper watershed, and intact adjacent upland habitat, it is likely that Cottonwood Creek provides valuable habitat to numerous riparian associated bird species. Current threats to riparian habitat on Cottonwood Creek include subdivision of large properties into ranchettes resulting in an increased intensity of land use within and adjacent to riparian habitat, increased demand for water from a growing population, and the encroachment of exotic invasive plant species.

The Tuolumne River has recently garnered conservation attention primarily through the restoration efforts of agencies and groups such as the Friends of the Tuolumne. Though mining, dredging, water diversion and development continue along its reach, the river continues to support breeding Song Sparrows, Common Yellowthroats, Blue Grosbeaks, and Swainson's Hawks. Fairly large habitat patches remain, especially in the river's upper reach.

The Mokelumne River's riparian habitat is currently restricted to linear patches directly along the river corridor due to agriculture and development as well as upstream dams that limit flows. However, a developing partnership between private landowners and the East Bay Municipal Utility District is pursuing riparian restoration along the river to increase the amount of habitat for the benefit of both farmers and wildlife.

Photo by Dan Stark, USFWS

Riparian habitat near the Sacramento River.

The San Joaquin River's water flows and habitat have been seriously diminished by the development of agriculture or mining along nearly every mile of its reach and the construction of Friant Dam. The demand for water from the river is immense. It irrigates the world's largest agricultural industry and can run nearly dry in parts of its reach during the summer. The river continues to host a number of riparian species, including Song Sparrow, Blue Grosbeak, Black-headed Grosbeak, and Swainson's Hawk. For the past two years Yellow Warblers have been documented breeding at the San Joaquin River National Wildlife Refuge (PRBO unpublished data). This hopeful sign that an extirpated breeder has returned to the valley floor is the result of protection and restoration efforts along the river, including the establishment of open space reserves near Friant Dam and a growing network of wildlife areas and refuges along its middle reach. These efforts include the San Luis National Wildlife Refuge Complex, Great Valley Grasslands State Recreation Area, and the San Joaquin River Parkway (Conservation) Trust.

Modoc

Of the California bioregions, perhaps the Modoc most resembles its historic state. It is characterized by hot, dry summers and cold, wet winters, extensive stands of conifers and oaks, and high elevation desert conditions in its northeast portion (RAC 1998). It has the smallest population of the states 10 bioregions, though it is expected to grow as California's population expands. A major effort to restore aspen stands has been taking place in the Eagle Lake Ranger District of the Lassen National Forest since 1999. Here they have employed an aggressive strategy of clear-cutting conifers and fencing the boundaries of aspen stands where livestock grazing is an issue. Preliminary results have been positive with extensive resprouting of aspen stems and associated herbaceous species. In 2004, a monitoring component will be added to this project in order to determine the effects aspen release treatments have on songbirds.

Portfolio Sites

Humbug Valley, totaling over 500 hectares, is the largest meadow in the Northern Sierra Nevada. Fed by two perennial streams, willows, alders, sedges and other wet meadow associated vegetation undoubtedly dominated the valley historically. Overgrazing and subsequent stream erosion has resulted in a drying out of this site over the past 180 years. Fencing off the riparian habitat in the mid-1980's, followed by the complete removal of grazing in 2001, has resulted in a dramatic recovery of this site. New willow and herbaceous vegetation has returned to large portions of the valley. The population of Willow Flycatcher has increased from two singing males in 2002 to at least 13 singing males in 2003 (Humple and Burnett 2004). With full recovery of this site, the valley could potentially sustain over 50 pairs of breeding Willow Flycatcher. Other focal species that breed in the valley that should benefit from the recovery of riparian habitat include Spotted Sandpiper, Tree Swallow, Warbling Vireo, Yellow Warbler, Wilson's Warbler, and Song Sparrow. Current conservation efforts are focused on providing permanent protective status for this biologically important mountain meadow.

Warner Valley, a CDFG wildlife area adjacent to the Lassen National Forest and Lassen Volcanic National Park, is one of the most significant breeding areas for Willow Flycatchers in the state. Approximately 10-15% of the Sierra Nevada population of this species breed at this one location (King and King 2003, Humple and Burnett 2004). Substantial numbers of Wilson's Warbler, Yellow Warbler, and a small population of the regionally rare Swainson's Thrush breed here as well. The Willow Flycatcher population here is now being intensively studied as part of a demographic study of the Willow Flycatcher in the Sierra Nevada.

Bear Creek Meadow, located on private property adjacent to the headwaters of the Fall River, is the site of an extensive meadow restoration project. The meadow already contains numerous Yellow Warblers and several other focal species, including Wilson's Warbler and Warbling Vireo. With the maturation of re-vegetation and natural regeneration following the restoration of a hydrologically functional stream, this site has the potential to provide significant breeding habitat for Willow Flycatcher and other riparian focal species.

The Modoc region now appears to be the only area in the Sierra Nevada where the Willow Flycatcher population is stable or increasing (Humple and Burnett 2004, Green et al. 2003, R. Siegel pers. comm.). This population increase in the Lassen area can be attributed primarily to recolonization of former breeding sites on Pacific Gas and Electric (PG&E) lands. The only restoration action taken on these lands has been the complete cessation of cattle grazing. While grazing remains a highly debated subject in the Sierra Nevada, this evidence suggests that restoring mountain meadows to an ecologically healthier state may be accomplished with minimal active restoration in this region. A rigorous study examining the effects of cattle grazing and the recovery of meadows where it has been removed is vital for ensuring the long-term sustainability of many meadow dependent Sierra bird species.

Photo by Steve Zack, WCS

Willow Flycatcher abundance is increasing in the Lassen

Klamath

The Klamath/North Coast bioregion consists of rocky, steep shorelines, rich conifer forests, and lush riparian corridors. The region is one of the wettest in California, with cool, foggy summers along the coast and rainy winters throughout. Though vast tracts of habitat remain, logging, cattle ranching and agriculture have degraded much of the historic riparian habitat. While the old growth redwoods garner much of the attention of conservationists, riparian habitat merits significant attention as well, providing habitat for salmon, mammals and numerous birds, including the Pacific-slope Flycatcher, Bank Swallow and Willow Flycatcher (RAC 1998).

Portfolio Sites

The Trinity River supports important breeding habitat for half of the focal species. It is also used by large numbers of Willow Flycatchers during the pre-migration and migratory periods (Ralph and Hollinger 2003). Congressional legislation has provided the directive for the restoration efforts by the USDI Bureau of Reclamation Trinity River Restoration Program. Proposed bank rehabilitation and flow manipulation projects are aimed at recreating historic aquatic and riparian habitat conditions primarily in the upper reach of the system. Ongoing bird monitoring within the restoration sites will provide population and habitat use information for effective adaptive management.

Central Coast

The Central Coast Bioregion is characterized by a mild climate, a wide variety of habitat types, and numerous small mountain ranges that roughly parallel the coastline. The region supports a robust agricultural industry, which includes cattle grazing, row crops and vineyards. In recent years, the Central Coast has experienced a dramatic population increase fueled largely by prosperous industries, including the booming computer industry in the Santa Clara "Silicon Valley." This expansive growth seriously threatens riparian habitats in the region because of land conversion, water diversion, resource extraction, intensive grazing, habitat clearing and the introduction of invasive plant species. These changes have rendered the Central Coast one of the three most threatened ecoregions in California, along with the Central Valley and Southwest Ecoregions (TNC 1997), and merits immediate attention for conservation and protection efforts.

Valley areas in the Central Coast once supported large floodplain forests of deciduous riparian trees and shrubs. These areas, dominated by sycamore, willows and cottonwoods, were considered the most productive riparian habitat in terms of biodiversity (Roberson and Tenney 1993). Because of land use practices such as grazing and agriculture and associated flood control and groundwater extraction, valley riparian habitat is rare (TNC 1997). Riparian patches on the Salinas, Nacimiento, and Carmel Rivers and a few other localities in the region are important remnants for native wildlife.

Portfolio Sites

The Big Sur River is one of the most intact free-flowing rivers in the Central Coast region. The majority of the upper portion flows through the Ventana Wilderness and the Los Padres National Forest; the lower portion runs through both state and private lands. The riparian corridor is dominated by dense stands of willow, alder, and cottonwood accompanied by mature sycamore alluvial woodlands. The river provides important breeding habitat for a variety of riparian focal species including Warbling Vireo, Swainson's Thrush, Wilson's Warbler, Black-headed Grosbeak, and Song Sparrow. Data collected from long-term monitoring in the lower Big Sur River valley suggest that the breeding population of Warbling Vireos is significantly declining on a local level (VWS unpublished data). This coastal riparian corridor also provides critical stopover habitat during both spring and fall migration. Monitoring along the lower Big Sur River continues, making this a valuable reference site.

Photo by BSOL

Riparian habitat along the Big Sur River.

The Carmel River flows northwest out of the Carmel Valley between the Santa Lucia Mountains on the South and the Sierra del Salinas Mountains to the north and east, draining approximately 255 square miles. Following the establishment of two dams and intensified floodplain development over the past 80 years, the river and its riparian corridor has shrunk dramatically. The watershed recently has become the focus of multiple restoration programs in an attempt to restore critical coastal riparian habitat and hydrologic function. The primary objective of songbird monitoring at these sites is to study avian responses to habitat restoration efforts, with particular attention given to riparian focal species. Currently, seven riparian focal species breed within the watershed. Although water diversion and intensive development continue, the river still provides important breeding, migratory-stopover, and overwintering habitat.

The Salinas River is the Central Coast bioregion's largest river, flowing through the longest inter-mountain valley in the state. Remnant habitat patches on the Salinas are important for the restoration and recolonization potential they provide for lowland forests and associated species, and include some of the last known potential breeding areas of the Least Bell's Vireo. Over 75% of the riparian habitat along the Salinas is considered disturbed or degraded (Roberson and Tenney 1993), underscoring the need for restoration and Brown-headed Cowbird management.

Priority streams and rivers were identified by TNC after it conducted a biological assessment of the Central Coast Bioregion. Priorities were determined based on factors such as landscape integrity, species richness of targeted species, and the presence of sycamore alluvial woodlands (TNC 1997). Highest priority sites include Pescadero Creek, Scott Creek, Uvas Creek, lower Salinas River, Arroyo Seco, Nacimiento River, upper San Benito River, Big Sur River, Arroyo de la Cruz, San Simeon Creek, San Antonio Creek, and Santa Ynez River.

Vandenberg Air Force Base supports some of the most extensive riparian habitat along the Central Coast (Farmer 1999). The base has high avian diversity and productivity and should be a conservation priority (Gallo et al. 2000).

Bay Delta

The Bay Area Delta Bioregion includes the San Francisco Bay area and spreads eastward to encompass the sprawling Sacramento San Joaquin River Delta. The climate is generally mild, with regular fog on the coast, wet winters, and warm summers inland. Historically, it supported a lush interconnected system of marshes, wetlands and riparian habitat. Though much has been lost to water projects and land conversion, the region continues to provide vital breeding habitat to riparian associated species.

Portfolio Sites

The Point Reyes National Seashore supports significant amounts of riparian habitat in the form of many small willow-alder dominated creeks. The National Park Service in collaboration with PRBO Conservation Science has conducted extensive bird monitoring at three riparian sites: Muddy Hollow, Redwood Creek and Lagunitas Creek. Currently, seven riparian focal species breed within these watersheds; most of which occur here in densities far higher than any other bioregion (Table 6-1). In addition to breeding habitat, these sites also provide critical stopover habitat during spring and fall migration.

The Cosumnes River Preserve, located at the eastern tip of the bioregion, is focused around the only undammed river on the west slope of the Sierras and encompasses over 5,670 hectares of riparian and upland habitats. The Preserve protects the largest remaining tracts of valley oak riparian forest. Management of the Preserve is an excellent example of a working partnership between BLM, The Nature Conservancy, California Dept. of Fish and Game, Ducks Unlimited, Sacramento County and the Wildlife Conservation Board. The Preserve is also an ideal site for studies assessing landbird response to natural recruitment restoration. Managers there have breached levees to capitalize upon natural flooding events and allow natural recruitment of riparian habitat within the Cosumnes bottomlands. The mosaic of different aged patches of habitat resulting from regeneration demonstrates the dynamic processes that result from a river being reconnected to its floodplain. However, low productivity of Song Sparrows and other species in some of these habitats along the Cosumnes indicates that these populations may be in danger of local extirpation, as seems to already have occurred locally in portions of the lower Sacramento River Valley (PRBO unpublished data).

South Coast

The South Coast bioregion includes miles of sandy beaches and steep cliffs along the Pacific, small mountain ranges, and extensive riparian, scrub and conifer habitats. The human population continues to expand rapidly, converting and fragmenting native landscapes at an alarming rate. The climate is arid and warm year round, increasing the importance of the few remaining riparian areas. The South Coast serves as the last refuge for the Least Bell's Vireo in California. Though the species once bred in riparian habitat throughout the state (Grinnell and Miller 1944), years of habitat reduction, nest predation and parasitism by the Brown-headed Cowbird have severely reduced the species' range (USFWS 1998).

Portfolio Sites

The Santa Clara River, is the largest unchannelized river in southern California. The Santa Clara River Enhancement and Management Plan, developed by the USFWS, the California Coastal Commission, and several southern counties, seeks to protect the natural resources and wildlife along the river and proactively avoid the listing or extirpation of any new species. However, current efforts to develop areas along the river's reach may further jeopardize the habitat.

Mojave and Colorado Deserts

While the desert regions have yet to be adequately assessed in this plan, desert oases and associated riparian habitat clearly represent critical bird breeding grounds that also serve as important migratory stopover and wintering sites for many species (Grinnell and Miller 1944, Massey and Evans 1994, Flannery et al. 2004). Water diversion, grazing, exotic plant species and recreational activities threaten riparian habitat in desert oases. The Colorado River hosts an impressive suite of resident and Neotropical migratory breeders (Rosenberg et al. 1991). Efforts along the Colorado River seek to restore some of the native habitat after over a century of degradation due to human disturbance, water diversion and exotic plant invasions. Riparian habitats in the Mojave and Colorado Desert bioregions will be covered more extensively in the CalPIF Desert Bird Conservation Plan (CalPIF *in prep*.).

Portfolio Sites

The Colorado River has recently become the focus of a multi species conservation plan that includes provisions for fish, birds and plants. Restoration efforts include protection and restoration of riparian vegetation and exotic plant control (specifically for tamarisk). Management of flows and reconnection of the river to historic backwater areas will benefit native fish, recreational fishing and riparian habitat.

Sierra

The Sierra Bioregion has faced over a century of land and water conversion, resource exploitation, invasive plant species and rural sprawl. The Sierra Nevada range is considered to be one of 233 sites of globally important biodiversity. Of those sites, it is one of 110 considered critically threatened or endangered (Olson and Dinerstein 1998). While riparian montane meadows historically provided ample habitat for species such as the Yellow Warbler and Willow Flycatcher, they have been degraded or destroyed by grazing and water diversion. Siegel and DeSante (1999) and the Sierra Nevada Ecosystem Project (Davis and Stoms 1996) provide an extensive review of conservation needs and recommendations for the Sierra Nevada region.

The Sierra Bioregion, as distinguished by the Biodiversity Council (RAC 1998), includes a portion of the eastern Sierra escarpment and the western Great Basin. Desert riparian habitats of the Owens Valley alluvial fan zone provide spring and fall migration and dispersal habitat not only for riparian associated species, but also upland species breeding in adjacent sagebrush habitats (Heath et al. 2001, Heath and Ballard 2003). Higher elevation riparian aspen habitats harbor the most diverse breeding songbird communities in the region (Heath and Ballard 2003[a]).

The Los Angeles Department of Water and Power (LADWP), the primary water rights and landowner of lands adjacent to the Owens River and Mono Basin feeder streams, has begun restoration efforts of riparian habitats in the eastern Sierra. Restoration plans for both the Mono Basin feeder streams and the lower Owens River rely primarily on returning water to these diverted systems. A majority of the Sierra Bioregion lands are managed by public agencies. Resource managers and landowners appear willing to invest time and money into finding more ecologically sound management practices and are incorporating conservation recommendations into work plans and project goals (LORP 1999, Siegel and DeSante 1999, Heath et al. 2001).

Portfolio Sites

Sierran mountain meadows are critically important for breeding and post breeding dispersal of Neotropical migrants and resident landbirds (Siegel and DeSante 1999, Burnett and Geupel 2001). These meadows also provide important stopover habitat for many migrating species. Examples of important Sierran meadows include Perazzo, Humbug Valley, Little Truckee River, and Sage Hen.

The South Fork Kern River supports high species diversity and an intensively managed program to support the reproductive success of riparian birds. It remains a high conservation priority, as it provides one of the most important breeding grounds for Yellow-billed Cuckoos and Willow Flycatchers in the West and continues to host a richly diverse bird community (including most of the 17 focal species considered in this Conservation Plan).

The Mono Lake tributaries, compromised for decades by water diversions to the Los Angeles aqueduct, are currently undergoing restoration and have been void of livestock grazing since the 1991 removal of cattle and sheep (LADWP 1996). The streams have been rewatered since 1989 and now harbor abundant breeding populations of many of the riparian focal species (Heath et al. 2002[b]). Rush Creek harbors the densest breeding population of Yellow Warblers currently recorded in the state, and a small population of Willow Flycatchers has recently been discovered breeding among Rush Creek's wild rose patches (Heath et al. 2002[c], McCreedy and Heath *in review*). Court mandated restoration monitoring efforts in the Mono Basin focus on hydrological functions, fish populations and plant regeneration. Songbird monitoring of Mono Basin streams continues to investigate songbird community response to passive riparian regeneration.

The Owens River and its riparian habitat, though compromised due to water diversions since the early 1900's, harbors remnant breeding populations of the Southwest Willow Flycatcher and perhaps the Western Yellow-billed Cuckoo (Laymon and Williams 1994). Once, this river system provided breeding or migratory habitat for nearly all of the 17 riparian focal species, including the Least Bell's Vireo (Fisher 1893, Laymon and Williams 1994, MacMillen et al 1996). As part of the Lower Owens River Project, water is scheduled to be released into over 60 miles of the River system by 2005. Restoration efforts will be primarily passive, relying on the reintroduction of water into the decades long dry channel (LORP 1999). Extensive baseline songbird monitoring on the Lower Owens River began in 2002 and will continue for several years after initial rewatering (Heath and Gates 2002).

Chapter 8. Conservation Recommendations

This chapter provides specific recommendations for riparian habitat activities throughout the state. They consider habitat protection and restoration, land management, research and monitoring, and policy action. Conservation organizations, agencies, scientific researchers and the public provided the information used in developing this chapter and most recommendations were derived from the most recent scientific data and analyses available. Unless otherwise referenced, most information from this section is derived from the focal species accounts (see http://www.prbo.org/calpif/htmldocs/riparian.html). Some, however, rely upon well-informed assumptions that require more scientific investigation. Standardized monitoring and adaptive management will test and develop these assumptions, continually improving our knowledge of conservation and restoration science.

These recommendations seek to reverse the current declines of many riparian-associated bird populations. By restoring healthy, stable populations, we will avoid the expensive and intrusive last resort of listing more species as threatened and endangered. We hope that these recommendations will galvanize and guide conservation organizations, project funding, and the actions of land managers and owners across the state. All of the following objectives and recommendations seek to fulfill the RHJV's central mission, which is to promote conservation and restoration of riparian habitat sufficient to support the long-term viability and recovery of native bird populations.

Habitat Protection Recommendations

Objective 1

Prioritize riparian sites for protection and restoration.

Recommendations

1.1. Prioritize potential riparian protection sites according to current indicators of avian population health.

Conservation efforts should use the most recent information regarding the quality of existing habitat and wildlife populations to prioritize the acquisition and protection of sites. Reproductive success, in particular, is an important demographic parameter that provides a foundation around which to build riparian conservation programs. After a four-year study of passive riparian restoration, Dobkin et al. (1998) suggested that the presence of "key" species in areas undergoing restoration during their third and fourth years signaled the beginning of avian restoration.

Key or "rapid-indicator" species are those that:

- Are still locally abundant in riparian habitats throughout the state.
- Can rapidly colonize an area.
- Depend upon early successional riparian shrub habitats.

1.2. Prioritize restoration sites according to their proximity to existing high-quality sites.

Restoration sites near existing high-quality sites and population sources have a higher probability of being recolonized by extirpated species. Along the San Luis Rey and San Diego Rivers in San Diego County, Kus (1998) documented Least Bell's Vireos' occupation of restored sites more rapidly in habitats adjacent to mature and intact riparian habitat. Tewksbury et al. (2002) found, for the Sacramento River basin and four other western study areas, that sites surrounded by more riparian habitat at the regional scale (5 km) tended to have more long-distance migrants, as well as resident birds.

1.3. Protect and restore riparian areas with intact adjacent upland habitats.

Riparian-associated birds make use of grass, shrub and woodland habitats adjacent to riparian zones throughout their lives. Upland zones provide migratory stopover grounds, foraging habitat, and dispersal corridors for non-breeding adults and juveniles. The Western Yellow-billed Cuckoo, Common Yellowthroat, and Least Bell's Vireo are among the many riparian species that commonly use upland habitats adjacent to riparian nesting sites. These areas act as both flood refugia and supplemental foraging areas. For example, the Common Yellowthroat will not nest over water and therefore must have access to alternative upland nest sites during late spring floods. The Western Yellow-billed Cuckoo's prey base, largely katydid and sphinx moth larvae, winters underground. In wet years, cuckoos must forage in upland areas until the prey base in the lower floodplain recovers. Because most extant riparian habitat is in the primary floodplain, floods may regularly reduce the cuckoo's prey-base and contribute to the decline of cuckoos in the West. Several riparian bird species, including the Warbling Vireo and Black-headed Grosbeak, commonly nest in upland habitats adjacent to riparian zones.

Riparian areas can also support primarily upland nesting bird species. For example, narrow riparian strips in the Owens Valley alluvial fan of the eastern Sierra Nevada provided perching sites, nesting material, foraging and watering areas for predominantly sagebrush nesting species. Additionally, these water birch drainages received an influx of Sage Sparrow families in late summer, suggesting the importance of riparian habitat for post-fledgling dispersal of sagebrush-associated juveniles (Heath and Ballard 2003[b]).

The importance of adjacent intact habitats can be illustrated by taxa other than birds. The Arroyo Southwestern Toad is another example of an animal that uses both riparian and upland habitats, and continuity between the two habitat types may be essential for species survival. This federally listed endangered species uses common riparian types in southern California for foraging and dispersal, even though dense, tall vegetation structures are least preferred for burrows. Females and breeding season males prefer channel and terrace habitats to campground, agricultural or upland habitats, but males use uplands after breeding season commences (Griffin and Case 2001).

A study on riparian lizards on the South Fork of the Eel River concluded that "rivers can feed the forests" and demonstrated that strong links between rivers and surrounding watersheds has implications for resource management. Riparian systems provide food and prey for riparian and

upland lizard species alike. Land uses (e.g., river impoundments) that alter downstream productivity and diversity of insects may influence not only downstream river biota, but adjacent terrestrial biota as well (Sabo and Power 2002).

1.4. Prioritize sites with an intact natural hydrology or the potential to restore the natural processes of the system.

Of the 11 focal riparian bird species that have suffered population declines, seven prefer to nest in early successional riparian habitat, particularly willow/alder shrub habitats with dense understory cover. To flourish, early successional habitats depend upon natural hydrology, including flooding, soil deposition, and point bar formation, for establishment (Sacramento River Advisory Council 1998). Seed dispersal and natural tree regeneration and growth also are sometimes compromised due to the absence of high peak flows or seasonal fluctuations in water levels (Smith et al. 1991, Stromberg and Patten 1992). Restoring or mimicking natural hydrology contributes to recreating the structural diversity found in natural riparian systems, increasing the habitat quality for native wildlife. Sites with intact natural hydrology or the potential to return to one should receive special consideration.

For the long-term conservation of the federally endangered Arroyo Southwestern Toad, management of natural disturbance regimes such as flooding, fires, and successional dynamics that promote continuous availability of preferred channel and terrace breeding sites is essential. Reservoirs, low water tables, paving, sediment mining, and exotic flora introduction have all negatively impacted habitats vital for Arroyo Toad breeding and larval development (Griffin and Case 2001).

1.5. Prioritize sites according to surrounding land use.

Management of riparian areas at a watershed-level is the best method for conserving bird populations. Landscape scale land use patterns may significantly affect the sustainability of riparian bird populations over the long term (Petit et al. 1995). Surrounding land uses influence the population sizes of Brown-headed Cowbirds and predators such as domestic cats, jays, skunks, raccoons, ravens, and crows. More research is needed regarding habitat buffers and their influence on predation and parasitism rates. It is known that Brown-headed Cowbirds may commute more than 12 kilometers between foraging grounds and the nest sites of their hosts (Mathews and Goguen 1997). For more information, refer to Recommendation 6-3.

The Swainson's Hawk demonstrates the need for protected and properly managed habitats surrounding riparian zones. In the Central Valley, Swainson's Hawks prefer to nest in riparian vegetation but typically forage upland. Historically, they hunted small mammals in native perennial grasslands. Today, they seek prey in grazed grasslands and certain forms of agricultural land (Table 8-1). Landscape-scale variables determine habitat suitability for these hawks: nest placement not only depends on vegetation characteristics around the nest site, but the suitability of surrounding habitat for foraging. In this case, protecting or restoring a pristine riparian forest is insufficient for the conservation of this species.

Table 8-1. Ranking of various habitats as foraging habitat for Swainson's Hawks in California[1]

Vegetation Type	Rank [2]	Access to Prey [3]	Prey Abundance [4] (Prey Population size and availability)
Perennial Grassland	1, 2	Consistently high	High prey and high availability
Alfalfa	1, 2	Consistently high	High prey and high availability
Fallow Fields	3, 5	Consistently moderate	Moderate prey and high availability
Dryland Pasture	4	Consistently moderate	Low prey, but high availability
Beets	4, 5	Usually low, high at harvest	Moderate prey, only highly available at harvest
Tomatoes	5, 6	Normally low, high at harvest	Moderate prey, only highly available at harvest
Weedy/Ruderal Field	5-11	Highly variable	Moderate prey with variable availability
Irrigated Pasture	7	Consistently low	Very low prey, but high availability
Shrub/Sage	7-12	Highly variable	Low prey and moderate availability
Grains	8	Consistently low	Low prey and low availability
Other Row Crops	9-12	Consistently low	Low prey and low availability
Orchard/Vineyard	10-12	Consistently low	Low prey and low availability

1. Table based on studies in the Central Valley (Estep 1989) and Great Basin (Woodbridge 1991).
2. Ranked from 1 to 12, highest to lowest value as foraging habitat, depending on prey abundance and availability.
3. Different foraging habitats provide varying amounts of prey throughout the year. Tilling and harvest activities strongly affected the availability of prey within each crop type (Estep 1989).
4. Ranked as high, moderate or low prey abundance and the degree of availability of the prey. Each crop type supports a different abundance of prey (Estep 1989).

The following land uses within a riparian buffer zone are listed in general order of preference. This list provides only rules of thumb and must be considered in context with many other factors when assessing each unique conservation opportunity. The land uses generally beneficial with sustainable management are:

- Natural habitat not used for commodity production (e.g., wilderness).
- Unimproved parks/open space (provided substantial non-native species problems do not exist).
- Commercially managed habitat (e.g., grazed oak woodlands or timber production forest).

The land uses that can be beneficial, neutral, or detrimental depending on the wide variety of crops, cultivation, and pest control techniques used (Table 8-1) are:

- Horse/cow pasture.
- Campgrounds and picnic areas.
- Row crops.
- Permanent crops (e.g., orchards, vineyards).

The land uses within a riparian corridor or buffer zone that can be detrimental to birds because they support and attract cowbirds and predators are:

- Manicured parks and golf courses.
- Rural homes/ranchettes.
- Dairies and intensive feedlots.
- Intensive development (urban/suburban) and intensive agriculture.

The land surrounding a proposed protection or restoration site should be assessed for its risk of change or conversion and how that may affect bird populations. For example, is the land available for conversion to other uses? Or, is it permanently prohibited from development (e.g., in a floodplain; in public ownership; or protected through an agricultural conservation easement, a habitat conservation plan, local zoning, or an urban limit line)?

Objective 2

Promote riparian ecosystem health (i.e., a self-sustaining, functioning system).

Recommendations

2.1. Ensure that the patch size, configuration, and connectivity of restored riparian habitats adequately support the desired populations of riparian dependent species.

The size and connectivity of riparian habitat patches may be limiting to bird species' occupancy and population size. A habitat patch is a contiguous area of similar vegetation, usually defined by the dominant vegetation (e.g., a cottonwood willow patch within the valley foothill riparian type). Patch sizes must not fall below the minimum necessary to support populations based on:

- Territory size requirements.
- Community dynamics.
- Sensitivity of some species to fragmentation and edge effects (increased predation/parasitism rates).

When determining the minimum acceptable patch size for a site, managers should consider the mean territory size of their target species as a guideline. When considering a suite of species, managers should use the species with largest territory needs (e.g., Western Yellow-billed Cuckoo) to set the minimum patch size requirement, and they should design corridors to connect habitat fragments

according to the needs of the species with the highest sensitivity to fragmentation (Bolger et al. 2001).

Western riparian habitats are naturally linear systems with extensive edges. Patch isolation (lack of connectivity) may influence bird communities as much as habitat fragmentation. Small patch size and/or patch isolation may increase predation and brood parasitism rates and limit population dispersal. For example, although a number of riparian areas in California are of sufficient size (41 hectares, Laymon and Halterman 1987, 1989) and structure to support Western Yellow-billed Cuckoos, individuals may not colonize these areas because of their distance from existing populations and the lack of enough potential mates in close proximity. Some studies have suggested that amount of available riparian habitat, at various spatial (e.g., Tewksbury et al. 2002) and temporal (e.g., Greco et al. 2002) scales, is more important than patch size *per se*. Because riparian systems are dynamic, patch sizes may differ from year to year and should be considered on a landscape scale (Greco et al. 2002).

2.2. Restore natural hydrology in riparian systems wherever possible. (see Recommendation 1.4).

Restoration Recommendations

Objective 3

Increase the value of ongoing restoration projects for bird species.

Recommendations

3.1. Restore and manage riparian forests to promote structural diversity and volume of the understory. (See Recommendation 5.2.)

Loss of appropriate microhabitat, such as habitat structure or heterogeneity, may explain a species decline or absence in areas where riparian habitat appears intact. In restored riparian areas, large tree size and high foliage volume promote avian diversity, but diversity of vegetation structure may be even more important (Nur et al. 1996, Holmes et al. 1999). Seven of the ten focal species that have suffered the greatest range reductions and/or are declining tend to depend upon early successional riparian habitat, particularly willow-alder shrub habitats with dense understory cover. These include the Willow Flycatcher, Song Sparrow, Bell's Vireo, Blue Grosbeak, Yellow-breasted Chat, Yellow Warbler, and Common Yellowthroat. Many other species, such as the Wilson's Warbler, Spotted Towhee, and Swainson's Thrush nest on or near the ground and need a healthy understory to successfully reproduce (PRBO unpublished data). The nest success of some species, such as Calliope Hummingbirds, Bushtits and Black-headed Grosbeaks in the eastern Sierra Nevada is positively influenced by herbaceous ground cover or wild rose shrub cover, even though these species tend to nest in the higher layers of the riparian canopy (Heath et al. 2001). Among several bioregions, riparian bird abundance, richness and occurrence is significantly and positively associated with herbaceous or shrub cover as well as tree DBH and tree cover (Gardali et al. 2001, Small et al. 2001, Heath and Ballard 2003a).

In coniferous forest habitats, managers frequently plant conifers in riparian corridors to produce large, woody debris that provides aquatic habitat. This practice should be reassessed, minding that a deciduous component creates the structural diversity needed to support riparian-dependent terrestrial species. For example, in aspen riparian habitats of the eastern Sierra Nevada, breeding bird species richness decreased as conifer cover and white fir cover increased, but was positively influenced by the cover of herbaceous layers, willow shrubs, and snowberry (Heath and Ballard 2003a).

3.2. Restore the width of the riparian corridor.

Most riparian corridors today are much narrower than they were historically, particularly in the Central Valley. Hence, restoration planners should consider increasing corridor width to historic margins when possible. In coastal riparian habitats, for example, the presence of Warbling Vireos, Common Yellowthroats, and Swainson's Thrushes positively correlates with the width of the riparian corridor. The mean riparian corridor width at sites supporting Warbling Vireos was 82 meters, 30 meters greater than the mean width at sites without vireos (Holmes et al. 1999, Gardali et al. 2001). Breeding bird diversity in the eastern Sierra Nevada is positively associated with riparian width at several landscape scales (Heath and Ballard 2003b).

Quantifying a specific target width of riparian habitat is extremely complex; the effect of riparian width varies by bird species and riparian type and is only one of many variables affecting species occurrence and reproductive success. For example, while insufficient width of riparian corridors has been shown to negatively affect the breeding success at some locations (Bednarz et al. 1998, Small and Geupel 1998), riparian width had no affect on Yellow Warbler nest success in 50m – 250m wide riparian sites in eastern California (Heath and Ballard 2002b). Future research and landscape-level analysis will elucidate the problem. Regardless, wider riparian corridors are likely to provide more and better habitat.

Objective 4

Ensure that large landscape scale management and flood control projects maximize benefits to wildlife while benefiting agriculture and urban populations. Achieving multiple goals simultaneously enhances the overall value of such projects to the people of California.

Recommendations

4.1. Management of new or existing flood bypass areas should consider the benefits of a regenerating riparian habitat against those of other uses.

Recent floods in California, such as the New Year's flood of 1997 or the Napa River flood of 1997-98, demonstrate the need for a new model for flood control and habitat protection. Management of bypass areas as riparian habitat maximizes the public benefits of floodway/bypass projects currently under consideration throughout the state.

The preliminary report of the California governor's Flood Emergency Action Team (1997) stated that new or enlarged flood bypass or levee setback systems should be considered as options for nonstructural flood control. This approach may be particularly useful in areas with little permanent infrastructure or development, such as the San Joaquin River floodplain and the Delta. The Army Corps of Engineers recently assessed the Sacramento and San Joaquin River Valleys for the potential to initiate nonstructural alternatives (NSAs), such as levee setbacks and flood bypass channels, rather than traditional flood control projects (i.e., dams, levees, and channelization).

Cultivated Restoration Recommendations

Restoration and improved management are the best means by which to increase the amount and quality of riparian habitat in the state, thereby increasing the reproductive success and population sizes of riparian-associated birds. California's restoration experts have pioneered the development of riparian habitat restoration techniques over the past few decades.

Scientists are evaluating restoration's effects on threatened or endangered bird populations in California (e.g., Kus 1998, McKernan and Braden 2001), and the Herculean effort of restoring riparian habitat to the Lower Colorado River has been well studied in regards to its benefits to bird populations (e.g., Anderson and Ohmart 1982, Rosenberg et al. 1991). Yet, only recently have scientists evaluated the effects of restoration on more common bird species in other regions of the state (Gardali et al. 2001, Larison et al. 2001, DiGaudio 2003, Haff 2003, Jaramillo and Hudson 2003) and many data remain unpublished or in report form (e.g., Geupel et al. 1997a, b; Small et al. 2000, Burnett and DeStaebler 2001, Small et al. 2001, Heath and Gates 2002, Heath et al. 2002[a]). The results from many of these studies suggest that greater attention should be directed to restoration of the understory to increase cover, particularly forbs (Larison et al. 2001, Burnett and DeStaebler 2002, Recommendation 5.2). Furthermore, primary and secondary cavity nesters greatly benefit when deadwood is maintained at a restoration site (Marzluff and Ewing 2001, Gilchrist et al. 2002).

Objective 5

Design and implement cultivated restoration projects that mimic the diversity and structure of a natural riparian plant community.

Recommendations

5.1. Plant a minimum of two or more species of native shrubs or trees (i.e., avoid monotypic plantings).

Several vegetation features have broad positive effects on bird species diversity, abundance and nesting success (Table 8-2, 8-3). Many non-avian species also respond positively to these vegetation components in riparian habitats. Microhabitat characteristics can also influence nest-site selection by breeding birds. The availability of appropriate nest sites may have a direct effect on the ability of birds to reproduce and maintain a viable population (Martin 1993, Nur et al. 1996, Small et al. 1998). Results from three years of monitoring of restoration sites along the lower Sacramento River indicate that bird diversity in an area increases when two or more shrub species are present and is substantially greater when there are seven or more species (Geupel et al. 1997a). Because many of the "shrubs" detected are actually young trees, high shrub species richness may indicate riparian forests with good structure and regeneration. Studies in coastal Marin County show that bird species diversity in riparian habitats significantly correlates with tree species richness, tree height, and tree girth (Holmes et al. 1999).

5.2. Increase shrub richness, shrub density, and the rate of natural reestablishment by including plantings of understory species in restoration design.

Understory vegetation is critical as nesting substrate for many riparian bird species, especially in newly restored habitats (Larison et al. 2001, Twedt et al. 2002, DiGaudio 2003). Avian density may increase in a habitat with increased foliage density because of a higher number of potential nest sites (Martin 1988). The greater the number of potential nest sites within a given habitat patch, the greater the effort required for predators to locate prey (nest sites). Thus, nests may possess a higher probability of fledging young.

Many revegetation projects enhance growth of tree plantings by mowing the restoration plots during the first two years. After mowing, restoration managers should plant a second stage to enhance recruitment of a native understory, thereby increasing the quality of the shrub and forb layers.

5.3. Plant native forb and sedge species.

The Common Yellowthroat and Spotted Towhee use native grass and sedge frequently in the Sacramento Valley as nest substrate. An excellent resource detailing type, sources, and techniques for planting and restoring native grasses is provided in *Bring Farm Edges Back to Life!* (YCRCD 1998).

5.4. Cultivate tree species where natural hydrological processes are compromised and natural tree regeneration is limited or absent.

Seed dispersal and natural tree regeneration is sometimes compromised due to the absence of high peak flows or seasonal fluctuations in water levels (Stromberg and Patten 1990, Smith et al. 1991). Cultivating tree species where regeneration is lacking is recommended.

5.5. Plant vegetation in a mosaic design with dense shrub patches interspersed with trees to achieve a semi-open canopy.

Plantings that are concentrated into clumps will create more productive patches of habitat for nesting birds than plantings uniformly spaced over a large area. "Clumped" planting designs more closely mimic the natural establishment of vegetation after scouring or soil deposition from a flood. For example, many willows grow naturally in clumps and can be easily planted this way.

Table 8-2. The following plant species and cover types have been found to positively influence breeding bird diversity or breeding species richness in riparian habitats, by California bioregion.

	Sacramento and San Joaquin Valleys[1]	Modoc	Klamath[2]	Central Coast	Bay-Delta[3]	South Coast	Mojave and Colorado Deserts[5]	Sierra Nevada[4]
Canopy layer	• Large trees • Oregon ash	No data	• Tree cover • Big leaf maple	No data	• Tree DBH • Tree cover • Tree richness	No data	• Freemont cottonwood • Black willow	• Aspen • Black willow • # snags
Shrub layer	• Blue elderberry • Box elder • Willow species • Wild rose • California blackberry • Wild grape • Poison oak • Shrub richness • Mugwort • Shrub cover	No data	• Big leaf maple • Ponderosa pine	No data	• Shrub height diversity	No data	No data	• Willow • Snowberry • Shrub cover
Ground cover	• Mugwort	No data	• Blackberry (Himalayan or California)	No data	No data	No data	No data	• Herbaceous cover • Grass cover • Rush cover

[1] Geupel et al. 1997[a], Small et al. 2001, Burnett and DeStaebler 2001, Burnett et al. *in press.*
[2] Nur et al. 1996.
[3] Gardali et al. 1999; Gardali et al. 2001, Holmes et al. 1999, DiGaudio 2003.
[4] Heath et al. 2001, Heath and Ballard 2003a, Heath and Ballard 2003[b], Heath 2002, Stefani 2000.
[5] Anderson et al. 1983.

5.6. Retain at least some existing trees on restoration sites, planting around them, to promote occupancy of the plot by birds requiring mature trees (e.g., cavity nesters, orioles, etc.). Projects that plan to remove orchards should consider leaving a few trees in small clumps (with the exception of fig or other species with invasive root stocks).

Both primary and secondary cavity nesters are common in natural forests and are excluded from nesting on restoration sites that lack older trees due to lack of nest sites. When possible, restoration managers should leave a few old trees with cavities and snags or girdle younger, healthy, non-native trees. It is essential to provide cavity nesters with habitat until planted trees grow sufficiently to provide nests.

Photo by Eric Preston, ericapreston.com

Consider the needs of cavity nesters at restoration sites.

5.7. Connect patches of existing riparian habitat with strips of dense, continuous vegetation that are at least 3-10 meters wide.

The connection of habitat patches is an important restoration consideration. Relatively sedentary species, such as Song Sparrows, Spotted Towhees, and Wrentits, may be affected most by patch isolation. These birds may disperse more widely and effectively if existing source populations were well connected with unoccupied habitats (such as linking the Butte Sink, which supports Song Sparrows, with the Sacramento National Wildlife Refuge, which does not, despite appearing to have suitable habitat). Even narrow strips may function as dispersal corridors. Song Sparrows, Wrentits, and Spotted Towhees have been observed in strips as narrow as 1 meter, and other species have been observed in strips 10 meters wide (Soulé 1988, PRBO unpublished data). These strips probably do not provide adequate breeding habitat, and nesting individuals may have low reproductive success. However, they may be vital in linking populations that would otherwise be isolated from one another, a benefit which outweighs the low reproductive success of relatively few individuals.

Management Recommendations

Effective management of riparian areas is as crucial as habitat restoration to the survival and recovery of riparian birds. Proper management increases habitat value to wildlife, arrests species declines, and contributes to the recovery of declining bird populations. Landscape-scale patterns of land use are of critical importance, influencing whether riparian bird populations remain stable over the long term.

Objective 6

Implement and time land management activities to increase avian reproductive success and enhance populations.

Recommendations

6.1. Manage riparian and adjacent habitats to maintain a diverse and vigorous understory and herbaceous layer, particularly during the breeding season.

The number of young produced in a bird population (reproductive success) may be the most important factor influencing a species' occurrence and persistence in an ecosystem. When less than 20% of nests survive to fledge young, nest success is considered poor and it probably indicates a nonviable population (Martin 1992, Robinson et al. 1995, Trine 1998, Budnik et al. 2000). Early successional habitats with a dense, shrubby understory and herbaceous groundcover are critical for successful nesting of nine of the 17 focal riparian species. Not surprisingly, shrub cover around the nest is an important variable in nest-site selection for many species (Table 8-3). The following recommendations will promote understory and groundcover quality:

- Use groundcover in orchards and vineyards to discourage foraging by Brown-headed Cowbirds, thereby increasing birds' reproductive success. Use of a native species groundcover is preferable. Managers should either avoid mowing through the nesting season or maintain the layer to 6 inches in height to discourage use by nesting birds.

- Control star thistle and other "weedy" non-native species to promote a diverse herb layer.

- Allow natural disturbance regimes, particularly periodic floods.

Grazing, mowing, and burning are common land management practices that significantly affect the understory. Options for managing these activities include:

- Manage grazing intensity and location to ensure riparian deciduous shrubs are recruiting well and are not "highlined" (i.e., cattle do not destroy all the foliage within their reach).

- Manage grazing intensity and timing to avoid direct impacts to low-nesting birds during breeding season.

- Postpone mowing until after peak breeding season. If mowing must be done during breeding season, maintain a low herbaceous layer of no more than 6 inches to discourage birds from nesting there in the first place.

- If burning must be used as a management technique, burn the groundcover in riparian habitats after the end of the breeding season.

The Willow Flycatcher demonstrates how land management activities can affect a breeding population. The subspecies of Willow Flycatcher *E. t. brewsteri* depends upon montane meadows in the Sierra Nevada for nesting. Grazing cattle in mountain meadows during the breeding season has both direct and indirect effects on Willow Flycatchers. Directly, cattle move through meadow willows and destroy Willow Flycatcher nests by bumping against or trampling them. Indirectly, browsing decreases foliage density in willows and other shrubs at heights lower than 1.5 meters, where Willow Flycatcher nests occur. This reduces the number of available nest sites and exposes existing nests to predators.

In desert riparian areas, grazing by wild burros severely affects riparian vegetation and associated bird species. The effects of burros in some areas include (BLM 1998):

- High browse lines and severe hedging of riparian trees and shrubs, which eliminates understory nesting habitat.

- Pulling forage plants out by the roots, possibly contributing to invasion by competitive non-native plants.

- Soil compaction along burro trails, which leads to erosion or inhibits seedling establishment.

These effects combine to destroy the vegetation, and in the harsh desert environment, the habitat recovers more slowly than in other riparian types in California.

Table 8-3. The following plant species and cover types have been found to positively influence select focal species occurrence[a], abundance[b], nest success[c] and nest site selection[d] in riparian habitats, by California bioregion.

	Sacramento and San Joaquin Valleys[1]	Bay-Delta[2]	South Coast[3]	Sierra Nevada[4]
Willow Flycatcher	Species not present	Species not present		• Willow cover[a,b] • Foliage density[a,b]
Warbling Vireo		• Tree richness[a] • Shrub height diversity[a]		• Aspen[a] • Tree height[a]
Least Bell's Vireo	Species not present	Species not present	• Shrub cover[a,b] • Tree cover[a,b] • Tree DBH[c] • Herbaceous cover[d] • Low Aquatic vegetation[d]	Species not present
Swainson's Thrush		• Tree cover[a,d] • Tree height[a] • Hedgenettle[d]		• Canopy closure[a] • Willow patch size[a]
Yellow Warbler	• Himalayan blackberry[b] • Valley oak[b]			• Grass[a] • Wild rose[c] • Willow[a]
Common Yellowthroat	• Shrub richness[a] • Mugwort[a] • Santa Barbara sedge[a]	• Herb cover[a] • Marsh cover[a] • Shrub cover[a]		

Table 8-3 continued

	Sacramento and San Joaquin Valleys[1]	Bay-Delta[2]	South Coast[3]	Sierra Nevada[4]
Wilson's Warbler		• Tree richness[a] • Small trees[a] • California bay[c]		
Yellow-breasted Chat	• Sedge[b] • Black mustard[b] • Sandbar willow[b] • California blackberry[b]			
Black-headed Grosbeak	• Tree richness[a] • California blackberry[a] • Mugwort[a] • Freemont cottonwood[b] • Black mustard[b]	• Tree height[a] • Shrub height diversity[a] • Tree cover[a] • Shrub cover[a] • Tree richness[a]		• Tree species richness[a] • Wild rose[c]
Blue Grosbeak		• Tree richness[a] • Shrub cover[a]		
Song Sparrow	• Valley Oak[b] • Pipevine[b] • Mugwort[b] • Black mustard[b]	• Marsh cover[a] • Shrub height[a] • Herb cover[a] • Red alder[c] • Litter depth[c] • Shrub cover[a,c] • Tree richness[a]		• Willow[a]

[1] Small et al. 2001, Burnett and DeStaebler 2001, Burnett et al. *in press.*
[2] Holmes et al. 1999, PRBO data, Gardali et al. 1999, DiGaudio 2003, Haff 2003.
[3] Salata 1981, Salata 1983, Goldwaser 1981, RECON 1989, Olson and Gray 1989, Kus 1998.
[4] Heath and Ballard 2003, Heath et al. 2001, Heath and Gates 2002, Stefani 2000, Bombay et al. 2003, Bombay 1999, Sanders and Flett 1989.

6.2. Manage or create "soft" edges (through establishment of hedgerows at field margins) appropriate to historical vegetation patterns.

"Soft" edges are gradual boundaries between differing vegetation or land uses where plant succession occurs. Historically, along many of California's rivers, a wetland area graded into scrubby willow that graded into riparian forest. This pattern created a mosaic landscape, where different habitats smoothly merged together into an ecotone. Soft edges are preferable to "hard" edges (abrupt changes in vegetation type) because predation levels along hard edges are higher (Suarez et al. 1997). Creating hedgerows using native plant species along forested riparian zones at the edge of agricultural fields results in "softer" edges. The Yolo County Resource Conservation District publication, *Bring Farm Edges Back to Life!* (YCRCD 1998), details how to create and mange hedgerows.

6.3. Avoid the construction or use of facilities and pastures that attract and provide foraging habitat for Brown-headed Cowbirds.

Management should avoid aggregations of livestock and associated livestock facilities (e.g., corrals, pack stations, salting areas and feedlots) near riparian nest sites during the breeding season whenever possible. Livestock, livestock facilities and human habitation provide foraging areas for cowbirds (Mathews and Goguen 1997, Tewksbury et al. 1998), who feed in short stature vegetation within "commuting distance" of their laying areas. In the eastern Sierra Nevada, weekly point counts at pack stations and adjacent riparian areas revealed significantly more cowbirds at pack stations than in riparian areas in most years and at most sites (Heath et al. 2002[a], 2002[b]). Furthermore, managers should discourage human habitation near riparian areas and bird feeders should be avoided during the breeding season if cowbirds are using them as supplemental food. In the eastern Sierra Nevada, weekly evening area searches in a suburban development near a riparian drainage documented, on average, six cowbirds per visit, with as many as 60 cowbirds observed foraging at one bird feeder on several occasions (PRBO data).

The proximity of active livestock grazing may also determine the feeding distributions of cowbirds and the distances they will commute between foraging and laying areas (Mathews and Goguen 1997). Grazing and human facilities within one kilometer of breeding sites affect reproductive success more negatively than facilities located farther away. Establishing cowbird buffer zones around riparian areas during the avian breeding season may reduce the impact of cowbirds on host species. The creation of such buffers may be difficult, however, since cowbirds may regularly commute up to 12 km between foraging and laying areas (Mathews and Goguen 1997).

In the Bitteroot River Valley of Montana, cowbird abundance declined significantly with increasing distance from agriculture (Tewksbury et al. 1998). Additional feeding areas (i.e., agriculture, livestock) located farther than one km from a laying area have no apparent additional impact on the density of cowbirds or brood parasitism. However, this study did not assess the effect of facilities located at greater than one km from the riparian zone in the absence of facilities located within a one km range. Forest Service management guidelines focused on the Willow Flycatcher recommend avoiding the establishment of new facilities within a two to five km range of important riparian areas. If this is not possible and if landscape features aggregate livestock, then livestock use should be limited during the breeding season (generally, April 1- June 30 for lowland nesting species and May 15 August 15 for nesting areas at high-elevation).

6.4. Brown-headed Cowbird trapping should only be used as an interim/emergency measure. Trapping can save or maintain a threatened population of host species while sustainable, habitat based solutions are developed, but should not be considered a long-term solution.

The consensus of expert opinion indicates that cowbird trapping is at best a temporary stopgap solution (Morrison et al. 1999). Preferably, land managers should focus on restoring riparian habitat and guide land use to lessen the negative impacts of cowbirds. A species will never fully recover as long as they rely upon human intervention for their survival (Kus 1999). The North American Cowbird Advisory Council recently formed to address trapping issues, review trapping programs, and advise land managers and regulatory agencies (http://cowbird.lscf.ucsb.edu/). Cowbird trapping is not an appropriate response to parasitism in many cases because:

- The Brown-headed Cowbird is a native North American breeding species
- It is not a long-term solution.
- It can be expensive and requires constant management
- There are ethical considerations and impacts on non-target species.
- A permanent trapping program may be a factor that weighs against delisting of threatened and endangered species (Kus 1999, Morrison et al. 1999).
- It may be detrimental to host species by removing experienced female cowbirds that are more selective in their host selections and egg laying, creating a void filled by more numerous, younger individuals (Hahn et al. 1999).

Additionally, cowbird trapping in areas such as the lower Sacramento River and the Cosumnes River, where restoration of habitat through large-scale natural recruitment is currently underway, would preclude the ability to monitor wildlife response to restoration efforts in the absence of cowbird trapping. Therefore, we will miss opportunities to learn whether songbird populations can recover simply due to habitat restoration without active cowbird management.

6.5. Manage or influence management at the landscape level (i.e., land surrounding riparian corridors or, preferably, the whole watershed).

Landscape scale land use patterns significantly affect the population levels of Brown-headed Cowbirds and avian predators in an area. With increases in cowbird and predator populations, species often suffer poor reproductive success and, possibly, population declines. Eventually, local extirpation of the species may occur. Managers should discourage certain adjacent land uses that subsidize cowbirds and avian predators, including intensive grazing, golf courses, human habitation and recreation areas, and pack stations. Grazing should be avoided during the breeding season in livestock pastures bordering riparian areas (Goguen and Mathews 1999, Hochachka et al. 1999). Linking and buffering large sections of riparian and associated upland habitat may restore top predators, such as coyotes or bobcats to the riparian system. These predators may, in turn, reduce populations of avian nest predator such as skunks, raccoons and snakes.

When grazing or agriculture constitutes a significant percentage of the landscape near the riparian corridor (particularly within a 1-12 km distance), the following are recommended:

- Use integrated pest management or organic production as an alternative to pesticide use. This prevents damage to nesting birds and increases available foraging habitat, especially in orchards immediately adjacent to healthy riparian areas. Riparian songbirds rely on local insect populations to feed young during the breeding season.

- Use groundcover crops in orchards and vineyards to minimize cowbird foraging habitat. Managers should limit or avoid mowing groundcover during the breeding season (see Recommendation 6-1).

- Eliminate, reduce, or closely manage grazing in spring and during the breeding season (April-July) to maximize the understory habitat value to wildlife and minimize foraging habitat for cowbirds.

- If grazing must occur in riparian zones, establish wide pastures and move cattle often to avoid the devastating impacts of year-round grazing.

6.6. Limit restoration activities and disturbance events such as grazing, disking, herbicide application, and highwater events to the nonbreeding season. When such actions are absolutely necessary during the breeding season, time disturbance to minimize its impacts on nesting birds.

The nesting season is a critical period for the maintenance of bird populations (Martin 1993). Some management activities, such as ground preparation for planting or water impoundment, can have serious consequences for breeding songbirds by destroying nests and nesting habitat or causing nest abandonment. Managers often have a degree of flexibility, allowing them to schedule these activities outside the breeding season while still achieving their management objectives. In general, the breeding season in California may begin as early as March and continue through August, depending on region, habitat type and elevation (Table 8-4).

6.7. Coordinate with management and restoration projects targeted at non-avian taxa to maximize the benefits of conservation of riparian habitats.

Extending riparian habitat restoration and management beyond avian requirements alone is essential. Many non-avian species respond positively to vegetation components and riparian functions that are important for bird populations in riparian habitats of California. The federally endangered riparian brush rabbit is an excellent example of a riparian-dependent species that needs our attention immediately. The riparian brush rabbit, or "brush bunny," is a small cottontail rabbit that is one of eight subspecies of brush rabbits native to California. Like many birds outlined in this document, they depend on a dense understory in riparian oak forests that includes willow thickets, California wild rose, wild grape and Pacific blackberry. In response to their perilous status, the Endangered Species Recovery Program leads a captive breeding program to reintroduce brush rabbits into California riparian areas. The story of the brush bunny illustrates a critical conservation concept: not only do birds benefit from dense riparian understories, but also other species like the endangered brush rabbit. For more information on the riparian brush rabbit, see the following web site: (http://sacramento.fws.gov/es/animal_spp_acct/riparian_brush_rabbit.htm).

Table 8-4. Dates of earliest egg, latest first egg, peak of egg initiation and timing of breeding season for riparian-breeding bird species by study site and bioregion. Derived from nests monitored every four days, all nests for all species combined.

Bioregion and study site	Earliest first egg	Latest first egg	Peak of egg initiation	Breeding Season
Sacramento Valley				
Clear Creek[5]	1st week March	2nd week July	April 30 – June 30	mid March – mid August
San Joaquin Valley				
San Luis NWR	April 12	July 23	April 1 – August 20	
Modoc[1]				
Lassen NF and NP	April 10	----	----	April 5 – August 31
Klamath	No data for this bioregion			
Central Coast	No data for this bioregion			
Bay-Delta				
West Marin county[4]	March 19	July 6	----	mid March – mid August*
South Coast	No data for this bioregion			
Mojave Desert	No data for this bioregion			
Colorado Desert	No data for this bioregion			
Sierra				
Owens Valley alluvial fan[2]	March 29	July 21	May 16 – June 15	Mar 25–August 31
Mono Basin[3]	April 4	July 25	May 16 – June 15	April 1–August 31
> 2500m Mono and Inyo co[3]	April 29	July 26	May 16 – June 15	April 20–August 31

[1] King et al. 1999
[2] Heath et al. 2001
[3] Heath et al. 2002a, Heath et al. 2002b
[4] Gardali et al. 1999
* Hummingbirds can nest year-round in this bioregion.

Objective 7

Protect, enhance or recreate natural riparian processes, particularly hydrology and associated high water events, to promote the natural cycle of channel movement, sediment deposition, and scouring that create a diverse mosaic of riparian vegetation types.

Recommendations

7.1. Avoid impacts on the natural hydrology of meadows, streams, and river channels, particularly in high-priority areas managed for riparian species. (See Recommendation 1.4)

The following options minimize damage to natural hydrology:

- Protect areas where grazing may be drying meadows or streams through soil compaction and gullying; provide alternative water sources for cattle.

- Implement grazing standards that protect natural hydrology; reduce soil compaction, erosion, and water pollution due to grazing.

- Limit or contain recreational use of meadows (e.g., off-road vehicles, horses, camping) that can compact soils and negatively affect hydrology.

- Manage upslope areas (e.g., timber harvest, road building) so that hydrologic function is maintained.

- Implement revegetation projects such as "willow walls" to prevent erosion and provide habitat.

7.2. At sites with dams or other flood control devices, manage flow to allow a near natural hydrograph (i.e., mimic natural flood events) sufficient to support scouring, deposition, and point bar formation. Time managed flood events to avoid detrimental impacts on Bank Swallow nesting colonies.

Managers should modify reservoir storage during wet years to simulate the natural, seasonal pattern of short duration flood peaks. The establishment and succession of native riparian vegetation rely upon a natural hydrology in the river system and provide essential habitat for many riparian-associated birds. Interruptions of these processes, including dams, levees, and water diversion, have significantly contributed to the decrease in riparian habitat and the consequent decline in songbird populations. Many non-native plant species are flood-intolerant, and the loss of regular scouring floods has abetted their invasion of the Central Valley. As invasive plants increasingly dominate a habitat, many native birds lose essential nesting and foraging habitat. For more information, please see the Sacramento River Conservation Area Handbook (Sacramento River Advisory Council 1998).

Bank Swallows are particularly vulnerable to poorly timed water management. The Bank Swallow nesting season extends from late March through early July, varying with seasonal weather fluctuations. During this period, the swallows nest in sandy banks along rivers. "Pulse flows" or "flushing flows" designed to mimic natural flood events may potentially wipe out entire colonies in a single event. These artificial flows, often used in fish management and restoration projects, should be prohibited (or at least severely curtailed and closely monitored) during the swallow's breeding season (April through July). Flows that artificially raise levels more than 2-3 feet during the breeding season should be avoided altogether. With 50% of the state's remaining Bank Swallow population nesting along the Sacramento River from Red Bluff to Colusa, a poorly timed flow event could have dire consequences.

7.3. Control and eradicate non-native plant species. Such control is best planned and implemented on a watershed scale.

The non-native plant species listed in Table 8-5 have invaded riparian habitats to the detriment of native flora and fauna. Their negative effects on bird communities are probably much more widespread than noted in the table. Invasive, introduced plants affect native birds by:

- Competing with native vegetation, thereby eliminating useful foraging and nesting habitat.
- Providing a sub-optimal nesting substrate, in which nest success is reduced
- Reducing several orders of native insects (NPS 1998).
- Enhancing non-native animal populations.

In river systems, these non-native plants often spread very quickly and should be controlled at the first sign of their presence. Managers should be especially concerned with the invasion of tamarisk and giant reed in desert riparian habitats. The species displace native vegetation and disrupt the system by drying perennial streams. Species diversity of resident songbirds was negatively correlated with riparian vegetation dominated by saltcedar at the Salton Sea and several bird species were negatively associated with saltcedar dominance (Holmes et al. 2003). Removal of these species can restore the flow of these seasonal streams (BLM 1998), allow native vegetation growth, and subsequently provide more and better habitat for birds.

Control of non-native species is much less expensive and more effective if conducted before the species has spread into extensive monotypic stands. This is particularly true in a riparian system where seeds, rhizomes and vegetation easily spread downstream. Control efforts, therefore, must be planned and undertaken on a watershed scale, preferably beginning with the removal of the invasive species which is furthest upstream.

In many areas, California black walnut is planted as a native; however, some botanists believe this plant was introduced early during the colonization of California. Black walnuts exude a sap that is a natural herbicide (juglans) that can result in a sparse understory beneath a black walnut canopy. Black walnut is detrimental to the nesting success of Yellow-billed Cuckoo and shows no positive influence on nest success of those species that do use it as nest substrate, including the Black-headed Grosbeak, Western Wood-pewee, Western Kingbird, House Wren, and Nuttall's Woodpecker. Black Walnut negatively influences nest-site selection by Lazuli Bunting, House Wren, and Spotted Towhee and negatively influences nest success of many cavity-nesting birds (Geupel et al. 1997[a]).

7.4. Control and eradicate non-native animal species.

Non-native animals can have a severely negative impact on birds. Invasive bird species such as European Starlings and House Sparrows often out-compete native birds for nest sites and have been known to destroy active nests and even kill nesting adults. Introduced animals, such as domestic cats, kill millions of birds every year. To reduce the effects of non-native animals on native birds:

- Avoid establishing human habitat near riparian zones.
- Do not feed or otherwise encourage populations of feral animals.
- Keep cats indoors.
- Do not put bird feeders in a yard where a cat might ambush feeding birds.
- Humanely control non-native species when necessary.

Table 8-5. Non-native species and their effects in riparian habitat.

Introduced Species	Scientific Name	Effects/Bird Species Affected [1]
Acacia	*Acacia dealbata*	Out-competes and hinders the establishment of willow-alder stands (Danner pers. comm.)
Black locust	*Robinia pseudoacacia*	Displaces native habitat
Black walnut	*Juglans californica*	Western Yellow-billed Cuckoo, Lazuli Bunting, Spotted Towhee, House Wren and other cavity nesters
Cocklebur	*Xanthium strumarium*	Bell's Vireo
Cape-ivy (German ivy)	*Delairea odorata*	Swainson's Thrush. Overtops and out-competes native understory and trees
Edible fig	*Ficus carica*	Western Yellow-billed Cuckoo
English ivy	*Hedera helix*	Chokes riparian trees
Giant reed	*Arundo donax*	Bell's Vireo
Periwinkle	*Vinca major*	Out competes understory plant species (Danner pers. comm.)
Purple loosestrife	*Lythrum salicaria*	Grows in dense stands that support less avian diversity but greater density than some native habitats (Whitt et. al. 1999)
Russian olive	*Elaeagnus augustifolius*	Willow Flycatcher
Sticky eupatorium	*Ageratina adenophora*	Obstructs waterways and forms dense strands on drier uplands (Danner pers. comm.)
Tamarisk	*Tamarix chinensis*	Least Bell's Vireo
Tasmanian blue gum	*Eucalyptus globulus*	Golden-crowned Kinglet, Ruby-crowned Kinglet
Opossum	*Didelphis virginiana*	Predator of many species, particularly those that forage and nest near or on the ground
House cats	*Felis catus*	Predator of many species, particularly those that forage and nest near or on the ground

[1] Unless otherwise noted, sources for the information provided in this table came from the species accounts developed as the first step in producing this conservation guide. Visit http://www.prbo.org/calpif/htmldocs/riparian.html.

Monitoring and Research Recommendations

Objective 8

Provide data on pressing conservation issues affecting birds.

In order to successfully protect and expand native bird populations, managers must have the most recent data available on populations and their habitat needs. Standardized scientific monitoring of populations will provide decision-makers with these essential tools.

Recommendations

8.1. Consider reproductive success and survival rates when monitoring populations, assessing habitat value, and developing conservation plans.

The number of young produced in a bird population (reproductive success) critically influences a population's presence, health and sustainability in an area. Reproductive success is a primary demographic parameter that provides critical information for understanding patterns of population change. Hence, these data can be used to understand trends, focus conservation action and funds, and identify hypotheses for further evaluation. When fewer than 20% of nestlings survive to fledge young, nest success is considered poor and probably indicates a nonviable population. Nur et al. (2004) and Shaffer (*in press*) describe feasible analytical techniques for monitoring nest survival as a function of covariates such as environmental and/or temporal variables. These variables may be quantitative (e.g., vegetation measurements, nest height, date, nest age) or qualitative (e.g., habitat type, management practice). However, to adequately measure annual productivity, investigators should not stop at calculating nest success alone (Thompson et al. 2001, Anders and Marshall *in press*); instead we should also strive to accurately 1) count re-nesting attempts after nest failure, 2) count number of young fledged per successful nest, 3) measure double brooding frequency by following color-marked birds throughout the breeding season.

Monitoring annual adult survival is important in the same way as discussed for reproductive success; population trends can thus be better understood from monitoring the interaction of these demographic parameters. Survival can only be confidently calculated for adults after at least four years of mark/recapture data (such as mist-netting) have been obtained (Nur et al. 1999). Research seeking to determine productivity for a breeding population should include at least four years of nest-searching and/or mist-netting.

8.2. Conduct intensive, long-term monitoring at selected sites. In order to analyze trends, long-term monitoring should continue for more than five years.

Long-term data are vital to deciphering the difference between a true population decline and a natural fluctuation in population size. Because conservation dollars are limited, the best possible data on population trends are needed so as not to squander scarce resources on a species that is not truly in decline. Long-term monitoring should be conducted at reference sites that embody the

characteristics restoration efforts strive to recreate. Additionally, long-term monitoring at key experimental sites can test the assumptions that currently drive restoration and management practices. Intensive monitoring includes collecting data on primary demographic processes and associated habitat characteristics and seeks to identify causal connections between habitat variables and species viability. Biologists collect data on reproductive success, breeding densities, reproductive success, parasitism, survival, vegetation data, suitable habitat requirements, and general life-history information. Managers can employ these data to make well-informed, adaptable management plans.

8.3. Investigate the relationship between herbaceous vegetation height and avian productivity and recruitment, especially in wet meadows.

Wet meadows are vital habitats for birds in the Sierra Nevada (Siegel and DeSante 1999). Grazing and other resource-extraction activities compromise these areas and endanger some local avian populations (see Chapter 7: Bioregional Conservation Objectives). More study of the effects of grazing, fire suppression and non-native plant invasion would facilitate the development of grazing prescriptions that are less detrimental to nesting and migrating birds.

8.4. Develop a series of monitoring and research projects that:

1) Determine the habitat attributes that affect migratory stopover use.
2) Assess how migratory stopover habitat may affect species survival.
3) Define conservation priorities and recommendations for stopover habitat.

While vital as breeding grounds, riparian corridors also provide essential stopover habitat for migrating birds. However, little information exists regarding which habitat factors attract and affect migrants. Events at migratory stopover areas may significantly affect certain populations and contribute to declines (Moore et al. 1995, Yong et al. 1998). Monitoring programs should attempt to have a broad geographic scope and seek to collect data on a wide variety of variables, including avian diversity, abundance, stopover duration, fat deposition/physical condition, and vegetation characteristics.

8.5. Conduct selective monitoring at critical sites to determine the effects of cowbird parasitism on the Willow Flycatcher, Bell's Vireo, Warbling Vireo, Common Yellowthroat, Blue Grosbeak, Wilson's Warbler and Yellow Warbler.

Brown-headed Cowbird parasitism has potentially devastating effects on the populations of these and many other species in California. Habitat size, vegetation structure, and adjacent land use all influence the rates of cowbird parasitism. By studying the variables involved, conservationists can better formulate landscape-level management plans to enhance bird populations.

8.6. Conduct selective monitoring at key sites to determine the factors influencing nest success of the Song Sparrow, Lazuli Bunting, Yellow Warbler, Willow Flycatcher and Warbling Vireo.

Relatively recent, local extirpation and declines of these and other western species from their historical breeding range appear to be caused by low productivity (Johnson and Geupel 1996, Chase et al. 1997, Gardali et al. 1998, Gardali et al. 2000). Local extirpation may signal the early stages of a process of severe population declines. By determining the factors associated with low reproductive success, research may identify which management and restoration actions will help reverse songbird population declines. Land managers, owners and regulatory agencies gain greater freedom in their decision-making if they conserve bird species before special-status listing becomes necessary.

Monitoring the reproductive success of key species provides gauges that allow management changes before it is too late.

Objective 9

Maximize the effectiveness of ongoing monitoring and management efforts.

Recommendations

9.1. Increase communication and coordination between land managers and specialists hired to implement specific projects or conduct monitoring.

Experts, such as those conducting endangered species or biodiversity inventories, should be consulted and included as part of project implementation teams. By doing so, managers can quickly and easily access a wealth of detailed information on local birds and their response to management activities. For example, bird monitoring in restored riparian habitats on the Stony Creek Preserve along the Sacramento River has provided detailed information about breeding birds and their habitat requirements and offered suggestions on how maintenance activities can be implemented with minimal disturbance. Managers on the preserve can quickly incorporate new data into management regimes, honing their project designs to better benefit birds.

9.2. Use standardized monitoring protocols.

By standardizing monitoring techniques, researchers ensure that results can be compared across space and time. The USDA Forest Service published guidelines for standardized monitoring techniques for monitoring birds (Ralph et al. 1993). Please refer to Appendix A for more information.

9.3 The CALFED Bay-Delta Authority should continue to incorporate bird monitoring into all riparian and wetland habitat restoration projects as a way to assess avian response, evaluate projects, and most importantly, adaptively manage.

CALFED is a state agency in California formed to implement the Bay-Delta Accord, signed in 1994. The Accord agreed to develop a Bay-Delta Conservation Plan that would seek to address issues of water quality, water supply, wildlife habitat, and flood control. A major CALFED program is the Ecosystem Restoration Plan, which, when approved, could be implemented with close to $1 billion in state and federal funds over the next 20 years. While the Ecosystem Restoration Plan considers the Central Valley, Delta, and San Francisco Bay riparian and wetland habitats, it historically focused on aquatic species. Realizing the efficacy of bird monitoring programs and their ability to provide information to adaptively manage habitat projects, most new CALFED projects now contain a bird monitoring element. Furthermore, if mistakes are made and practices are harming bird populations, managers can alter their methods and avoid similar mistakes in the future. With additional monitoring, a steady feedback loop of management, monitoring, and revision of practices is established.

9.4. Maximize the cost effectiveness and value of existing specialized monitoring programs for listed species (e.g., those oriented toward Western Yellow-billed Cuckoo and Willow Flycatcher) by collecting standardized data on multiple species (such as point counts) in addition to any specialized protocols aimed at one species.

Many state and federally sponsored surveys only monitor special-status species. By adding a standard protocol that provides information on multiple species while conducting special-status species surveys, researchers could rapidly expand their knowledge of California's birds. Such data could be shared and analyzed and results would be added to conservation plans and incorporated into management regimes. Even if resources are not immediately available for analysis, the information will provide a baseline or historical perspective on bird distribution and abundance.

9.5. Determine what habitat and population characteristics are necessary to successfully wean a songbird population from cowbird trapping.

Most experts agree that cowbird trapping is only a temporary measure for relieving parasitism pressure on landbirds (Morrison et al. 1999). Furthermore, intense cowbird trapping has proven ineffective for certain local populations on the edge of extirpation. Willow Flycatcher populations at both the Kern River Valley and Camp Pendleton failed to increase after extensive cowbird control efforts. It is likely that there are other factors negatively influencing these populations. Although some species experience marked population growth following cowbird trapping (i.e., Least Bell's Vireo), often times little attempt is made to assess the extent to which other management actions, such as improved and expanded habitat, have contributed to the increases (USFWS 2002).

9.6. Coordinate with monitoring and research projects targeted at non-avian taxa to maximize the benefits of the protection, management and restoration of riparian habitats. Stream amphibians also provide another means of measuring environmental stress, and like birds, amphibians can be good indicators of different niches within riparian habitats (Welsh and Olliver 1998). Like birds, widespread declines of amphibians are well documented (Blaustein and Wake 1990, Wake 1991 and 1998, Pechmann and Wilbur 1994) and amphibians use diverse riparian habitats throughout California. The federally listed endangered Arroyo Southwestern Toad uses most common riparian types in southern California for foraging and dispersal, and females and breeding season males prefer channel and terrace habitats to campground, agricultural or upland habitats. The natural flooding disturbance regimes that encourage understory vegetation growth and provide habitat for declining bird species also promote continuous availability of preferred breeding habitat for the Arroyo Toad (Griffin and Case 2001).

Objective 10

Expand research and monitoring of selected special-status species to address pressing conservation issues.

Recommendations

10.1. Identify and implement research relevant to management of Tricolored Blackbirds, which continue to decline in California.

The most recent surveys of Tricolored Blackbirds in California show a continued population decline in Central Valley wetland habitats. This is likely due to a lack of management for this species. Tricolored Blackbirds require acceptable nesting substrates and adequate water levels throughout the

breeding season to discourage mammalian predators. Harvesting of silage and plowing of weedy fields currently are the most common reasons for destruction of nesting colonies (Beedy and Hamilton 1999). Therefore, managers must make thoughtful, well-informed decisions to protect these populations.

10.2. Identify winter range, habitat, and possible overwintering conservation issues for as many Neotropical migrants as possible, including the Western Yellow-billed Cuckoo, Least Bell's Vireo, and Swainson's Hawk.

Wintering grounds play a significant role in the life cycles of Neotropical migratory birds. If a population is declining primarily due to low overwinter survival, no amount of effort to restore or protect breeding grounds will suffice to conserve the species. Additionally, recent research implies that declines in habitat quality on wintering or migratory stopover grounds may lead to lower productivity on breeding grounds (Marra 1998).

For many species, little information is available on overwintering habitat requirements and survival. Least Bell's Vireos overwinters in unknown locations in Baja California. Western Yellow-billed Cuckoos show a very distinct sex ratio in their breeding populations (8 males to every 1 female); if the sexes have different wintering grounds, and the females' has been destroyed or compromised, the ratio could skew further in the future, further imperiling the population. Preliminary radio telemetry data indicate that the Central Valley Swainson's Hawk overwinters in Mexico and Colombia, while Swainson's Hawks from other regions winter in the pampas of Argentina. Conservationists would learn much from solving such questions regarding overwintering habitats.

10.3. Inventory the Central Valley for Swainson's Hawk territories and map distributions of nesting and foraging habitat to develop a target population size. Plan management strategies for protecting priority habitats.

Swainson's Hawks in the Central Valley are more closely associated with riparian habitats than populations in other bioregions. Migratory patterns, overwintering areas, and relative isolation of breeding grounds suggest that this area may support a distinct metapopulation, which should therefore be managed as such.

10.4. Conduct statewide surveys to establish current population and range sizes every five years for the Swainson's Hawk and Bank Swallow, and every 10 years for the Western Yellow-billed Cuckoo.

Such surveys will provide a comprehensive picture of the state of these species and monitor long-term population trends in California. They would alert managers to population declines or expansions. As recommended in 8-2, these surveys should include the collection of as much data as possible on all other riparian birds.

Objective 11

Use information gathered from avian monitoring and research programs to improve the effects of agricultural and land management techniques on birds.

Recommendations

11.1. Work cooperatively with agricultural researchers to assess the potential of agriculture adjacent to existing riparian areas to be more "bird friendly."

Researchers could explore:

- Techniques for minimizing or eliminating cowbird foraging habitat.

- The relative utility to wildlife of row crops versus permanent crops (e.g., orchards, vineyards) as buffers.

- Creating habitat within a farming system through the use of hedgerows, tailwater ponds, hill ponds, irrigation canal and levee revegetation, and roadside buffer strips (YCRCD 1998).

- USFWS records describe Swainson's Hawk mortality events involving from one to 40 birds killed by applications of organophosphate and carbamate insecticides in agricultural fields, particularly in autumn, when flocks fed on insects in harvested fields. Goldstein et al. (1999) attributed high hawk mortality in the pampas of Argentina to poisoning by the organophosphate insecticides monocrotophos and dimethoate, used to control grasshoppers.

11.2. Devise an urgently needed method for controlling giant reed.

Giant reed, often referred to as Arundo, has spread throughout riparian zones in southern and central California, wreaking havoc with native plant communities and the natural hydrology of the area (see Recommendation 7.3). Current control efforts, which primarily employ physical removal and herbicides, appear inadequate to halt the invasion of this species. More effective measures, including biocontrol, must be sought.

Policy Recommendations

Conservation efforts will make little headway without effective policy development. The future of habitat conservation in the West lies not only in the activity of scientists and restoration experts in the field, but also within the walls of statehouses and the pages of law. Policy makers need to examine and appropriately amend statutory and regulatory programs that endanger native habitats or that unnecessarily impede restoration actions. Whenever possible, policy should encourage governmental support of innovative local conservation and sustainable-growth projects.

To achieve conservation and management goals, diverse interests must effectively combine their skills and financial resources. Partners in Flight and the Riparian Habitat Joint Venture embody this kind of cooperative effort. In these groups, scientists, governmental agencies, nonprofit organizations and private citizens share information and concerns and collaborate on solutions. The biological recommendations in this Conservation Plan are readily available to policy-makers, public land managers and private landowners. Furthermore, the findings described here will be relevant to the Partners in Flight North American Landbird Conservation Plan, enhancing conservation efforts throughout the country.

Funding from the National Fish and Wildlife Foundation, derived from the Neotropical Migratory Bird Conservation Initiative, and the USDA Forest Service Partners in Flight awards continue to catalyze conservation activity across the country. Government agencies participating in the RHJV intend to use this Conservation Plan to guide their riparian conservation projects. These agencies include the California Wildlife Conservation Board, the U.S. Bureau of Reclamation, the U.S. Fish & Wildlife Service, the USDA Forest Service, and recent efforts by the Bureau of Land Management.

The following recommendations seek to assist policy advocates and decision-makers as they shape the regulations and procedures that affect avian conservation in the West.

Objective 12

Encourage regulatory and land management agencies to recognize that avian productivity is a prime criterion for determining protected status of specific habitats, mitigation requirements for environmental impacts, and preferred land management practices.

Recommendations

12.1. Land managers should consider avian population parameters, such as reproductive success, as important criteria when designating priority or special-status sites, such as Areas of Critical Environmental Concern (BLM), Research Natural Areas (BLM, USFS) and other publicly owned areas specially managed for biodiversity.

Until recently, few data regarding avian reproductive success at many important riparian sites have been available. Government land managers should consider reproductive success data when designating and managing areas in support of biodiversity, including state wildlife areas and ecological reserves. This information complements ongoing efforts by agencies to evaluate and restore riparian areas, such as efforts by the BLM, USFS, and NRCS to assess proper functioning condition of riparian areas on public lands throughout the West.

12.2. When developing management practices for natural areas, government agencies, such as the USFWS and CDFG, should consider environmental impacts on local bird populations. Such evaluations should also occur when developing plans for habitat mitigation, habitat conservation, multi-species conservation, and natural community conservation.

The California Department of Fish & Game estimates that more than 89 habitat conservation plans, natural community conservation plans, and resource management plans were ongoing in California in 1998. Of these, 33 addressed the needs of one or more bird species. Additionally, the U.S. Fish & Wildlife Service constantly makes decisions regarding mitigation requirements for private and federally sponsored projects that affect the habitats of threatened or endangered species. By incorporating the conservation, restoration, management and monitoring recommendations of this Conservation Plan into their regulatory plans, agencies can implement the most effective conservation actions.

12.3. Land managers should consider the impacts of horses and burros on riparian vegetation and associated birds when designating acceptable numbers of wild horses and burros on public land.

Public Law 92-195, the Wild Free-roaming Horse and Burro Act of December 1971, mandates that the Bureau of Land Management and USFS manage and control wild horses and burros on public lands. Horse and burro population levels are to be maintained at an "optimum number" that results in a thriving ecological balance and avoids deterioration of the range (BLM 1998). Because browsing animals can significantly degrade riparian habitats, land managers must consider the requirements of breeding and migrating birds and monitor habitat quality when establishing acceptable ungulate population sizes.

12.4. Incorporate the costs of limited-term (two–five years) or long-term bird monitoring into management endowments prescribed for conservation projects, including mitigation banks, habitat conservation plans and natural community conservation reserves.

The size of management endowments for preserves in Southern California, for example, varies substantially with management needs and staffing levels. In 1998, they varied from $70,000 at Dos Palmas (covering coordination meetings and management support to the BLM) to $2.5-$3 million at the Coachella Preserve (providing for 1.5 to 2 staff positions, buildings, vehicles, management activities and monitoring). Most endowments for unstaffed preserves are less than $1 million (usually less than $500,000). Most endowments for staffed preserves are greater than $2 million, depending upon the level of management, staffing, and partnerships at the site. Endowments of up to $510 million are common for sites requiring several staff, building maintenance, and active management, and that lack partners with whom to share costs.

Incorporating the long-term cost of bird monitoring into the management endowments of large-scale reserves is an efficient way to ensure that monitoring occurs. In 2000, a monitoring program costing $35,000 per year could provide extensive data from point count routes, mist-netting and two nest monitoring plots (see Appendix A for more information regarding methods). Using progressive investment strategies and a 5% capitalization rate, an endowment of approximately $700,000 would support this level of monitoring. Under these assumptions, one can calculate the cost for endowing monitoring at a site. A good rule of thumb is to add $150,000 to an endowment for every additional $7,500.00/year cost added to the long-term management (i.e., take the additional annual cost, e.g., $7,500, and divide by 5%) (Teresa, pers. comm. 1998).

12.5. Local governments should establish locally-relevant riparian buffer zones to protect riparian habitat and associated surrounding uplands from development and disturbance, through zoning ordinances and/or general plan provisions.

Many California cities and counties have adopted some type of riparian development setback requirements, prohibiting various types of construction activities within a given distance from a stream. Typical development setbacks range from 15 to 30 m from the stream centerline, depending on stream type (perennial vs. intermittent) or land use type (urban vs. rural). In many areas, this small setback distance may not even extend outside the riparian zone. Although some local governments have adopted setbacks that start at the edge of the riparian zone, this is still not general practice. In addition, most zoning ordinances address the construction of a "structure," but often do not require setbacks for other activities that could disturb riparian areas, including roads, corrals/pens, pools, and other types of impervious surfaces that are not "structures" (Clark, pers. comm.).

Existing development setback distances are generally adopted from forestry standards, which are based primarily on the height of the highest tree and are generally focused on protecting water quality and habitat for anadromous fish (Erman et al. 1977, Peterjohn and Cornell 1984). While many have advocated the protection of larger, variable-width riparian buffer zones that incorporate variations in local hydrology and vegetation (Moyle et al. 1996), the emphasis has largely been on aquatic, rather than terrestrial resources. While more research is needed to identify appropriate riparian buffer widths for different terrestrial species, the value of preserving at least the width of a species' home range is well recognized (Warner and Hendrix 1984, Granholm 1987, Chapel 1992). For many, if not most, riparian-associated species, home ranges extend well outside the riparian zone, including adjacent upland vegetation such as grassland, shrub, oak woodland, or coniferous forest. Much of the research to date on effects and appropriate sizes of riparian buffer zones have been conducted in forested landscapes, where the nearby disturbance is timber extraction (e.g., Hagar 1999, Pearsono and Manuwal 2001, Robichaud et al. 2002). Little research on the topic has been done in urban and suburban areas, where the level of disturbance is arguably much greater.

Local ordinances and general plan provisions on riparian development setbacks should be expanded to include a wide range of riparian disturbances, and should start from the edge of the riparian zone, providing an additional upland buffer zone for species whose home ranges extend outside the riparian zone. A review of reptile and amphibian minimum habitat requirements found that a buffer of up to 290 m from the stream edge would be necessary to protect the core habitat of these taxa (Semlitsch and Bodie 2003). While a similar review of home range sizes should be conducted for riparian-associated bird species, territory sizes of locally breeding species (see Table 5-2) may be used as a minimum guideline.

Objective 13

Increase protection and management actions to benefit severely declining or locally extirpated bird species in California.

Recommendations

13.1. Establish a committee to review management and research objectives and progress for Tricolored Blackbirds, seeking to incorporate the efforts and viewpoints of those actively involved in wetland management for waterfowl and shorebirds.

As Tricolored Blackbirds continue to decline, a concerted effort is required to address the needs of this species within the context of overall wetland and waterbird management within the Central Valley. This committee should review and amplify protection, management and research

recommendations developed by researchers and agencies. The committee should maximize coordination of conservation efforts with conservation groups and land managers that are focused primarily on waterfowl or shorebird management. Distribution, abundance and reproductive success of Tricolored Blackbirds should be monitored annually.

13.2. Develop GIS layers representing the extent of riparian zone habitats throughout the state at a resolution fine enough for the analysis of territory-level bird data in association with the occurrence of various habitat types. Resulting maps should be field-verified and may be used to identify suitable habitat for riparian birds, including Western Yellow-billed Cuckoos and habitats for other declining or sensitive species.

Riparian habitat covers a small area relative to its importance and value to wildlife. Because most regional landcover maps are based on satellite imagery with 30-m pixel resolution, they generally do not adequately represent riparian habitats, which are often (a) smaller than the minimum mapping unit and/or (b) not easily distinguishable from surrounding uplands in forested areas. Although riparian vegetation may be mapped at a more local scale using high-resolution aerial photos, the quality and composition of the understory is not easily mapped without extensive ground-truthing (as is true for any forest vegetation type). Thus, existing riparian GIS layers are variable in spatial resolution, floristic detail and quality, as well as inconsistent in vegetation and hydrologic classification standards. The dynamic nature of riparian systems, as well as on-going restoration efforts also make this habitat particularly difficult to represent in map form.

Through the California Legacy Project, with the California Department of Forestry and Fire Protection (CDF) and the U.S. Forest Service, efforts are currently underway to develop an intermediate-scale statewide riparian vegetation map/GIS layer for the State of California. In addition, the Riparian Habitat Joint Venture (RHJV) is coordinating efforts to map smaller areas at a higher spatial resolution. Finally, a list of riparian GIS layers can be found at the California Partners in Flight website at: http://www.prbo.org/calpif/htmldocs/riparian.html.

Objective 14

Promote federal, state, and local government flood control policies that will benefit wildlife in tandem with community safety.

The Army Corps of Engineers' mandate to develop non-structural flood control alternatives for the state of California in the aftermath of the 1996-97 floods is a positive step in floodplain management. The importance of flood events has been discussed throughout this document. For specific examples, please see Recommendations 1.4, 4.1, 6.1, 7.1, and 7.2.

Chapter 9. Implementation of Conservation Plan Recommendations

The Riparian Habitat Joint Venture (RHJV) has developed a Strategic Plan and an Annual Operating Plan to achieve the habitat protection/restoration goals set forth in this Conservation Plan. The Strategic Plan articulates the vision, mission, and goals of the Riparian Habitat Joint Venture. It also provides a framework for understanding the long-term goals of the RHJV, and direction for the Operating Plan. The Operating Plan will detail the specific tasks the RHJV will undertake during each year to meet their mission, as well as identify tasks planned for the next three-five years. The Operating Plan will identify measures of success for each identified task, will document achievements, and will be updated annually. The RHJV anticipates working closely with other statewide conservation efforts with overlapping goals during the implementation phase, particularly the Biodiversity Council, Sacramento River Advisory Council (SB1086), and the Coordinated Resource Management Plan Council. Some of the tasks in the Operating Plan include:

- Develop a riparian map and data layer to identify the extent and condition of riparian habitat
- Develop conservation/restoration acreage objectives and a system to prioritize areas for conservation efforts.
- Conduct local workshops to familiarize constituents with the RHJV and the Conservation Plan and to identify partners and initiatives to collaborate with in implementing riparian conservation.
- Provide guidance for a statewide riparian policy to fully protect riparian habitat.

In areas that already have a thriving conservation process in place, such as the SB1086 program along the lower Sacramento River (from Keswick Dam to Verona), the process will provide support and technical assistance for ongoing efforts.

The North American All Bird Initiative

In 1998, participants at a meeting of the International Association of Fish and Wildlife Agencies developed a vision to link all of the major bird conservation initiatives in Canada, the U.S. and Mexico (CEC 1998). The participants represented each of the four major bird conservation initiatives already underway on the continent: the North American Waterfowl Management Plan, Partners in Flight, the Shorebird Conservation Plan, and the Colonial Waterbird Conservation Plan. This new, overarching program, known as the North American All Bird Conservation Initiative (NABCI), seeks to synthesize the efforts of all of these groups by creating "regionally based, biologically driven, landscape-oriented partnerships delivering the full spectrum of bird conservation across the entirety of the North American continent, including simultaneous, on-the-ground delivery of conservation for both game and nongame birds." NABCI aims to ensure that populations and habitats of North America's birds are protected, restored, and enhanced through coordinated efforts at international, national, regional and local levels guided by sound science and effective management. It is designed to increase the effectiveness of new and existing initiatives through:

- Effective coordination;
- Building on existing regional partnerships such as joint ventures; and
- Fostering greater cooperation among the nations and the peoples of the continent.

State, provincial, federal and non-governmental representatives from Canada, Mexico and the U.S. adopted an ecological framework that facilitates coordinated conservation planning, implementation, and evaluation among major bird initiatives. These Bird Conservation Regions (BCR) were defined by adopting the hierarchical framework of nested ecological units delineated by the Commission for Environmental Cooperation (CEC). Existing Joint Ventures as formed under the North American Waterfowl Management Plan (NAWMP) are recognized as important vehicles for local and regional delivery of bird conservation goals. Joint venture focus areas do not always correspond with BCR boundaries, but joint ventures are coordinating with the BCRs encompassed within their boundaries. Many joint ventures in North America have embraced the concept of "all-bird" conservation.

Photo by Eric Preston, ericnpreston.com.

Joint Ventures, originally created to protect North America's waterfowl such as this Ring-necked Duck, are now embracing the conservation of all birds.

California is encompassed within five BCRs: the Northwestern Pacific Rainforest region, the Sierra Nevada region, the Coastal California region (which includes the Central Valley), the Great Basin region, and the Sonoran and Mojave Desert region. The state currently hosts five official joint ventures: the Central Valley Habitat Joint Venture, the San Francisco Bay Joint Venture, the Intermountain West Joint Venture, the Pacific Coast Joint Venture, and the Riparian Habitat Joint Venture (Chapter 1). Future bird conservation in California priority habitats will be achieved by encouraging adoption of the all-bird conservation concept within existing joint ventures or by creating new joint ventures, organized regionally around specific habitats and habitat conservation goals.

Chapter 10. Outreach and Education

Scientific efforts for conservation have little impact without the support of local communities, including private landowners, government land managers, and the public of all ages. To gain crucial support, research, management, and conservation programs must share their findings and involve community groups and partners in conservation through education and outreach. For the purposes of this chapter, outreach refers to communication with land managers, agencies, planners, business interests, nonprofit organizations, academia, and volunteers. Outreach activities include, but are not limited to, conferences and workshops that facilitate communication among experts, participation in land use planning, volunteer restoration and monitoring programs, field trips, and ecotourism. Education, an important component of outreach, refers to the range of activities that educate and involve students and adults. Education activities include visits for classes and groups to field sites, interpretive displays, specialized curricula, and participation in festivals.

This chapter will:

- outline key concepts to be disseminated through riparian focused outreach programs;
- identify user groups to address through outreach programs;
- summarize existing resources for use by educators and outreach groups; and
- highlight examples of educational opportunities and successful programs.

Key Concepts

The following list of *Key Concepts for Bird Conservation* should be incorporated into education and outreach programs. These concepts are important to include in any program concerning conservation, and are indispensable in programs focusing on birds and riparian habitats.

- **Reproductive success may be the most important factor influencing bird population health.** It contributes directly to a population's size and viability in an area. A number of factors influence reproductive success, including predation, nest parasitism (ex. Brown-headed Cowbird), nest site availability, and food availability.

- **Nesting habitat requirements vary among species.** Different bird species place their nests in different locations, from directly on the ground to the tops of trees. Most birds nest within five meters of the ground. Managers must consider that habitat needs for different species vary and manage for this diversity accordingly. This can be accomplished by managing grass and forbs to a height greater than 6 inches for ground nesters, retaining a structurally diverse shrub and tree layer for low to mid-height nesters, and leaving dead trees and snags for cavity nesters. Additionally, older tall trees should be retained for birds that build their nests in the canopy (Figure 5-1).

- **The breeding season is a vital period in birds' lives.** Birds nest during the spring and early summer of each year (generally mid-March-August). Nestlings are particularly sensitive to changes in the environment and are indicators of ecosystem health. Disturbances during the breeding season, such as vegetation clearing, habitat restoration, and recreation, may result in nest abandonment, remove potential nest sites, directly destroy nests, expose nests to predators, and decrease food sources such as insects. Predators, such as domestic cats, skunks, and jays, can decimate breeding populations, thus land managers should avoid subsidizing their populations through human food and garbage.

- **Understory (the weedy, shrubby growth underneath trees) is crucial to birds.** A healthy and diverse understory with lots of ground cover offers well-concealed nest and foraging sites. Manicured parks and mowed lawns provide poor nesting conditions for all but a few bird species.

- **Native plants are important to birds.** Native bird populations evolved with the regional vegetation, learning to forage and nest in certain species. Introduced plant species may not provide the same nutrition, host sites for insects, or nest site quality. Introduced plants can also quickly dominate an area, reducing the diversity of vegetation. Less diverse vegetation can lower the productivity and viability of a bird population.

- **Natural predator-prey relationships are balanced, but human disturbance creates an imbalanced system.** Interactions with predators are a natural and essential part of an ecosystem. However, a preponderance of non-native predators or a sustained surplus of natural predators severely affects the health and persistence of bird populations. Feeding wildlife, especially foxes, raccoons, and skunks, should be discouraged. Feeders that are frequented by jays, crows and cowbirds should not be maintained during the breeding season (most songbirds feed their young insects). Domestic and feral cats are responsible for an estimated 4.4 million birds killed each day (Stallcup 1991). It is not true that a well-fed cat will not hunt! In fact, a healthy cat is a more effective predator.

- **Natural processes, such as flood and fire, are integral to a healthy ecosystem.** They provide the natural disturbance needed in an area to keep the vegetative diversity high, an important factor for birds.

"Did you know" and "How you can help" facts about Riparian Habitat

Did you know facts are a great way to teach the public of all ages about riparian habitats? Here are a few to include in educational programs, signs, curriculum, flyers, and presentations:

Did you know…

Cats kill approximately 4 million birds a day in this country alone.

How you can help….

- If you own a cat, help reduce the impact of cats on bird populations. Domestic cats kill hundreds of millions of native birds, reptiles and small mammals every year. This

unnecessary impact can easily be reduced if cat owners would keep their cats indoors, and if broad education on the impact of cats on wildlife is conducted.

- The American Bird Conservancy's (ABC) Cats Indoors! campaign seeks to educate the public on the facts of cat predation on birds and other wildlife, and the hazards to free roaming cats. This information is available at the American Bird Conservancy's web site at http://www.abcbirds.org.

- Educate your community about outdoor cats as a conservation threat to birds and other wildlife and distribute brochures and information from ABC's website broadly.

- Attend town hall meeting to raise awareness, especially in problem areas where there are large concentrations of feral or stray cats.

Other actions that cat owners can take to help birds:

- Keep cats as indoor pets.
- Don't abandon unwanted cats; rather, give them to the local SPCA or Humane Society.
- Spay and neuter your cats.
- Cats on ranches or farms, kept to control rodent populations, should be kept to a minimum. Spayed females tend not to stray or wander from the barn area. Keeping feed in closed containers also helps reduce rodent populations (Coleman et al. 1997). Trapping rodents can also be more effective than relying on cats to do the job.
- Don't feed stray or feral cat populations. A more humane alternative for cats and wildlife is to reduce the unwanted cat population by limiting reproduction and facilitating adoption by responsible pet owners.
- Support local efforts to remove feral cats.

Did you know…

Predation is the main cause of nest failure for songbirds. Humans can contribute to an unbalanced predator-prey relationship of both native and non-native predators. Increased numbers of these predators can depress bird populations.

How you can help…

- Eliminate outdoor sources of food including pet food dishes, garbage, and open compost piles that may attract stray cats, jays, raccoons, rats, opossums.
- Avoid indiscriminate open tray bird feeders or seed scattered on the ground that may attract jays, cowbirds, ravens, rats, squirrels, etc. and support unhealthy predator numbers (see the Feeding Birds Safely handout in the resource table).
- Keep cats indoors
- Construct safe bird boxes that are predator proof (see the Keeping your nest box safe Table 10-1).
- Do not feed wildlife or allow wildlife access to your trash when hiking or camping. If you feed birds, avoid doing more harm than good.

Did you know…

Feeding birds can be beneficial if properly done, but it always carries the potential for upsetting the natural balance between native predators and prey species. Improper feeding can help to spread disease, support predator populations that prey on birds and other organisms, or increase non-native populations that displace the natives.

How you can help…

- Feeder placement should be away from shrubs or bushes that provide places for cats to ambush birds (Coleman et al. 1997).

- Avoid feeding birds in the spring and summer. Feeding birds supplements their natural diet, but springtime feeding may encourage a lower quality diet for nestlings that need high-protein insects, which are naturally abundant throughout the breeding season.

- Do not supplement the diet of avian nest predators such as jays, magpies, crows and ravens by feeding them during the breeding season. These predators tend to benefit disproportionately from human habitation, and as their populations expand they are negatively affecting the health of other bird populations. The National Audubon Society produces bird feeders that discourage use by avian predators.

- Avoid supplementing the diet of Brown-headed Cowbirds, which parasitize songbird nests. If cowbirds come to your feeder, try eliminating millet from the birdseed you provide. Evidence indicates that Brown-headed Cowbirds are attracted to bird feeders primarily for millet. Sunflower seeds and other types of birdseed attract many songbird species, but may not attract cowbirds. In addition, do not use open tray feeders or scattered seed on the ground to feed birds; this attracts cowbirds as well as predators.

- When feeding birds in winter, change birdseed if it gets wet from rain as the moisture may promote mildew or sprouting, which can cause birds to become ill.

- In feeding hummingbirds, use a solution of four parts water to one part sugar. Do not use brown sugar, artificial sweeteners, or red dye. Place the feeders in the shade and change the feeder solution every two to three days to avoid cultivating pathogens that can cause hummingbirds to become ill. In freezing weather, bring feeders indoors at dusk and return them with lukewarm fluid at dawn. Clean feeders every 10 days using a few drops of bleach in the wash water, and let stand before rinsing. Rinse thoroughly many times.

Did you know…

Baby birds will often leave, or fledge, the nest before they look fully-grown. Newly fledged birds are often mistaken for "abandoned." Their parents, however, can find them on the ground and will feed them. Most fledglings will continue to be fed by their parents even after leaving the nest.

How you can help…

Leave young uninjured birds alone, as it is likely their parents are nearby. It is not true that parents will avoid young after humans have handled them, but it is still best to leave nests and young undisturbed. Fledglings should not generally be returned to their nest, as this may disturb the nest site. Trampled vegetation and human activity can alert predators to the presence of the nest. Allowing baby birds to remain in the care of their parents provides them their best opportunity for survival. Be aware that it is against federal law to collect wild birds, nests, or their eggs without a permit.

Did you know…

Bird watching is one of the fastest growing hobbies in this country. According to the US Fish and Wildlife Service, about one-fifth of the American population, more than 50 million people, watch birds each year. This outnumbers hunters and anglers combined. Bird watchers are excellent observers and can contribute to the conservation process.

How you can help…

If you are a bird watcher, volunteer for a bird monitoring program. There are increasing opportunities for bird watchers of all skill levels to gain training and experience in various bird monitoring techniques. Participants gain knowledge in a subject area of interest, learn new skills, and can directly contribute to the science of conservation while enjoying birds in the outdoors. There are increasing opportunities to contribute to bird monitoring projects in riparian habitats throughout the state. Subscribe to the Birder Conservationist, an online newsletter of the American Birding Association at http://www.americanbirding.org/programs/constbc.htm.

Key Audiences for Outreach

When designing and implementing education and outreach programs on riparian habitat in your region, you should ensure your program is addressing one or more of the target groups. The four key user groups that need to be targeted through riparian education and outreach programs are:

- Stakeholders (farmers, ranchers)
- Community Members (families, outdoor recreators, homeowners)
- Educators (school teachers and educators)
- Land managers (government agencies, private landowners, homeowners)

Each of the user groups is outlined here with suggestions of the types of outreach activities that are appropriate for each group.

Stakeholders: Stakeholders are people who rely on the habitat for their livelihood, ranching, farming, recreation companies, etc. These are often the group of people that have the highest potential for protecting riparian birds yet they may be the most difficult to reach. In order to effectively communicate with them, conservationists and educators need to find a common ground and build a relationship of trust. Often times highlighting the economic value of songbirds is a great way to reach these groups, e.g., highlighting the role of songbirds as natural pest control at farms.

There is a wide assortment of government funded agricultural/wildlife conservation programs for farmers (http://www.nrcs.usda.gov/programs/farmbill/2002/products.html). Effective programs that target stakeholders include restoration programs that provide incentives to landowners for restoration and conservation. Private landowners can be reached through flyers, brochures, posters, talks at local growers clubs, county fairs, farmers associations, Natural Resource Conservation Service (NRCS) groups, Resource Conservation Districts (RCD's), etc. Tours that take stakeholders into the field to observe the wildlife that depend and co-exist with their agricultural practices are another effective tool. Incorporating articles about riparian songbirds into stakeholder newsletters is a great way to communicate key messages for songbirds in your region. Perhaps most important is person-to-person contact.

Private landowner conservation programs on agricultural lands work best when there is a person getting to know the farmer and showing them the birds. For example, in the years 2001-2002, the Marin County Resource Conservation District (MRCD), in partnership with PRBO, hired a Riparian Habitat Conservationist. The purpose of this position was to link landowners with the riparian songbirds and habitat on their land through monitoring, newsletter articles, presence at MRCD meetings, and person-to-person contact. As a result, farmers who may not have otherwise thought about the songbirds on their land began allowing a biologist to monitor their creeks, agreeing to initiate restoration projects, and looking for ways to protect their creeks while still supporting their cattle operation. This project was an effective way of bridging the gap between a stakeholder group and wildlife conservation. For more information please contact the MRCD (415) 663-1170 or visit http://www.sonomamarinrcds.org/district-mc/.

Community Members: Community members include the public, birders, local businesses, homeowners, families, and outdoor recreation groups. Economically, this group has a lot of influence especially in terms of access to recreation areas. In addition, community members can participate in conservation indirectly through creating favorable public sentiment, promoting legislation to protect riparian habitat and voting on measures to protect and enhance riparian habitat. As a result it is important that education and outreach programs be targeted to these users.

Appropriate programs for this group include general awareness building programs such as informational flyers, birding trips, mist-netting demonstrations, presentations within the community, outreach at local fairs, articles in newspapers and newsletters, and educational materials on the web. In this broad audience there will be users that are receptive to messages about riparian songbird conservation such as birders or conservationists. Other users, such as homeowners, or equestrians, may be more difficult to reach because conservation measures may limit their activities. In this case, continued outreach is needed to build a trusting relationship. It is essential to provide conservation messages to the bilingual or multilingual communities. To improve communication in diverse communities it is important to work with partners in the community to build conservation connections.

Educators: Educating educators expands the potential to reach larger numbers of people with fewer direct staff. Training educators such as schoolteachers, naturalists, bird tour leaders, and docents in the key messages for riparian songbird conservation for each region is essential. Identifying existing education programs in schools, nature centers, and visitor centers and partnering to infuse conservation messages into their existing programs is a cost effective way to reach a broader audience.

To accomplish this, teacher trainings through existing networks and partnerships are an excellent way to train teachers. Providing them with materials in the form of activities, posters, and bird identification guides are well received. Aligning educational programs with state science standards also makes the teachers more receptive to the messages presented through our materials. When trying to reach educators at nature centers or other docent groups, it is best to offer training for staff and provide them with outreach materials to distribute (informational flyers, posters) (Table 10-1).

Land managers: Land managers are user groups that require more technical information to make informed decisions about changing land management practices to benefit songbirds. In addition, land managers are often charged with managing their preserve or refuge for a variety of resources and are often understaffed for the amount of work they are expected to accomplish. As a result, connecting land managers with riparian songbirds becomes extremely important. Getting land managers into the field with biologists, connecting them to their resource, and showing them the direct benefit their actions can produce for songbirds is critical. Clear, concise messages advising managers on how to alter practices are needed. Slide presentations are also effective in reaching this group.

Educational Opportunities and Successful Programs

We now understand that the majority of plant and wildlife population declines are intimately tied with habitat loss and degradation. Diverse flora and fauna depend on riparian habitats in California during some or all phases of their life cycles; however, with less than 5% of riparian habitat left from historical ranges, these species are under pressure. With these facts in mind, we must act now to turn the tide.

Certain educational programs teach hands-on activities, such as ecological restoration.

Targeted education and outreach programs are effective tools to heighten awareness about the biological wealth of riparian habitats. Thankfully, in California there are a number of innovative and inspirational education programs focused on riparian habitats and the surrounding watersheds, some of which are outlined in this section. The success of these educational programs is largely built around meaningful learning experiences that inspire appreciation, generate inquiry, and encourage action in the learner; moreover, the programs involve many regional partners in conservation.

Education programs engage participants most effectively when they involve hands-on activities. Conservation education has the whole of the outdoors as a classroom - what better way to elicit the interest and enthusiasm of students and the public! Teaching ecosystem connections between plants, birds, fish, invertebrates, amphibians, mammals, hydrology, etc. enriches riparian habitat education programs. There are, in fact, many commonalities between riparian-dependent species that lend themselves to excellent 'teachable topics'; for example, the endangered riparian brush rabbit and many nesting songbirds all need a dense understory of diverse plants in the riparian forest to successfully complete some part of their life cycle (see Recommendation 6.7). Seizing educational opportunities, building alliances among educators, and sharing your program's successes and challenges with other others (e.g., California Partners in Flight Education and Outreach Committee) will help ensure well-informed decision-making in California communities into the future.

Table 10-1. Outreach and education resources for schools, educators, and community groups.

Title	Description	Grade and language	Geographic Range	How to Order
International Migratory Bird Day	Celebration information on IMBD. Activities include bird walks, displays, videos	All grades, Spanish and English	Throughout the Americas	http://www.fs.fed.us/dxnf/IMBD.html
PRBO Teacher Resource Packets	11 activities teaching students about birds and conservation	Adaptable for all grades, English	All of CA	PRBO Education Program 4990 Shoreline Hwy. Stinson Beach, CA 94970 (415) 868-1221 or on the web: www.prbo.org/education
Where Do Birds Nest Poster	11 X 17 black and white poster showing where riparian focal species nest in riparian habitat	All grades, English	All of CA	PRBO Education Program Address previously listed
Helping Birds at Bird Feeders	Handout on safe tips for feeding songbirds	All grades, English	All of CA	PRBO Education Program Address previously listed
The Birders Handbook: A Field Guide to the Natural History of North American Birds	Book gives detailed life history information for all birds in North America	High-school, adult, teacher resource	All of CA	Ehrlich et al. 1988
The Sibley Guide to North American Birds by David Sibley.	Resource field guide	High-school, adult, teacher resource	All of CA	Sibley 2000
Bird Study Guide, Tiburon Audubon Society	On-line study guide for students with information about birds and habitats in Marin County.	Grades 4-12	Marin Co. CA	www.tiburonaudubon.org/jrbird/background.html
Bird Songs of California	Cornell's latest audio guide, "Bird Songs of California" - a 3-CD set featuring the voices of 220 bird species from across the Golden State.	All grades	All of CA	http://birds.cornell.edu/

Table 10-1 continued

Title	Description	Grade and language	Geographic Range	How to Order
Birds Beyond Borders	An international environmental education program linking students in the western US with western Mexico through birds.	Grades 3-6	All of the western US	Rocky Mountain Bird Observatory 14500 Lark Bunting Lane Brighton, CO 80601 303-659-4348 education@rmbo.org
The Songbird Blues	A trunk of materials and resources exploring neotropical birds	Grades K-5	All of the Americas	Montana Natural History Center 1617 Roland Ave. Missoula, MT 59801 406 543-6886
Birds in Hand and Field	An activity booklet that makes a great accompaniment to a visit to a mist-netting or bird banding demonstration	K-7	Throughout the West.	Rocky Mountain Bird Observatory 14500 Lark Bunting Lane Brighton, CO 80601 303-659-4348 education@rmbo.org
Keeping Your Nest Box Safe for Songbirds in the West	Handout on how to safely use nest boxes	All grades, English	All of CA	PRBO Education Program Address previously listed
Helping Birds At Home	Handout on how to landscape your yard to help songbirds	All grades, English	All of CA	PRBO Education Program Address previously listed

Table 10-2. Outreach and education resources for wildlife managers and stakeholders (farmers, ranchers).

Title	Description	Geographic Range	How to Order
Riparian Bird Conservation Plan	Science-based bird conservation plan containing recommendations for land managers on enhancing riparian habitat for birds	All of CA	California Partners In Flight 4990 Shoreline Hwy. Stinson Beach, CA 94970 (415) 868-0655 or on the web: www.prbo.org/calpif
Recommendations for Improving Riparian Bird Habitat on Private Lands in Marin County	Handout on how private landowners can enhance their Riparian habitat for birds	Marin County	PRBO Education Program 4990 Shoreline Hwy. Stinson Beach, CA 94970 (415) 868-1221 or on the web: www.prbo.org/education
Improving Songbird Habitat on Your Horse Ranch	Handout on how to improve songbird Habitat on Your Horse Ranch	All of CA	PRBO Education Program Address previously listed
Decreasing Crows and Ravens on Ranches and Dairies	Handout on how to decrease the number of crows and ravens associated with livestock.	All of CA	PRBO Education Program Address previously listed
Horse Keeping: A guide to Land Management for Clean Water	A guidebook prepared by the Bay Area Resource Conservation Districts outlining land management for clean water on horse facilities.	Designed for the Bay Area but could be used throughout CA.	PRBO Education Program Address previously listed

Educational Opportunities

The concepts and guidelines outlined in this chapter can be presented to the public and to students through a variety of media. Following is a list of common education opportunities and some suggestions for content:

Classroom Education

Programs in the classroom should focus on communicating key concepts to students through hands-on activities. Lessons should stress studying birds in the field - whether in the backyard, on school grounds, or in a nearby natural area - and include keeping field notes and observing natural behaviors of birds. Field trips to riparian areas with groups conducting bird conservation and monitoring projects fosters interest and enthusiasm for wildlife and teaches students the importance of conserving birds.

One method of educational outreach, called project-based learning, allows an open-ended approach to solving a conservation problem. Students identify a local conservation issue in their community and through library and field research plan and implement a project from idea conception to project completion. Teachers and students work co-operatively to make important decisions, while working with biologists, land managers, business people, private landowners and others in the community. Because of this investment and emphasis on self-direction, students take ownership of their work, and the lessons learned are profound and long lasting (Rogers, pers. comm.).

A great way to get students interested in birds is through bird observation in the field. While access to binoculars is sometimes limited, you can contact your local Audubon Society, nature center or other local wildlife education group to see if sets are available for check out. If you feel uncertain of your birding skills, contact your local Audubon Society or Nature Center to see if there are any docents or naturalists who will can join your class for a day of birding. An invaluable experience that catches students' interest immediately is to visit a mist-netting site where students have the opportunity to examine birds up close and interact with biologists.

There are many excellent sources for curriculum and hands-on bird activities for the classroom. Many can be found in the table of educational resources listed on pages 100-101. Another useful source is *A Guide to Bird Education Resources* produced by Partners in Flight and the National Fish and Wildlife Foundation. Copies of this book are available from American Birding Association Sales, PO Box 6599, Colorado Springs, CO 80934, phone 1-800-850-2473, member@aba.org. In addition, the California Partners in Flight Education Committee is working on producing educational tools, kits, and resource guides for educators in California. Contact the CalPIF Education Coordinator through the website at http://www.prbo.org/calpif/education.html to find out more.

Volunteer Involvement

Using volunteers to aid in data collection and restoration is an excellent way to gain additional help and to teach people about conservation. Increasingly, families and school groups have opportunities to participate in habitat restoration projects at local parks or nature preserves. Volunteers that participate in counting and studying birds quickly develop a connection to them, which intimately involves the volunteer in the conservation effort. Furthermore, volunteers provide additional support and resources that make long-term monitoring of songbirds viable. To ensure reliable data collection, supervisors must match monitoring techniques with the skill level of the volunteer.

Interpretation at Natural Areas

Interpretation is an excellent way to disseminate key concepts about bird conservation to the public. Displays at preserves, public parks, nature trails, picnic areas, and other natural areas should highlight the birds using the habitats and show the specific features of the habitat that are critical to bird reproduction and survival, including assemblages of native plants. Displays can effectively illustrate how individuals can make a difference at home (e.g., planting native plants in their yards or restraining cats from killing birds). These displays should be aimed at the general public, emphasizing the causes of the decline of songbirds. Again, integrating people as part of the solution encourages their support for conservation issues.

Participation in Birding Festivals and Environmental Fairs

Birding festivals are becoming a popular means of enhancing local economies through ecotourism, which can help to promote local support for conservation of natural areas–a requirement for long-term sustainability of conservation actions. Festivals also present an excellent opportunity to further educate people already familiar with birds about the scientific reasons behind bird conservation. Birders already recognize and love birds and can easily be taught the reasons for bird conservation and what a healthy bird population needs to survive. Birders also constitute a pool of experienced observers who may volunteer for monitoring programs.

Representation of bird conservation at environmental fairs is another way to reach large numbers of people, convey the key concepts behind bird conservation, and build conservation partnerships in the region. Booths that convey the key conservation messages and provide information on how individuals can help through interactive games or activities for children engage families and visitors in bird conservation topics. The National Fish and Wildlife Foundation has published Bridges to Birding, an interactive program for introducing birds, bird watching, and bird conservation to your community. It contains step-by-step instructions on how to put on a festival or fair focusing on birds. To obtain a copy contact IMBD Information Center at (703) 358-2318 or IMBD@fws.gov.

Conducting an International Migratory Bird Day celebration is another excellent way to get local recognition of birds through this international program of the National Fish and Wildlife Foundation. International Migratory Bird Day celebrates the incredible journeys of migratory birds between their breeding grounds in North America and their wintering grounds in Mexico, Central, and South America. The event, which takes place on the second Saturday in May each year, encourages bird conservation and increases awareness of birds through hikes, bird watching, information about birds and migration, public events, and a variety of other education programs. Schedule an IMBD celebration near you. For more information visit www.birdday.org.

Examples of Successful Programs

Mono Basin Birding Chautauqua

The Mono Basin Bird Chautauqua is a birding festival with a mission to enhance the appreciation and understanding of the Mono Basin's diverse and abundant bird life and to educate the public about the area's value to birds and people. The Chautauqua takes place annually over the summer solstice weekend when bird activity in the Basin is at its height. Through field trips, evening presentations by Mono Basin expert biologists, seminars, and special kids' activities, many levels of bird enthusiasts can find something of interest. The event is both volunteer operated and cooperatively organized by several agency and nonprofit partners including Inyo National Forest,

Mono Lake Tufa State Reserve, Mono Lake Committee, PRBO Conservation Science, and the Eastern Sierra Audubon Society. Interest and attendance has dramatically increased in the first two years of the Chautauqua, and enthusiasm for the event continues to grow. In 2002 and 2003, 150 and 250 people participated, respectively. The Mono Basin Bird Chautauqua is an excellent example of a bird-focused event that targets a diverse audience and provides a powerfully informative and affective experience for visitors. For more information about the event please visit the website: http://www.birdchautauqua.org/. A similar type of festival is held annually at the Kern River Preserve celebrating the wildlife of the Kern River Valley. For more information visit http://www.valleywild.org/bioregion.htm.

STRAW Bird Project

The STRAW Project coordinates and sustains a network of teachers, students, restoration specialists and other community members as they plan and implement watershed studies and restoration projects in Marin and Sonoma counties. STRAW provides teachers and students with the scientific, educational and technical resources to prepare them for hands-on, outdoor watershed studies, including ecological restoration of riparian corridors. STRAW's overarching goals are to empower students, support teachers, restore the environment, and reconnect communities. STRAW's educational programs include restoration, birds, water quality, and plants. For more information visit www.bay.org/watershed_education.htm.

Mist-netting demonstrations for the public

Providing opportunities for the public to observe mist netting and bird banding demonstrations is an excellent way to connect people with birds and bird conservation science. The following organizations and bird observatories offer public and/or school programs: Big Sur Ornithology Lab www.ventanaws.org/lab.htm, Klamath Bird Observatory www.kbo.org, Humboldt Bay Bird Observatory (a subsidiary of Klamath Bird Observatory), PRBO Conservation Science www.prbo.org, San Francisco Bay Bird Observatory www.sfbbo.org, and Wright Wildlife Refuge.

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Appendix A. How to Monitor Riparian Bird Populations

Adaptive management requires the periodic gathering of information to ascertain whether management actions are achieving desired results. The most comprehensive and rigorous way of collecting this information is through a strategic program of monitoring using standardized methods that can be compared between years and between regions. Restoration and land stewardship programs need to build in long-term monitoring programs to assess the effectiveness of their activities. Such data are necessary to determine the need for continued funding.

Research and Monitoring

If habitat restoration or management is undertaken to benefit wildlife species, wildlife monitoring becomes the ultimate measure of success. There are many reasons that bird monitoring should be adopted as a basic component of long-term stewardship in preserves with significant riparian habitats or significant bird populations:

- Birds are highly visible and monitoring is cost effective.
- Birds can show relatively quick response in abundance and diversity to restored habitats (3-5 years).
- Many Neotropical migrants are dependent on early successional development in riparian habitats; therefore, they are good indicators of the success of natural recruitment restoration on an ecosystem scale.
- As secondary consumers (i.e., insectivores), birds are sensitive indicators of environmental change.
- By managing for a diversity of birds, most other elements of biodiversity are conserved.
- Bird monitoring can prevent future listing of declining species by identifying problems and solutions early.
- Because of the increasing popularity of birdwatching, there is great potential for public participation in bird monitoring.
- Birds are tremendously important culturally and economically and their popularity can help raise awareness of land-stewardship needs.

Monitoring Strategically

Monitoring can be conducted at varying levels of intensity, depending on the objectives to be achieved and the resources available. The standardization of protocols is critical to comparing results across space and time. Many recent programs (Ralph et al. 1995, Martin et al. 1997, DeSante et al. 1999a) and publications (Ralph et al. 1993, Geupel and Warkentin 1995, DeSante et al. 1995, 1999b, Nur et al. 2000) have summarized methods, objectives, and implementing results.

Monitoring programs should always include an analysis plan and identification of issues or site-specific projects to be assessed. The primary purpose of site-specific monitoring is to assess the effects on wildlife of natural and anthropogenic stressors or disturbances in the environment. This knowledge is critical in determining the relative priority of identified conservation problems and in developing effective measures to address those problems.

Monitoring across many sites at varying scales can be analyzed to highlight broad changes or trends in species presence, diversity, abundance and productivity. Ideally, a series of reference sites with long-term monitoring, using most if not all protocols below, will be developed for each California bioregion. Other sites will be monitored more opportunistically, depending on the objectives of the landowner.

The following is a list of common monitoring regimes from least to most intensive.

- **Rapid assessment of habitat or designation of Important Bird Areas based on general vegetation characteristics and presence/absence of indicator species.**

Method: area search or point count as little as one census per site per year.

- **Determine breeding status, habitat association, restoration evaluation and/or evaluation of changes in management practices.**

Method: area search or point count two or more times per year for three years. For restoration evaluation every other year, surveys should continue for at least 10 years.

- **Determination of population health or source/sink status.**

Method: census combined with demographic monitoring for a minimum of four years.

- **Reference site.**

Method: point count census, constant effort mist netting and nest monitoring at a minimum of every other year for 10 years.

Long-term Monitoring

Long-term monitoring provides a wealth of useful information about bird populations. Long-term data are vital to deciphering the difference between a true population decline and a natural fluctuation in population size. In addition to parameters that can be determined by both short- and long-term monitoring (such as annual productivity, abundance, and diversity), patterns of variation in reproductive success and trends in abundance and diversity may also be described. Long-term monitoring is also the only method to monitor natural and human-induced changes in bird populations.

Monitoring Protocols

These are listed from least to most intensity of effort. All are described in detail in Handbook of Field Methods for Monitoring Landbirds (Ralph et al. 1993). Online support, field protocols, example data sheets, and data entry and management resources are supplied at http://www.prbo.org/tools (Ballard 2003).

Area Search

The Area Search, adopted from the Australian Bird Count, is a habitat specific, time constraint census method to measure relative abundance and species composition. It may also provide breeding status. While still quantitative, this technique is ideal for volunteers as it mimics the method that a

birder would use while searching for birds in a given area, allowing the observer to track down unfamiliar birds.

Point Count

The point count method is used to monitor population changes of breeding landbirds. With this method, it is possible to study the yearly changes of bird populations at fixed points, differences in species composition between habitats, and assess breeding status and abundance patterns of species. The objective of point count vegetation assessment is to relate the changes in bird composition and abundance to differences in vegetation.

Mist Netting

Mist netting provides insight into the health and demographics of the population of birds being studied. Mist nets provide valuable information on productivity, survivorship, and recruitment. With these data, managers will have information on the possible causes of landbird declines or their remedies. This method is currently being used nationwide in the Monitoring Avian Productivity and Survivorship (MAPS) program (DeSante 1992).

Territory Mapping

Also known as "spot mapping," based on the territorial behavior of birds, where locations of birds are marked on a detailed map during several visits (a minimum of eight) in the breeding season. By counting the number of territories in an area, this method estimates the density of birds. Distribution of territories, species richness, and diversity are also documented. This is an excellent method for assessing areas with limited habitat. Standard methods are described by Robbins (1970) and used by The Cornell Laboratory of Ornithology's resident bird counts.

Nest Monitoring

Also called nest searching, this technique measures nesting success in specific habitats and provides information on trends in recruitment; measurement of vegetation associated with nests may identify habitat influences on breeding productivity. Examination of nests also allows collection of life-history data (e.g., clutch size, number of broods, numbers of nesting attempts), which provide important insight into vulnerability of species to decimation or perturbations (Martin and Geupel 1993).

Appendix B. How Birds Respond to Riparian Restoration

In measuring the success of habitat restoration/rehabilitation projects, there are two general levels of evaluation that can be undertaken. Measures of success for cultivated restoration projects include measurements of habitat, particularly survival, size, structure, etc., of regenerating vegetation or plantings. Cultivated measures provide two types of information:

- A picture of how closely restored habitats resemble the "reference-site ideal" for which one is striving.
- A measure of how closely the current restoration site resembles the intended project design.

However, for a measure of the actual benefits to wildlife, as well as the efficacy of a particular restoration design, measurements of wildlife response to restored habitats must be undertaken. Such measures may include all manner of wildlife monitoring techniques. Measuring demographic parameters, particularly reproductive success, are most likely the best measure of success (Martin 1993).

Riparian habitats are perhaps unique in California in that, provided that natural flooding and depositional processes remain, they can often regenerate quickly, providing significant benefits to wildlife in as little as two-three years. Natural recruitment restoration, in which habitat is allowed to regenerate naturally, as in a levee setback or flood bypass project, is probably the most effective and least costly form of restoration possible. However, when natural processes have been eliminated or altered, when non-native plants have become a dominant part of the vegetation, or when restoration outside the active floodplain is sought (i.e., floods occur less than one in four years), cultivated restoration is often employed, wherein intensive site preparation, collection of native-plant stock, and planting and maintenance of riparian vegetation takes place.

Kern River Preserve

Studies have shown that diversity and abundance (or density) can be misleading indicators of bird population health (e.g., Van Horne 1983); therefore, the goal of any restoration project should be ultimately to support populations with high productivity (i.e., high nest success on the breeding grounds). At the Kern River Preserve, 12 years of bird monitoring conducted by the Kern River Research Center in restored habitats suggest predictable patterns of response among bird species as riparian restoration sites regenerate and grow. Species diversity tends to increase significantly with the age of a restoration site; however, the best predictor of total bird species richness is mean tree height, followed by total foliage volume and mean quadratic diameter at breast height. Total foliage volume has been the best predictor of breeding bird density over the life of a riparian restoration site at the Kern River Preserve. In general, the richness and density of riparian obligate bird species increase with the age of the restoration plot. This does not mean, however, that managers should manage their sites or skew natural processes to prefer more mature sites over less mature sites. A mosaic of habitat ages is created naturally.

Patterns of response among individual bird species have also been found at the Kern River Preserve. Five general patterns have been identified: three that involve a positive trend in species population, one that demonstrates no trend, and one that involves a negative trend. A brief description of these patterns follows.

- Species occurring in small numbers before planting which gradually increase (for example, Northern Flicker, Mourning Dove, Nuttall's Woodpecker, Hairy Woodpecker, House Wren, Bushtit, Bewick's Wren, Brown-headed Cowbird, Bullock's Oriole, Spotted Towhee, Song Sparrow, and Lawrence's Goldfinch).

- Species not found before restoration that increase to the breeding population levels of natural forest sites (for example, Anna's Hummingbird, Yellow-billed Cuckoo, Black-chinned Hummingbird, Ash-throated Flycatcher, Western Kingbird, Western Scrub-jay, European Starling, Summer Tanager, and Lesser Goldfinch).

- Species found in low numbers before restoration that show a higher density subsequent to restoration than on natural forest sites (for example, Common Yellowthroat, Black Phoebe, Blue Grosbeak, Lazuli Bunting, and Red-winged Blackbird).

- Species found in small numbers before planting that show no trends as a result of restoration (for example, Downy Woodpecker, Western Wood-pewee, Willow Flycatcher, Tree Swallow, Oak Titmouse, White-breasted Nuthatch, Western Bluebird, American Robin, Yellow Warbler, and Yellow breasted Chat).

- Species that show a negative effect from restoration (for example, Horned Lark, Savannah Sparrow, and Western Meadowlark).

At the Kern River Preserve, restoration sites (with ages up to 12 years) averaged 18 to 22 species per plot, whereas natural forest sites averaged 41 species per plot. Much of the variation results from differences in structural diversity of vegetation. Additionally, natural forest sites show more diversity of habitats, with the interspersion of meadows, patches of mule fat, closed canopies of trees centuries old, and thickets of new growth (Nur et al. 1996).

Sacramento River

At a site restored by The Nature Conservancy, working in partnership with the U.S. Fish and Wildlife Service, PRBO found that in a newly restored riparian site along the Sacramento River bird species diversity increased by 73% from year two to year four of the restoration project. Revegetated sites ranging in age from four to 10 years supported species diversity comparable to mature riparian habitat. Moreover, habitat restoration will also benefit listed species, provided the needs of these species are taken into consideration during project implementation. Nine years after conducting the first riparian restoration at the Kern River Preserve, Yellow-billed Cuckoos nested on a habitat restoration site. Limited foraging use of restored areas began much sooner (after three years), but by the ninth year, restoration sites were used extensively for foraging. Willow Flycatchers began nesting in restored sites seven years after restoration.

Appendix C. Acronyms, Abbreviations, and Species Codes

List of Acronyms and Abbreviations

BBS:	Breeding Bird Survey
BLM:	U.S. Bureau of Land Management
BSOL:	Big Sur Ornithology Lab
CALFED:	CALFED Bay-Delta Program
Conservation Plan:	The California Partners in Flight Riparian Bird Conservation Plan
Corps:	U.S. Army Corps of Engineers
CalPIF:	California Partners in Flight
CDFG:	California Department of Fish and Game
DWR:	California Department of Water Resources
GIS:	Geographic Information Systems
HY:	hatch year
km:	kilometers
m:	meters
MAPS:	Monitoring Avian Productivity and Survivorship
NRCS:	Natural Resource Conservation Service
NSAs:	initiate nonstructural alternatives
PIF:	Partners in Flight
PRBO:	Point Reyes Bird Observatory
RHJV:	Riparian Habitat Joint Venture
USFS:	U.S. Forest Service
USFWS:	U.S. Fish and Wildlife Service
USGS:	U.S. Geological Service
VWS:	Ventana Wilderness Society
WHR:	Wildlife Habitat Relationships

List of Species Codes

BANS:	Bank Swallow
BHGR:	Black-headed Grosbeak
BLGR:	Blue Grosbeak
COYE:	Common Yellowthroat
LBVI:	Least Bell's Vireo
SOSP:	Song Sparrow
SPSA:	Spotted Sandpiper
SWHA:	Swainson's Hawk
SWTH:	Swainson's Thrush
TRES:	Tree Swallow
WAVI:	Warbling Vireo
WIFL:	Willow Flycatcher
WIWA:	Wilson's Warbler
YBCH:	Yellow-breasted Chat
YBCU:	Yellow-billed Cuckoo
YWAR:	Yellow Warbler

Appendix D. Scientific and Common Names

Plants

Common Name	*Latin Name*
Acacia	*Acacia dealbata*
Alder species	*Alnus spp.*
Alkali goldenbush	*Haplopappus acradenius*
Alkali sacaton	*Sporobolus airoides*
Arrowweed	*Pluchea sericea*
Baltic rush	*Juncus balticus*
Bent grass	*Agrostis spp.*
Bigleaf maple	*Acer macrophylum*
Black cottonwood	*Populus balsamifera*
Black locust	*Robinia pseudoacacia*
Black walnut	*Juglans californica*
Blue elderberry	*Sambucus mexicana*
Boxelder	*Acer negundo*
Buttonbush	*Cephalanthus occidentalis*
California Bay	*Umbellularia californica*
California blackberry	*Rubus ursinus*
California fan palm	*Washingtonia filifera*
California sycamore	*Platanus racemosa*
Cape ivy (German ivy)	*Delairea odorata*
Cattail	*Typha spp.*
Chokecherry	*Prunus virginiana*
Cocklebur	*Xanthium strumarium*
Common cattail	*Typha latifolia*
Common reed	*Phragmites australis*
Coyote willow	*Salix exigua*
Date palm	*Phoenix dactilifera*
Desert lavender	*Hyptis emoryi*
Dogwood	*Cornaceae spp.*
Douglas fir	*Pseudotsuga menziesii*
Edible fig	*Ficus carica*
Engelmann spruce	*Picea engelmannii*
English ivy	*Hedera helix*
Fremont cottonwood	*Populus fremontii*
Giant reed	*Arundo donax*
Himalayan blackberry	*Rubus himalaya*
Jeffrey pine	*Pinus jeffreyi*
Lodgepole pine	*Pinus contorta*
Mesquite	*Prosopis spp.*
Mojave seablight	*Suaeda torreyana*
Oatgrass	*Danthonia spp.*
Oregon ash	*Fraxinus latifolia*
Periwinkle	*Vinca major*
Poison oak	*Toxicodendron diversilobum*
Ponderosa pine	*Pinus ponderosa*
Purple loosestrife	*Lythrum salicaria*
Quailbush	*Atriplex lentiformis*
Red Fir	*Albies magnifica*

River bulrush	*Scirpus fluviatilis*
Rose species	*Rosa spp.*
Rush species	*Juncus spp.*
Russian olive	*Elaeagnus augustifolius*
Sagebrush species	*Artemesia spp.*
Sandbar willow	*Salix sessilifolia*
Sedge species	*Carex/Scirpus spp.*
Seep willow	*Baccharis glutinosa*
Serviceberry	*Amelanchier spp.*
Snowberry	*Symphoricarpos spp.*
Squaw waterweed	*Baccharis sergiloides*
Star thistle	*Centaurea spp.*
Sticky euphatorium	*Ageratina adenophora*
Tamarisk, salt cedar	*Tamarix chinensis*
Tasmanian blue gum	*Eucalyptus globulus*
Tule bulrush	*Scirpus acutus*
Valley oak	*Quercus lobata*
Velvet ash	*Fraxinus velutina*
Water Birch	*Betula occidentalis*
Western Juniper	*Juniperus occidentalis*
White alder	*Alnus rhombifolia*
White fir	*Abies concolor*
Wild grape	*Vitis californica*
Wild rose	*Rosa californica*
Willow species	*Salix spp.*
Wiregrass	*Juncus acutus*

Birds

American Crow	*Corvus brachyrhynchos*
American Robin	*Turdus migratorius*
Anna's Hummingbird	*Calypte anna*
Ash-throated Flycatcher	*Myiarchus cinerascens*
Bank Swallow	*Riparia riparia*
Bewick's Wren	*Thryomanes bewickii*
Black Phoebe	*Sayornis nigricans*
Black-chinned Hummingbird	*Archilochus alexandri*
Black-crowned Night Heron	*Nycticorax nycticorax*
Black-headed Grosbeak	*Pheucticus melanocephalus*
Blue Grosbeak	*Guiraca caerulea*
Brown-headed Cowbird	*Molothrus ater*
Bullock's Oriole	*Icterus bullockii*
Bushtit	*Psaltriparus minimus*
Clapper Rail (Light-footed)	*Rallus longirostris levipes*
Common Raven	*Corvus corax*
Common Yellowthroat	*Geothlypis trichas*
Downy Woodpecker	*Picoides pubescens*
European Starling	*Sturnus vulgaris*
Golden-crowned Kinglet	*Regulus satrapa*
Hairy Woodpecker	*Picoides villosus*
Horned Lark	*Eremophila alpestris*
House Wren	*Troglodytes aedon*
Lawrence's Goldfinch	*Carduelis lawrencei*

Lazuli Bunting	*Passerina amoena*
Least Bell's Vireo	*Vireo bellii pusillus*
Lesser Goldfinch	*Carduelis psaltria*
Nuttall's Woodpecker	*Picoides nuttallii*
Oak Titmouse	*Baeolophus inornatus*
Red-winged Blackbird	*Agelaius phoeniceus*
Ring-necked Duck	*Aythya collaris*
Ruby-crowned Kinglet	*Regulus calendula*
Savannah Sparrow	*Passerculus sandwichensis*
Snowy Plover	*Charadrius alexandrinus*
Song Sparrow	*Melospiza melodia*
Spotted Towhee	*Pipilo maculatus*
Summer Tanager	*Piranga rubra*
Swainson's Hawk	*Buteo swainsoni*
Swainson's Thrush	*Catharus ustulatus*
Swainson's Thrush (Olive-backed)	*Catharus ustulatus swainsoni*
Swainson's Thrush (Russet-backed)	*Catharus ustulatus ustulatus, C. u. oedicus*
Tree Swallow	*Tachycineta bicolor*
Tricolored Blackbird	*Agelaius tricolor*
Warbling Vireo	*Vireo gilvus*
Western Bluebird	*Sialia mexicana*
Western Kingbird	*Tyrannus verticalis*
Western Meadowlark	*Sturnella neglecta*
Western Wood-pewee	*Contopus sordidulus*
White-breasted Nuthatch	*Sitta carolinensis*
Willow Flycatcher	*Empidonax traillii*
Willow Flycatcher (Little)	*Empidonax traillii brewsteri*
Willow Flycatcher (Southwestern)	*Empidonax traillii extimus*
Wilson's Warbler	*Wilsonia pusilla*
Wrentit	*Chamaea fasciata*
Yellow Warbler	*Dendroica petechia*
Yellow-billed Cuckoo	*Coccyzus americanus*
Yellow-billed Magpie	*Pica nuttalli*
Yellow-breasted Chat	*Icteria virens*

Mammals

Bobcat	*Felis rufus*
Coyote	*Canis latrans*
Domestic cat	*Felis catus*
Fox, Gray	*Urocyon cinereoargenteus*
Fox, Red	*Vulpes vulpes*
Opossum, Virginia	*Didelphis virginiana*
Raccoon	*Procyon lotor*
Riparian Brush Rabbit	*Sylvilagus bachmani riparius*
Skunk, Striped	*Mephitis mephitis*

Amphibians

Arroyo Southwestern toad	*Bufo microscaphus californicus*

Invertebrates

Katydid	Family *Tettigoniidae*
Sphinx moth	Family *Sphingidae*

Appendix E. Riparian and Semi-riparian Natural Communities from a Manual of California Vegetation, 2nd Edition (Sawyer and Keeler-Wolf in prep)

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
30.000.00	**SCRUB AND CHAPARRAL**					N	
33.000.00		Sonoran and Mojavean Desert Scrub				N	
33.200.00			Cheesebush Scrub		*Hymenoclea salsola*	N	
33.260.00				Sweetbush Riparian Scrub	*Bebbia juncea*	Y	
40.000.00	**GRASS & HERB DOMINATED COMMUNITIES**					N	
41.000.00		Native Grassland				N	
41.310.00				Knotweed-Echinochloa Riparian Grassland		N	
45.000.00		Meadows and Seeps not dominated by grasses				N	
45.500.00			Alkali Meadow			N	
45.550.00				Cocklebur Riparian Grassland	*Xanthium strumarium*	N	
45.560.00				Rush Riparian Grassland	*Juncus spp.*	N	
45.561.00				Common Rush Riparian Grassland	*Juncus effusus var. brunneus*	N	

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
5.562.00				Baltic Rush Riparian Grassland	*Juncus balticus*	N	
45.563.00				Cooper Rush Riparian Grassland	*Juncus cooperi*	Y	
45.565.00				Mexican Rush Riparian Grassland	*Juncus mexicanus*	N	
60.000.00	**RIPARIAN AND BOTTOMLAND HABITAT**					N	
61.000.00		Riparian Forest and Woodland				N	
61.100.00			Cottonwood and Aspen Woodlands and Forests		*Populus spp.*	N	
61.111.00				Aspen Upland and Riparian Forests and Woodlands		N	ASP
61.120.00				Black Cottonwood Riparian Forests and Woodlands	*Populus balsamifera*	Y	MRI
61.130.00				Fremont Cottonwood Riparian Forests and Woodlands	*Populus fremontii*	Y	VRI, DRI, MRI
61.200.00			Willow Riparian Forests and Woodlands		*Salix spp.*	N	
61.201.00				Arroyo Willow Riparian Forests and Woodlands	*Salix lasiolepis*	Y	DRI, VRI, MRI

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
61.202.00				Black Willow Riparian Forests and Woodlands	*Salix gooddingii*	Y	VRI, DRI
61.203.00				Hooker Willow Riparian Forests	*Salix hookeriana*	Y	VRI
61.204.00				Pacific Willow Riparian Forests	*Salix lucida ssp. lasiandra*	Y	DRI, VRI, MRI
61.205.00				Red Willow Riparian Forests	*Salix laevigata*	Y	VRI, DRI, MRI
61.206.00				Sitka Willow Riparian Forests	*Salix sitchensis*	Y	VRI, DRI
61.207.00				Mixed Willow Riparian Forests and Woodlands	*Salix spp.*	Y	
61.208.00				Southern Willow Scrub	*Salix spp.*	Y	
61.209.00				Narrow-leaf Willow Riparian Scrub	*Salix exigua*	N	VRI, DRI, MRI
61.210.00				Yellow Willow Riparian Scrub	*Salix lutea*	N	MRI
61.211.00				Gooding Willow Woodland	*Salix goodingii*	N	
61.300.00			Sycamore		*Platanus spp.*	N	VRI
61.310.00				California Sycamore	*Platanus racemosa*	Y	VRI

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
61.311.00				Central CA Sycamore Alluvial Woodland	*Platanus spp.*	Y	VRI
61.312.00				Southern Sycamore - Alder Riparian Woodland	*Platanus spp.-Alnus spp.*	Y	VRI
61.313.00				Foothill Sycamore Riparian Woodland	*Platanus spp.*	Y	VRI
61.314.00				Central Coast Cottonwood - Sycamore Riparian Woodland	*Populus spp.-Platanus spp.*	Y	
61.400.00			Alder Riparian Forest		*Alnus spp.*	N	
61.410.00				Red Alder	*Alnus rubra*	N	RDW, VRI, MRI
61.420.00				White Alder Forest and Woodland	*Alnus rhombifolia*	N	MRI
61.500.00			Desert Wash Riparian Woodland			N	
61.510.00				Mesquite Woodland	*Prosopis spp.*	Y	
61.512.00				Honey Mesquite Scrub	*Prosopis glandulosa*	Y	
61.513.00				Tornillo Scrub	*Prosopis pubescens*	Y	
61.520.00				Fan Palm Woodland	*Washingtonia filifera*	Y	POS
61.530.00				Blue Palo Verde - Ironwood - Smoke Tree Woodland	*Cercidium floridum-Olneya tesota-Psorothamnus spinosus*	Y	

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
61.540.00				Blue Palo Verde Woodland	*Cercidium floridium*	N	
61.550.00				Desert-willow Woodland	*Chilopsis linearis*	N	
61.560.00				Ironwood Woodland	*Olneya tesota*	N	
61.570.00				Smoke Tree Woodland and Scrub	*Psorothamnus spinosus*	N	
61.580.00				Desert Olive Scrub	*Forestiera pubescens*	Y	
61.800.00			Walnut		*Juglans spp.*	Y	
61.810.00				Hind's Walnut Unique Stands	*Juglans californica var. hindsii*	Y	
61.900.00			Mixed Riparian Forest and Woodland			Y	
61.910.00				Great Valley Mixed Riparian Forest		N	VRI
61.920.00				Southern Mixed Riparian Forest		Y	
61.930.00				Southern Riparian Forest		Y	
61.940.00				Mojave Riparian Forest		Y	DRI
61.950.00				Desert Dry Wash Woodland		N	DSW

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
61.960.00				Oregon Ash Riparian Forest	*Fraxinus latifolia*	Y	VRI, MRI
63.000.00		Low to High Elevation Riparian Scrub				N	
63.100.00			Scrub Willow		*Salix spp.*	N	
63.110.00				Narrowleaf Willow	*Salix exigua*	Y	VRI, MRI, DRI
61.111.00				Tealeaf Willow Riparian Scrub	*Salix planifolia*	N	
61.112.00				Sierra Willow Riparian Scrub	*Salix eastwoodiae*	N	MRI
61.113.00				Lemmon's Willow Riparian Scrub	*Salix lemmonii*	N	MRI
61.114.00				Dusky Willow Riparian Scrub	*Salix melanopsis*	N	MRI
61.115.00				Grayleaf Sierra Willow Riparian Scrub	*Salix orestera*	N	MRI
61.116.00				Arctic Willow Dwarf Scrub	*Salix arctica*	N	MRI
61.117.00				Snow Willow Dwarf Scrub	*Salix reticulata*	N	MRI
63.120.00				Sandbar Willow	*Salix sessifolia*	N	VRI

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
63.130.00				Southern Willow	*Salix spp.*	Y	
63.140.00				Great Valley Willow	*Salix spp.*	Y	VRI
63.150.00				Montane Wetland Shrub Habitat		Y	MRI
63.160.00				Subalpine Wetland Shrub Habitat		N	MRI
63.200.00			Alder Scrubs		*Alnus spp.*	N	
63.210.00				Mountain Alder Scrub	*Alnus incana*	Y	MRI
63.220.00				Sitka Alder Scrub	*Alnus viridis*	Y	MRI
63.300.00			Buttonbush Scrub		*Cephalanthus occidentalis*	Y	VRI
63.400.00			Elderberry Scrub and Savanna		*Sambucus spp.*	N	
63.410.00				Mexican Elderberry	*Sambucus mexicana*	N	VRI
63.510.00				Mulefat Scrub	*Baccharis salicifolia*	N	DRI, VRI
63.520.00				Emory Baccharis Scrub	*Baccharis emoryi*	N	DSW, DRI
63.530.00				Broom Baccharis Scrub	*Baccharis sergiloides*	Y	DSW, DRI
63.600.00			Birch Scrub		*Betula spp.*	N	
63.610.00				Water Birch Scrub	*Betula occidentalis*	Y	MRI

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
63.700.00				Arrow Weed Scrubs	*Pluchea spp.*	N	DSW
63.710.00				Arrow Weed Scrub	*Pluchea sericea*	N	DSW
63.800.00			Vegetation dominated by Tamarisk		*Tamarix spp.*	N	
63.810.00				Tamarisk Scrubs and Woodlands	*Tamarix spp.*	N	DSW, DRI
63.900.00			Southern Riparian Scrub			Y	
63.901.00				North Coast Riparian Scrub		N	MRI
63.902.00				Central Coast Riparian Scrub		N	MRI
63.903.00				Montane Riparian Scrub		N	MRI
63.904.00				Modoc-Great Basin Riparian Scrub		N	
63.905.00				Mojave Desert Wash Scrub		N	DSW
63.906.00				Himalayan Blackberry Scrub	*Rubus discolor*	N	CSC
63.907.00				California Rose Riparian Scrub	*Rosa californica*	N	SEW
63.908.00				Salmonberry Scrub	*Rubus spectabilis*	N	CSC

Code	Group	Subgroup	Formation	Alliance	Scientific Name	Rare	CWHR Type
70.000.00	**BROAD LEAFED UPLAND TREE DOMINATED**					N	
71.000.00			Oak Woodlands and Forests			N	
71.040.00				Valley Oak Forests and Woodlands	*Quercus lobata*	Y	VOW, VRI
71.060.00				Coast Live Oak Forest and Woodland	*Quercus agrifolia*	N	COW
80.000.00	**CONIFEROUS UPLAND FOREST AND WOODLAND**					N	
82.000.00			Coastal and Montane Douglas-fir Forests and Woodlands		*Pseudotsuga spp.*	N	
82.500.00				Douglas-fir - Tanoak Forest	*Pseudotsuga menziesii-Lithocarpus densiflora*	N	DFR, COW, MHW, MHC

SCOTT CASHEN: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR THE TOWN AND COUNTRY PROJECT

CITED REFERENCE

U.S. Fish and Wildlife Service, Migratory Bird Management. 2010. Suggested Priority of Migratory Bird Conservation Actions for Projects. p. 1

Suggested Priority of Migratory Bird Conservation Actions for Projects
U.S. Fish and Wildlife Service, Migratory Bird Management
(For External Distribution)
March 9, 2010

1. Avoid any take of migratory birds and/or minimize the loss, destruction, or degradation of migratory bird habitat while completing the proposed project or action.

2. Determine if the proposed project or action will involve below- and/or above-ground construction activities since recommended practices and timing of surveys and clearances could differ accordingly.

3. If the proposed project or action includes a reasonable likelihood that take of migratory birds will occur, then complete actions that could take migratory birds outside of their nesting season. This includes clearing or cutting of vegetation, grubbing, etc. The primary nesting season for migratory birds varies greatly between species and geographic location, but generally extends from early April to mid-July. However, the maximum time period for the migratory bird nesting season can extend from early February through late August. Also, eagles may initiate nesting as early as late December or January depending on the geographic area. Due to this variability, project proponents should consult with the appropriate Regional Migratory Bird Program (USFWS) for specific nesting seasons. Strive to complete all disruptive activities outside the peak of migratory bird nesting season to the greatest extent possible. Always avoid any habitat alteration, removal, or destruction during the primary nesting season for migratory birds. Additionally, clearing of vegetation in the year prior to construction (but not within the nesting season) may discourage birds from attempting to nest in the proposed construction area, thereby decreasing chance of take during construction activities.

4. If a proposed project or action includes the potential for take of migratory birds and/or the loss or degradation of migratory bird habitat and work cannot occur outside the migratory bird nesting season (either the primary or maximum nesting season), project proponents will need to provide the USFWS with an explanation for why work has to occur during the migratory bird nesting season. Further, in these cases, project proponents also need to demonstrate that all efforts to complete work outside the migratory bird nesting season were attempted, and that the reasons work needs to be completed during the nesting season were beyond the proponent's control.

   Also, where project work cannot occur outside the migratory bird nesting season, project proponents must survey those portions of the project area during the nesting season prior to construction occurring to determine if migratory birds are present and nesting in those areas. In addition to conducting surveys during the

nesting season/construction phase, companies may also benefit from conducting surveys during the prior nesting season Such surveys will assist the company in any decisions about the likely presence of nesting migratory birds or sensitive species in the proposed project or work area. While individual migratory birds will not necessarily return to nest at the exact site as in previous years, a survey in the nesting season in the year before construction allows the company to become familiar with species and numbers present in the project area well before the nesting season in the year of construction. Bird surveys should be completed during the nesting season in the best biological timeframe for detecting the presence of nesting migratory birds, using accepted bird survey protocols. USFWS Offices can be contacted for recommendations on appropriate survey guidance. Project proponents should also be aware that results of migratory bird surveys are subject to spatial and temporal variability. Finally, project proponents will need to conduct migratory bird surveys during the actual year of construction, if they cannot avoid work during the primary nesting season (see above) and if construction will impact habitats suitable for supporting nesting birds.

5. If no migratory birds are found nesting in proposed project or action areas immediately prior to the time when construction and associated activities are to occur, then the project activity may proceed as planned.

6. If migratory birds are present and nesting in the proposed project or action area, contact your nearest USFWS Ecological Services Field Office and USFWS Region Migratory Birds Program for guidance as to appropriate next steps to take to minimize impacts to migratory birds associated with the proposed project or action.

* Note: these proposed conservation measures assume that there are no Endangered or Threatened migratory bird species present in the project/action area, or any other Endangered or Threatened animal or plant species present in this area. If Endangered or Threatened species are present, or they could potentially be present, and the project/action may affect these species, then consult with your nearest USFWS Ecological Services Office before proceeding with any project/action.

** The Migratory Bird Treaty Act prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. While the Act has no provision for allowing unauthorized take, the USFWS realizes that some birds may be killed during construction and operation of energy infrastructure, even if all known reasonable and effective measures to protect birds are used. The USFWS Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries that have taken effective steps to avoid take of migratory birds, and by encouraging others to implement measures to avoid take of migratory birds. It is not possible to absolve

individuals, companies, or agencies from liability even if they implement bird mortality avoidance or other similar protective measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent and effective measures to avoid that take. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction or similar activities.

*** Also note that Bald and Golden Eagles receive additional protection under the Bald and Golden Eagle Protection Act (BGEPA). BGEPA prohibits the take, possession, sale, purchase, barter, offer to sell, purchase, or barter, transport, export or import, of any Bald or Golden Eagle, alive or dead, including any part, nest, or egg, unless allowed by permit. Further, activities that would disturb Bald or Golden Eagles are prohibited under BGEPA. "Disturb" means to agitate or bother a Bald or Golden Eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an Eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. If a proposed project or action would occur in areas where nesting, feeding, or roosting eagles occur, then project proponents may need to take additional conservation measures to achieve compliance with BGEPA. New regulations (50 CFR § 22.26 and § 22.27) allow the take of bald and golden eagles and their nests, respectively, to protect interests in a particular locality. However, consultation with the Migratory Bird, Ecological Services, and Law Enforcement programs of the Service will be required before a permit may be issued.

LETTER A
ATTACHMENT 5

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From: Shearer-Nguyen, Elizabeth <EShearer@sandiego.gov>
Sent: Wednesday, September 28, 2016 7:32 AM
To: Rick Bates
Cc: Tony LoPresti; Eng, Anita
Subject: RE: Information Request re 9/22/16 Wetlands Advisory Board Decision on Workshop Action Item No. 1 - Town and Country Project
Attachments: T&C Wetland Advisory Board Presentation.pdf

Importance: High

Good Morning,

Attached is the applicant's presentation that was made before the Wetlands Advisory Board. The meeting minutes will be forwarded once the Wetlands Advisory Board have been reviewed and approved.

The Wetlands Advisory Board passed two motions, the first being to not continue the item. The second was to issue an opinion of high quality. While the Wetlands Advisory Board did push back on the low quality designation, the Wetlands Advisory Board did not make a statement of acceptance of the proposed construction of a runoff system, pedestrian bridge replacement, and wetland revitalization of 10.5 acres or 7.5 acres.

Thank you,

Elizabeth Shearer-Nguyen
Senior Planner
City of San Diego
Development Services Department
T (619) 446-5369 | http://www.sandiego.gov

Please Note: Work hours are M-F 6am to 230pm

From: Shearer-Nguyen, Elizabeth
Sent: Tuesday, September 27, 2016 10:14 PM
To: Rick Bates
Cc: Tony LoPresti
Subject: Re: Information Request re 9/22/16 Wetlands Advisory Board Decision on Workshop Action Item No. 1 - Town and Country Project
Importance: High

Good Evening,

We are in receipt of your request for materials/exhibits utilized/submitted by the applicant to the board and/or staff for the Thursday, September 22, 2016 Wetlands Advisory Board. I am not aware of any materials that were submitted, but will need to verify with City staff.

I will provide a follow-up email providing the requested materials along with responding to the addition questions posed within your email.

Thank you,

Elizabeth Shearer-Nguyen
Senior Planner
City of San Diego
Development Services Department
T (619) 446-5369 | http://www.sandiego.gov

Please Note: Work hours are M-F 6am to 230pm

From: Rick Bates <rbates@unitehere.org>
Sent: Friday, September 23, 2016 2:25 PM
To: Shearer-Nguyen, Elizabeth
Cc: Tony LoPresti
Subject: Information Request re 9/22/16 Wetlands Advisory Board Decision on Workshop Action Item No. 1 - Town and Country Project

Dear Ms. Shearer-Nguyen,

Good afternoon. My name is Rick Bates with Unite Here Local 30. Yesterday, I attended the WAB meeting and commented on the above referenced agenda item. Regarding this item, I would like to make the following information requests:

- Copies of any materials/exhibits used or submitted by the applicant to the board or staff during this presentation. Primarily, I'm interested in viewing the power point.
- Meeting minutes

Also, can you please provide a clear description of the motion passed by the board? The board seemed to adamantly push back on the low quality designation sought by the applicant while at the same time accept the proposed construction of a runoff system, pedestrian bridge replacement, and wetland revitalization of 10.5 acres or 7.5 acres? Thank you for your timely consideration.

Sincerely,

Rick Bates / Researcher

UNITEHERE! Local 30

2436 Market Street / San Diego / CA 92102

Cell: (619) 309-6770 / Fax: (619) 516-1383

Town & Country Project

Purpose of the Meeting

- Familiarize the Board with the Project Site
- Discuss Wetland Designation of “Low Quality”

Town & Country Project Highlights

On-site 3.2 acre public park with native habitat

San Diego River Trails and 7.5 acres of restored river habitat area

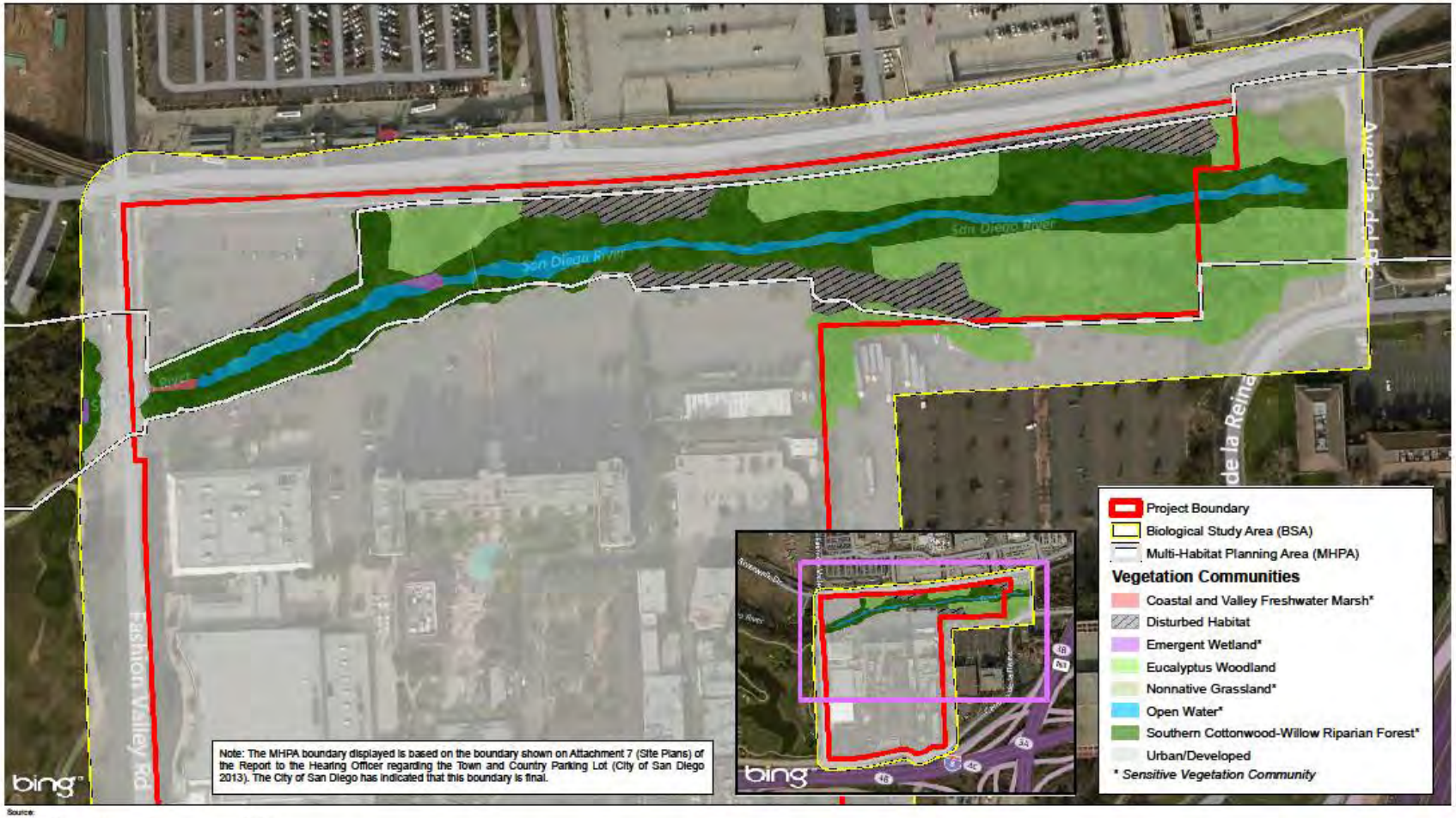
Added housing directly adjacent to transit

Expanded mobility options: transit, bicycle, pedestrian

Renovated hotel with added amenities

NO NEW VEHICULAR TRIPS

Vegetation Communities & Other Land Cover Types



Source:

150 75 0 150 Feet

Scale: 1:1,800, 1 inch = 150 feet

Figure 7
Vegetation Communities and Other Land Cover Types

Path: P:\2014\68529917_TC_Level998-CAD-GIS\928 GIS\922_Maps\STR\Veg_Communities.mxd, 1/19/2016, angelkp

Areas of Impact

0.13 acre Temporary

<0.01 acre Permanent

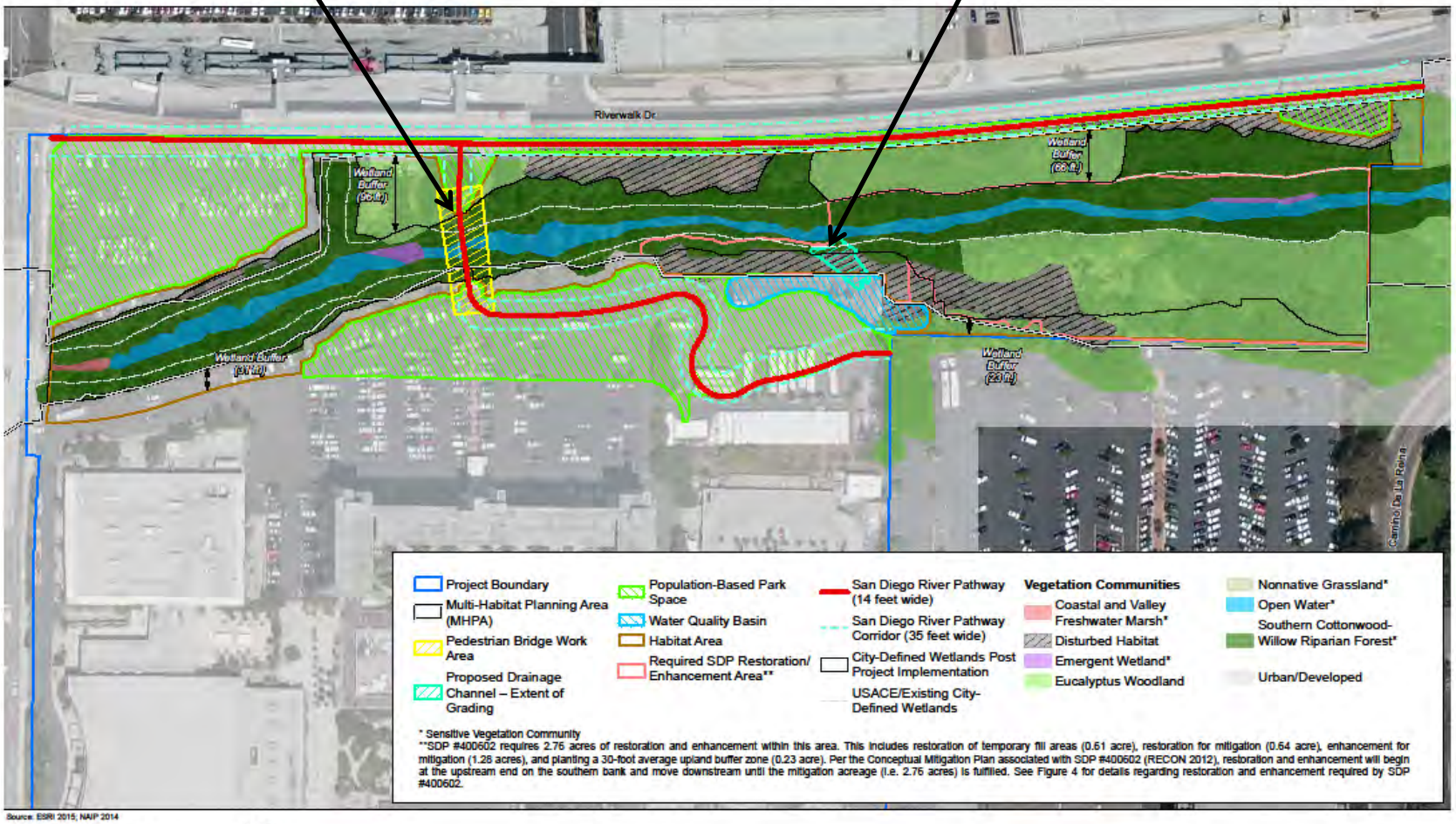


Figure 10
Project Impacts – Vegetation Communities

Town & Country Project

Pedestrian Bridge Replacement

Highly Constrained by Urban Development

Narrow Riparian Corridor

Subject to Relatively Intense Edge Effects

Human Presence

Litter & Debris

Trampled Vegetation

Foot Traffic

Denude of Vegetation

Edge Effects (cont.)

Stormwater Runoff

Degraded by Nonnative Species

Giant Reed

Eucalyptus

Nonnative Grasses

Mexican Fan Palm

Plant Species Detected within the Biological Survey Area

Family	Scientific Name	Common Name
Aizoaceae	**Carpobrotus edulis*	Hottentot-Fig
Anacardiaceae	*Rhus integrifolia*	Lemonadeberry
	**Schinus molle*	Peruvian Pepper Tree
	**Schinus terebinthifolius*	Brazilian Pepper Tree
Apiaceae	*Apiastrum angustifolium*	Mock-Parsley
	**Apium graveolens*	Common Celery
	**Conium maculatum*	Common Poison Hemlock
	**Foeniculum vulgare*	Sweet Fennel
Apocynaceae	**Asclepias curassavica*	Bloodflower Milkweed
Arecaceae	**Phoenix canariensis*	Canary Island Date Palm
	**Washingtonia robusta*	Mexican Fan Palm
Asteraceae	**Ageratina adenophora*	Sticky Eupatorium
	Ambrosia psilostachya	Western Ragweed
	Artemisia douglasiana	Douglas Mugwort
	Baccharis salicifolia	Mule-Fat
	Baccharis sarothroides	Broom Baccharis
	**Bidens pilosa*	Common Beggar's Tick
	Erigeron canadensis	Horseweed
	**Glebionis coronaria*	Crown Daisy
	**Hedypnois cretica*	Crete Hedypnois
	**Helminthotheca echioides*	Bristly Ox-Tongue
	Heterotheca grandiflora	Telegraph Weed
	**Lactuca serriola*	Prickly Lettuce
	**Silybum marianum*	Milk Thistle
	**Sonchus asper* ssp. *asper*	Prickly Sow-Thistle
	**Sonchus oleraceus*	Common Sow-Thistle
	Xanthium strumarium	Cocklebur
Brassicaceae	**Brassica nigra*	Black Mustard
	**Raphanus sativus*	Wild Radish
Chenopodiaceae	**Atriplex semibaccata*	Australian Saltbush
	**Chenopodium murale*	Nettle-Leaf Goosefoot
	**Salsola australis*	Australian Tumbleweed
Commelinaceae	**Commelina benghalensis*	Dayflower
Cucurbitaceae	**Citrullus lanatus* var. *citroides*	Watermelon
Cyperaceae	**Cyperus involucratus*	African Umbrella Plant
	Schoenoplectus californicus	California Bulrush
Euphorbiaceae	**Euphorbia peplus*	Petty Spurge
	Euphorbia polycarpa	Small-Seed Sandmat
	**Ricinus communis*	Castor Bean
Fabaceae	**Melilotus indicus*	Indian Sweetclover
Lamiaceae	**Marrubium vulgare*	Horehound
Malvaceae	**Malva parviflora*	Cheeseweed
Meliaceae	**Melia azedarach*	China Berry
Myrsinaceae	**Anagallis arvensis*	Scarlet Pimpernel, Poor Man's Weatherglass
Myrtaceae	**Eucalyptus camaldulensis*	River Red Gum
Oleaceae	**Fraxinus uhdei*	Shamel Ash
	**Olea europaea*	Olive
Onagraceae	**Ludwigia hexapetala*	Uruguayan Primrose-Willow
	Oenothera elata ssp. *hirsutissima*	Hairy Evening-Primrose
Oxalidaceae	**Oxalis corniculata*	Creeping Wood-Sorrel
Plantaginaceae	**Plantago lanceolata*	English Plantain, Rib-Grass
Platanaceae	*Platanus racemosa*	Western Sycamore
Poaceae	**Arundo donax*	Giant Reed
	**Avena barbata*	Slender Wild Oat
	**Bromus diandrus*	Ripgut Grass
	**Bromus madritensis*	Compact Brome
	**Cortaderia selloana*	Selloa Pampas Grass
	**Cynodon dactylon*	Bermuda Grass
	**Hordeum murinum* ssp. *glaucum*	Glaucous Barley
	**Paspalum dilatatum*	Dallis Grass
	**Pennisetum clandestinum*	Kikuyu Grass
	**Schismus barbatus*	Mediterranean Schismus
	**Stipa miliacea*	Smilo Grass
Polygonaceae	**Rumex crispus*	Curly Dock
Rubiaceae	*Galium aparine*	Common Bedstraw
Salicaceae	*Populus fremontii* ssp. *fremontii*	Western Cottonwood
	Salix exigua var. *hindsiana*	Hinds's Willow
	Salix gooddingii	Goodding's Black Willow
	Salix laevigata	Red Willow
	Salix lasiolepis	Arroyo Willow
Simaroubaceae	**Ailanthus altissima*	Tree-of-Heaven
Solanaceae	*Datura wrightii*	Western Jimson Weed
	**Nicotiana glauca*	Tree Tobacco
Tropaeolaceae	**Tropaeolum majus*	Garden Nasturtium
Typhaceae	*Typha domingensis*	Southern Cattail
Urticaceae	**Urtica urens*	Dwarf Nettle

* = Nonnative

Wetlands onsite have substantial restoration and enhancement potential

Restoration & Enhancement

- 0.14 acre of impact
  7.5 acres of restoration and enhancement

- Removal of nonnatives
- Planting native species – palette consistent with:
  - composition, diversity and relative abundance of existing native wetlands
  - native species approved for the public park plantings
- Establishment of an upland buffer between wetlands and development

“Low Quality”

- In summary…
  - Highly Constrained
  - Narrow Riparian Corridor
  - Increased Edge Effects
    - Human presence – litter & trampled vegetation
    - Stormwater runoff – pollutants & nonnative seed
  - Nonnative Species

“Low Quality”

- There is so much potential for restoration and enhancement.
- Still restoring on-site at a ratio consistent with the City’s Biology Guidelines.
- Quality is not dictating the level of mitigation.

LETTER A
ATTACHMENT 6

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NO FEE GC §6103

FILED
Clerk of the Superior Court
MAR 22 2007
By: C. NEPOMUCENO, Deputy

SUPERIOR COURT OF CALIFORNIA

COUNTY OF SAN DIEGO

THE PEOPLE OF THE STATE OF CALIFORNIA; and THE CITY OF SAN DIEGO, a municipal corporation, Plaintiffs, v. TOWN AND COUNTRY HOTEL LLC, a Delaware Limited Liability Company; AMERICAN ASPHALT AND CONCRETE INC., a California corporation; DOES I through XX, inclusive, Defendants.	CASE NO. GIC880884 JUDGE WILLIAM R. NEVITT, JR. DEPT. 64 STIPULATION IN FULL SETTLEMENT FOR FINAL JUDGMENT OF PERMANENT INJUNCTION; JUDGMENT THEREON [CCP § 664.6]

Plaintiffs, the People of the State of California and the City of San Diego, a municipal corporation, appearing through their attorneys, Michael J. Aguirre, City Attorney, and Diane Silva-Martinez, Head Deputy City Attorney; and Defendants Town and Country Hotel, a Limited Liability Company; American Asphalt and Concrete, Inc. a California corporation; by and through their attorneys, Matthew A. Peterson and James H. Flaherty, enter into the following Stipulation in full and final settlement of the above-captioned case without trial or adjudication of any issue of fact or law, and agree that final judgment may be so entered:

1. This Stipulation for Entry of Final Judgment [STIPULATED JUDGMENT] is executed as of 3/19, 2007, between and among Plaintiffs, The People of the State of California and the City of San Diego, and Defendants Town and Country Hotel, American Asphalt and Concrete, Inc.; and DOES I through XX, inclusive.

2. The parties to this STIPULATED JUDGMENT are parties to a civil suit pending in the Superior Court of the State of California for the County of San Diego, entitled *The People Of the State Of California and the City of San Diego, a municipal corporation v. Town And Country Hotel, a Limited Liability Company; American Asphalt And Concrete Inc., a California corporation; and Does I through XX, inclusive,* Civil Number GIC880884.

3. The parties to this STIPULATED JUDGMENT incorporate by reference the Cleanup and Abatement Order No. R9-2005-0279 [CAO] issued to the Defendants by the California Regional Water Quality Control Board, San Diego Region (RWQCB) attached hereto as Exhibit 1.

4. The City of San Diego, through its police power and its Municipal Code ordinances, has the legal authority to enforce those portions of the California Water Code [CWC] referenced in the CAO, in privy with the RWQCB.

5. The parties to this STIPULATED JUDGMENT agree that the relief granted herein is sufficient to address all of the findings in the CAO and violations listed in the City of San Diego's Notice of Violation dated December 12, 2005.

6. The City of San Diego is a charter city empowered to govern its own municipal affairs.

7. This STIPULATED JUDGMENT resolves an enforcement action regarding municipal affairs.

8. The parties wish to avoid the burden and expense of further litigation and accordingly have determined to compromise and settle their differences in accordance with the provisions of this STIPULATED JUDGMENT. Neither this STIPULATED JUDGMENT nor any of the statements or provisions contained herein shall be deemed to constitute an admission or an adjudication of any of the allegations of the Complaint.

9. This action is brought under California law and this Court has jurisdiction over the subject matter and each of the parties in this action.

10. The property [PROPERTY] that is the subject of this STIPULATED JUDGMENT consists of the following parcels in the City of San Diego known by the assessor's parcel numbers

and legal descriptions listed below as recorded in the Office of the Recorder for the County of San Diego:

PARCEL A: (APN 437-260-49)

ALL THAT PORTION OF LOT 2 OF MISSION VALLEY BALL PARK, IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, State of California, ACCORDING TO MAP THEREOF NO. 3755, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, DECEMBER 6, 1957, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 2: THENCE ALONG THE WESTERLY LINE OF SAID LOT 2, NORTH 14° 55' 19" WEST -RECORD NORTH 15° 20' 48" WEST- 254.05 FEET TO A POINT IN THE SOUTHERLY BOUNDARY OF FASHION VALLEY, MAP NO. 6170, ON FILE IN THE OFFICE OF SAID COUNTY RECORDER, SAID POINT BEING ALSO ON A 5,000 FOOT RADIUS CURVE, CONCAVE NORTHERLY, A RADIAL LINE TO SAID POINT BEARS SOUTH 19° 14' 14" EAST; THENCE EASTERLY ALONG SAID CURVE AND ALONG SAID SOUTHERLY BOUNDARY OF FASHION VALLEY THROUGH A CENTRAL ANGLE OF 01° 45' 56" AN ARC DISTANCE OF 154.08 FEET; THENCE TANGENT TO SAID CURVE NORTH 68° 59' 50" EAST, ALONG SAID SOUTHERLY BOUNDARY, 508.97 FEET, MORE OR LESS. TO A POINT IN THE WESTERLY LINE OF LOT 8, E. W. MORSE'S SUBDIVISION, MAP NO. 103, ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, BEING ALSO A POINT IN THE BOUNDARY OF SAID MISSION VALLEY BALL PARK; THENCE ALONG SAID BOUNDARY THE FOLLOWING COURSES: SOUTH 14° 50' 59" EAST -RECORD SOUTH 15° 20' 48" EAST-105.41 FEET; SOUTH 74° 55' 10" WEST - RECORD SOUTH 74° 39' 12" WEST-65.00 FEET; SOUTH 14° 50' 59" EAST - RECORD SOUTH 15° 20' 48" EAST- 224.68 FEET; SOUTH 75° 52' 53" WEST 594.22 FEET - RECORD SOUTH 75° 24' 12" WEST, 594.20 FEET- TO THE POINT OF BEGINNING.

PARCEL B: (APN 437-260-44)

THAT PORTION OF LOT 4 OF PARTITION OF PUEBLO LOT 1105, IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, State of California, ACCORDING TO REFEREE'S MAP NO. 1029 MADE IN THE ACTION OF THOMAS J. DALEY VS. ARPAD HARASZTHY, ET AL, IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, FILED IN THE COUNTY CLERK'S OFFICE, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEASTERLY CORNER OF SAID LOT 4, THENCE ALONG THE EASTERLY LINE OF SAID LOT NORTH 15° 25' WEST -RECORD NORTH 15° 15' WEST- 1485.00 FEET; THENCE LEAVING SAID EASTERLY LINE SOUTH 75° 20' WEST 275.10 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTH 75° 20' WEST 74.90 FEET TO A TANGENT 233.12 FOOT RADIUS CURVE TO THE LEFT; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE 307.43 FEET, MORE OR LESS, THROUGH A CENTRAL ANGLE OF 75° 33' 34" TO THE SOUTHERLY LINE OF THAT PARCEL 1 OF THE LAND DESCRIBED IN THE DEED TO E. A. WITTMER, RECORDED MARCH 20, 1947, AS FILE NO. 30506, IN

BOOK 2349, PAGE 466 OF OFFICIAL RECORDS; THENCE SOUTH 75° 20' WEST ALONG SAID SOUTHERLY LINE AND ITS WESTERLY PROLONGATION 497.20 FEET, MORE OR LESS, TO THE EASTERLY LINE OF THE WESTERLY 30 FEET OF SAID LOT 4; THENCE ALONG SAID EASTERLY LINE NORTH 15° 30' 45" WEST 89.12 FEET OF A TANGENT 60.00 FOOT RADIUS CURVE, THE CENTER OF WHICH BEARS NORTH 74° 29' 15" EAST FROM THE POINT OF TANGENCY; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 93.36 FEET, THROUGH A CENTRAL ANGLE OF 89° 09' 15" THENCE TANGENT TO SAID CURVE NORTH 75° 20' EAST 14.47 FEET TO A TANGENT 25 FOOT RADIUS CURVE TO THE LEFT; THENCE EASTERLY ALONG THE ARC OF SAID CURVE 19.93 FEET, THROUGH A CENTRAL ANGLE OF 45° 41'; THENCE TANGENT TO SAID CURVE NORTH 29° 39' EAST 210.51 FEET TO A TANGENT 500 FOOT RADIUS CURVE TO THE RIGHT; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE 148.60 FEET, MORE OR LESS, THROUGH A CENTRAL ANGLE OF 17° 01' 43" TO A LINE WHICH BEARS SOUTH 15° 30' 45" EAST FROM THE SOUTHEASTERLY CORNER OF A PARCEL OF LAND DESCRIBED IN DEED TO DR. NORMAN C. ROBERTS, ET UX, RECORDED NORTH 4, 1949 AS FILE NO. 102379 IN BOOK 3376, PAGE 102 OF OFFICIAL RECORDS; THENCE NORTH 15° 30' 45" WEST 127.13 FEET, MORE OR LESS, TO A LINE WHICH IS PARALLEL WITH AND 25 FEET SOUTHERLY AT RIGHT ANGLES FROM THE SOUTHERLY LINE OF SAID ROBERTS LAND; THENCE ALONG SAID PARALLEL LINE NORTH 74° 29' 15" EAST 440.61 FEET, MORE OR LESS , TO A LINE WHICH BEARS NORTH 15° 25' WEST FROM THE TRUE POINT OF BEGINNING THENCE SOUTH 15° 25' EAST ALONG SAID LINE 236.25 FEET, MORE OR LESS, TO THE TRUE POINT OF BEGINNING.

PARCEL C: (APN 437-260-48-00)

ALL THAT PORTION OF LOT 4 OF PARTITION OF PUEBLO LOT 1105, IN THE CITY OF SAN DIEGO, COUNTY OF SAN Diego, State of California, ACCORDING TO REFEREE'S MAP NO. 1029, MADE IN THE ACTION OF THOMAS J. DALEY VS. ARPAD HARASZTHY, ET AL, IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, FILED IN THE COUNTY CLERK'S OFFICE, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE EASTERLY LINE OF SAID LOT 4 DISTANT ALONG SAID LINE NORTH 14° 55' 19" WEST -RECORD NORTH 15° 15' 00" WEST- 1485.00 FEET FROM THE SOUTHEASTERLY CORNER OF SAID LOT 4; THENCE CONTINUING ALONG SAID EASTERLY LINE, NORTH 14° 55' 19" WEST 254.05 FEET TO A POINT IN THE SOUTHERLY BOUNDARY OF FASHION VALLEY, MAP NO. 6170 FILED IN THE OFFICE OF THE RECORDER OF SAID COUNTY, SAID POINT BEING ALSO ON A 5,000 FOOT RADIUS CURVE, CONCAVE NORTHERLY, A RADIAL LINE TO SAID POINT BEARS SOUTH 19° 14' 14" EAST; THENCE WESTERLY ALONG SAID CURVE, AND ALONG SAID SOUTHERLY BOUNDARY THROUGH A CENTRAL ANGLE OF 04° 15' 04" AN ARC DISTANCE OF 370.98 FEET - RECORD 370.10 FEET; THENCE TANGENT TO SAID CURVE, ALONG SAID SOUTHERLY BOUNDARY, SOUTH 75° 00' 50" WEST, 734.57 FEET TO THE SOUTHWEST CORNER OF SAID MAP NO. 6170; THENCE LEAVING SAID BOUNDARY SOUTH 14° 59' 10" EAST ALONG THE WESTERLY LINE OF SAID LOT 4, 399.06 FEET, MORE

OR LESS, TO THE NORTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED IN PARCEL 1 IN DEED IN TO TOWN AND COUNTRY DEVELOPMENT, INC., RECORDED AUGUST 16, 1961 AS FILE NO. 140984 OF OFFICIAL RECORDS; THENCE EASTERLY ALONG THE NORTHERLY LINE OF SAID PARCEL 1, NORTH 75° 51' 31" EAST - RECORD NORTH 75° 20' 00" EAST- 530.32 FEET TO A POINT IN A NON-TANGENT 233.12 FOOT RADIUS CURVE, CONCAVE SOUTHEASTERLY, SAID POINT BEING THE SOUTHEASTERLY CORNER OF LAND DESCRIBED IN DEED TO EVERETT C. DAVIS AND ELLEN S. DAVIS RECORDED AUGUST 31, 1961 AS FILE NO. 151988 OF OFFICIAL RECORDS: THENCE NORTHERLY AND EASTERLY ALONG SAID CURVE AND ALONG THE BOUNDARY OF SAID DAVIS' LAND AN ARC DISTANCE OF 304.40 FEET, MORE OR LESS , THENCE CONTINUING ALONG SAID BOUNDARY OF DAVIS' LAND, NORTH 75° 00' 50" EAST -RECORD NORTH 75° 20' 00" EAST- 330.00 FEET, MORE OR LESS, TO A POINT WHICH LIES 20.00 FEET, MEASURED AT RIGHT ANGLES, FROM SAID EASTERLY LINE OF LOT 4; THENCE SOUTHERLY, PARALLEL WITH SAID EASTERLY LINE OF LOT 4, 175.00 FEET; THENCE EASTERLY, AT RIGHT ANGLES, TO THE LAST DESCRIBED COURSE 20.00 FEET TO A POINT IN SAID EASTERLY LINE OF LOT 4; THENCE NORTHERLY ALONG SAID EASTERLY LINE OF LOT 4; 175.00 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE ABOVE DESCRIBED PARCEL C ALL THAT PORTION INCLUDED WITHIN THAT PARCEL 1 DESCRIBED IN DEED TO BETTY FOWLER, RECORDED FEBRUARY 6, 1952 IN BOOK 4364, PAGE 164 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM ALL THAT LAND DESCRIBED ABOVE AS PARCEL B.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN FASHION VALLEY ROAD.

SAID IS SHOW ON RECORD OF SURVEY NO. 2595, RECORDED JANUARY 25, 1951.

PARCEL D: (APN 437-260-46)

THAT PORTION OF LOT 4 OF PARTITION OF PUEBLO LOT 1105, IN THE CITY OF SAN DIEGO, State of California, ACCORDING TO REFEREE'S MAP NO. 1029, MADE IN THE ACTION OF THOMAS J. DALEY VS. ARPAD HARASZTHY, ET AL, IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, FILED IN THE COUNTY CLERK'S OFFICE, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE EASTERLY LINE OF SAID LOT 4, DISTANT ALONG SAID LINE, NORTH 15° 25' WEST, - RECORD NORTH 15° 15' WEST - 1485.00 FEET FROM THE SOUTHEASTERLY CORNER OF SAID LOT 4; THENCE SOUTH 75° 20' WEST, 54.61 FEET TO THE TRUE POINT OF BEGINNING SAID POINT BEING THE BEGINNING OF A TANGENT 30 FOOT RADIUS CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 30.00 FEET; THENCE EASTERLY AND SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 89° 15', A DISTANCE OF 46.73

FEET; THENCE SOUTH 15° 25' EAST, 145.39 FEET TO A POINT IN THE SOUTHERLY LINE OF PARCEL 1 OF THAT LAND DESCRIBED IN THE DEED TO E. A. WITTMER, RECORDED ON MARCH 20, 1947 AS DOCUMENT NO. 30506, IN BOOK 2349, PAGE 466 OF OFFICIAL RECORDS: THENCE ALONG THE SOUTHERLY LINE OF SAID PARCEL 1, SOUTH 75° 20' WEST, 250.10 FEET; THENCE NORTH 15° 25' WEST, 175.00 FEET TO AN INTERSECTION WITH A LINE BEARING SOUTH 75° 20' WEST, FROM THE TRUE POINT OF BEGINNING; THENCE NORTH 75° 20' EAST, 220.49 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL E: (APN 437-260-45-00)

THAT PORTION OF LOT 4 OF PARTITION OF PUEBLO LOT 1105, IN THE CITY OF SAN DIEGO, State of California, ACCORDING TO REFEREE'S MAP NO. 1029, MADE IN THE ACTION OF THOMAS J. DALEY VS. ARPAD HARASZTHY, ET AL, IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, FILED IN THE COUNTY CLERK'S OFFICE, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT IN THE EASTERLY LINE OF SAID LOT 4, DISTANT ALONG SAID LINE NORTH 15° 25' WEST (RECORD NORTH 15° 25' WEST) 1310 FEET FROM THE SOUTHEASTERLY CORNER OF SAID LOT 4; THENCE CONTINUING ALONG SAID EASTERLY LOT LINE, NORTH 15° 25' WEST 175 FEET; THENCE SOUTH 75° 20' WEST 350 FEET TO THE BEGINNING OF A 233.12 FOOT RADIUS CURVE CONCAVE SOUTHEASTERLY, A RADIAL LINE AT SAID POINT BEARING NORTH 15° 25' WEST, BEING ALSO THE TRUE POINT OF BEGINNING OF THE PROPERTY HEREIN DESCRIBED; THENCE SOUTHWESTERLY ALONG SAID CURVE 307.43 FEET - RECORD 304.40 FEET - MORE OR LESS, TO THE SOUTHERLY LINE OF THAT PARCEL 1 OF THE LAND DESCRIBED IN THE DEED TO E. A. WITTMER, RECORDED MARCH 20, 1947 AS DOCUMENT NO. 30506, IN BOOK 2349, PAGE 466 OF OFFICIAL RECORDS; THENCE ALONG SAID SOUTHERLY LINE OF WITTMER'S PARCEL 1, NORTH 75° 20' EAST 302.95 FEET - RECORD NORTH 75° 30' EAST 300 FEET - MORE OR LESS, TO THE SOUTHWESTERLY CORNER OF THAT PARCEL OF LAND DESCRIBED IN THE DEED TO ARTHUR H. MARX ET UX, RECORDED MARCH 19, 1951 AS DOCUMENT NO. 34219 IN BOOK 4016, PAGE 207 OF OFFICIAL RECORDS; THENCE NORTH 15° 25' WEST ALONG SAID MARX LAND, 175 FEET TO THE NORTHWESTERLY CORNER THEREOF; THENCE SOUTH 75° 20' WEST 74.90 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL F: (APN 437-260-47)

THAT PORTION OF LOT 4 OF PARTITION OF PUEBLO LOT 1105, IN THE CITY OF SAN DIEGO, State of California, ACCORDING TO REFEREE'S MAP NO. 1029, MADE IN THE ACTION OF THOMAS J. DALEY VS. ARPAD HARASZTHY, ET AL, IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, FILED IN THE COUNTY CLERK'S OFFICE, DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE EASTERLY LINE OF LOT 4 DISTANT THEREON NORTH 15° 25' 00" WEST 1485.00 FEET FROM THE SOUTHERLY CORNER THEREOF; THENCE SOUTH 75° 20' WEST

54.61 FEET TO A TANGENT 30.00 FOOT RADIUS CURVE CONCAVE SOUTHWESTERLY AND BEING THE TRUE POINT OF BEGINNING; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE 46.73 FEET; THENCE LEAVING THE ARC OF SAID CURVE SOUTH 15° 25' 00" EAST 145.39 FEET; THENCE NORTH 75° 20' 00" EAST TO A POITN WHICH BEARS SOUTH 75° 20' 00" WEST 20.00 FEET FROM SAID EASTERLY LINE; THENCE NORTH 15°25'00" WEST - RECORD THENCE ALONG SAID EASTERLY LINE; 175.00 FEET; THENCE SOUTH 75°20'00" WEST - RECORD THENCE LEAVING SAID EASTERLY LINE - TO THE TRUE POINT OF BEGINNING.

11. Plaintiffs allege that defendants, and each of them, engaged in or caused to be performed grading operations on the Property. Plaintiffs allege that the grading operations were performed negligently, improperly and without appropriate authorizations, causing, among other things, physical injury to adjacent property and physical injury to or destruction of vegetation, trees and other tangible property. Plaintiffs also allege that damages were caused by the accidental use of grading equipment in areas beyond those intended, authorized or permitted, as well as the accidental pushing or depositing of concrete, asphalt, dirt, rocks and other debris onto adjacent property, damaging such adjacent property. Defendants deny each and every one of these allegations.

INJUNCTION

12. Upon entry of this STIPULATED JUDGMENT, Defendants, their successors and assigns, and any of its agents, employees, representatives and all persons, corporations or other entities acting by, through, under or on behalf of Defendants and all persons acting in concert with or participating with the Defendants with actual or constructive knowledge of this injunction shall be permanently enjoined from:

a. Violating all applicable building, zoning, and nuisance laws and regulations at the PROPERTY.

b. Performing any clearing, grubbing, grading, excavating, filling, or otherwise performing any activity constituting "development" as defined by San Diego Municipal Code [SDMC] section 113.0103 at any portion of the PROPERTY containing Environmentally Sensitive Lands per SDMC section 113.0103, unless City approval has been granted or all required local, state or federal permits and approvals have been obtained.

c. Performing any construction activity at the PROPERTY until permits and approvals have been obtained from the City. Discharging waste sand, silt, clay, or dredged or fill material in a manner or quantity which would result in pollutants entering the City of San Diego's Storm Water Conveyance System.

d. Violating any of the provisions of the CAO.

COMPLIANCE MEASURES

13. The parties acknowledge that Defendant Town and Country Hotel has already performed and continues to perform, repair, erosion and sediment control measures and mitigation as required by the City of San Diego, the RWQCB, and federal and state agencies for any impacts allegedly caused by the negligent grading on the PROPERTY.

14. Defendant Town and Country Hotel shall maintain all necessary erosion and sediment control measures and Best Management Practices to protect any exposed slopes and pads which resulted from any development and to eliminate the potential for a discharge of sediments and other pollutants into the adjacent open space. Best Management Practices shall include appropriate stabilization and repair of physical injuries of disturbed slopes directly contacting the San Diego River and shall include practices beyond standard construction practices. Any repair shall not result in additional environmental impacts and must be approved by the appropriate federal or state agencies. The City's requirement to repair the property damage and to stabilize these slopes shall not in any way exempt Defendants from their responsibility to obtain any necessary permits from the applicable Federal, State, and County resource agencies prior to beginning work.

15. City acknowledges that Defendant Town and Country Hotel has already removed all of the items stored in the required parking spaces located on the lower level of the three-story parking structure located to the south of the newly constructed northeasterly parking lot;

16. With the exception of temporary special events approved by the City, Defendant Town and Country Hotel shall maintain all parking spaces so that they are available for vehicle parking as required by discretionary permit, Planned Commercial Development [PCD]/Conditional Use Permit [CUP] 88-0585.

17. Defendant Town and Country Hotel has already retained the services of a qualified biological consultant and civil engineer and has provided the City by a written evaluation of the existing vegetation on site, the quantity and amount of vegetation allegedly damaged by the negligent grading activity, and the quantity and amount of acreage allegedly impacted. The evaluation shall include a discussion of impacts to wetlands, water bodies, and the water shed. The evaluation, shall include a hydraulic analysis of the impacts to the water surface elevations during the base flood discharge. The biological evaluation shall be prepared in accordance with the "City of San Diego's Biological Review Reference" (July 2002) and shall include a discussion on wetlands, water bodies, watersheds or streambeds on which have been impacted. All proposals for mitigation of wetland habitat as set forth herein reflect adequate compensatory mitigation. Plaintiffs shall comply with the City of San Diego's mitigation ratios for impacts to wetlands associated with the grading activity at 3:1.

The required evaluation shall include a historical resources survey and report prepared by a qualified archaeologist in accordance with the Land Development Code Historical Resources Guidelines. This survey and report may include an on-site assessment and records search, an impact assessment for all existing and any newly identified archaeological resources, accompanied by mitigation measures as necessary.

18. Defendant Town and Country Hotel must elect to either repair the two impacted sites (OPTION ONE) or repair portions of the two impacted sites and develop a portion of the impacted site upon which the parking lot is constructed (OPTION TWO) in the manner described below. The two areas of impact are:

a. the newly constructed northeasterly parking lot which is approximately 280 feet x 229 feet, or 64,120 square feet in size. Repair of this area requires the removal of all asphalt, concrete, landscape material, imported fill material, storage containers and trash compacting and collection equipment.

b. the second area of impact is the area immediately east of and adjacent to the newly constructed northeasterly parking lot. This impacted area is approximately 80 feet x 450 feet, or 36,000 square feet in size. Within this second area, it is alleged that vegetation and trees were

accidentally damaged during the grading operations and fill material was accidentally pushed into this area, causing additional damaged to vegetation.

OPTION ONE: REPAIR ONLY

In order to repair impacts to sensitive biological resources and the Special Flood Hazard Area, Defendant Town and Country Hotel must submit a complete application to the Development Services Department [DSD] at the direction of the Neighborhood Code Compliance Division of DSD for all necessary discretionary permits from DSD including but not limited to a Site Development Permit [SDP]; California Environmental Quality Act [CEQA] review; and a grading/landscape plan to address the impacts to Environmentally Sensitive Lands [ESL] and to address the impacts allegedly caused by grading operations including the repair of the damage to native habitat (vegetation, trees, etc.). Necessary to the application process are the written evaluations provided by a qualified biological consultant and civil engineer hired by defendants as referenced in Paragraph 17 of this STIPULATED JUDGMENT.

OPTION TWO: REPAIR AND DEVELOPMENT

In order to repair the damage to sensitive biological resources and the Special Flood Hazard Area, Defendant Town and Country Hotel must submit a complete application to the Development Services Department [DSD] at the direction of the Neighborhood Code Compliance Division of DSD for all necessary discretionary permits from DSD including but not limited to a Site Development Permit [SDP]; California Environmental Quality Act [CEQA] review; and a grading/landscape plan to address the impacts to Environmentally Sensitive Lands [ESL] and to address the damage allegedly caused by the grading operations including repair of the damages to native habitat (vegetation, trees, etc.). Necessary to the application process are the written evaluations provided by a qualified biological consultant and civil engineer hired by defendants as referenced in Paragraph 17 of this STIPULATED JUDGMENT.

In addition, Defendant Town and Country Hotel must submit plans with its application which would allow for:

A. the legal and proper development of the impacted area which is approximately 212 feet x 280 feet in size and located in the south portion of the newly constructed northeasterly parking lot;

B. the development, excluding repair work, must adhere to the design sensitive zone as identified in the Atlas Specific Plan and other City plans and ordinances as applicable;

C. a demonstration by way of hydraulic modeling of the pre-conditions and post-conditions that show no increase occurred in the base flood elevations for the parking lot.

19. If Defendant is unsuccessful in ultimately obtaining approvals necessary to exercise OPTION TWO, Defendant understands that OPTION ONE (repair of the site) is required to comply with the Municipal Code.

20. In the event NCCD, DSD, or a federal or state agency requests corrections to the submitted plans described in OPTION ONE AND TWO above, Defendant Town and Country Hotel agrees to exercise due diligence and resubmit the corrected plans and any other applicable documents no later than 30 calendar days from the date of any such request or such extension that may be granted by the City for good cause.

21. Within 90 calendar days from the date any State and Federal permits, if required, are issued or such extension that may be granted by the City for good cause, Defendant Town and Country Hotel shall obtain all necessary and final approvals from the appropriate agencies for these permits.

SUPPLEMENTAL ENVIRONMENTAL PROJECTS

22. Within 60 calendar days of the entry of this STIPULATED JUDGMENT, Defendants shall commence the following Supplemental Environmental Projects valued at $160,000:

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a. **$100,000 shall be used for the implementation of a riparian enhancement plan to be undertaken by RECON in the San Diego River Park described in Exhibit 2 attached hereto.**

b. **$45,000 shall be used to fund the construction of various amenities in the San Diego River Park including, but not limited to, ornamental fencing to restrict motor vehicle intrusion into the River corridor, educational kiosks and interpretive signage.**

c. **$15,000 as a cash contribution to the San Diego River Park Foundation.**

IN KIND CONTRIBUTION

23. Dedication to the City of approximately 7.1 acres in the form of an open space easement valued at $125,000 per acre.

MONETARY RELIEF

24. Upon entry of this STIPULATED JUDGMENT, Defendants shall pay $5,576.51 for costs incurred by Plaintiff, the City of San Diego for the investigation of the alleged violations on the PROPERTY. Payment shall be made in the form of a certified check, payable to the "City Treasurer." Such payment shall be in full satisfaction of all costs associated with the City's investigation of this action to date. The check shall be delivered to the attention of Diane Silva-Martinez on the 5th floor of the Office of the City Attorney, 1200 Third Avenue, San Diego, California.

25. Upon entry of this STIPULATED JUDGMENT, Defendants shall pay the sum of $75,000 as civil penalties of which $60,000 shall apply to and/or be offset against San Diego River Park repairs which may also include riparian enhancements/mitigation performed by Defendants of the alleged property damage caused by grading operations. The remaining $15,000 shall be paid in the form of one certified check made payable to the "City Treasurer. Such penalties shall be in full satisfaction of all claims against Defendants, arising from any of the past violations alleged by Plaintiffs in this action. The check shall be delivered to Diane Silva-

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Martinez on the 5th floor of the Office of the City Attorney, 1200 Third Avenue, San Diego, California.

26. Upon entry of this STIPULATED JUDGMENT, Defendants shall reimburse RWQCB $10,000.00 for costs incurred by the RWQCB for the investigation of the alleged violations on the PROPERTY related to the CAO. Payment shall be made in the form of one certified check, payable to the Regional Water Quality Control Board, San Diego Region. Such payment shall be in full satisfaction of all costs associated with the RWQCB's investigation of this action and its CAO to date. The check shall be delivered to the attention of Frank Melbourn, California Regional Water Quality Control Board, San Diego Region, State of California, 9174 Sky Park Court, Suite 100, San Diego, California.

27. Upon entry of this STIPULATED JUDGMENT, Defendants shall pay the sum of 5,000 as civil penalties to the RWQCB. Payment shall be in the form of one certified check, payable to the Regional Water Quality Control Board, San Diego Region. Such penalties shall be in full satisfaction of all claims against Defendants, arising from any of the past violations alleged by Plaintiffs in this action. The check shall be delivered to Frank Melbourn, California Regional Water Quality Control Board, San Diego Region, State of California, 9174 Sky Park Court, Suite 100, San Diego, California.

28. In the event of default by Defendants as to any amount due under this STIPULATED JUDGMENT the whole amount due shall be deemed immediately due and payable as penalties to the City of San Diego. Any amount in default shall incur interest at the prevailing legal rate from the date of default until paid.

RESTITUTION

29. As to Defendant American Asphalt and Concrete Inc., **within 180 calendar days of the entry of this STIPULATED JUDGMENT,** Defendant shall perform 200 hours of community service with the San Diego River Park Foundation and provide proof to the City Attorney's Office of the completed work service.

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///

30. Nothing in this Stipulation shall prevent any party from pursuing any remedies as provided by law to subsequently enforce this Stipulation or the provisions of the San Diego Municipal Code.

RECORDATION OF JUDGMENT

31. A certified copy of this Judgment shall be filed in the Office of the County Recorder pursuant to the legal description.

32. As provided by law, the recordation of this Final Judgment shall constitute a prior lien over any lien that may be held on Defendants' property as legally described above.

RETENTION OF JURISDICTION

33. Jurisdiction is retained for the purpose of enabling the parties to this Final Judgment to apply to this Court at any time for such order or directions as may be necessary or appropriate for the construction or operation of this Final Judgment, or the modification or termination of any or all of the provisions, or for the enforcement or compliance of these terms.

34. All allegations as to Does I through XX, inclusive, are dismissed.

35. Prior to filing any pleadings to initiate contempt proceedings for any violation(s) of this Stipulation, Plaintiffs shall provide Defendants with written notice of their intent to initiate contempt proceedings at least 30 calendar days in advance of filing such pleadings.

36. Plaintiffs agree to meet and confer with Defendants and counsel of record prior to initiating any such proceedings.

37. Plaintiffs and Defendants agree that upon meeting and conferring and if requested following a hearing related to the alleged violation, a fine up to $250 per violation, per day may be imposed as settlement resolution without resorting to contempt proceedings. These fines may be paid without admissions of liability or guilt.

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38. By signing this Stipulated Judgment, Defendant admits personal knowledge of all of the terms of this Stipulated Judgment. Service by mail shall constitute sufficient notice for all purposes.

Dated: March 19, 2007

MICHAEL J. AGUIRRE, City Attorney

By _____
Diane Silva-Martinez
Head Deputy City Attorney

Attorneys for Plaintiff

Dated: 3/16/07, ~~2007~~

_____
Matthew A. Peterson, Esq.
Attorney for Defendants

Dated: 3-16, 2007

_____
James H. Flaherty, Esq.
Attorney for Defendants

Dated: 3/16, 2007

_____
Defendant Town and Country Hotel, LLC, by C. Terry Brown

Dated: 3-16, 2007

_____
Defendant American Asphalt and Concrete Inc. by Robert E. Tyner

Upon the stipulation of the parties hereto and upon their agreement to the entry of judgment without trial or adjudication of any issue of fact or law herein, and good cause appearing therefore, IT IS SO ORDERED, ADJUDGED AND DECREED.

Dated: MAR 22 2007.

WILLIAM R. NEVITT, JR.
JUDGE OF THE SUPERIOR COURT

EXHIBIT "1"

California Regional Water Quality Control Board

San Diego Region

Alan C. Lloyd, Ph.D.
Agency Secretary

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
(858) 467-2952 • Fax (858) 571-6972
http:// www.waterboards.ca.gov/sandiego

December 15, 2005

CERTIFIED MAIL
7004 2510 0004 4024 2924

In reply refer to:
WPN:20-0505.05:portm
WDID 9000550N05

C. Terry Brown, President
Atlas Hotel Management L.L.C.
Town and Country Hotel L.L.C.
500 Hotel Circle North
San Diego, CA 92108

CERTIFIED MAIL
7004 2510 0004 4024 2931

Robert Edward Tyner, Responsible Managing Officer
American Asphalt & Concrete, Inc
9011 Memory Lane
Spring Valley, CA 91977

Dear Mr. Brown and Mr. Tyner:

SUBJECT: CLEANUP AND ABATEMENT ORDER NO. R9-2005-0279 FOR *UNAUTHORIZED* DISCHARGE OF WASTE INTO SAN DIEGO, TOWN AND COUNTRY HOTEL AND RESORT, 500 HOTEL CIRCLE NORTH, SAN DIEGO, CA

Enclosed is *California Regional Water Quality Control Board, San Diego Region* (Regional Board) Cleanup and Abatement Order (CAO) No. R9-2005-0279. This order addresses the unauthorized discharge of waste to the San Diego River from the property at 500 Hotel Circle North, San Diego, San Diego County, California.

The CAO is issued pursuant to California Water Code (CWC) section 13304 and directs you to cleanup and abate the effects of these wastes. Please note the deadlines contained within the CAO. Failure to meet the deadlines may subject you to further enforcement action by the Regional Board, including administrative or judicial proceedings for the assessment of civil liability in amounts of up to $10,000.00 per day; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

Pursuant to CWC section 13304, the Regional Board is entitled to reimbursement for all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action required, by this Order.

Please be aware that you may receive future invoices for additional cost incurred by the Regional Board in overseeing implementation of the requirements of this order.

You may contest the issuance of this CAO by requesting a public hearing on the matter before the Regional Board within 30 days of the issue date. However, in order to request a public hearing for the next scheduled meeting of the Regional Board on February 8, 2006, this office must receive a written request no later than 5 PM on January 5, 2006. Be aware that a request for a hearing does not stay any of the deadlines in the CAO.

I strongly urge a complete and prompt response to each directive in CAO No. R9-2005-0279. If you have any questions regarding this matter, please contact Mr. Mike Porter by telephone (858) 467-2726 or by email at mporter@waterboards.ca.gov.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

Respectfully,

JOHN H. ROBERTUS
Executive Officer
San Diego Regional Water Quality Control Board

JHR:rwm:mgp

Enclosures: (1) Cleanup and Abatement Order No. R9-2005-0279
(2) November 23, 2005 Inspection Report & Photos

CC: Ms. Jeannette Baker
U.S. Army Corps of Engineers
Regulatory Branch
San Diego Field Office
16885 West Bernardo Drive
San Diego, CA 92127

Mr. Terrence Dean
U.S. Army Corps of Engineers
Regulatory Branch
San Diego Field Office
16885 West Bernardo Drive
San Diego, CA 92127

Mr. Mike Richmond
City of San Diego
Land Development Investigator
Neighborhood Code Compliance Department
1200 Third Ave., 8th Floor, MS 51N
San Diego, CA 92101-4106

Ms. Deborah Jayne,
Executive Officer
San Diego River Conservancy
9174 Sky Park Court
Suite 100
San Diego, CA 92123-4340

Bill Tippets
California Department of Fish and Game
4949 Viewridge Ave.
San Diego, CA 92123

Kelly Fisher
California Department of Fish and Game
4949 Viewridge Ave.
San Diego, CA 92123

Atlas Hotels, Inc
CT Corporation System, Agent for Service
818 West 8th Street
Los Angeles, CA 90017

American Asphalt & Concrete, Inc.
Melvyn J. Schulman, Agent for Service
1551 Fourth Avenue Suite 502
San Diego, CA 92101-3153

Dianne Silva-Martinez
Deputy City Attorney
City Attorney's Office
1200 Third Avenue, Suite 700
San Diego, CA 92101

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. R9-2005-0279
FOR
C. TERRY BROWN,
ATLAS HOTEL MANAGEMENT L.L.C.
TOWN AND COUNTRY HOTEL L.L.C.
TOWN AND COUNTRY RESORT, HOTEL & CONVENTION CENTER
ROBERT EDWARD TYLER,
AMERICAN ASPHALT & CONCRETE, INC.

The California Regional Water Quality Control Board, San Diego Region, (hereinafter Regional Board), finds that:

1. The basis for this Cleanup and Abatement Order is pursuant to California Water Code Section 13304.

    a) The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited pursuant to Basin Plan Waste Discharge Prohibition No.1.

    b) The discharge of sand, silt, clay or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited pursuant to Basin Plan Waste Discharge Prohibition No.14.

    c) The Discharge of waste to waters of the State (and U.S.) caused a condition of pollution/nuisance and will continue to threaten pollution/nuisance.

2. All fill in the floodplain constitutes a deposit of waste where likely to be discharged to waters of the State.

3. On or before November 23, 2005, C. Terry Brown, the Atlas Hotel Management L.L.C., the Town and Country Hotel L.L.C., Robert Edward Tyler, and American Asphalt & Concrete caused or permitted the discharge of waste and pollutants, including fill, subject to erosion, and likely to be discharged in storm water runoff to the San Diego River, a navigable water of the U.S. within the San Diego Region.

4. The Atlas Hotel Management L.L.C. or Town and Country Hotel L.L.C. is in violation of State Water Resources Control Board (State Board) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System No.CAS000002, Waste

Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity for failure to obtain coverage under the Order.

5. All waste (asphalt, concrete, earthen materials, etc.) at construction site constitutes source of polluting waste that is likely to be discharged to the San Diego River by erosion from storm water.

6. C. Terry Brown is President of Atlas Hotel Management L.L.C. and Town and Country Hotel L.L.C.

7. Robert Edward Tyner is a Responsible Managing Officer for American Asphalt & Concrete Inc.

8. The Atlas Hotel Management L.L.C. and Town and Country Hotel L.L.C. owns and operates the Town and Country Resort & Convention Center and the Town and Country Resort Hotel (hereafter Town & Country Hotel) at 500 Hotel Circle North, San Diego, California. The Town & Country is bounded by Hotel Circle North to the south, Fashion Valley Road to the west, the San Diego River to the north, and the Union Tribune Newspaper property to the east.

9. The Atlas Hotel Management L.L.C. or Town and Country Hotel L.L.C. has recently constructed or renovated a parking area affecting greater than 2 acres of riparian habitat adjacent to and on the southern bank of the San Diego River without applying for, or receiving, any applicable permits or authorizations.

10. The construction site is located within the Mission San Diego Hydrologic Subarea (907.11) of the San Diego Hydrologic Unit (907), as described in the "Water Quality Control Plan, San Diego Basin (9)" (hereafter Basin Plan).

11. The Basin Plan has established the following potential and designated beneficial uses for this reach of the San Diego River: Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Cold Freshwater Habitat (COLD), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Rare Wildlife Habitat (RARE), Agricultural (AGR), and Industrial (IND).

12. The lower 20 miles of the San Diego River is listed on the 2002 Clean Water Act section 303(d) list of impaired water bodies. The water quality of the San Diego River is impaired for elevated concentrations of total dissolved solids and phosphorus and depressed levels of dissolved oxygen.

13. The discharge of earthen fill and concrete waste to the flowing San Diego River has exacerbated the existing impairments for elevated concentrations of total dissolved solids and phosphorus and depressed levels of dissolved oxygen.

14. The active channel, the banks and the floodplain of the San Diego River parallel, adjacent to, and under the construction site constitutes waters of the State, as

indicated by the presence of river bed, banks, hydrophytic vegetation, ordinary high water mark, and flood stage elevations. Waters of the State are defined in the Porter-Cologne Water Quality Control Act (California Water Code, Division 7) as "...any temporary of permanent occurrence of surface water or groundwater, including saline waters, within the boundaries of the state."

15. An immediate cleanup is needed because the rainy season is underway, and the heaviest rainstorms typically occur after December.

16. The discharge of waste to the San Diego River obstructs its natural surface flow and eliminates its ability to support beneficial uses and water quality functions in those portions of the tributary where the waste was discharged.

17. The discharge of waste to the San Diego River threatens the beneficial uses of the San Diego River through increased sediment loads and increased turbidity.

18. Restoration of the affected property adjacent to the San Diego River is needed to abate pollution and the threat of pollution associated with construction of parking lot, restore water quality needed to support Beneficial Uses, and restore the Beneficial Uses and water quality functions that have been lost as a result of the discharge of waste to the River and deposit of waste likely to be discharged to the River by erosion and storm water runoff. The waste, if not cleaned up, will continue to cause and threaten to cause conditions of pollution and nuisance. Without abatement, the effects of the waste threaten to unreasonably impair/degrade water quality needed to support the designated beneficial uses of the San Diego River.

19. Pursuant to CWC Section 13304, the Regional Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action required, by this Order.

20. This enforcement action is being taken for the protection of the environment and, as such, is exempt from Chapter 3 provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 Et seq.) in accordance with Section 15108, Chapter 3, Title 14, California Administrative Code.

21. This Cleanup and Abatement Order is necessary to ensure that remedial actions are completed by the Dischargers to cleanup and abate the effects of the discharge of waste from the Town & County Hotel to the San Diego River.

22. A technical report is necessary, because of violations noted in the Order, to document that remedial actions have been completed.

23. Deadlines for compliance established in this Order are final and enforceable upon issuance of the Order. The Regional Board, however, retains continuing jurisdiction over investigation and cleanup and abatement actions and may extend or adjust

deadlines and other directives as circumstances warrant. The Regional Board will consider reasonable requests for time extension that are supported by documentation of good cause.

IT IS HEREBY ORDERED that, pursuant to Section 13304, 13267 and 13383 of the California Water Code that C. Terry Brown, Atlas Hotel Management L.L.C., Town and Country Hotel L.L.C., Robert Edward Tyler, and American Asphalt & Concrete, or its agents, successors, or assigns (hereinafter Dischargers) shall conduct the following:

1. The Dischargers shall immediately cleanup the waste and abate all effects of the discharge of waste into waters of the State, and take any other remedial actions, which may be necessary to abate the existing and threatened effects of the discharged waste. All deposited waste (fill, asphalt, curbs, plumbing, lighting, ornamental plantings) shall be removed from the area affected by construction, including the River bed, bank, and floodplain by January 12, 2006. Cleanup and abatement activities shall be conducted in such a manner to avoid any further adverse impacts to the San Diego River.

2. The Dischargers shall immediately seek coverage under and implement the following requirements of the State Board Construction Storm Water Permit No. 99-08-DWQ:

    a. An effective and appropriate combination of sediment and erosion controls on all disturbed areas.
    b. *Specific Best Management Practices (BMPs) to prevent the discharge of* sediment, gravel and sediment-laden water to The San Diego River.
    c. BMPs to divert on-site drainage and concentrated storm water runoff from discharging to disturbed areas.
    d. BMPs to eliminate the tracking of sediment onto public or private roads.
    e. A comprehensive maintenance program to ensure continued BMP effectiveness.

3. Pursuant to California Water Code (CWC) section 13267 and 13383, the San Diego Regional Water Quality Control Board directs you to submit a Required Technical Report (RTR) received at the SDRWQCB no later than 5:00 PM, December 21, 2005. The RTR is required due to the violations noted in the enclosed Cleanup and Abatement Order. The RTR will be reviewed to assess the need for further possible enforcement actions. The RTR shall include the following Sections:

    a) An Immediate Actions Section describing the reasons for the discharge of waste from the site into the San Diego River, and what immediate steps were taken to stop the illegal discharge.
    b) A description of the parking lot project including objectives, timelines, and financing.
    c) A graphic and textural description of the resources impacted including maps of project area showing the 1, 2, 5, 10, 25, 50 and 100-year storm River elevation.
    d) Copies of all local, State and Federal Permits received for the parking lot project.

e) A list of all contractors and subcontractors involved with the parking lot project.
f) A description of the companies and companies operating under fictitious names that control the property at 500 Hotel Circle North, San Diego. The description shall include names and titles of all officers in those companies.
g) Paper, digital or electromagnetic copies of transcripts or notes of any meetings pertaining to the parking lot project where "company" staff and/or officers were present.

The submitted Required Technical Report shall include the following signed certification:

> *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Failure to submit the above information by the date requested may result in the imposition of administrative civil liability pursuant to CWC sections 13268 and 13385.

Note: All documents requiring signature shall be signed as follows:

> "For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (b) the manager of the construction activity if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
>
> For a partnership or sole proprietorship: by a general partner or the proprietor, respectively."

4. By January 12, 2006, the Dischargers shall submit to the Regional Board a cleanup and abatement report documenting the cleanup and abatement of all waste discharged into waters of the State deposited where likely to be discharged. The cleanup and abatement report must include, but not be limited to:

    a. Certification that all discharged waste (sediment, concrete, asphalt, piping, plumbing, ornamental plants, trash, and debris) has been removed from the bed, banks and floodplain so that the pollutants do not pose a threatened discharge to the San Diego River.

b. Confirmation that all necessary approvals for the cleanup and abatement work were obtained, with a listing of the approvals obtained.
c. A detailed description of specific activities and methodologies used in removing all wastes.
d. A detailed description of measures (e.g., BMPs) implemented to prevent additional water quality impacts during and after the cleanup process.
e. A detailed description of measures implemented to comply with State Board Construction Storm Water Permit No. 99-08-DWQ and prevent additional water quality degradation from construction activities.
f. A detailed description of measures implemented to prevent further discharges of waste to waters of the State.

5. The Regional Board will establish the deadline for completion of Cleanup and Abatement actions after the Dischargers submit the Cleanup and Abatement Report to the Regional Board.

6. The Dischargers shall dispose of all removed waste in a manner that complies with applicable codes and regulations, including Waste Discharge Requirements for discharge of solid waste, or conditions of waiver of Waste Discharge Requirements.

7. The Dischargers shall obtain all necessary approvals (permits) from the California Department of Fish and Game, the U. S. Army Corps of Engineers, Regional Water Quality Control Board, and other applicable federal, state, and local authorities for any cleanup and restoration work.

8. When the Dischargers become aware that they failed to submit any relevant facts in any report required under this Cleanup and Abatement Order, or submitted incorrect information in any such report, the Dischargers shall promptly submit such facts or information to the Regional Board. If the Dischargers become aware that they may not be able to comply with any deadline or other directive in this Cleanup and Abatement Order, the Dischargers shall promptly notify the Regional Board of the problem and the reasons therefore, and shall provide the Regional Board with documentation supporting extension of deadlines or such other adjustment as may be necessary to accommodate the problem

9. All documents submitted to the Regional Board shall include the following signed certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false

information, including the possibility of fines and imprisonment for knowing violations.

10. This CAO in no way limits the authority of this Regional Board to institute additional enforcement actions or to require additional investigation and cleanup at the facility consistent with California Water Code. This CAO may be revised by the Executive Officer as additional information becomes available

NOTIFICATIONS

Pursuant to CWC Section 13304, the Regional Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

Failure to comply with a cleanup and abatement order may result in further enforcement actions, including actions under Section 13265, 13268, 13350, 13385, and 13387 of the CWC, which allows for civil liability up to a maximum of twenty-five thousand dollars ($25,000) for each day of violation.

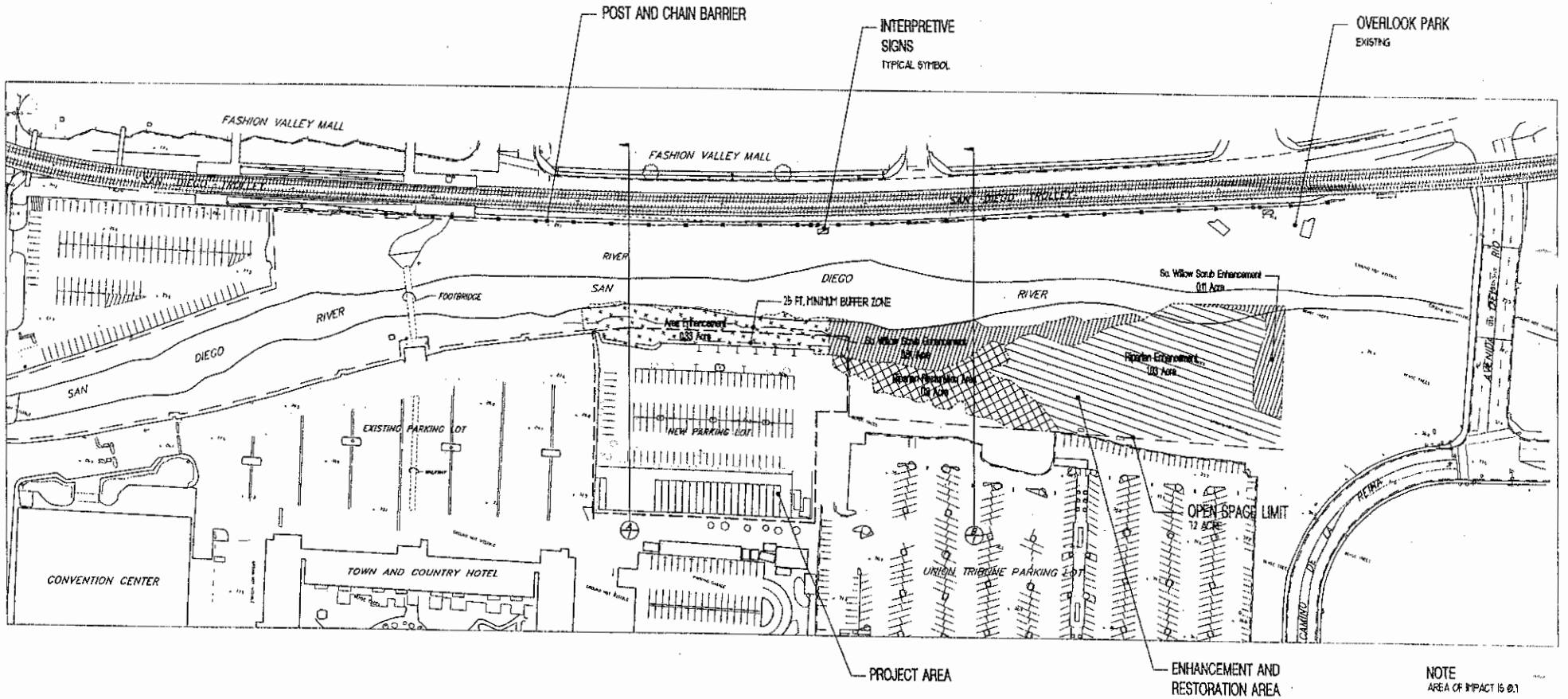
John H. Robertus
Executive Officer

12/15/2005
Date

EXHIBIT "2"

Enhancement and Restoration Plan

ATLAS ~ TOWN AND COUNTRY HOTEL



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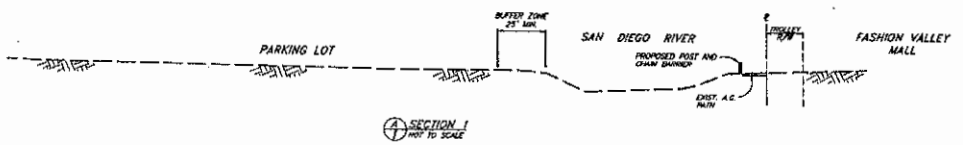

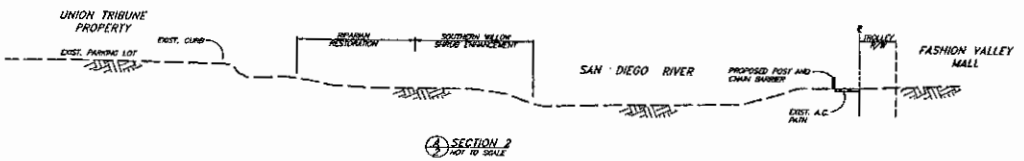

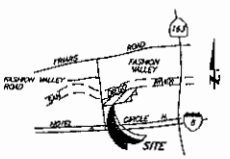

VICINITY MAP
NOT TO SCALE

PLAN

NORTH

0 50 100 FT.
SCALE

ASHLES LANDSCAPE ARCHITECTURE INC.
P.O. Box 1503
Rancho Santa Fe, California 92067
858.756.8963

MICHAEL J. AGUIRRE, City Attorney
CHRISTOPHER S. MORRIS, Assistant City Attorney
DIANE SILVA-MARTINEZ, Head Deputy City Attorney

Office of the City Attorney
Criminal Division
1200 Third Avenue, Suite 700
San Diego, California 92101-4103
Telephone (619) 533-5500

Date:
Time:
Dept: 64
Judge: William R. Nevitt, Jr.

Attorneys for Plaintiff

SUPERIOR COURT CALIFORNIA,
COUNTY OF SAN DIEGO

DECLARATION OF
PERSONAL SERVICE

Case No. GIC880884
People v. Town and Country, et al.

I, Chelly Bolger-Wathen, declare that I am, and was at the time of service of the papers herein referred to, over the age of eighteen years and not a party to the action; that, pursuant to Section 1011, Code of Civil Procedure, I made personal service in the County of San Diego, State of California of the following document(s): **STIPULATION IN FULL SETTLEMENT FOR FINAL JUDGMENT OF PERMANENT INJUNCTION; JUDGMENT THEREON [CCP § 664.6].**

Manner of Service: A copy of the above-listed document(s) was hand delivered.

Matthew A. Peterson
Peterson & Price, APC
655 West Broadway, Suite 1600
San Diego, CA 92101

March 23, 2007 at or about 3:15 p.m.

James H. Flaherty
Attorney At Law
Flaherty and Flaherty
401 West "A" Street, Suite 2220
San Diego, CA 92101

March 23, 2007 at or about 3:30 p.m.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 27, 2007, at San Diego, California.

Chelly Bolger Wathen
Chelly Bolger-Wathen

LETTER A
ATTACHMENT 7

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RECON

Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project San Diego, California Project No. 118318

Prepared for

Peterson and Price
655 West Broadway, Suite 1600
San Diego, CA 92101
Contact: Matthew Peterson

Prepared by

RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101-2358
P 619.308.9333 F 619.308.9334
RECON Number 4259B
June 13, 2012

Gerald A. Scheid, Senior Biologist

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ATTACHMENT

1: Cal-IPC List of Exotic Invasive Plants

1.0 Executive Summary

The purpose of this document is to provide a single comprehensive guide for the enhancement of riparian habitats and buffer areas within the Town and Country Hotel project site. This document will be used by all parties implementing mitigation tasks on the site.

The proposed mitigation plan would enhance a diversity of habitats within and adjacent to the San Diego River. All of the components of this Mitigation Plan would be implemented on-site. Pursuant to mitigation obligations described in more detail below, the Town and Country Hotel or its assignee (e.g., San Diego River Park Foundation) will implement, maintain, and monitor the following mitigation measures:

- Restore 0.61 acre of area that was impacted by the temporary fill during the construction of the parking lot expansion. This restoration would not count towards the mitigation requirement.

- Restore 0.64 acre of riparian habitat on the south side of the San Diego River to meet the 1:1 restoration requirement.

- Enhance 1.28 acres of riparian habitat along the San Diego River. Enhancement opportunities include removal of non-native plant species and revegetation with native plant species similar to adjacent areas along the San Diego River channel within the area depicted on the site plan for enhancement.

- Plant a 30-foot average coastal sage scrub buffer zone measured from the edge of the river bank to separate the new parking area from the riparian mitigation areas.

- Provide split-rail fencing or equivalent and signage to alert people that the area is a restoration area and that trespassers would be prosecuted if the enhancement areas were damaged.

- Maintain and monitor all enhancement and revegetation areas for a minimum of five years or until all of the success criteria are reached, whichever is shorter.

This plan represents the mitigation along the San Diego River within the Town and Country property that directly addresses mitigation for temporary impacts along the River, and the restoration and enhancement of areas infested with non-native species along the San Diego River within the property.

2.0 Project Description

2.1 Location of Project

The project is located along the San Diego River (River) in Mission Valley within the City of San Diego (Figure 1). The site is shown on the U.S. Geological Survey (USGS) La Jolla City quadrangle (Figure 2). The three-parcel survey area (Assessor's Parcel Number's 437-260-44, 437-260-48, and 437-260-49) is located south of Fashion Valley Mall, east of Fashion Valley Road, and north of Hotel Circle (Figure 3).

2.2 Project Impacts

In August 2005, the Town and Country Hotel (Hotel) hired a construction company to undertake construction of a 120-car parking lot expansion on the north side of their property, which borders the San Diego River. Portions of the lot required resurfacing and movement of dirt prior to paving. In September 2005, dirt removed from the parking lot expansion area was stockpiled by the contractor adjacent to the bank of the River and to the east of the expansion area without the consent of the Hotel. This stockpiling area was outside of the proposed grading limits and resulted in the unauthorized placement of fill material in jurisdictional riparian and wetland habitats.

In November 2005, the Hotel was instructed by the Regional Water Quality Control Board (RWQCB) to remove the stockpiled dirt from the River and remediate the area in anticipation of the issuance of a Cleanup and Abatement Order. The Hotel then removed the stockpiled dirt from along the River and installed erosion control devices. In December 2005, RECON was contracted to conduct biological surveys, a wetland delineation, and an impact assessment according to City of San Diego Biological Survey Guidelines (July 2002) to determine the extent of impacts associated with the unauthorized grading activities.

As a result of the described activities, a total of 0.64 acre of southern cottonwood-willow riparian forest and disturbed riparian woodland were temporarily impacted along with 0.16 acre of disturbed land (Tier IV habitats). Impacts to southern cottonwood-willow riparian forest and disturbed riparian habitat are considered significant and require mitigation. Approximately 0.6 acre of developed land and 0.11 acre of eucalyptus woodland were also affected by paving of the expansion lot and anticipated by the proposed future installation of a natural trail within the provided Recreation Easement on the south side of the river.

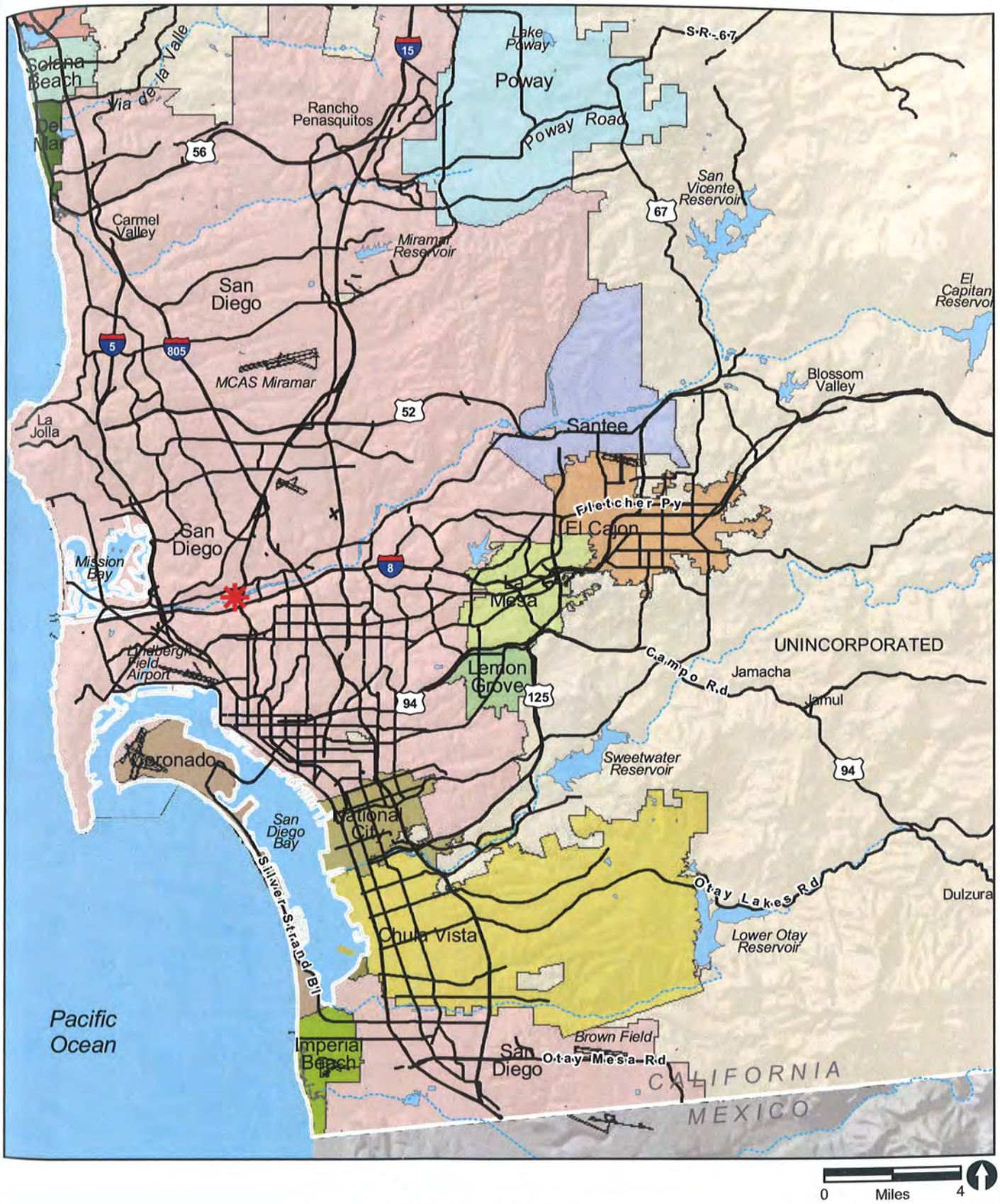

FIGURE 1

Regional Location

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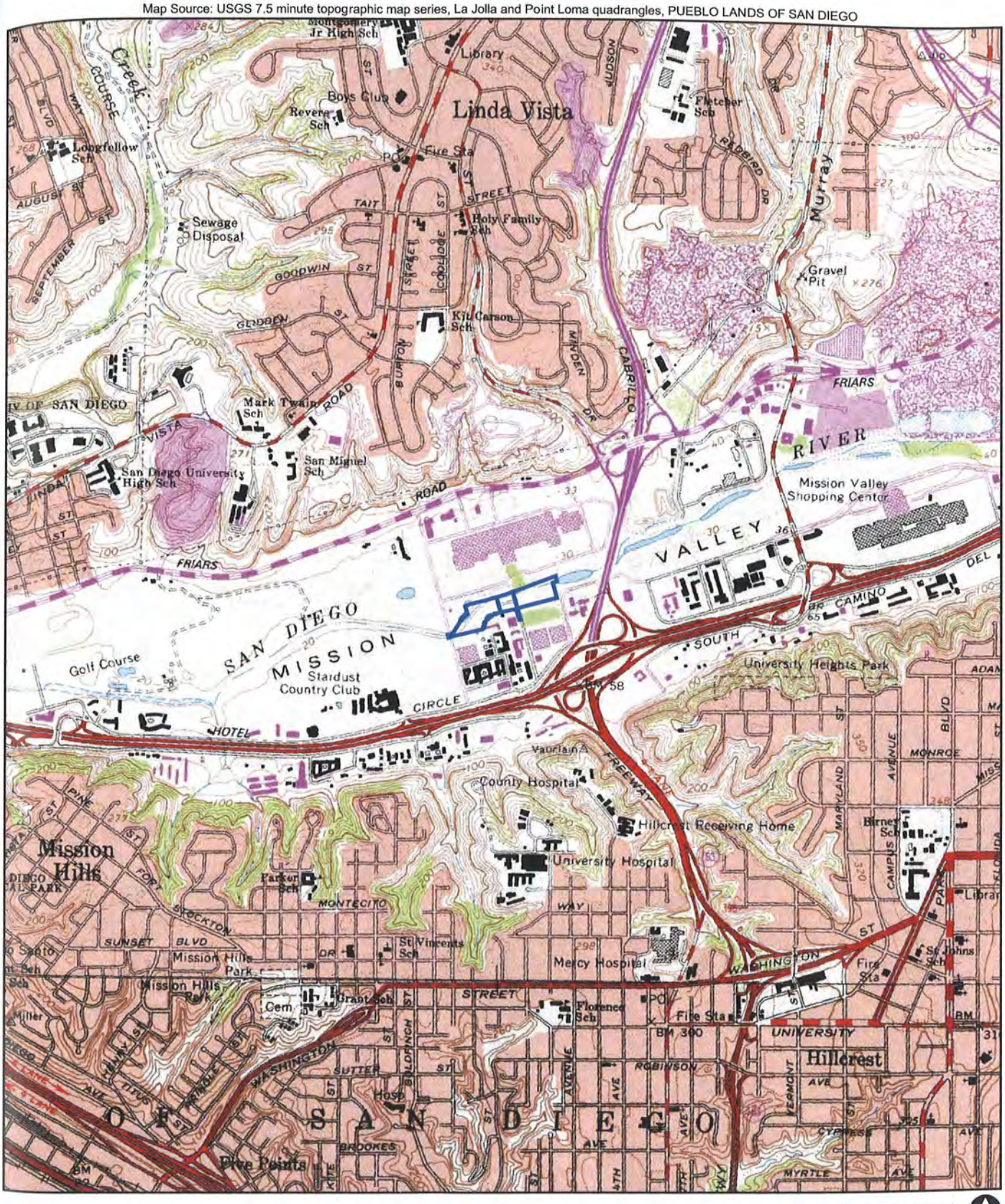
Map Source: USGS 7.5 minute topographic map series, La Jolla and Point Loma quadrangles, PUEBLO LANDS OF SAN DIEGO



Project Boundary

FIGURE 2

Project Location on USGS Map

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Map Source: City of San Diego, Engineering and Development Department, City 800' Maps, Number 218-1713 and 210-1713

FIGURE 3

Project Location on City 800' Map

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A complete description of the project impacts and biological assessments are included in the Biological Technical Report for the Town and Country Parking Lot Expansion Project (RECON 2010).

2.3 Mitigation Requirements

To mitigate for the temporary impacts to riparian habitat within the site, a combination of restoration and enhancement at a 3:1 ratio has been proposed (RECON 2009). A total of 0.64 acre of southern cottonwood-willow riparian forest and disturbed riparian woodland was affected, requiring a total of 1.92 acres of restoration and/or enhancement. Restoration opportunities are present in the open area south of the river along the southern property boundary within the area depicted on the site plan for enhancement.

2.3.1 Sensitive Wildlife

Since enhancement activities will involve the removal of eucalyptus trees (*Eucalyptus* spp.) and other non-native trees, work should be conducted outside of the raptor breeding season. In the event that these activities occur during the breeding season from February 1 to September 15, a pre-construction clearance survey for nesting raptors should be conducted within the eucalyptus trees by a qualified biologist, prior to any work. If an active raptor nest is located, the nest area will be flagged and a 300-foot buffer zone delineated and flagged or otherwise marked. No work activity may occur within this buffer area, until a qualified biologist determines that the fledglings are independent of the nest.

2.3.2 Multiple Habitat Planning Area Lands and Land Use Adjacency Guidelines

The implementation of a Multiple Habitat Planning Area (MHPA) land use adjacency guidelines as reported in the City of San Diego Multi-Species Conservation Program Subarea Plan (1997) will reduce the level of indirect impacts below a level of significance. The following guidelines will be implemented to ensure compliance with the MHPA:

- Runoff from the parking lot expansion area shall not drain directly into the MHPA. The Hotel intends to plant a vegetative buffer and will incorporate native plants to enhance water quality, where feasible. This vegetated buffer includes native plants between the parking lot expansion area and the River, as well as restoration and enhancement within the impacted areas along the River corridor as described in this conceptual mitigation plan.

- Toxic materials will not be applied in or allowed to drain into the MHPA.

- All lighting on the parking lot expansion area shall be directed away from the MHPA and shall be adequately shielded. A vegetative buffer of native shrubs will be installed in the buffer to shield the MHPA from car headlights in the adjacent parking lot expansion area.

- Proposed landscaping in areas adjacent to the MHPA shall not contain invasive exotic plant species. Landscape plans shall be reviewed by a qualified biologist and approved by the City of San Diego's Environmental Analysis Section staff.

- To minimize impacts to the MHPA from the intrusion of domestic pets, a barrier is generally recommended. However, a solid barrier is not recommended at this site for the following reasons: (1) as the site is located within a narrow wildlife corridor, a solid barrier, such as a wall or fence that may preclude wildlife movement through the corridor, is not permitted. The only barrier proposed as part of the site plan is a wood post-type fence along the northern edge of the property boundary to discourage patrons of Fashion Valley Mall from parking adjacent to the River (refer to Site Plan); (2) The site is within the 100-year floodplain, and the potential for the site to become flooded is high. Therefore, a vegetative buffer is recommended to discourage intrusion into the MHPA.

2.4 Responsible Parties

The applicant responsible for this Mitigation Plan is:

Atlas Hotels
Town and Country Hotel
500 Hotel Circle North
San Diego, CA 92108
Contact: Terry Brown
(619) 291-2232

and/or Assignee (e.g., San Diego River Park Foundation)

This Mitigation Plan was prepared by RECON. The address and telephone number are:

RECON
1927 Fifth Avenue
San Diego, CA 92101-2358
Contact: Peter J. Tomsovic, Restoration Biologist
(619) 308-9333

2.5 Types, Functions, and Values of the Impacted Areas

Since impacts already occurred to the areas to be mitigated, it is impossible to precisely quantify what functions and values occurred at the stockpile site prior to disturbances. Instead, inferences can be made by surveying the areas adjacent to the impacted area and by reviewing historical aerial photographs of the site pre-disturbance. The following sections briefly describe the functions and values that probably existed prior to impacts and are illustrated in Figure 4. Complete descriptions of the existing bio-technical conditions on-site are described in detail in the Biological Technical Report (RECON 2010).

2.5.1 Biological

A total of 0.64 acre of temporary impacts occurred to southern cottonwood-willow riparian forest and disturbed riparian woodland, and 0.16 acre of temporary impacts occurred to disturbed land. These habitat types are described separately below.

2.5.1.1 Southern Cottonwood-Willow Riparian Forest

Southern cottonwood-willow riparian forest is a tall, open, broad-leaved winter-deciduous riparian forest dominated by cottonwood (*Populus* spp.) and several species of willow trees (*Salix* spp.). This type of riparian forest occurs along perennially wet stream reaches of the Transverse and Peninsular ranges, from Santa Barbara County south to Baja California Norte and east to the edge of the deserts (Holland 1986).

Dominant species within this community within the impacted area include mature Goodding's black willow (*Salix gooddingii*) and Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), with an understory of arroyo willow (*Salix lasiolepis*) and mule fat (*Baccharis salicifolia*). Other species found in the southern cottonwood-willow riparian forest along the River bank include three-square bulrush (*Scirpus americanus*), California bulrush (*Scirpus californicus*), and yellow water primrose (*Ludwigia peploides*).

2.5.1.2 Disturbed Riparian Woodland

The disturbed riparian woodland occurs on the upper banks of the River. The habitat overstory is dominated by blue gum eucalyptus (*Eucalyptus globulus*); however, the habitat supports a dense understory of mule fat and arroyo willow. Other species present within this habitat include tall yellow evening primrose (*Oenothera elata* ssp. *hirsutissima*) and cocklebur (*Xanthium strumarium*). Non-native species within the habitat include Mexican fan palm (*Washingtonia robusta*) and Brazilian pepper

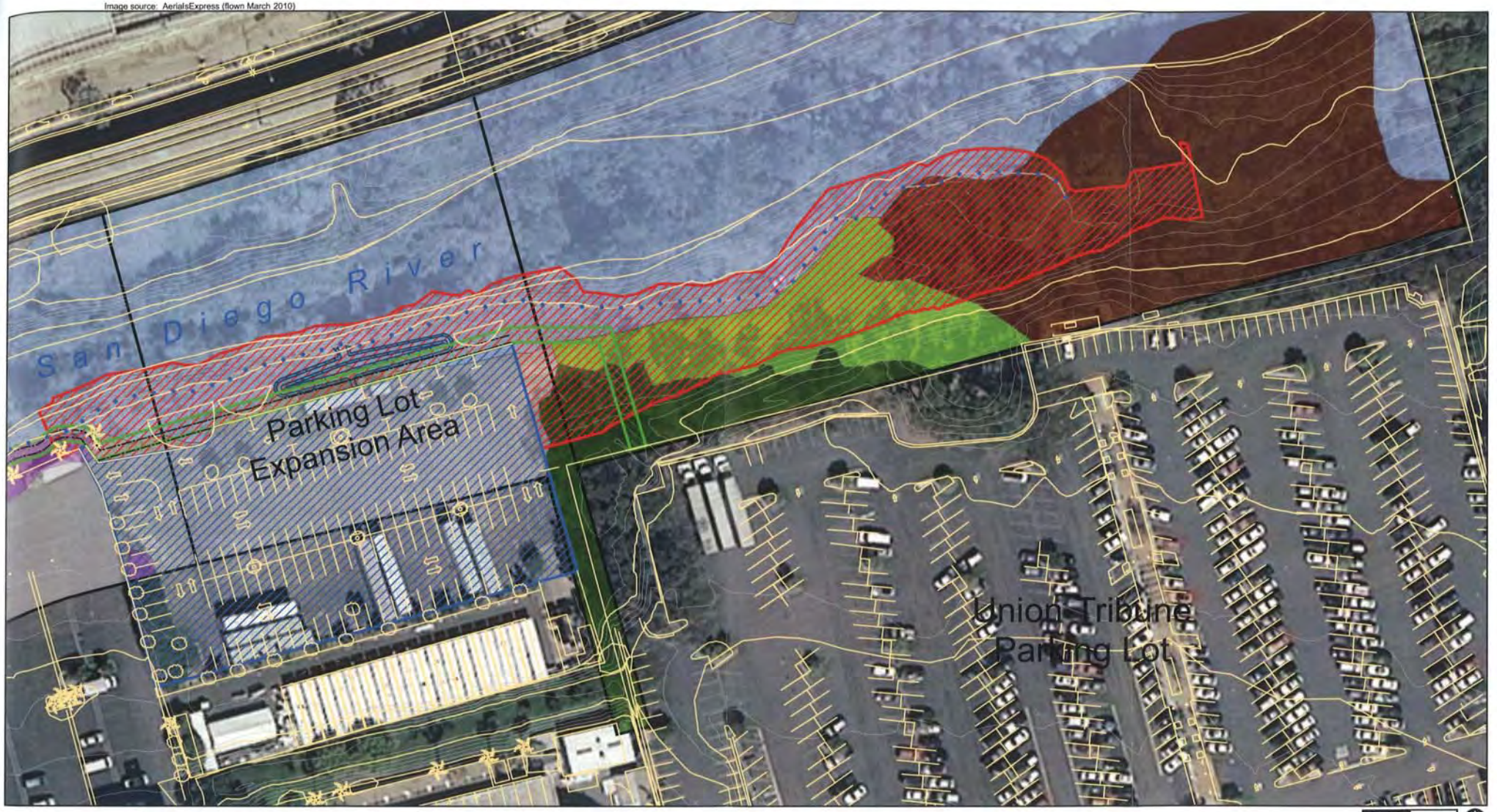

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FIGURE 4
Impacts to Vegetation Communities

(*Schinus terebinthifolius*). The western edge of this community supports several mature cottonwoods where no understory is present.

2.5.1.3 Disturbed Land

Both the parking lot expansion area and the undeveloped area immediately east of the parking lot were mapped as disturbed land based on analysis of 1972, 2004 and 2005 aerial photographs (RECON 2009). The area appears to have been used for hotel staging, overflow parking, and hotel landscape operations. This area also supported non-native grasses and weedy species such as mustard (*Brassica nigra*), horseweed (*Conzya canadensis*), and telegraph weed (*Heterotheca grandiflora*). Ornamental nursery plantings, including ficus (*Ficus indica*), occur along the southern perimeter.

2.5.1.4 Eucalyptus Woodland

Eucalyptus woodland is a vegetation community composed of non-native eucalyptus trees. This community supports little understory due to the leaf litter (Holland 1986).

A linear cluster of eucalyptus trees is present along the southern property boundary adjacent to the Union Tribune parking lot.

2.5.1.5 Wildlife

Wildlife observed in the vicinity of the stockpile area is typical of those associated with riparian habitats. In addition to commonly observed species, four sensitive bird species were observed within the survey area: great blue heron (*Ardea herodias*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and western bluebird (*Sialia mexicana*). A complete description of these species, their occurrences and other sensitive species which potentially occur onsite are described in the Biological Technical Report for the project (RECON 2010).

2.5.2 Chemical

The portion of the San Diego River that was impacted by soil stockpiling was moderate to low quality riparian habitat that functioned collectively with all adjacent areas to improve hydrologic conditions downstream. The primary biogeochemical functions of these systems include nutrient cycling and the transformation or elimination of pollutants from water. Natural filtration and sedimentation help remove imported elements (i.e., macronutrients, heavy metals) and pollutants (i.e., herbicides, pesticides) from floodwaters, runoff, and precipitation. Removal of toxins and organic material greatly improves water quality. While these natural processes continued following the soil stockpiling event, it is assumed that the cumulative beneficial effect of natural filtration was lessened due to the reduction in vegetation available for these processes to occur.

2.5.3 Physical

The physical environment affected by the soil stockpiling is probably the most obvious by creating a visual change along the San Diego River. The understory of the riparian habitat became unvegetated soil following construction activities. However, these areas once functioned as sources of flood control, sediment trapping, and groundwater recharge. Other physical benefits of the former riparian areas included cooling water temperatures, lowering evaporation rates, and providing habitat for fish, reptiles, and amphibians.

3.0 Goal of Mitigation

Mitigation will include habitat enhancement through the removal of non-native species and introduction of native species and restoration through replanting areas where weeds were removed and where temporary impacts occurred. The goal of mitigation will be to create a quality southern willow scrub habitat with a coastal sage scrub buffer zone that separates the riparian corridor, pedestrian path, and the parking lot. Over time, the mitigation areas should develop into a self-sustaining habitat that will sustain itself in perpetuity with minimal human involvement.

Invasion by exotic weeds, such as palms, eucalyptus, and pepper trees, has altered and displaced the native plant community of the San Diego River channel within the project site. Non-native species out-compete native species for available light, physical space, and nutrients. In turn, the habitat has been altered and has become dominated by non-native species that are less desirable as habitat for native wildlife.

The goal of this restoration effort is to reverse the negative effects caused by the soil stockpiling and to restore and enhance riparian habitat by removing non-native species and reintroducing of native species. Restoration of vegetation to the disturbed floodplains and streams will help restore natural riparian and stream functions and values that provide benefits to the ecosystem. Riparian functions and values are discussed below.

4.0 Proposed Mitigation Sites

4.1 Location and Size of Mitigation Areas

Portions of the San Diego River riparian corridor within the Hotel's property boundary will provide several locations for riparian habitat enhancement/restoration (Figure 5). Restoration, through exotic weed removal and planting both the weeded areas and

Image source: AerialsExpress (flown March 2010)

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FIGURE 5

Location of Mitigaiton Areas

temporary impact areas, will begin at the upstream end of the project site on the southern bank of the river and move downstream until the mitigation acreage is fulfilled. One of the key components of this restoration project included the removal of the fill material that was placed into the San Diego River riparian areas. This removal activity has already taken place and erosion control devices have been installed as a temporary means of controlling erosion and sedimentation until the areas are revegetated.

4.1.1 Southern Cottonwood-Willow Riparian Forest

A total of 1.92 acres of southern cottonwood-willow riparian forest will be enhanced and restored as mitigation for impacts to sensitive habitats. Enhancement opportunities include removal of non-native plant species, including but not limited to eucalyptus, pepper (*Schinus* sp.), queen palm (*Syagrus romanzoffiana*), Washington fan palm (*Washingtonia robusta*), garden nasturtium *(Tropaeolum majus*), giant reed (*Arundo donax*), and coral tree (*Ethryina* sp.). Following removal of these invasive species, the areas will be planted with native container stock and maintained for a period of five years, or until all of the success criteria have been achieved, whichever is shorter.

4.1.2 Buffer Areas

A 30-foot average buffer area comprised of coastal sage scrub plant species will be created between the parking lot expansion area and the edge of the river bank to protect the restored habitats. This buffer area will be maintained and weeded, as necessary, in order to protect the mitigation areas from invasive weeds.

4.2 Ownership Status

The riparian and buffer restoration sites are all located within the Town and Country Hotel project site owned by:

Atlas Hotels
Town and Country Hotel
500 Hotel Circle North
San Diego, CA 92108
Contact: Terry Brown
(619) 291-2232

The Town and Country Hotel or its assignee (e.g., San Diego River Park) will be responsible for all costs associated with restoration, maintenance, and monitoring until the mitigation sites are determined by the City of San Diego to have met final success criteria.

4.3 Present and Proposed Uses of Mitigation Areas

The mitigation sites are all currently native southern cottonwood-willow riparian forest, disturbed riparian habitat, or degraded habitats that have little native vegetation or are areas that were temporarily impacted as a result of fill activities (see Figure 5). All sites have hydrologic conditions that make them suitable for establishing the designated habitat.

There is no development proposed for the riparian enhancement/restoration areas. All mitigation areas will remain as passive open space. Mitigation areas will be protected by creating a 30-foot average buffer zone that will prevent activities from encroaching on the restored areas.

5.0 Implementation Plan

5.1 Rationale for Expecting Implementation Success

The applicant has consulted with RECON biologists which have noted expertise in their fields and who have successfully completed numerous restoration projects similar to those described in this Mitigation Plan. RECON's successes include restoring over 200 acres of uplands and 25 acres of wetland and riparian habitat in Del Mar, a stream restoration in Lakeside, vernal pool restoration in Otay Mesa, and several restoration projects along the San Diego River and its tributaries.

Success of the restoration sites will be based on the proper placement of buffer and riparian habitats in areas with appropriate hydrologic conditions. Soil and hydrology conditions in restored riparian areas will be similar to existing, adjacent vegetated riparian areas, and therefore, success is expected to be high. All larger planted trees and shrubs will be irrigated until established. All plantings will be maintained and monitored for a minimum of five years or until the success criteria have been met, whichever is shorter.

5.2 Responsible Parties

The many entities that are involved in a habitat restoration project are the property owner, habitat restoration specialist, habitat restoration installation contractor, plant supplier, seed supplier, and monitoring biologist. These may all be separate entities or

they can be combined if they have the appropriate skills and expertise. The responsibilities of each of these entities are described in this section.

5.2.1 Owner/Restoration Entity

The entity undertaking the restoration must make a good faith effort to meet success criteria. Town and Country Hotel or its assignee will be responsible for implementing this restoration and monitoring plan. The address and telephone number is:

Atlas Hotels
Town and Country Hotel
500 Hotel Circle North
San Diego, CA 92108
Contact: Terry Brown
(619) 291-2232

Their responsibilities include, but are not limited to the list below:

- Fund the habitat enhancement and restoration on the property, to include preparation of a specific habitat restoration plan, preparation of landscape drawings (if needed), implementation of the plan, and maintenance and monitoring of each habitat restoration site until it has been considered successful by the City of San Diego.

- Hire or find qualified entities for the tasks described in this plan to install and maintain the project, or have the habitat restoration specialist subcontract them.

- Administer contracts for implementing the plan.

- Decide to stop work, suspend payment, or terminate contracts for inadequate performance. This includes all phases of project installation, long-term maintenance, and biological monitoring. The restoration entity may replace any of these providers if necessary.

- Pay for plants, seeds, and other materials needed for restoring the habitat.

- Catastrophic events such as fire, flood, or drought will not result in additional restoration or repeat restoration responsibilities and will not extend monitoring responsibilities beyond five years.

5.2.2 Habitat Restoration Specialist

The habitat restoration specialist must have a minimum of two years of experience in upland and riparian habitat restoration. The habitat restoration specialist must understand upland and riparian plant communities and have expertise in upland and

riparian plant and wildlife identification and ecology. The habitat restoration specialist will be retained during habitat restoration to perform the following tasks and be responsible for implementing the restoration plan in accordance with its specifications:

- Attend pre-construction meetings to consult with the installation contractor and to educate all interested parties on habitat restoration goals and habitat sensitivity.
- Coordinate and monitor restoration site preparation, container plant health prior to planting, planting layout, planting, irrigation, and techniques used by the installation contractor in carrying out these tasks.
- Oversee maintenance of the habitat restoration areas as defined herein.
- Coordinate with the maintenance contractor and monitoring biologist on remedial measures needed to improve performance (e.g., Irrigation schedule, weed control, and replacement planting).

5.2.3 Installation and Maintenance Contractor

The installation and maintenance contractor shall be responsible to:

- Prepare the restoration site(s) and remove exotic vegetation as defined herein.
- Plant the restoration area(s) with the species presented in this plan.
- Maintain and irrigate all plantings throughout the establishment period.
- Provide ongoing maintenance activities, under the direction of the habitat restoration specialist, throughout the five-year maintenance and monitoring period.

5.2.4 Plant Supplier

The plant supplier must have at least two years' experience in propagating native plants for upland restoration projects. The plant supplier's tasks are:

- Produce properly aged plants (roots filling pots, but not root-bound) in specified pot sizes ready for out-planting.
- Produce plants from seed collected on or adjacent to the site.
- Innoculate plants with mycorrhizae (fungi) using native soil collected from the site.
- Deliver healthy plants to the restoration site.

5.2.5 Seed Supplier

The seed supplier must have at least two years' experience collecting seeds for wetland and riparian restoration projects.

- Collect only species specified in the Mitigation Plan or by the habitat restoration specialist.
- Collect seeds on or within 15 miles of the Town and Country Hotel mitigation site.
- Seed will only be collected on legally accessible lands.
- Supply weed free (pure) seed.

5.2.6 Monitoring Biologist

The monitoring biologist may be the habitat restoration specialist or a biologist with a minimum of two years of experience in upland and riparian habitat restoration monitoring. The monitoring biologist must understand upland and riparian plant communities and have expertise in upland and riparian plant and wildlife identification and ecology.

- Oversee and perform the required monitoring and reporting in accordance with the procedures established in this plan.
- Coordinate with the maintenance contractor and habitat restoration specialist on remedial measures needed to improve performance (e.g., Irrigation schedule, weed control, and replacement planting).

5.2.7 Resource Agencies

- Review and approve plans.
- Monitor restoration efforts.
- Review annual reports and provide comments in a timely manner.
- At the completion of the project, attend a site visit to confirm that all success criteria have been met and subsequently release the owner of all mitigation obligations.

5.3 Riparian Site Preparation

5.3.1 Timing

All mitigation should be implemented outside of the raptor breeding season (February 1 through September 15). Removing invasive vegetation from within the riparian restoration sites should be planned so that they will be ready to plant in November or December to take maximum advantage of the winter and spring rains. If planted at the right time of year, more plants will survive and, in the long run, the success goals will be met earlier.

5.3.2 Invasive Species Removal

There are several different widely accepted methods to control invasive weed species and many of them rely on the type of weeds being controlled, the presence or absence of native plants, size of the stand, the amount of biomass that must be dealt with, the terrain, and the season. The method that is ultimately selected will also require future maintenance visits to ensure that the weeds have been effectively removed. The contractor selected to implement mitigation measures should consult with the habitat restoration specialist to determine the most effective strategy in removing the undesirable species from within the restoration area.

The target weed species for removal include giant reed, eucalyptus, salt cedar (*Tamarisk* spp.), and any other perennial or annual invasive weed species that appears on the California Invasive Plant Council (Cal-IPC) list of invasive plants (Attachment 1). Large trees, such as eucalyptus, will be completely removed from the site while the stumps may be left in place to decompose. Several treatments may be necessary to effectively kill unwanted plants such as tamarisk, giant reed, eucalyptus, and others.

5.4 Planting Plan

5.4.1 Southern Cottonwood-Willow Riparian Forest

Following invasive species removal, the southern cottonwood-willow riparian forest restoration areas and areas temporarily impacted by fill activities will be planted with willows, including arroyo and black willow, and Freemont cottonwood (Table 1). To diversify the shrub layer, mule fat liners or one-gallon-sized rooted cuttings and Palmer's or Douglas sagewort (*Artemisia palmeri*; *Artemisia douglasiana*) from one-gallon container stock should be planted randomly between willow groupings. San Diego marsh elder (*Iva haysiana*) may also be used as an understory shrub to add more diversity.

TABLE 1
RECOMMENDED PLANT MATERIAL FOR
SOUTHERN COTTONWOOD WILLOW RIPARIAN FOREST

Species	Size	Density (plants/acre)
Arroyo willow *Salix lasiolepis*	liners/1-gallon rooted cuttings	200
Black willow *Salix gooddingii*	liners/1-gallon rooted cuttings	200
Mule fat *Baccharis salicifolia*	liners/1-gallon rooted cuttings	200
Fremont cottonwood *Populus fremontii* ssp. *fremontii*	liners/1-gallon rooted cuttings	100
California sycamore *Platanus racemosa*	1-gallon	100
San Diego marsh elder *Iva haysiana*	1-gallon	250
Palmer's sagewort *Artemisia palmeri*	1-gallon	150
Salt-march fleabane *Pluchea odorata*	1-gallon	150
Spike rush *Juncus acutus*	1-gallon	150
Douglas mugwort *Artemisia douglasiana*	1-gallon	150
TOTAL	-	1,500

NOTE: These recommendations are guidelines that may be changed due to a variety of circumstances, including reflecting the reference area monitoring and the amount of natural habitat being lost.

Willows should be planted from one-gallon rooted cuttings. Rooted cuttings are live branches cut from willow trees that are placed into one-gallon containers and allowed to develop a root system before planting. This type of container stock is best for areas that have a high potential for flood damage and scouring since the developed root system can help anchor plants to the ground quickly.

5.4.2 Buffer Zones

Table 2 lists plant material recommended for buffer zone restoration areas. The approximately 30-foot average buffer zone will be planted in the space between the edge of the river bank and parking lot expansion area (see Figure 5). The species used for planting will be an assemblage of native shrubs, grasses, and herbs that are commonly found in coastal sage scrub habitats. A swale will be incorporated into the buffer zone to act as a natural filtration area for the benefit of water quality. The shrubs, grasses, and herbs selected will provide a protective screen from the parking lot to the riparian corridor.

TABLE 2
RECOMMENDED PLANT MATERIAL FOR COASTAL SAGE SCRUB BUFFER ZONE

Species	Size	Density (plants/acre)
California buckwheat (*Eriogonum fasciculatum*)	1-gallon	300
Black sage (*Salvia mellifera*)	1-gallon	200
Bush monkeyflower (*Mimulus aurantiacus*)	1-gallon	200
California encelia (*Encelia californica*)	1-gallon	250
California sagebrush (*Artemisia californica*)	1-gallon	500
Deergrass (*Muhlenbergia rigens*)	1-gallon	200
Purple needlegrass (*Nassella pulchra*)	1-gallon	400
Blue-eyed grass (*Sisyrinchium bellum*)	4-inch	300
Beardless wild rye (*Leymus triticoides*)	Plugs	150
TOTAL	-	2,500

NOTE: These recommendations are guidelines that may be changed due to a variety of circumstances, including reflecting the reference area monitoring and the amount of natural habitat being lost.

5.4.3 Planting and Seeding Specifications

Planting specifications include the collection and application of native seed mixes and the production and planting of one-gallon rooted willow and cottonwood cuttings and container plants.

5.4.3.1 Native Seed Collection

Beginning at least six months before restoration activities begin and continuing as needed for the duration of the maintenance and monitoring period, native seed will be collected within a 15-mile radius of the project site, as directed by the project's habitat restoration specialist. A list of appropriate seeds for collection and use in riparian and buffer zone restoration on the project site is presented in Table 3.

5.4.3.2 Seed Application Methods

The riparian restoration sites will be seeded with locally collected native species (see Table 3). Seed may be applied by hand seeding and raking into the soil to ensure

good seed to soil contact. Hand seeding allows for the most precise seed application. The seed mix can vary from one area to the next; therefore, each area can receive a specific combination of plant species and amount of seed. Seeding rates will be determined by the habitat restoration specialist, who will take into account the reference site data and the amount of seed available for collecting and sowing. The best time to apply seed is early in the rainy season (November and December).

5.4.3.3 Plant Production

Container plants should be produced at a native plant nursery. The nursery must specialize in producing high-quality native plant species for habitat restoration projects. Plant production will begin as seed becomes available. Native soil will be used in the plant containers. If more native soil is needed than is available to fill plant containers, each container should receive some native soil mixed with an appropriate commercial soil mix. The native soil provides mycorrhizae and other microorganisms that enhance native plant growth.

5.4.3.4 Planting Procedure

Standard plant installation procedures for native plants will be followed for this project. For container stock, this involves digging a hole approximately twice the size (width and depth) of the root-ball of the plant. The hole is then filled with water and allowed to drain. Plants are then positioned so that the surface of the soil in the container is at ground level, with backfill from the excavation of the hole added carefully beneath and around the installed plant's root-ball. The soil is then firmly tamped in around the plant. A small berm, only two to three inches high, should surround the edge of the planting hole to hold irrigation water. The plant should be watered thoroughly immediately after installation.

5.4.3.5 Timing

Planting should be done as early as November to take advantage of winter rains but no later than March to avoid the raptor breeding season. If plants produced for the project cannot be propagated for that timeframe, they should be stored and cared for in a plant nursery on-site or one selected by the project restoration biologist until conditions and restrictions allow.

TABLE 3
TARGET SEED COLLECTION LIST FOR
RIPARIAN AND BUFFER RESTORATION AREAS

Scientific Name	Common Name	Restoration Habitat
Amsinkia menziesii	Rancher's fireweed	CSS
Anemopsis californica	Yerba mansa	SCWRF
Artemisia douglasiana	Mugwort	SCWRF
Artemisia palmeri	San Diego sagewort	SCWRF
Baccharis salicifolia	Mule fat, seep-willow	SCWRF
Encelia californica	California encelia	CSS
Eriogonum fasciculatum	California buckwheat	CSS
Hemizonia fasciculata	Tarplant	CSS
Isocoma menziesii	Coast goldenbush	CSS
Iva hayesiana	San Diego marsh-elder	SCWRF
Juncus acutus L. ssp. *leopoldii*	Spiny rush	SCWRF
Lonicera subspicata.	Wild honeysuckle	SCWRF
Lotus scoparius	Deerweed	CSS
Mimulus aurantiacus	Bush monkeyflower	CSS
Mimulus guttatus	Common monkeyflower	SCWRF
Nassella pulchra	Purple needlegrass	CSS
Rhus integrifolia	Lemonadeberry	CSS
Rosa californica	California rose	SCWRF
Rubus ursinus	California blackberry	SCWRF
Salix gooddingii	Goodding's black willow	SCWRF
Salix lasiolepis	Arroyo willow	SCWRF
Salvia apiana	White sage	CSS
Salvia mellifera	Black sage	CSS
Sambucus mexicana	Blue elderberry	SCWRF
Scirpus californicus	California bulrush	SCWRF
Viguiera laciniata	San Diego County viguiera	CSS

SCWRF = Southern Cottonwood Willow Riparian Forest
CSS = Coastal Sage Scrub

5.5 Irrigation Plan

Riparian plants require consistent watering during the first one to two years of growth. With southern California's highly unpredictable rainfall pattern, it is often necessary to include irrigation in areas where riparian habitat is to be restored. Irrigation will help insure the survival and growth of newly installed plants.

The goal of the revegetation plan is to create habitats that will persist over time and be self-supporting. Therefore, the mitigation sites are designed to have saturated soils and adequate water under natural seasonal conditions; irrigation will be used only to assure survival of container plantings until root systems are well enough developed to access groundwater in the dry season. Water use is expected to be highest during the first growing season, tapering off gradually until no supplemental water is necessary.

Supplemental water will be applied by a temporary irrigation system. Temporary irrigation systems can be installed above ground and removed when not needed, or the system can be buried and left in place. The system should be installed over the entire creation and restoration site and be designed to minimize runoff and the creation of rills and gullies. A watering schedule should be developed by the habitat restoration specialist and watering should occur on an as-needed basis during the first two years, or longer, until the plants have become well established.

5.6 Site Protection

An effective fence will be located on the north side of the river to prevent automobile intrusion into the river corridor. The fence may either be a split-rail type fence or equivalent. Signs will be attached to the fence that describe the area as a habitat restoration site, state that trespassers will be liable for any damage caused, and list the project contact. Town and Country Hotel employees will be informed by holding a meeting or by pamphlets which describe the restoration areas, the sensitivity of those areas, and precautions to be used around the restoration sites.

5.7 As-Built Conditions

The restoration project will require an as-built plan to be prepared and submitted to the City of San Diego within 90 days following completion of implementation. The as-built plan covers the time period from when grading of the restoration site begins to the end of the main planting activities. This time period will be called the construction period.

The as-built plan will document exactly what was done to prepare the site for restoration, and to plant and seed the site. Throughout construction of the restoration site, the

habitat restoration specialist will keep records including dates of site preparation, container plantings, and seeding. These, along with any significant problems encountered, or necessary changes made in the field, will be recorded and included in the as-built restoration plan. The as-built plan will include photographs of the restoration activities and the site after it is planted and seeded.

6.0 Maintenance During Monitoring Period

The maintenance program will include weed control, replanting and reseeding, site protection (building and maintaining fences or other), debris removal, and other tasks as required for the site to grow and achieve the success criteria established in this Mitigation Plan. Maintenance measures will be conducted by maintenance personnel who are experienced in caring for native plant communities.

6.1 Schedule

The maintenance period will follow the construction period and will last for five years or until success criteria are achieved, whichever is greater, as presented in Table 4.

TABLE 4
APPROXIMATE MAINTENANCE SCHEDULE

Type/Task	Year 1	Year 2	Year 3	Year 4	Year 5
Site protection	Monthly	Quarterly	Quarterly	Quarterly	Quarterly
Weed control	As-needed	As-needed	Quarterly	Twice a year	Twice a year
Trash removal	Monthly	Quarterly	Quarterly	Quarterly	Quarterly
Replanting/seeding	Winter	Winter	Winter	Winter	Winter
Irrigation	As-needed	As-needed	Remove	–	–

6.2 Site Protection

Any protection fences shall be inspected monthly for damage and openings during monitoring visits by the project biologist. Repeated vandalism or destruction of the protection fence shall be reported to the property owner and the project biologist will provide suggestions for remedial action.

6.3 Weed Control

Weed removal and control will be a major component to the success of this restoration project. Most weedy species encountered can be controlled under general weeding procedures; however, removal of some species, such as giant reed, will require a different protocol due to the nature of the invasiveness of the species.

Weed control will continue throughout the five-year monitoring period. Exotic species will be removed by hand, mechanical weed cutters, or herbicide applications (Roundup®) by maintenance workers familiar with and trained to distinguish weeds from native species. During the first and second years, weeding will be performed as needed to keep weeds from producing seeds and to control weed competition during the establishment period of native plants.

Weeds will be killed or removed before seed sets. Appropriate weed control measures will be implemented under the direction of the habitat restoration specialist. A list of exotic species anticipated to grow on the site is presented in Table 5 and a supplementary list compiled by Cal-IPC is included in Attachment 1. In the event that additional invasive plant species are encountered, the habitat restoration specialist will refine control measures to include them.

TABLE 5
ANTICIPATED EXOTIC PLANT
SPECIES THAT MAY NEED TO BE CONTROLLED

Scientific Name	Common Name
Arundo donax	Giant reed
Atriplex semibaccata	Australian saltbush
Avena spp.	Wild oats
Brassica spp.	Mustard
Chrysanthemum coronarium	Crown daisy
Cortaderia spp.	Pampas grass
Erodium spp.	Filaree, storksbill
Eucalyptus spp.	Eucalyptus
Foeniculum vulgare	Fennel
Hypochaeris glabra	Smooth cat's-ear
Nicotiana glauca	Tree tobacco
Ricinus communis	Castor bean
Salsola tragus	Russian thistle
Schinus molle	Peruvian pepper
Tamartix ramossissima	Salt cedar

6.4 Vegetation Clearing and Trash Removal

Pruning of any native vegetation or removal of deadwood and leaf litter shall not be allowed in the revegetation areas, unless the area is within a fuel management zone and brush control is required by fire department regulations. Trash will be removed from the sites by hand on a monthly basis, or as necessary, for the duration of the first year and quarterly thereafter. Within the context of restoration, trash consists of all man-made materials, equipment, or debris left within the revegetation areas that are not serving a function related to revegetation.

6.5 Replacement Plantings and Reseeding

The habitat quality of each restoration site is expected to improve each year of the mitigation and monitoring period. Each restoration site will be replanted or reseeded with appropriate species or species that did not produce adequate seed during the first year, if necessary. This process will be repeated every year as needed to increase species diversity and cover and to improve long-term plant community stability. Additional seeds will be hand broadcast early in the rainy season (October to December). Plants which may have died will be replaced with appropriate container sized plants and slow-growing species that were not prepared in time for the initial planting will be planted from containers only if natural recruitment is not occurring at a rate to replace these individuals.

6.6 Irrigation Maintenance

Irrigation will be applied as needed (as determined by the habitat restoration specialist) for the first two maintenance and monitoring years. Maintenance of irrigation lines will be performed periodically and the system will be repaired whenever necessary to keep it functioning properly. At the direction of the habitat restoration specialist, the irrigation system will be removed or turned off when the plants have become established and irrigation is no longer necessary. If the irrigation system is removed, the habitat restoration specialist should monitor the removal so that native plants are not damaged.

6.7 Responsible Parties

The party responsible for all costs involved with all maintenance activities including weed control, replanting and reseeding, site protection (building and maintaining fences or other), debris removal, and other tasks as required for the site to grow and achieve the success criteria established in this Mitigation Plan is:

Atlas Hotels (or its assignee)
Town and Country Hotel
500 Hotel Circle North
San Diego, CA 92108
Contact: Terry Brown
(619) 291-2232

7.0 Monitoring Plan

The restoration site will be monitored both qualitatively and quantitatively for five years following the installation of the plant materials. Monitoring similar habitats within the same geographic region will attain quantitative baseline performance data. The performance criteria selected for monitoring are based on the theoretical approach of the Hydrogeomorphic Method (HGM; USACE 1995) and functional assessment methodology approved by USACE. The performance goals will evaluate: (1) structural diversity, coverage, and spatial density of habitat; (2) percent of exotic and invasive vegetation present; (3) hydrologic regime of the riparian zone, hydrologic inputs, and saturation duration; (4) micro and macro topographic complexity; and (5) vegetation roughness and organic carbon. Ultimate success of the mitigation areas will be determined by the attainment of performance goals outlined in the Performance Standards sections described below.

7.1 Schedule

The monitoring period will begin with implementation of the restoration work and will last for five years or until the restored areas have met all of the specified success criteria, whichever is greater. A monitoring schedule is presented in Table 6. The monitoring program will be conducted by the project biologist as outlined below.

TABLE 6
APPROXIMATE MONITORING SCHEDULE

Type/Task	Year 1	Year 2	Years 3–5
Qualitative			
Monitoring	Weekly/ twice monthly	Monthly	Quarterly
Quantitative			
Spring vegetation sampling	–	Annually	Annually
Weed, Hydrology, Topographic complexity, Veg. roughness sampling	–	Annually	Annually

7.2 Vegetative Density, Diversity, and Coverage

Species diversity, density, and cover will be assessed by measuring the extent of vegetative cover including understory herbaceous species and shrubs, and overstory trees in areas of restored riparian habitat. The expected mature aerial extent of tree canopy cover in riparian areas will not be reached during the monitoring and maintenance period. However, the long-term health of planted trees and shrubs should be ensured if they are growing at expected levels at the end of the five-year monitoring period.

7.2.1 Riparian Monitoring Methods

7.2.1.1 Qualitative Monitoring

Evaluation of plant health and identifying and correcting problems as they arise are necessary for ensuring successful vegetation establishment. Qualitative monitoring will be conducted weekly for the first two months following the construction period and twice a month for the remainder of the first year. Qualitative monitoring will occur monthly for the second year and quarterly for the remainder of the maintenance and monitoring period. Qualitative monitoring involves the project biologist reviewing the revegetation areas to examine transplant vigor, native annual and grass germination, rate of natural recruitment, and exotic plant encroachment and control.

7.2.1.2 Quantitative Monitoring

Quantitative monitoring will be performed to measure development of vegetation in the restoration areas and to document that the restoration areas achieve the success criteria as defined by the performance standards.

Beginning in Year 2, permanent vegetation sampling stations will be established within each restoration site to measure year-to-year changes in shrub or tree cover, density, and diversity following the protocol of the California Native Plant Society (CNPS) Plant Communities Project (Sawyer and Keeler-Wolf 1995). This data will be compared to baseline data collected at reference sites in nearby native plant communities. Results will objectively demonstrate if the restoration areas approach the community characteristics of the reference habitat.

The CNPS sampling method is based on a 50-meter point transect centered on a 5×50-meter plot. Using this method, vegetation is sampled by the point method at 0.5-meter intervals along the 50-meter transect to determine cover. The projector will note the species encountered and classify its growth form (i.e., herb, shrub, or tree) at each interval. In addition, each shrub-sized individual of each perennial species growing in the 5×50-meter plot will be counted to determine shrub density and diversity. All annuals present in the 5×50-meter plot will be noted.

Sampling will be conducted in the spring within each plant community to be restored so that the maximum species diversity will be recorded. At least one plot per three acres will be established in each plant community of a specific restoration area to determine vegetation cover, plant community composition, vegetation density, and plant diversity of each area. A photograph will be taken from each sample endpoint (toward the plot) each time the site is monitored to record the progress of mitigation over the monitoring period.

7.2.2 Performance Standards

Revegetation of the disturbed habitats on the Town and Country Hotel restoration site will be considered successful when the performance standards have been met (Table 7). If the minimum levels for any one of the measurements described below are not achieved in any year, the project restoration biologist will implement remedial actions, such as replanting container stock, to reach the following year's expected levels. The habitat must sustain itself for a minimum of two years in the absence of significant maintenance measures. Significant maintenance measures include replanting or seeding, eradication of major weed infestations, irrigation, and erosion repairs. Other maintenance measures (such as weed and erosion control in small areas) may continue until the end of the monitoring period. Performance standards described below, for achieving a percentage of cover, diversity (species composition), and species dominance similar to mature habitats will be based on reference area values.

7.2.3 Maintenance Measures

If the restoration site will not have required significant maintenance measures (replanting, eradication of major weed infestations, and erosion repairs) during the last

two years of the monitoring period, as certified by the project biologist/restoration monitor, then the areas will have reached this performance criteria.

TABLE 7
FIVE-YEAR PERFORMANCE STANDARDS (percent)

Year	Transplant/ Container Plant Survival	Total Native Plant Cover	Density as a Percentage of Reference Area Values	Diversity as a Percentage of Reference Area Values
1	80	–	–	–
2	100	50	50	60
3	100	60	60	75
4	100	70	70	85
5	100	80	80	90

7.2.4 Remedial Actions

If the restoration on the project site does not meet the standards established above, the project biologist/restoration monitor will develop remedial measures, probably to include reseeding or replanting certain areas. After remedial measures have been implemented, maintenance and monitoring shall be conducted according to the steps in this plan until the restoration site meets the performance standards.

7.3 Wetland Functional Analysis

The wetland functional analysis-monitoring program is a semi-quantitative comparison of the functions and values of reference wetland areas with mitigation areas. The monitoring protocol and success criteria will follow the Function-Based Method for Assigning Mitigation Ratios for Impacts to Riparian Systems (Stein 1999).

7.3.1 Success Criteria Based on General Site Characteristics

To be successful, the wetland mitigation areas must achieve the following general standards:

- The site shall be free of perennial invasive exotic weeds.
- The site must sustain itself with minimal maintenance and no irrigation for two growing seasons.

7.3.2 Success Criteria Based on Functional Condition

The criteria used to determine the wetland functions are based on characteristics of the habitat, hydrology/floodplain, and biogeochemical processes. Habitat characteristics quantified include structural diversity, spatial diversity, presence of invasive vegetation, and biogeochemical processes (vegetation roughness and organic carbon). These success criteria have been assigned according to those suggested in the Function-Based Method for Assigning Mitigation Ratios for Impacts to Riparian Systems (Stein 1999).

Each year, the mitigation areas will be evaluated and scores assigned to each of the success criteria assessed. These values are then compared to the standard criteria goals and the functional interim and final goals. The interim and final target goals are listed in Table 8. Interim and ultimate success will be determined as follows:

- Interim success of riparian mitigation areas equals attainment of interim target score for Hydrologic Regime criterion and attainment of interim target scores for five of the remaining six criteria.

- Ultimate success of riparian mitigation areas equals attainment of ultimate target score for Hydrologic Regime criterion and attainment of ultimate target scores for area five of the remaining six criteria.

TABLE 8
FUNCTION-BASED GOALS FOR SUCCESS IN RIPARIAN MITIGATION AREAS

Evaluation Criterion	Interim Target	Ultimate Target
Structural Diversity	0.4	0.8
Spatial Diversity	0.6	0.8
Exotic Vegetation	0.8	1.0
Biogeochemistry	0.6	0.8

SOURCE: Stein 1999

Structural Diversity. The structural diversity is determined by ranking a site with respect to the presence of different layers in the vegetation. These layers include tree, shrub, and understory.

Spatial Diversity. Spatial diversity ranks are dependent on the amount of native riparian vegetation cover and on the number of different native riparian species contributing to this cover. Areas with relatively high cover of native riparian species comprised of at least three genera are given the highest rank.

Exotic Vegetation. This habitat characteristic is ranked by the amount of vegetative cover contributed by non-native invasive plant species. Areas with less than five percent cover of invasive species are given the highest rank.

Biogeochemical Processes. The biogeochemical process of an area is the activity of nutrient cycling and plant-soil interactions that take place over time. A riparian mitigation area that displays high relative cover of riparian vegetation and healthy accumulation of organic material (i.e., leaf litter, fallen branches detritus) would have high biogeochemical activity.

7.4 Exotic Weed Surveys

7.4.1 Monitoring Methods and Weeding Program

The exotic weed surveys will coincide with the qualitative vegetation surveys listed in Table 6. All pest plant species appearing on the Cal-IPC that are ranked either High or Medium (see Attachment 1) as well as other locally known pest plants will be targeted for eradication. Pest plants will be mapped or flagged by the biologist for removal and regular maintenance visits will be scheduled around these surveys and during weed germination seasons.

Weed control will continue throughout the five-year monitoring period. Hand weeding or other weed control measures including the use of glyphosate-based herbicides will be performed by maintenance workers familiar with and trained to distinguish weeds from native species. During the first year, weeding will be performed as needed, as determined by the project biologist to keep weeds from producing seeds and to control weed competition during the establishment period of native plants. Weed control will continue at least quarterly for Years 2 and 3 and twice a year thereafter.

Weeds will be killed or removed before seeds set. Appropriate weed control measures will be implemented under direction of the habitat restoration specialist.

7.4.2 Performance Standards

The cover tolerance of weeds and non-native annual grasses, as identified by the project biologist/restoration monitor, will be no more than 5 percent of the total cover for non-native annuals in the mitigation site. The tolerance of aggressive non-native perennial species such as giant reed and pampas grass will be zero percent throughout the five-year maintenance and monitoring period.

7.5 Reference Sites for Monitoring

In the spring before the restoration project begins, or in conjunction with the first year of monitoring (see Monitoring Methods section), the project biologist will select riparian reference sites for monitoring. Vegetation transects through existing mature plant

communities will be monitored to determine plant species composition, diversity, density, and cover for the various plant communities to be restored. The selected communities will be characteristically undisturbed native habitat of the same community type being restored located closest to the restoration site.

Sampling protocol will follow that presented in the Monitoring Methods section of this document. This will provide baseline information and species information to be used to improve the restoration site's planting palette. The data collected from these mature communities will also be used as the baseline for evaluating restoration site success. Separate reference sites will be used for each habitat type being restored. A minimum of three transects will be sampled per habitat type to provide an accurate estimate of the baseline community composition.

7.6 Monitoring Reports

Annual reports summarizing monitoring results of individual restoration projects will be submitted to the City of San Diego per permit conditions by the project biologist within two months of the end of the monitoring year. The quantitative monitoring section will include project methods, data summary analysis, comparison to performance standards, discussion, reporting remedial actions, recommendations, and photo-documentation. Each annual report will compare findings of the current year with those in previous years.

8.0 Completion of Mitigation

8.1 Notification of Completion

Upon satisfactory achievement of the performance standards, the project biologist shall notify the owner and the City of San Diego. Within two months of the notification, a site review will be scheduled to review the restored areas. The City of San Diego will provide written confirmation of success within one month following the site visit and shall release the owner/assignee of all obligations.

8.2 USACE Confirmation

At the completion of all mitigation measures outlined in this Mitigation Plan and when the applicant believes the success criteria have been met, the applicant will submit the final report documenting completion to the USACE and request that the USACE provide written acknowledgement of mitigation completion.

9.0 Contingency Measures

9.1 Initiating Procedures

If the restoration on the Town and Country Hotel property does not meet the standards established above, the project biologist/restoration monitor will develop remedial measures, probably to include reseeding or replanting certain areas. After remedial measures have been implemented, maintenance and monitoring shall be according to the steps in this plan until the restoration site meets the performance standards.

9.2 Funding Mechanism

The applicant will be responsible for reasonably funding the contingency procedures necessary for completion of the mitigation success as determined by the City of San Diego.

10.0 References Cited

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1995 *A Manual of California Vegetation*. California Native Plant Society. Sacramento.

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1995 A Guidebook for Application of Hydrogeomorphic Assessments to Riverine Wetlands. Wetlands Research Program Technical Report WRP-DE-11. December 1995-Operational Draft.

ATTACHMENT 1

TABLE 1: Invasive Non-Native Plants that Threaten Wildlands in California

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
	Acacia melanoxylon	black acacia, blackwood acacia	Limited	C	C	B	2.7	Coniferous forest, chaparral, woodland, riparian. Impacts low in most areas.	NW, CW, SW
	Acroptilon repens	Russian knapweed	Moderate	B	B	B	3.2	Scrub, grasslands, riparian, pinyon-juniper woodland, forest. Severe impacts in other western states. Spreading in many areas of CA.	CA-FP, GB
	Aegilops triuncialis	barb goatgrass	High	A	A	B	3.6	Grassland, oak woodland. Spreading in NW and Central Valley.	CaR, CW, SN, GV
	Ageratina adenophora	croftonweed, eupatorium	Moderate	B	B	B	2.8	Coastal canyons, scrub, slopes. Very invasive in Australia, limited information and distribution in CA.	CW, SW
	Agrostis avenacea	Pacific bentgrass	Limited	C	C	C	2.4	Vernal pools, coastal prairie, meadows, grasslands. Impacts are low in most areas.	NW, SN, GV, CW, SW
	Agrostis stolonifera	creeping bentgrass	Limited	C	B	C	1.9	Wetlands, riparian; grown for domestic forage. Limited distribution and impacts unknown.	NW, SN, GV, CW, SW
	Ailanthus altissima	tree-of-heaven	Moderate	B	B	B	3.0	Riparian areas, grasslands, oak woodland. Impacts highest in riparian areas.	CA-FP
	Alhagi maurorum (=*A. pseudalhagi*)	camelthorn	Moderate	B	B	B	3.2	Grassland, meadows, riparian and desert scrub, Sonoran thorn woodland. Very invasive in southwestern states. Limited distribution in CA.	GV, D, SNE
◆	*Alternanthera philoxeroides*	alligatorweed	High	A	B	C	2.9	Freshwater aquatic systems, including marshes	GV, SW
	Ammophila arenaria	European beachgrass	High	A	B	B	3.2	Coastal dunes	NW, CW, SW
	Anthoxanthum odoratum	sweet vernalgrass	Moderate	B	B	B	2.7	Coastal prairie, coniferous forest. Little information available on impacts and limited ecological range.	NW, SN, CW
◆	*Arctotheca calendula* (fertile strains)	fertile capeweed	Moderate	B	B	C	3.6	Coastal prairie. Can produce seed. Important agricultural weed in Australia, but limited distribution in CA.	NW, CW
	Arctotheca calendula (sterile strains)	sterile capeweed	Moderate	B	B	B	2.8	Coastal prairie. Only propagates vegetatively. More competitive than fertile form, but limited distribution.	NW, CW
	Arundo donax	giant reed	High	A	B	A	2.8	Riparian areas. Commercially grown for musical instrument reeds, structural material, etc.	CW, SN, GV, SW

Scientific names based on *The Jepson Manual*. For each species, the first common name is based on the Weed Science Society of America's "Composite List of Weeds" (www.wssa.net), followed by other names used in California. Scores: A = Severe, B = Moderate, C = Limited, D = None, U = Unknown. Documentation level averaged. Regions invaded based on Jepson geographic regions. Plant assessment forms, literature citations, and full rating criteria available at www.cal-ipc.org.

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
◆	*Asparagus asparagoides*	bridal creeper	Moderate	B	B	D	2.6	Riparian woodland	CW, SW
◆	*Asphodelus fistulosus*	onionweed	Moderate	B	A	C	2.9	Coastal dunes, prairie, grasslands. Invasive in Australia. High invasiveness but limited distribution in CA.	GV, SW
	Atriplex semibaccata	Australian saltbush	Moderate	B	B	B	2.9	Coastal grasslands, scrub, upper salt marsh. Limited distribution, but can be very invasive regionally.	CA except CaR and SN
	Avena barbata	slender wild oat	Moderate	B	B	A	3.5	Coastal scrub, grasslands, oak woodland, forest. Very widespread, but impacts more severe in desert regions.	CA-FP, MP, DMoj
	Avena fatua	wild oat	Moderate	B	B	A	3.2	Coastal scrub, chaparral, grasslands, woodland, forest. Very widespread, but impacts more severe in desert regions.	CA-FP, MP, DMoj
	Bassia hyssopifolia	fivehook bassia	Limited	C	C	B	2.7	Alkaline habitats. Weed of agriculture or disturbed sites. Impacts minor in wildlands.	CA except NW
	Bellardia trixago	bellardia	Limited	C	C	C	1.9	Grasslands, including serpentine. Impacts and invasiveness appear to be minor.	NW, CW
◆	*Brachypodium sylvaticum*	perennial false-brome	Moderate	B	A	D	2.5	Redwoods and mixed evergreen forest in Santa Cruz Mtns. Expanding range rapidly in OR, potentially very invasive.	CW
	Brassica nigra	black mustard	Moderate	B	B	A	2.0	Widespread. Primarily a weed of disturbed sites, but can be locally a more significant problem in wildlands.	CA-FP
	Brassica rapa	birdsrape mustard, field mustard	Limited	C	B	B	1.8	Coastal scrub, grasslands meadows, riparian. Primarily in disturbed areas. Impacts appear to be minor or unknown in wildlands.	CA-FP
	Brassica tournefortii	Saharan mustard, African mustard	High	A	A	B	2.3	Desert dunes, desert and coastal scrub	SW, D
	Briza maxima	big quakinggrass, rattlesnakegrass	Limited	B	C	B	2.3	Grasslands. Widespread in coast range. Impacts generally minor, but locally can be higher.	NW, SN, CW, SW
	Bromus diandrus	ripgut brome	Moderate	B	B	A	3.3	Dunes, scrub, grassland, woodland, forest. Very widespread, but monotypic stands uncommon.	CA

Scientific names based on *The Jepson Manual*. For each species, the first common name is based on the Weed Science Society of America's "Composite List of Weeds" (www.wssa.net), followed by other names used in California. Scores: A = Severe, B = Moderate, C = Limited, D = None, U = Unknown. Documentation level averaged. Regions invaded based on Jepson geographic regions. Plant assessment forms, literature citations, and full rating criteria available at www.cal-ipc.org.

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
	Bromus hordeaceus	soft brome	Limited	B	C	A	2.8	Grasslands, sagebrush, serpentine soils, many other habitats. Very widespread, but primarily in converted annual grasslands.	CA
	Bromus madritensis ssp. *rubens* (=*B. rubens*)	red brome	High	A	B	A	3.0	Scrub, grassland, desert washes, woodlands. Impacts most significant in desert areas.	CA
	Bromus tectorum	downy brome, cheatgrass	High	A	B	A	3.1	Interior scrub, woodlands, grasslands. Most widely distributed invasive plant in the US.	SN, GB, D
	Cakile maritima	European sea-rocket	Limited	C	B	B	3.6	Coastal dunes. Widespread, but impacts appear to be minor.	NW, CW, SW
◆	*Cardaria chalepensis* (=*C. draba* ssp. *chalepensis*)	lens-podded whitetop	Moderate	B	B	C	3.2	Central Valley wetlands. Limited distribution in CA. May not be as invasive as *C. draba*.	CA-FP, GB
	Cardaria draba	hoary cress	Moderate	B	B	B	2.6	Riparian areas, marshes of central coast. More severe invasive in northern CA.	CW, SW
	Cardaria pubescens	hairy whitetop	Limited	C	B	C	2.5	Grasslands and meadows. Impacts unknown but may be significant in meadows of Cascade Range.	GV, SW
	Carduus acanthoides	plumeless thistle	Limited	B	C	C	3.0	Valley and foothill grasslands. Limited distribution in CA, impacts higher locally.	NW, SN, CW
	Carduus nutans	musk thistle	Moderate	B	B	B	3.1	Grasslands. More invasive in other western states. Limited distribution in CA.	NW, CaR, SN
	Carduus pycnocephalus	Italian thistle	Moderate	B	B	A	2.9	Forest, scrub, grasslands, woodland. Very widespread. Impacts may be variable regionally.	NW, SN, CW, SW
	Carduus tenuiflorus	slenderflower thistle	Limited	C	C	B	2.8	Valley and foothill grasslands. Limited distribution. Impacts appear to be minor.	NW, SN, CW, SW
	Carpobrotus chilensis (and *C. edulis* x *chilensis* hybrids)	sea-fig, iceplant	Moderate	B	B	A	1.8	Coastal dunes, scrub, prairie. Little information on species, most inferred from *C. edulis*.	NW, CW, SW
	Carpobrotus edulis	Hottentot-fig, iceplant	High	A	B	A	3.3	Coastal habitats, especially dunes	NW, CW, SW
◆	*Carthamus lanatus*	woolly distaff thistle	Moderate	A	B	C	2.8	Grasslands. Expanding in coast ranges, may become more severe. Current distribution limited.	NW, SN, CW

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TABLE 1: Invasive Non-Native Plants that Threaten Wildlands in California (continued)

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
	Centaurea calcitrapa	purple starthistle	Moderate	B	B	B	2.7	Grasslands. Impacts regionally variable. Relatively limited distribution.	NW, SN, GV, CW, SW
◆	*Centaurea debeauxii* (=*C. jacea* x *C. nigra*, *C.* x *praiensis*)	meadow knapweed	Moderate	B	B	C	2.7	Grasslands. Spreading rapidly in NW CA, but limited distribution elsewhere. Little known of impacts.	NW, CW
	Centaurea diffusa	diffuse knapweed	Moderate	B	B	B	3.3	Great Basin scrub, coastal prairie. Severe impacts in other western states. Limited distribution in CA with impacts higher in some locations.	Ca-R, CW, NW, SN
	Centaurea maculosa (=*C. biebersteinii*)	spotted knapweed	High	A	B	B	3.4	Riparian, grasslands, wet meadows, forests. More widely distributed in other western states.	CA-FP, GB
	Centaurea melitensis	Malta starthistle, tocalote	Moderate	B	B	B	2.6	Grasslands, oak woodland. Sometimes misidentified as *C. solstitialis*. Impacts vary regionally.	CW, SW, D
	Centaurea solstitialis	yellow starthistle	High	A	B	A	3.0	Grasslands, woodlands, occasionally riparian	CA-FP
	Centaurea virgata var. *squarrosa* (=*C. squarrosa*)	squarrose knapweed	Moderate	B	B	B	2.8	Scrub, grassland, pinyon-juniper woodland. Highly invasive in Utah and other western states. Limited distribution in CA.	NW, CaR, MP
	Chondrilla juncea	rush skeletonweed	Moderate	B	B	B	3.1	Grasslands. Very invasive in other western states, but currently limited distribution in CA.	NW, CaR, SN, GV, CW,
	Chrysanthemum coronarium	crown daisy	Moderate	B	B	B	2.0	Coastal prairie, dunes, and scrub. Impacts generally low to moderate, but can vary regionally.	CW, SW
	Cirsium arvense	Canada thistle	Moderate	B	B	B	2.8	Grasslands, riparian areas, forests. Severe impacts in other western states. Limited distribution in CA.	CA-FP, DMoj
	Cirsium vulgare	bull thistle	Moderate	B	B	B	3.3	Riparian areas, marshes, meadows. Widespread, can be very problematic regionally.	CA-FP, GB
	Conicosia pugioniformis	narrowleaf iceplant	Limited	C	B	C	2.1	Coastal dunes, scrub, grassland. Limited distribution. Impacts generally minor but can be higher locally.	CW
	Conium maculatum	poison-hemlock	Moderate	B	B	B	2.8	Riparian woodland, grassland. Widespread in disturbed areas. Abiotic impacts unknown. Impacts can vary locally.	CA-FP

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	Cordyline australis	giant dracaena, New Zealand-cabbage tree	Limited	C	C	C	2.0	Coniferous forest. Two reports of horticultural escape into wildlands. Appears best suited to moist, cool climates.	NW, CW
	Cortaderia jubata	jubatagrass	High	A	A	A	3.1	Many coastal and interior habitats	NW, CW, SW
	Cortaderia selloana	pampasgrass	High	A	A	B	3.2	Coastal dunes, coastal scrub, Monterey pine, riparian, grasslands, wetlands, serpentine soils. Still spreading both coastal and inland.	CW, SW
	Cotoneaster franchetii	orange cotoneaster	Moderate	B	A	B	2.6	Coniferous forest. Limited distribution. Abiotic impacts largely unknown.	NW, CW
	Cotoneaster lacteus	Parney's cotoneaster	Moderate	B	B	B	2.1	Many coastal habitats, mainly a problem from SF Bay Area north along coast. Limited distribution. Abiotic impacts largely unknown.	NW, CW
	Cotoneaster pannosus	silverleaf cotoneaster	Moderate	B	A	B	2.5	Many coastal habitats, mainly a problem from SF Bay Area north along coast. Limited distribution. Abiotic impacts largely unknown.	NW, CW
	Cotula coronopifolia	brassbuttons	Limited	C	C	B	2.2	Salt and freshwater marshes. Impacts largely unknown, but appear to be minor.	NW, CW, SW
	Crataegus monogyna	English hawthorn	Limited	C	B	C	3.4	Riparian habitats, woodland. Limited distribution. Impacts appear to be minor.	NW, CW, SW
	Crocosmia x *crocosmiiflora*	montbretia	Limited	C	B	B	2.6	Coastal scrub and prairie, north coast forests. Abiotic impacts unknown. Higher invasiveness in some areas.	NW, CW
	Crupina vulgaris	common crupina, bearded creeper	Limited	B	C	B	3.2	Forest, woodland, grassland. Limited distribution. More invasive in other western states.	NW, MP
	Cynara cardunculus	artichoke thistle	Moderate	B	B	B	4.0	Coastal grasslands. Impacts more severe in southern CA where monotypic stands are more common.	CW, SW
	Cynodon dactylon	bermudagrass	Moderate	B	B	B	3.3	Riparian scrub in southern CA. Common landscape weed, but can be very invasive in desert washes.	SW, DSon
	Cynoglossum officinale	houndstongue	Moderate	B	B	B	2.5	Woodland, forest, interior dunes. Abiotic impacts unknown. Limited distribution. Can have impacts in other western states.	CaR, SN

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	Cynosurus echinatus	hedgehog dogtailgrass	Moderate	B	B	A	2.5	Oak woodland, grassland. Widespread, impacts vary regionally, but typically not in monotypic stands.	NW, SN, GV, CW, SW
	Cytisus scoparius	Scotch broom	High	A	B	A	3.2	Coastal scrub, oak woodland, horticultural varieties may also be invasive.	CA-FP
	Cytisus striatus	Portuguese broom	Moderate	B	B	B	2.7	Coastal scrub, grasslands. Often confused with *C. scoparius*. Limited distribution.	NW, CW, SW
	Dactylis glomerata	orchardgrass	Limited	C	B	B	2.9	Grasslands, broadleaved forest, woodlands. Common forage species. Impacts appear to be minor.	CA-FP
	Delairea odorata (=*Senecio mikanioides*)	Cape-ivy, German-ivy	High	A	A	B	3.1	Coastal, occasionally other riparian areas.	CW, SW
	Descurainia sophia	flixweed, tansy mustard	Limited	C	B	B	1.9	Scrub, grassland, woodland. Impacts appear to be minor, but locally more invasive in NE CA.	CA
	Digitalis purpurea	foxglove	Limited	C	B	B	2.4	Forest, woodland. Widely escaped ornamental. Impacts largely unknown or appear to be minor.	NW, SN, CW
	Dipsacus fullonum	common teasel	Moderate	B	B	B	3.8	Grasslands, seep, riparian scrub. Impacts regionally variable, forms dense stands on occasion.	NW, CW, SN
	Dipsacus sativus	fuller's teasel	Moderate	B	B	B	3.8	Grasslands, seep, bogs. Impacts regionally variable, forms dense stands on occasion.	NW, CW, SW
◆	*Dittrichia graveolens*	stinkwort	Moderate	B	A	C	3.0	Grasslands, riparian scrub. Spreading rapidly, impacts may become more important in future.	NW, SN, CW, GV, SW
	Echium candicans	pride-of-Madeira	Limited	C	B	B	1.5	Two escaped populations near Big Sur and San Elijo Lagoon. Little information on impacts.	CW, NW, SW
	Egeria densa	Brazilian egeria	High	A	A	B	3.1	Streams, ponds, sloughs, lakes, Sacramento-San Joaquin Delta	SN, GV, SW
	Ehrharta calycina	purple veldtgrass	High	A	A	B	3.4	Sandy soils, especially dunes. Rapidly spreading on central coast.	CW, SW
	Ehrharta erecta	erect veldtgrass	Moderate	B	B	B	2.2	Scrub, grasslands, woodland, forest. Spreading rapidly. Impacts may become more important in future.	CW, SW

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TABLE 1: Invasive Non-Native Plants that Threaten Wildlands in California (continued)

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◆	*Ehrharta longiflora*	long-flowered veldtgrass	Moderate	B	B	C	2.8	Coastal scrub. Limited distribution, but spreading rapidly in southern CA. Impacts largely unknown.	SW
◆	*Eichhornia crassipes*	water hyacinth	High	A	A	C	3.2	Aquatic systems in Sacramento-San Joaquin Delta	GV, CW, SW
	Elaeagnus angustifolia	Russian-olive	Moderate	B	A	B	3.3	Interior riparian. Impacts more severe in other western states. Current distribution limited in CA.	GV, CW, DMoj
◆	*Emex spinosa*	spiny emex, devil's-thorn	Moderate	B	B	D	1.6	Edges of beaches, other coastal habitats. Invasive in other states and countries. Spreading rapidly in southern CA. Impacts not well known.	SW
	Erechtites glomerata, E. minima	Australian fireweed, Australian burnweed	Moderate	C	B	A	3.2	Coastal woodland, scrub, forests. Widespread on coast, but impacts low overall. May vary locally.	NW, CW
	Erodium cicutarium	redstem filaree	Limited	C	C	A	3.1	Many habitats. Widespread. Impacts minor in wildlands. High-density populations are transient.	CA
	Eucalyptus camaldulensis	red gum	Limited	C	C	C	2.2	Mainly southern CA urban areas. Impacts, invasiveness and distribution all minor.	NW, GV, CW, SW
	Eucalyptus globulus	Tasmanian blue gum	Moderate	B	B	B	2.8	Riparian areas, coastal grasslands, scrub. Impacts can be much higher in coastal areas.	NW, GV, CW, SW
◆	*Euphorbia esula*	leafy spurge	High	A	A	C	3.5	Forests, woodlands, juniper forest. More widespread invasive in northern states.	NW, CaR, MP
	Euphorbia oblongata	oblong spurge	Limited	C	C	B	2.0	Meadows, woodlands. Limited distribution. Impacts unknown. Locally in dense stands.	GV, CW
◆	*Euphorbia terracina*	carnation spurge	Moderate	B	B	C	1.7	Coastal scrub. Limited distribution. Spreading in southern CA. Impacts unknown.	SW
	Festuca arundinacea	tall fescue	Moderate	B	B	A	2.9	Coastal scrub, grasslands; common forage grass. Widespread, abiotic impacts unknown.	CA-FP
	Ficus carica	edible fig	Moderate	B	A	B	2.6	Riparian woodland. Can spread rapidly. Abiotic impacts unknown. Can be locally very problematic.	CW, SW, GV
	Foeniculum vulgare	fennel	High	A	B	A	3.0	Grasslands, scrub.	CA-FP

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	Genista monspessulana	French broom	High	A	A	B	3.2	Coastal scrub, oak woodland, grasslands. Horticultural selections may also be invasive.	NW, CW, SW
	Geranium dissectum	cutleaf geranium	Limited	C	B	A	1.7	Numerous habitats but impacts appear minor.	CA-FP
	Glyceria declinata	waxy mannagrass	Moderate	B	B	B	1.9	Vernal pools, moist grasslands. Often confused with native *Glyceria*. Impacts largely unknown, but may be significant in vernal pools.	GV
	Halogeton glomeratus	halogeton	Moderate	B	A	B	3.0	Scrub, grasslands, pinyon-juniper woodland. Larger problem in NV. Monotypic stands are rare.	CaR, DMoj, GB
	Hedera helix, H. canariensis	English ivy, Algerian ivy	High	A	A	A	2.7	Coastal forests, riparian areas. Species combined due to genetics questions.	CA-FP
	Helichrysum petiolare	licoriceplant	Limited	C	B	C	2.0	North coastal scrub. Limited distribution. Impacts unknown, but can form dense stands.	NW, CW
	Hirschfeldia incana	shortpod mustard, summer mustard	Moderate	B	B	A	1.9	Scrub, grasslands, riparian areas. Impacts not well understood, but appear to be greater in southern CA.	CW, GV, NW, SN, SW
	Holcus lanatus	common velvetgrass	Moderate	B	B	A	2.9	Coastal grasslands, wetlands. Impacts can be more severe locally, especially in wetland areas.	CA-FP, DMoj, GB
	Hordeum marinum, H. murinum	Mediterranean barley, hare barley, wall barley	Moderate	B	B	A	2.8	Grasslands. *H. marinum* invades drier habitats, while *H. murinum* invades wetlands. Widespread, but generally do not form dominant stands.	CA
◆	*Hydrilla verticillata*	hydrilla	High	A	B	C	3.2	Freshwater aquatic systems. The most important submerged aquatic invasive in southern states.	NW, SN, GV, SW, D
◆	*Hypericum canariense*	Canary Island hypericum	Moderate	B	B	C	1.2	Coastal scrub, prairie. Impacts unknown. Limited distribution. Spreading rapidly on central coast.	SW, CW
	Hypericum perforatum	common St. Johnswort, klamathweed	Moderate	B	B	B	3.7	Many northern CA habitats. Abiotic impacts low. Biological control agents have reduced overall impact.	SN, CW, GV, NW, SW
	Hypochaeris glabra	smooth catsear	Limited	C	B	B	3.1	Scrub and woodlands. Widespread. Impacts appear to be minor. Some local variability.	CA-FP
	Hypochaeris radicata	rough catsear, hairy dandelion	Moderate	C	B	A	2.2	Coastal dunes, scrub, and prairie, woodland, forest. Widespread. Impacts unknown or appear to be minor.	CA-FP

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◆	*Ilex aquifolium*	English holly	Moderate	B	B	C	2.7	North coast forests. Expanding range south from Oregon.	CW, NW
	Iris pseudacorus	yellowflag iris	Limited	C	B	C	2.3	Riparian, wetland areas, especially southern CA. Limited distribution. Abiotic impacts unknown.	SN, GV, CW, SW
	Isatis tinctoria	dyer's woad	Moderate	B	B	A	3.0	Great Basin scrub and grasslands, coniferous forest. More severe impacts in other western states, but can be locally very invasive in northern CA.	CaR, NW, SN, MP
	Kochia scoparia	kochia	Limited	B	C	B	3.2	Scrub, chaparral, grasslands. Primarily a weed of disturbed sites.	CW, GV, D, GB
	Lepidium latifolium	perennial pepperweed, tall whitetop	High	A	A	A	3.1	Coastal and inland marshes, riparian areas, wetlands, grasslands. Has potential to invade montane wetlands.	CA-FP, GB
	Leucanthemum vulgare	oxeye daisy	Moderate	B	B	B	2.5	Montane meadows, coastal grasslands, coastal scrub. Expanding range, invasiveness varies locally.	CW, NW, SN, SW
	Linaria genistifolia ssp. *dalmatica* (=*L. dalmatica*)	Dalmation toadflax	Moderate	B	B	B	2.8	Grasslands, forest clearings. Limited distribution. More severe impacts in other western states.	CA-FP
	Lobularia maritima	sweet alyssum	Limited	C	B	B	2.4	Coastal dune, coastal scrub, coastal prairie, riparian.	NW, CW, SW
	Lolium multiflorum	Italian ryegrass	Moderate	B	B	A	2.6	Grasslands, oak woodland, pinyon-juniper woodland; widely used for post-fire erosion control. Widespread. Impacts can vary with region.	CA-FP
	Ludwigia peploides ssp. *montevidensis*	creeping water-primrose	High	A	B	B	2.5	Freshwater aquatic systems. Clarification needed on taxonomic identification.	NW, SN, GV, CW, SW, DMoj
◆	*Ludwigia hexapetala* (= *L. uruguayensis*)	Uruguay water-primrose	High	A	B	C	2.6	Freshwater aquatic systems. Clarification needed on taxonomic identification.	NW, CW, SW
	Lythrum hyssopifolium	hyssop loosestrife	Limited	C	B	B	3.0	Grasslands, wetlands, vernal pools. Widespread. Impacts unknown, but appear to be minor.	CA-FP
	Lythrum salicaria	purple loosestrife	High	A	A	B	3.8	Wetlands, marshes, riparian areas	NW, GV, MP
	Marrubium vulgare	white horehound	Limited	C	C	B	2.8	Grasslands scrub, riparian areas. Widespread. Rarely in dense stands. Impacts relatively minor.	CA-FP, DMoj

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	Medicago polymorpha	California burclover	Limited	C	C	A	2.8	Grasslands. Widespread weed of agriculture and disturbed areas. Impacts in wildlands minor.	CA-FP
	Mentha pulegium	pennyroyal	Moderate	C	A	A	2.7	Vernal pools, wetlands. Poisonous to livestock. Spreading rapidly. Impacts largely unknown.	CW, GV, NW, SW
◆	*Mesembryanthemum crystallinum*	crystalline iceplant	Moderate	B	B	C	3.7	Coastal bluffs, dunes, scrubs, grasslands. Limited distribution. Locally problematic, especially in southern CA.	CW, NW, SW
	Myoporum laetum	myoporum	Moderate	B	B	B	2.6	Coastal habitats, riparian areas. Mostly along the southern coast. Abiotic impacts unknown.	CW, SW
	Myosotis latifolia	common forget-me-not	Limited	C	B	B	2.2	Coniferous forest, riparian. Little information on impacts.	CA-FP
◆	*Myriophyllum aquaticum*	parrotfeather	High	A	B	C	2.8	Freshwater aquatic systems	NW, CaR, CW, SW
	Myriophyllum spicatum	Eurasian watermilfoil	High	A	A	B	2.8	Freshwater aquatic systems	SN, GV, CW
	Nicotiana glauca	tree tobacco	Moderate	B	B	B	2.5	Coastal scrub, grasslands, riparian woodland. Abiotic impacts unknown. Impacts vary locally. Rarely in dense stands.	NW, SN, GV, SW, D
	Olea europaea	olive	Limited	C	B	B	2.5	A problem in Australia. Rarely escapes in CA but is a concern due to the possibility of spread from planted groves.	CW, GV, NW, SW
	Ononis alopecuroides	foxtail restharrow	Limited	C	B	C	2.2	Grasslands, oak woodland. Highly invasive but impacts unknown. Nearly eradicated.	CW
	Onopordum acanthium	Scotch thistle	High	A	B	B	2.9	Wet meadows, sage brush, riparian areas	CA-FP, MP
	Oxalis pes-caprae	buttercup oxalis, Bermuda buttercup, yellow oxalis	Moderate	B	B	B	2.9	Coastal dunes, scrub, oak woodland. Impacts in coastal areas may prove more severe in time.	CW, NW, SW
	Parentucellia viscosa	yellow glandweed, sticky parentucellia	Limited	C	B	B	2.5	Coastal prairie, grassland, and dunes. Impacts unknown, but can be locally significant.	NW, CaR, SN, CW, SW
	Pennisetum clandestinum	kikuyugrass	Limited	C	C	B	2.3	Present at low levels in numerous wildland habitats. Impacts unknown. Common turf weed.	NW, CW, SW

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	Pennisetum setaceum	crimson fountaingrass	Moderate	B	B	B	2.9	Coastal dunes and scrub, chaparral, grasslands. Some horticultural cultivars sterile. Very invasive in Hawaii.	CW, NW, SN, SW
	Phalaris aquatica	hardinggrass	Moderate	B	B	B	2.6	Coastal sites, especially moist soils. Limited distribution. Can be highly invasive locally.	CW, NW, SN, SW
	Phoenix canariensis	Canary Island date palm	Limited	C	B	D	2.3	Desert washes; agricultural crop plant. Limited distribution in southern CA. Impacts can be higher locally.	CW, SW
	Picris echioides	bristly oxtongue	Limited	C	B	B	2.4	Coastal prairie, scrub, riparian woodland. Widespread locally. Abiotic impacts unknown.	CA-FP
	Piptatherum miliaceum	smilograss	Limited	C	B	B	2.4	Coastal dunes, scrub, riparian, grassland. Expanding range. Impacts largely unknown.	GV, CW, SW
	Plantago lanceolata	buckhorn plantain, English plantain	Limited	C	C	B	2.1	Many habitats. Turf weed primarily. Low density and impact in wildlands.	CA-FP
	Poa pratensis	Kentucky bluegrass	Limited	C	B	B	2.7	Grasslands scrub, riparian areas. Widespread turf plant. Abiotic impacts unknown.	CA
◆	*Polygonum cuspidatum (=Fallopia japonica)*	Japanese knotweed	Moderate	B	B	D	2.7	Riparian areas, wetlands, forest edges. More severe impacts in NW wetlands. Distribution limited in CA.	NW, CaR, SN, GV, CW
◆	*Polygonum sachalinense*	Sakhalin knotweed	Moderate	B	A	D	2.5	Riparian areas. More severe impacts in NW wetlands. Distribution limited in CA.	NW, CaR, SN, GV, CW
	Polypogon monspeliensis and subspp.	rabbitfoot polypogon, rabbitgoot grass	Limited	C	C	B	2.3	Margins of ponds and streams, seasonally wet places, edge of coastal dunes. Widespread. Impacts appear to be minor.	CA
	Potamogeton crispus	curlyleaf pondweed	Moderate	B	B	B	3.2	Freshwater aquatic systems. Can be very invasive locally.	NW, GV, CW, SW, DMoj
	Prunus cerasifera	cherry plum, wild plum	Limited	C	B	B	1.8	Riparian habitats, chaparral, woodland. Limited distribution. Abiotic impacts unknown.	NW, CW
	Pyracantha angustifolia, P. crenulata, P. coccinea	pyracantha, firethorn	Limited	C	B	B	2.8	Coastal scrub and prairie, riparian areas. Horticultural escape. Impacts unknown or minor.	NW, CW, SW
	Ranunculus repens	creeping buttercup	Limited	C	C	B	2.9	Riparian areas, coniferous forest. Impacts appear to be minor to negligible in most areas.	NW, CaR, SN, CW, SW
	Raphanus sativus	radish	Limited	C	C	B	2.5	Present at low levels in numerous habitats. Widespread in disturbed sites.	CA-FP

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Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
◆	*Retama monosperma*	bridal broom	Moderate	B	B	C	1.8	Coastal scrub. Can spread rapidly but largely if uncontrolled. Limited distribution in CA.	SW
	Ricinus communis	castorbean	Limited	C	B	B	2.5	Coastal scrub and prairie, riparian areas. Widespread in southern CA. Impacts locally variable.	GV, CW, SW
	Robinia pseudoacacia	black locust	Limited	C	B	B	2.8	Riparian areas, canyons. Severe impacts in southern states. Impacts minor in CA.	CA-FP, GB
	Rubus armeniacus (= *R. discolor*)	Himalaya blackberry	High	A	A	A	3.0	Riparian areas, marshes, oak woodlands	CA-FP
	Rumex acetosella	red sorrel, sheep sorrel	Moderate	B	B	A	2.3	Many habitats, riparian areas, forest, wetlands. Widespread. Abiotic impacts unknown. Impacts can vary locally.	CA-FP
	Rumex crispus	curly dock	Limited	C	C	A	2.7	Grasslands, vernal pool, meadows, riparian. Widespread. Impacts appear to be minor.	CA
	Salsola paulsenii	barbwire Russian-thistle	Limited	C	C	C	2.9	Desert and Great Basin scrub. Limited distribution. Impacts in desert appear to be minor.	SW, SNE, DMoj
	Salsola tragus (=S. *kali*)	Russian-thistle	Limited	C	B	B	2.8	Desert dunes and scrub, alkali playa. Widespread. Impacts minor in wildlands.	CA
	Salvia aethiopis	Mediterranean sage	Limited	C	B	B	2.5	Sagebrush, juniper, bunchgrass. Limited distribution. Impacts minor but can be locally higher.	MP
◆	*Salvinia molesta*	giant salvinia	High	A	A	C	2.9	Freshwater aquatic systems	CW, DSon
◆	*Sapium sebiferum* (=*Triadica sebifera*)	Chinese tallowtree	Moderate	B	B	C	3.2	Riparian areas. Impacts severe in southeast US. Limited distribution, but spreading rapidly regionally.	GV
	Saponaria officinalis	bouncingbet	Limited	C	B	C	2.5	Riparian scrub and woodland. Impacts unknown or minor, but appear to be locally variable.	NW, GV, CW, SW, GB
	Schinus molle	Peruvian peppertree	Limited	C	B	B	2.5	Riparian. Limited distribution. Impacts largely unknown in CA.	GV, SN, CW, SW
	Schinus terebinthifolius	Brazilian peppertree	Limited	C	B	C	2.6	Riparian. Very invasive in tropics. Abiotic impacts unknown, but appear significant locally.	SW

Scientific names based on *The Jepson Manual*. For each species, the first common name is based on the Weed Science Society of America's "Composite List of Weeds" (www.wssa.net), followed by other names used in California. Scores: A = Severe, B = Moderate, C = Limited, D = None, U = Unknown. Documentation level averaged. Regions invaded based on Jepson geographic regions. Plant assessment forms, literature citations, and full rating criteria available at www.cal-ipc.org.

TABLE 1: Invasive Non-Native Plants that Threaten Wildlands in California (continued)

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
	Schismus arabicus, S. barbatus	mediterranean-grass	Limited	B	C	A	2.3	Scrub, thorn woodland. Widespread in deserts. Impacts can be more important locally.	GV, CW, SW, D
	Senecio jacobaea	tansy ragwort	Limited	C	B	B	2.8	Grasslands, riparian. Impacts generally minor. Can be locally important in NW CA.	CA-FP
◆	*Sesbania punicea*	red sesbania, scarlet wisteria	High	A	B	C	3.2	Riparian areas	GV
	Silybum marianum	blessed milkthistle	Limited	C	C	A	3.5	Grasslands, riparian. Widespread, primarily in disturbed areas. Impacts can be higher locally	NW, GV, CW, SW
	Sinapis arvensis	wild mustard, charlock	Limited	C	C	C	2.9	Grasslands. Primarily in disturbed sites. Impacts minor or unknown in wildlands.	CA-FP
	Sisymbrium irio	London rocket	Moderate	B	B	A	1.9	Scrub, grasslands. Widespread. Primarily in disturbed sites. Impacts vary locally.	GV, SW
◆	*Spartina alterniflora* (and *S. alterniflora* x *foliosa* hybrids)	smooth cordgrass & hybrids, Atlantic cordgrass	High	A	A	C	3.5	San Francisco Bay salt marshes and mudflats. Hybridizes with native *S. foliosa*.	CW
◆	*Spartina anglica*	common cordgrass	Moderate	B	B	D	3.4	San Francisco Bay salt marshes. Very severe impact in other countries. Limited distribution in CA.	CW
◆	*Spartina densiflora*	dense-flowered cordgrass	High	A	B	C	3.3	San Francisco and Humboldt Bay salt marshes	NW, CW
	Spartina patens	saltmeadow cordgrass	Limited	C	C	D	2.9	San Francisco Bay salt marshes. Very limited distribution. Impacts currently minor in CA, but high in other countries.	CW
	Spartium junceum	Spanish broom	High	A	B	B	3.2	Coastal scrub, grasslands, wetlands, oak woodland, forests	NW, CW, SW
◆	*Stipa capensis*	Mediterranean steppegrass, twisted-awned speargrass	Moderate	B	B	D	1.9	Desert scrub. First recorded in CA 1995. Limited distribution, but spreading rapidly in CA deserts.	DSon
	Taeniatherum caput-medusae	medusahead	High	A	A	A	3.4	Grasslands, scrub, woodland	CaR, NW, SN, GV, SW

Scientific names based on *The Jepson Manual*. For each species, the first common name is based on the Weed Science Society of America's "Composite List of Weeds" (www.wssa.net), followed by other names used in California. Scores: A = Severe, B = Moderate, C = Limited, D = None, U = Unknown. Documentation level averaged. Regions invaded based on Jepson geographic regions. Plant assessment forms, literature citations, and full rating criteria available at www.cal-ipc.org.

Alert ◆	Scientific Name	Common Name	Rating	Impacts	Invasiveness	Distribution	Doc. Level	Ecological Types Invaded and Other Comments	Regions Invaded
	Tamarix aphylla	athel tamarisk	Limited	C	B	B	3.5	Desert washes, riparian areas. Limited distribution. Impacts minor, but can be locally higher.	GV, SW, D
	Tamarix parviflora	smallflower tamarisk	High	A	A	B	3.1	Riparian areas, desert washes, coastal scrub	NW, GV, CW, Dmoj
	Tamarix ramosissima	saltcedar, tamarisk	High	A	A	A	3.3	Desert washes, riparian areas, seeps and springs	SN, GV, CW, SW, D, SNE
	Tanacetum vulgare	common tansy	Moderate	B	B	B	2.3	Riparian areas, forest. Limited distribution. Severe problem in other western states.	NW, CaR,
	Torilis arvensis	hedgeparsley	Moderate	C	B	A	2.3	Expanding range. Appears to have only moderate ecological impacts.	CA-FP, especially CW, NW
	Trifolium hirtum	rose clover	Moderate	C	B	B	2.8	Grasslands, oak woodland. Widely planted in CA. Impacts relatively minor in most areas.	CA-FP
	Ulex europaeus	gorse	High	A	B	B	2.9	Scrub, woodland, forest, coastal grassland	NW, CaR, SN, CW
	Undaria pinnatifida	wakame	Limited	C	B	C	3.3	Algae of estuaries. First recorded in CA in 2000. Impacts unknown, but do not appear to be significant	CW, SW
	Verbascum thapsus	common mullein, woolly mullein	Limited	C	B	B	3.8	Meadows, riparian, sagebrush, pinyon-juniper woodlands. Widespread. Impacts minor.	NW, CaR, SN
	Vinca major	big periwinkle	Moderate	B	B	B	2.8	Riparian, oak woodlands, coastal scrub. Distribution currently limited but spreading in riparian areas. Impacts can be higher locally.	CaR, SW, SN, GV
	Vulpia myuros	rattail fescue	Moderate	B	B	A	3.0	Coastal sage scrub, chaparral. Widespread. Rarely forms monotypic stands, but locally problematic.	CA-FP, D
◆	*Washingtonia robusta*	Mexican fan palm	Moderate	B	B	C	2.7	Desert washes. Limited distribution but spreading in southern CA. Impacts can be higher locally.	SW
	Watsonia meriana	bulbil watsonia	Limited	C	B	C	2.3	Coastal prairie, coniferous forest. Abiotic impacts unknown, but may be locally dense.	NW
	Zantesdeschia aethiopica	calla lily	Limited	C	B	C	2.1	Coastal prairie, wetlands. Impacts high in other countries and local impacts may be high in CA.	NW, CW, SW

Scientific names based on *The Jepson Manual*. For each species, the first common name is based on the Weed Science Society of America's "Composite List of Weeds" (www.wssa.net), followed by other names used in California. Scores: A = Severe, B = Moderate, C = Limited, D = None, U = Unknown. Documentation level averaged. Regions invaded based on Jepson geographic regions. Plant assessment forms, literature citations, and full rating criteria available at www.cal-ipc.org.

LETTER A
ATTACHMENT 8

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Town and County Submittal Response to Planning Commission Resolution Recommendations
October, 2015

The following information is provided for the consideration of City staff in reviewing the consistency of the proposed Town and Country Master Plan submission with the Planning Commission Resolution No. PC-4658 dated February 19, 2015.

Project Development:

1. **Consistency of the proposed Town and Country plan with the offset distances and design criteria in the SD River Park Master Plan.**

   Response: The proposed Master Plan for Town and Country retains all existing hotel structures located adjacent to the currently defined river floodway. Consequently, these constraints limit the implementation of the required offset distances specified by River Corridor Area and River Influence Area. However, despite this condition, the Town and Country Master Plan insure that the five principles of the SD River Master Plan are achieved. This includes:

   1. *Restore and Maintain a Healthy River System:* The Master Plan will implement a range of specific actions that meet the intent of the SDRPMP by restoring and maintaining a healthy river ecosystem. The project will provide improvements in several ways:
      - The portions of the Plan Area within the boundaries of the MHPA and wetland buffers will be restored or enhanced.
      - The width of native habitats at the most constricted section of the river will be increased from approximately 80 feet to up to 210 feet.
      - The Master Plan will establish a wetland buffer and a variety of Low Impact Development (LID) strategies directly adjacent to the riparian corridor.
      - The Master Plan will replace approximately 1.7 acres of existing surface parking area south of the river with native habitats and/ or park lands designed to enhance the River experience and enjoyment.
      - The Master Plan will replace approximately 1.3 acres of existing surface parking area north of the river with native habitats and/or park lands designed to enhance the river experience and enjoyment.
   2. *Unify Fragmented Lands and Habitats:*
      - The Master Plan will restore a key connecting section between currently fragmented natural habitats along the San Diego River.
      - The Master Plan significantly improves the quality and function of the San Diego River by improving water quality and enhancing the habitat area and width.
   3. *Create a Connected Continuum:*
      - The Master Plan will implement the San Diego River Pathway on both sides of the river. It will include a rebuilt non-vehicular 10- foot wide multi-use bridge across the river, providing connectivity between the Fashion Valley Mall and transit center to the north, and the hotel and residential to the south.
      - The Park District includes over 2,500 linear feet of multi-use pathways plus additional interconnecting pedestrian trails.
      - The Master Plan converts approximately 3.0 acres of existing surface parking areas or degraded areas north and south of the river into new trail corridors and park space that will create unique

places and opportunities for special experiences immediately adjacent to the riverine habitat area. Importantly, the Master Plan will provide all of the required population-based park acreage on-site in a highly visible and accessible location immediately adjacent to the restored riparian open space.

4. *Reveal the River Valley History:*
   - The Plan Area on-site public park and trail system is proposed to include interpretive way stations that convey the history of the river, the valley, its inhabitants and their impact on the ecology and efforts to control the river over time. These are learning opportunities covering a broad spectrum of information that will educate, and increase understanding and appreciation of the river and its history.
   - The Master Plan provides amenities along the River Pathway such as benches, picnic areas, overlooks, interpretive signs, and gathering areas.
5. *Reorient Development Toward the River:*
   - The River is being improved and expanded, to enhance the overall user experience. Riverine habitat, totaling 7.71 acres, will be restored and/or enhanced. The 4.33-acre public park is showcased in the Master Plan as a major hub of activity.
   - New buildings in the adjacent Residential District are designed to face the river and create active spaces and entries opening onto the restored riparian open space and park. Residential windows, balconies, and common areas take advantage of river views and adjacencies.
   - Park spaces provide direct recreation value and flex space that can accommodate indoor/outdoor hotel and convention events, weddings, and outdoor entertainment.
   - A new exterior pre-function space for the Golden Pacific Ballroom will face the restored riparian open space.
   - The Master Plan pedestrian and bicycle circulation network dramatically improves pedestrian access to and across the river as well as throughout the Plan Area connecting the Master Plan area to the MTS Fashion Valley transit center and Fashion Valley Mall.

- Master Plan Information Location: *Town & Country Draft Master Plan* (September 2015)Section 4 River Park District, especially:
  Table 4.1, 4.2, and 4.3
- *MIR Sheet* DP-01N, LP-01N

2. Development along the San Diego River that activates the open space and faces the river and acts as a "front door."

Response: In response to the SD River Master Plan, the proposed Town and Country Master Plan improves and activates the river corridor to enhance the overall user experience. This includes:

- The 12.04 acre River Park District provided in the Master Plan will restore and/or enhance 7.71 acres of riparian habitat. The Park District will be showcased as a major hub of activity with passive recreation, trails, interpretive signage and a 4.33-acre public park open space.
- The existing pedestrian bridge over the river will be rebuilt to strengthen the connection of the MTS Fashion Valley transit center and Fashion Valley Mall directly to the Plan Area to further encourage orientation toward the river.

- Residential buildings are designed to face the river and create active spaces with doors to some units opening onto the restored riparian open space and park.
- Residential windows, balconies, and common areas take advantage of river views and adjacencies.
- The existing hotel loading dock located adjacent to the Golden Pacific Ballroom will be relocated to the south side of the Grand Exhibit Hall. This area will be renovated to provide a function space for the Golden Pacific Ballroom. This outdoor terrace will provide views directly to the restored riparian open space.
- The Master Plan pedestrian and bicycle circulation network dramatically improves pedestrian access to and across the river as well as throughout the Plan Area connecting the Master Plan area, the MTS Fashion Valley transit center, and Fashion Valley Mall to the restored riparian habitat and open space amenities.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)

- Section 4 River Park District, especially Table 4.1, 4.2, and 4.3*MIR Sheet* LP-01N

3. Compatibility of the proposed amendment with the General Plan Urban Design goals and policies related to horizontal and vertical mixed-use development and development adjacent to natural features.

Response: The Master Plan creates a compact, efficient, and environmentally-sensitive urban development pattern. It focuses future growth and infill development close to jobs, services, transit, and public facilities to maximize the use of existing infrastructure and preserve open space and natural resources. The resulting neighborhoods are walkable and promote good community design focused on providing more housing and transportation choices for those who live and work in in this TOD. This is directly in alignment with General Plan Urban Design goals and policies. The Master Plan TOD directly implements the "City of Villages" strategy and Urban Design Element by:

- Focusing growth into dense mixed-use pedestrian-friendly districts that are linked to the regional transit system.
- Encouraging the incremental redevelopment of aging buildings and sites.
- Implementing this strategy with the close coordination of land use and transportation planning as well as inter-jurisdictional coordination of regional planning efforts.
- Creating a unique compact pedestrian-friendly TOD with a convention hotel and multifamily residential focused on a public park and the restored open space along the San Diego River.
- Establishing a unifying site and building architectural language and cohesive theme for all land uses fortified with architectural and site design guidelines.
- Incorporating a corresponding implementation program to ensure cohesive urban design.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 1 Introduction

1.1.1 Vision
1.1.2 Objectives
1.3.1 City of San Diego General Plan

4. Enhancement of access and views to the San Diego River from Hotel Circle North and the I-8 highway.

Response: The Master Plan includes a comprehensive pedestrian and bicycle network and improvements within adjacent rights-of-way to connect the greater community through the Plan Area to the San Diego River. This includes:

- The Master Plan pedestrian and bicycle circulation network dramatically improves pedestrian access to and across the river as well as throughout the Plan Area connecting the Master Plan area to the MTS Fashion Valley transit center and Fashion Valley Mall.
- The sidewalk along Fashion Valley Road is accessible from Hotel Circle Drive North to River Walk Drive.
- A new 10-foot-wide concrete sidewalk connects along Hotel Circle Drive North and Camino de la Reina to the sidewalk along the hotel entry drive.
- A new public access pathway extends north from Hotel Circle Drive at the hotel entry drive through the Plan Area to the river park along the tree-lined pedestrian corridor that transects the proposed residential, hotel, and park development.
- Hotel building access ways are proposed at two locations to provide hotel guests and visitors access to the public park, riparian open space, San Diego River Pathway.
- A network of sidewalks along internal Plan Area streets will create strong connections to the San Diego River.
- In addition to the internal sidewalk improvements, intersection traffic calming measures complement the walkability of the Plan Area street network through the use of curb extensions at select intersections.
- The Park District includes over 2,500 linear feet of multi-use pathways plus additional interconnecting pedestrian trails.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 3 Circulation
  Section 3.3
  Section 3.4
  Figure 3-16

5. Consistency with the design criteria in the Transit-Oriented Development Design Guidelines (adopted 1992).

Response: The Master Plan supports the guiding principles of the City Transit-Oriented Development Design Guidelines (City of San Diego, 1992) as follows:

- Provides infrastructure-sensitive infill redevelopment
- Increases the efficiency of existing land uses
- Establishes land uses that reinforce the viability of the transit system
- Creates a safe and convenient pedestrian and bicycle network
- Protects the natural environment and community character by restoring and enhancing the riparian ecosystem and constructing the San Diego River Pathway
- Employs sustainable building principles
- Creates a vital, interactive and secure neighborhood

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  - Section 1 introduction
    - 1.1 Master Plan Vision and Objectives
  - Section 3 Circulation
    - 3.1.1 Light Rail Transit
    - Figure 3-1 Walking Distance to Transit
    - 3.3 Pedestrian Circulation

6. Provide a minimum 30 foot landscaped buffer to limit noise and air pollution to guests and residents along Fashion Valley Road & Hotel Circle North.

Response: This buffer requirement is from the 1988 Atlas Specific Plan (Section V Urban Design Element, C. Site Specific Design Criteria, 1. Town and Country, page 5-81). The Town & Country site is being removed by amendment from the Atlas Specific Plan area and the requirements and authority of the Atlas Specific Plan will not be applicable to the Master Plan area in the future (see Town & Country Draft Master Plan, September 2015, Section 1.3.3 Atlas Specific Plan). The Master Plan proposes a minimum 15-foot landscape buffer along Fashion Valley Road, Hotel Circle North and Camino de la Reina. Along Hotel Circle North and Camino de la Reina, the minimum setback includes architectural building design criteria to mitigate noise and air pollution impacts as detailed in the technical studies.

Master Plan Information Location:

The landscape buffer provided in the Master Plan is detailed in following sections.

- *Town & Country Draft Master Plan* (September 2015)
  - Figure 3-6
- Figure 3-7 *Noise Technical Report Town & Country Resort and Convention Center Redevelopment Project* (AECOM, September 2015)
  - Table 8 Ambient Noise Measurement Data – Proposed Residences

Table 9 Traffic Noise Significance Thresholds
Section 7.3 Traffic Noise
Section 8.1 Mitigation Measures

- *Air Quality Technical Study for the Town & Country Resort and Convention Center Redevelopment Project* (AECOM, September 2015)
  Section 4.2 Methodology (Figure 5. Highway HRA Receptor Grid)
  Section 4.3 Project Impacts (Highway Health Risks)
  Section 5.1 Conclusions
  Section 5.2 Mitigation Measures (AQ-F)
- *MIR Sheet* DP-01S, LP-01S

7. Provide a health risk assessment to determine impacts of residential units within close proximity to I-8.

Response: The proposed project has the potential to expose sensitive receptors to pollutant concentrations from highway emissions that would result in a health risk. The Air Quality Technical Study determined that without mitigation this impact would be significant. Implementation of mitigation measures AQ-A through AQ-C of the *Air Quality Technical Study* would reduce the impact to a level of less than significant.

Master Plan Information Location:

- *Air Quality Technical Study for the Town & Country Resort and Convention Center Redevelopment Project* (AECOM, September 2015)
  Section 4.2 Methodology (Figure 5. Highway HRA Receptor Grid)
  Section 4.3 Project Impacts (Highway Health Risks)
  Section 5 Conclusions and Mitigation Measures

Project Open Space:

8. Active and passive public spaces and 14 foot multi-modal trail along the San Diego River that connect to adjacent properties including but not limited to the Union-Tribune Mixed Use Project, Riverwalk Golf Course, Fashion Valley Transit Center and Fashion Valley Mall.

Response: The Master Plan proposes a comprehensive multi-modal network that provides multiple connections to the San Diego River, adjacent properties and the surrounding community. This network directly links various active and passive public spaces and publicly accessible recreational facilities including:

- The 14-foot-wide San Diego River Pathway comprising over 2,500 linear feet of multi-use pathways both north and south of the river as well as through the population-based park
- Improved pedestrian/bicycle bridge across the river
- Amenities along the River Pathway such as benches, picnic areas, overlooks, interpretive signs, and gathering areas.
- Improved existing picnic area on north side of river

- Additional interconnecting pedestrian trails in the population-based park adjacent to the river
- Access ways leading to and through the Master Plan area.
- Additional interconnecting pedestrian trails in the population-based park adjacent to the river
- Lighting along the River Pathway
- A Public Park expected to include: play areas, equipment, and furnishings for children , multipurpose turf area (native grasses) for informal play, gatherings, and events, picnic tables, waste and recycled materials receptacles, benches, multipurpose paved area for use by authorized mobile café vendors, and areas for quiet contemplation.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 4 River Park District
  4.3.4 Population Based Park
  Figure 4-3 Population Based Park
- *MIR Sheet* LP-01N, LP-21N

9. Provide a 35 foot buffer from the floodway that incorporates the multi-modal trail and no new development, parking structures, or parking lots.

Response: The Master Plan retains all existing hotel structures located adjacent to the southern limit of the currently defined river floodway. The northern limit of the currently defined river floodway is approximately 300 feet north of the Master Plan Area within the Fashion Valley Mall property. Furthermore, the large concrete pylons supporting the MTS Trolley line run along the northern Plan Area boundary. In combination, these constraints limit the strict implementation of the required offset distances specified by the 35-foot Path Corridor, River Corridor Area and River Influence Area in the SDRPMP. However, despite these conditions, the Master Plan insures that the multi-modal trail along the restored riparian habitat and active and passive recreational areas will be quality public amenity and satisfy the intent of the SDRPMP.

The Master Plan proposes the construction of the multi-modal San Diego River Pathway within a 35' corridor on the north and south sides of the San Diego River connected by a bridge across the river.
North of the river, the River Pathway is proposed to be constructed along the full extent of the northern Plan Area boundary from the northeast corner of the Plan Area to Fashion Valley Road. It will be constructed within the Plan Area but outside the MHPA and wetland buffer. South of the river the San Diego River Pathway is proposed to be constructed from the south end of the new pedestrian bridge but outside the MHPA and wetland buffer. This section of the San Diego River Pathway will meander eastward through the new public park to a point at the eastern Plan Area boundary

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 4.3.6
- Figure 4.3 Population Based Public Park

- *MIR Sheet* DP-01N, LP-01N

10. Provide open space and population based park in addition to and outside of the required habitat restoration areas per code enforcement impact.

Response: The proposed project Town and Country Master Plan provides 2.76 acres of required code enforcement impact restoration. Furthermore, the Master Plan provides an additional 4.74 acres of additional habitat restoration and enhancement and 0.21 acres of water quality area for a total of 7.71 acres of restored and enhanced riparian open space habitat.

- 2.76 acres will be restored and enhanced per Mitigated Negative Declaration No. 118318 and Site Development Permit (SDP) No. 400602 approved by the Mission Valley Unified Planning Committee on April 2, 2008.
- 4.74 acres of existing disturbed areas within the MHPA and wetland buffers will be restored through the removal of invasive exotic species and the establishment of native habitats.
- .

In addition to and outside of the required and additional habitat restoration, the Master Plan provides a 4.33-acre population-based park adjacent to the riparian open space. Given the limited amount of public parkland in Mission Valley, is important to note that the population-based park requirement will be fulfilled entirely on-site (not by payment of in-lieu fees). In total the Master Plan provides 12.04 acres of restored or enhanced habitat and public park acreage. Furthermore, semi-private and private open space features are included throughout the Plan area.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 4 River Park District, especially:
  4.3.2 Site Development Permit no. 400602
  4.3.3 Open Space Habitat
  Figure 4-2
- *MIR Sheet* LP-03

Project Connectivity

11. Coordinate with adjacent development to address cumulative traffic impacts and provide a traffic study to evaluate traffic demand of the proposed mix of land uses to serve the Town & Country Site and assess traffic impacts of the proposed amendment in conjunction with surrounding approved developments.

Response: Using the City of San Diego trip generation rates (based on *Trip Generation Manual, May 2003*), the Town & Country Master Plan build-out is calculated to generate a total of 0 cumulative ADT with – -209 inbound / 173 outbound cumulative trips during the AM peak hour (total -36 trips) and 78 inbound /-123 outbound cumulative trips during the PM peak hour (total -45 trips). The project is calculated with 0 ADT and negative peak hours because **the reduction in traffic from the demolition of the existing uses is greater**

than the new traffic added due to new multi-family residential use. Furthermore, the change of use from hotel to residential, changes peak hour traffic patterns as well (residential includes heavy AM out and PM in, hotel includes heavy AM and PM in).

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  Section 3 - Circulation
- *Based on trip generation co-ordination with city staff in August and September (see separately attached trip generation tables)*

12. Consider a comprehensive transportation demand management (TDM) program including but not limited to shared parking agreement, unbundled parking, transit pass subsidies, discounted and/or prioritized alternative fuel vehicle parking, and car-share programs.

Response: Other mobility options under consideration for the Town and Country Master Plan include several Travel Demand Management (TDM) strategies and techniques that aid in reducing vehicular trips and associated air quality impacts and greenhouse gas emissions. The TDM program is based on project features that provide mobility options and support the Town and Country Master Plan as a Smart Growth Transit Oriented Development (TOD). The intent of the TDM program is to reduce peak period vehicle trips by creating a truly integrated mixed-use community that maximizes use of pedestrian and bicycle travel, transit, and carpools.

Master Plan Information Location:

- *Traffic Impact Analysis Town & Country Master Plan* (LLG, March 16, 2015)
  Section 14.1.2 Other Mobility Options

13. Provide a non-contiguous pedestrian connection along Fashion Valley and Hotel Circle North that connects to adjacent development.

Response: Public Access Pathways extend beyond the River Influence Area to connect the on-site residents and more importantly, the greater community to the Park, River Pathway and the transit center. The sidewalks along Hotel Circle North and Camino De La Reina will also enhanced to provide the pedestrian access at the property boundaries.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  3.3 Pedestrian Circulation
  Figure 3-16 Pedestrian Circulation
- *Traffic Impact Analysis Town & Country Master Plan* (LLG, March 16, 2015)
  Section 14.2 Pedestrian Circulation and Linkages (Access Routes, Street Sidewalks)

14. Provide Class 2 bicycle lanes along frontage of Fashion Valley Shopping Center and Hotel Circle North that connects to adjacent development and connects to city-wide and regional bicycle facilities.

Response: The Master Plan provides a network of Class I, Class II, and Class III bikeways as follows:

- The 14-foot wide San Diego River Pathway is a Class I bike path that includes a 10- feet wide paved path with a 2-feet wide clear zone on each side.
- The Master Plan provides this Class I bike path along both the north and south sides of the river with a connecting segment via the rebuilt 10-foot wide multi-use bridge across the river.
- Along the north side of the river, the Class I bike path parallels Riverwalk Drive along the southern frontage of Fashion Valley Mall.
- The Master Plan proposes widening Hotel Circle North and Camino de la Reina along the project frontage to comply with the improvements proposed as a part of the San Diego Regional Bicycle Master Plan. The widening of Hotel Circle North and Camino de la Reina will include 6-foot-wide Class II bicycle lanes on both sides of the roadway.
- The project also proposes to restripe Fashion Valley Road between Riverwalk Drive and Hotel Circle North to accommodate a Class III bike route on both sides of the roadway.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015) Section 3 Circulation
  3.4 Bicycle Circulation
  Figure 3-18 Bicycle Circulation

15. Provide an improved pedestrian and bicycle bridge over the San Diego River that provides a direct connection to the Fashion Valley Transit Center.

Response: The existing pedestrian bridge crossing the San Diego River will be replaced and improved to a width of 10 feet as required by the San Diego River Park Master Plan, providing a multi-use facility to accommodate pedestrians and bicyclists. The rebuilt bridge will provide connectivity between the Fashion Valley Mall and the MTS Fashion Valley transit center to the north, and the hotel and residential to the south.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  3.3.1 San Diego River Pathway

  Figure 3-16 Pedestrian Circulation

16. Provide a pedestrian and bicycle connection from Hotel Circle North through the Town & Country Site to the San Diego River trail.

Response: For pedestrians, a landscaped pedestrian connection will extend north-south through the Plan Area. This central pedestrian corridor will provide safe and convenient access to both residents and visitors in the Mission Valley community through the Master Plan area directly to the San Diego River Pathway.

For cyclists, the master plan proposes to restripe Fashion Valley Road between Riverwalk Drive and Hotel Circle North to accommodate a Class III bike route on both sides of the roadway. The Master Plan also provides a Class III bike route with shared lane markings through the Master Plan Area on Street D. This bike route will provide a north-south connection between the Class I multi-use San Diego River Pathway and the Class II bike lanes on Hotel Circle North and Camino de la Reina.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  3.3 Pedestrian Circulation, especially 3.3.2 Enhanced Pedestrian Facilities
  Figure 3-16 Pedestrian Circulation

Project Housing:

17. Incorporate a range of 1 bedroom, 2 bedroom, and 3 bedroom unit types to provide for a variety of household sizes and household incomes.

Response: The Master Plan Residential District will provide a range of unit types to serve a variety of household sizes and house hold incomes. The proposed unit mix detail has not been determined.

18. Consider the retail jobs surrounding the amendment site and consider incorporate affordable housing and workforce housing on-site.

Response: Affordable housing for the Plan Area shall be provided in accordance with the of the City of San Diego Inclusionary Affordable Housing Ordinance (LDC Section 142.1300) and the San Diego Housing Commission's Implementation and Monitoring Procedures. This requirement will be satisfied by payment of the in-lieu fee.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  7.8 Affordable Housing

Project Public Services and Facilities

19. Full analysis of the availability and provision of public services and facilities, including onsite location of public facilities, such as neighborhood parks and/or community parks, a fire station to serve the community, and others deemed necessary.

Response: A full analysis of public services is included in the Master Plan. Significantly, the entire population-based park requirement of 4.03 acres is being entirely satisfied by the construction of a new park on-site. Other public existing off-site facilities will serve the Master Plan.

- San Diego Public Library System Mission Valley Library
- San Diego Unified School District Carson Elementary School (K-5), Montgomery Middle School (6-8), and Kearny High School (9-12)
- City of San Diego Fire-Rescue Department Fire Station 45
- City of San Diego Police Department Western Division Substation
- City of San Diego and Miramar Landfill Solid Waste Management

20. Coordinate with the San Diego Unified School District to address the need for public school facilities as a result of cumulative impacts associated with adjacent development.

Response: The Plan Area is served by existing facilities of the San Diego Unified School District (SDUSD). Nearby schools have sufficient capacity to serve future students from the Plan Area. Developers of the residential projects within the Plan Area will be responsible for the payment of fees associated with SDUSD service based on size of residential units and number of dwelling units as established by SDUSD and in accordance with City development impact fees.

21. Public Facilities Financing Plan Amendment if the amendment results in a demand for public facilities that is different from the adopted Community Plan and Public Facilities Financing Plan.

Response: The financing plan for public facilities is to be determined.

22. Comprehensive analysis and status of all public improvements identified in the Atlas Specific Plan as they relate to amendment site.

Response: The Town & Country site is being removed by amendment from the Atlas Specific Plan area and the requirements and authority of the Atlas Specific Plan will not be applicable to the Master Plan area in the future.

Precisely, the AMENDMENT TO THE Atlas Specific Plan [is] TO REMOVE the Town and Country Site (a 39.4-acre site located at the intersection of Fashion Valley Road and Hotel Circle North Road north of Interstate 8) from the [Atlas] Specific Plan and AMEND the Mission Valley Community Plan TO REDESIGNATE LAND FROM Commercial Recreation TO Multi-Use. The 2008 General Plan will be amended as the Mission Valley Community Plan is a component of the adopted general plan. The requested Community Plan and General Plan Amendment [bases] its compliance with the criteria found in policy LU-D.10 of the Land Use Element of the General Plan and [criteria] specifically addressed in Report No. PC-15-012.

The Atlas Specific Plan, adopted in 1988, included a range of public improvements that are outdated and contrary to contemporary plans. Examples of these outdated plans include the channelization of the San

Diego River corridor through the Town and Country site and certain roadway and interchange improvements.

Project Conservation /Environmental

23. Adhere to adjacency guidelines and restoration policies for sensitive vegetation communities within Multiple Habitat Planning Area (MHPA) designated lands identified within the site, consistent with the Multiple Species Conservation Program (MSCP) Subarea Plan.

Response: The Master Plan is in compliance with the Multiple Species Conservation Program (MSCP) which preserves a network of habitat and open space, protects bio-diversity and enhances the region's quality of life. Portions of the Plan Area within the boundaries of the MHPA and wetland buffers will be restored or enhanced.

- Approximately 7.71 acres of restoration and enhancement of the riparian open space habitat.
- Approximately 4.74 acres of existing disturbed areas within the MHPA and wetland buffers will be restored through the removal of invasive exotic species and the establishment of native habitats. Additionally approximately 0.21 acres of water quality area will be established.
- Approximately 2.76 acres will be restored and enhanced per Mitigated Negative Declaration No. 118318 and Site Development Permit (SDP) No. 400602 approved by the Mission Valley Unified Planning Committee on April 2, 2008.
- All these areas will be cleaned of litter and solid waste on a regular basis under an ongoing

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
- Section 4.3.3 Open Space Habitat
- *MIR Sheets* LP-03 and LP-04
- *Biological Technical Report Town& Country Project* (AECOM, september 2015)
  Section 2.3 Local Programs
  Figure 5 Vegetation Communities and other Land Cover Types
  Section 4.4.3 Multi-Habitat Planning Area
  Section 5.1 Direct Impacts
  Section 5.2 Indirect Impacts

24. Identify appropriate boundaries and development regulations to guide the development of Federal Emergency Management Agency (FEMA) mapped floodplain running along the San Diego River.

Response: The Master Plan floodplain boundaries and regulations adhere to FEMA regulations per the current Flood Insurance Rate Map (FIRM) Number 06073C1618G, revised May 16, 2012 and Code of Federal Regulations (CFR). 2002. Title 44 Emergency Management and Assistance, Chapter 1 Federal Emergency Management Agency, Department of Homeland Security, Parts 59, 60, 65, and 70. As amended. No habitable structures are proposed within the regulatory floodway. The finished floor elevations of all new structures are in compliance with CFR as well as the more stringent City of San

Diego Municipal Code. The construction of new structures within the floodplain will trigger the FEMA Conditional Letter of Map Revision (CLOMR)/ LOMR process.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
- 4.4 Development Standards
- *Hydrology & Hydraulics Study Town and Country* (Fuscoe Engineering, September 2015)
  Section 1.4 FEMA Flood Plain
  Appendix F Reference Plans (Flood Insurance Rate Map)

25. Provide a hydrology study to evaluate flooding potential of the proposed mix of land uses to serve the Town & Country Site and assess impacts of the proposed amendment in conjunction with surrounding approved developments.

Response: Per the Hydrology & Hydraulics Study, the majority of the site is in the 100 year flood plain (Zone AE) with a base flood elevation of 35 using the NAVD88 datum. That elevation is roughly equivalent to an elevation of 33 using the NGVD 29 datum which the aerial topography is based on. Portions of the site where new construction will occur will be raised several feet above the base flood elevation. A CLOMR-F will be filed with FEMA in order construct and remove the proposed buildings out of the flood plain as well as detail impacts (if any) to the size of the flood plain or impacts (if any) to the flood plain in relation to property outside the boundary of the Master Plan Area.

Master Plan Information Location:

- *Town & Country Draft Master Plan* (May 2015)
  4.4 Development Standards

- *Hydrology & Hydraulics Study Town and Country* (Fuscoe Engineering, September 2015)
  Section 1.4 FEMA Flood Plain

26. Enhance groundwater recharge and consider sustainable water conservation such as:

1. Designing landscape that does not require a permanent irrigation system beyond a maximum two year establishment period.

Response: Revegetation and restoration areas in the river corridor will not require permanent irrigation.

2. Carefully selecting careful plant species that require less water and smart sensor irrigation systems.

Response: A water-wise Mediterranean plant material palette is incorporated into the planting plan. All irrigation shall be programed to utilize water-wise hydrozones.

Master Plan Information Location:

- *MIR Sheet* LP-02

3. Permanent water meters for water subsystems including: irrigation, indoor plumbing fixtures and fittings, domestic hot water, reclaimed water, and process water (humidification systems, dishwashers, pools, etc.).

Response: The specifics of water metering to be determined with final design.

27. Meet storm water regulations as identified by 2013 Municipal Separate Storm Sewer System (MS4) Permit (Order No. R9-2013-0001).

Response: The Master Plan is in compliance with recent changes to the new MS-4 permit which include more stringent requirements for implementation of source control and site design practices to minimize pollution generation. The Master Plan includes the requirements of three tiers of Best Management Practices (BMPs):

- Implement Low Impact Development (LID) BMPs to retain 100% of the runoff from the 24-hour 85th percentile storm event (Design Capture Volume).
- If retention is not feasible, implement biofiltration to treat 1.5 times the Design Capture Volume, or a flow-through biofiltration BMP with capture volume of 0.75 times the Design Capture Volume.
- If biofiltration is not feasible, implement flow-through treatment control BMPs on-site and perform alternative compliance

Master Plan Information Location:

- *Town & Country Draft Master Plan* (September 2015)
  4.2.2 Storm Water Management Facilities

- *Hydrology & Hydraulics Study Town and Country* (Fuscoe Engineering, September 2015)
  Appendix D BMP/DMA Exhibit
  Appendix E BMP Sizing
- *Preliminary Water Quality Technical Report Town and Country* (Fuscoe Engineering, September 2015)
  Section 4.0 Post Construction BMPs

28. Identify any design requiring grade changes exceeding 2 feet.

Response: Cut/fill detail to be provided as part of final grading plan.

Master Plan Information Location:

- *Hydrology & Hydraulics Study Town and Country* (Fuscoe Engineering, September 2015)
  Section 1.4 FEMA Flood Plain, page 3

- *MIR Sheet* (Vesting Tentative Map sheets 5 and 6 of 10) Preliminary Grading Plan

LETTER A
ATTACHMENT 9

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Cycle Issues

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Project Information

Project Nbr: **424475** **Title:** Town & Country
Project Mgr: Peterson, Jeff (619) 446-5237 japeterson@sandiego.gov

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Community Planning Group	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Peterson, Jeff**	**Assigned:**	10/16/2015	
	(619) 446-5237	**Started:**	10/16/2015	
	japeterson@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.15	**Completed:**	10/16/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for Community Planning Group on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 3 outstanding review issues with Community Planning Group (all of which are new).
. Last month Community Planning Group performed 53 reviews, 41.5% were on-time, and 41.2% were on projects at less than < 3 complete submittals.

Frist Review Comments

Cleared?	Issue Num	Issue Text
☐	1	The proposed project is located within the Mission Valley Community Planning Area and the Mission Valley Planning Group (MVPG) is the community group for the area. This group is officially recognized by the City Council as a representative of the community, and as an advisor to the City in actions that would affect the community. (New Issue)
☐	2	If you have not already done so, please contact Dottie Surdi, Chair of the MVPG at (858) 349-2007 to schedule your project for a presentation before the group so that they may able to provide a recommendation. If you have already obtained a recommendation from the community planning group, please submit a copy of the recommendation and/or minutes from the meeting which includes the vote count. (New Issue)
☐	3	Information Bulletin 620, "Coordination of Project Management with Community Planning Committees" (available at http://www.sandiego.gov/development-services), provides some valuable information about the advisory role the Community Planning Group. Council Policy 600-24 provides standard operating procedures and responsibilities of recognized Community Planning Committees and is available at http://clerkdoc.sannet.gov/Website/council-policy. (New Issue)

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	SBC(ROW)	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Peterson, Jeff**	**Assigned:**	10/16/2015	
	(619) 446-5237	**Started:**	10/16/2015	
	japeterson@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.30	**Completed:**	10/27/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. We request a 2nd complete submittal for SBC(ROW) on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month SBC(ROW) performed 3 reviews, 33.3% were on-time, and 100.0% were on projects at less than < 3 complete submittals.

First Review Comments

Cleared?	Issue Num	Issue Text
☒	1	AT&T facilities will not be affected in the public ROW and do not have any known conflicts. Additionally, we can definitely help with establishing new services for the new structures. (New Issue)
☒	2	Judith Villacruz-Brandt Capital Improvement Projects - PM AT&T California 7337 Trade St. Rm 5685 San Diego, CA 92121 P: 858.886.1910 jv3696@att.com (New Issue)

For questions regarding the 'SBC(ROW)' review, please call Jeff Peterson at (619) 446-5237. Project Nbr: 424475 / Cycle: 16

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	SDG&E (ROW)	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Peterson, Jeff**	**Assigned:**	10/16/2015	
	(619) 446-5237	**Started:**	10/16/2015	
	japeterson@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.15	**Completed:**	10/26/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for SDG&E (ROW) on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 1 outstanding review issues with SDG&E (ROW) (all of which are new).
. Last month SDG&E (ROW) performed 3 reviews, 33.3% were on-time, and 100.0% were on projects at less than < 3 complete submittals.

MIR Review Comments

Cleared?	Issue Num	Issue Text
☐	1	The applicant was informed that the reviewer needed a copy of the plans sent via email. The City has not received a response to the review. You may contact: Connie P. Peacock Land Assistant P.O. Box 129831 San Diego, CA 92112-9831 Mail Stop SD1170 Desk: 858.650.4117 Fax: 619.819.4113 cpeacock@semprautilities.com (New Issue)

For questions regarding the 'SDG&E (ROW)' review, please call Jeff Peterson at (619) 446-5237. Project Nbr: 424475 / Cycle: 16

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Time Warner Cable (ROW)	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Peterson, Jeff**	**Assigned:**	10/16/2015	
	(619) 446-5237	**Started:**	10/16/2015	
	japeterson@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.15	**Completed:**	10/26/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for Time Warner Cable (ROW) on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 1 outstanding review issues with Time Warner Cable (ROW) (all of which are new).
. Last month Time Warner Cable (ROW) performed 3 reviews, 33.3% were on-time, and 100.0% were on projects at less than < 3 complete submittals.

MIR Review Comments

Cleared?	Issue Num	Issue Text
☐	1	Time Warner Cable has not provided any response to the review as of todate. You may contact: Randall Starkey (858) 635-8405 Randall.Starkey@twcable.com (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Planning Review	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Abalos, Raynard**	**Assigned:**	11/06/2015	
	(619) 446-5377	**Started:**	11/12/2015	
	rabalos@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.10	**Completed:**	11/12/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Change In Project Scope.
. We request a 2nd complete submittal for LDR-Planning Review on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 25 outstanding review issues with LDR-Planning Review (1 of which are new issues).
. Last month LDR-Planning Review performed 88 reviews, 31.8% were on-time, and 47.1% were on projects at less than < 3 complete submittals.

MIR June 2015

Project Information

Cleared?	Issue Num	Issue Text
☐	1	The project site is located within the OF-1-1 zone along the northern portion of the site and is within the MVPD-M/SP zone (Atlas Specific Plan) for the remainder of the site. The site is also located within the Residential Tandem Parking Overlay Zone, the Transit Area Overlay Zone, and the Mission Valley Community Plan area. [Info Only - No Response Required] (From Cycle 9)
☐	2	The project is located within the Airport Land Use Compatibility Overlay Zone for Montgomery Field, the Airport Influence Area for SDIA and Montgomery Field (Review Area 2) and the FAA Part 77 Notification Area. See Plan-Airport's review for SDIA requirements. For Montgomery Field, LDR-Planning has determined that the proposed height of any structure will not exceed the FAA Part 77 plane for Montgomery Field of 617' AMSL and will comply with the Airspace Protection Compatibility requirements in the ALUCOZ in Chapter 13 of the SDMC. [Info Only - No Response Required] (From Cycle 9)
☐	3	The project is subject to a Planned Commercial Development/Conditional Use Permit (PCD/CUP) No. 88-0585, approved on September 6, 1989, which allowed the expansion of an existing hotel and convention facility within specified phases in accordance with the Atlas Specific Plan. [Info Only - No Response Required] (From Cycle 9)
☐	4	The project is also subject to Site Development Permit (SDP) No. 400602 (Project No. 118318), approved in 2013 to allow the prior unauthorized construction of a 112-space paved parking lot along with remediation and mitigation for the unauthorized placement of soil into sensitive biological resources during the unauthorized construction. LDR-Planning could not locate any subsequent construction permits that utilized the approved SDP. Please verify is any permits were issued that utilized the approved SDP. (From Cycle 9)
☐	5	As noted by other reviewers, this project is subject to the terms and conditions set forth in the STIPULATION IN FULL SETTLEMENT FOR FINAL JUDGMENT OF PERMANENT INJUNCTION; JUDGMENT THEREON, Case No. GIC880884, dated March 22, 2007, Superior Court. LDR-Planning will coordinate with the other reviewers to verify that the project complies with the stipulated judgment dated March 22, 2007. [Info Only - No Response Required] (From Cycle 9)
☐	6	The project proposes to convert the existing hotel and convention facility into a mixed-use development with residential, upgraded hotel, and related facilities and improvements. The project also includes a public park and restoration of the San Diego River. Please verify and provide a more complete scope of work on Sheet G-01. (From Cycle 9)
☐	7	This review is a partial review of the project since it is unclear what zone the applicant is proposing (see "Rezone" below). In addition, this review is limited to a review of the submitted drawings only. LDR-Planning is coordinating with other reviewers and will address the Draft Master Plan in a separate consolidated review. (From Cycle 9)

Expedite Program

Cleared?	Issue Num	Issue Text
☐	8	The project has been submitted into the Expedite Program, however, it is unclear what is proposed. On the applicable sections, elevations, landscape or architectural site plan, or master plan, indicate and show how the project is consistent with the sustainable requirements in Council Policy 600-27 and Council Policy 900-14. See Information Bulletin 538 for the links to the applicable council policies. To view the bulletin online, please visit http://www.sandiego.gov/development-services/pdf/industry/infobulletin/ib538.pdf (From Cycle 9)

For questions regarding the 'LDR-Planning Review' review, please call Raynard Abalos at (619) 446-5377. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	9	The Conservation Element of the City's General Plan (GP) contains Climate Change and Sustainable Development Goals and Policies which exceed the expectations of the Expedite Program. On Sheet G-01, please list the proposed sustainable, clean, and green building and development techniques, as well as conservation efforts being employed within the proposed project that are consistent with both Council Policy 900-14 and the General Plan. (From Cycle 9)

Permits/Disc Actions

Cleared?	Issue Num	Issue Text
☐	10	The project requires the following discretionary permits/actions: - Land Use Plan Amendment to amend the Atlas Specific Plan; - Planned Development Permit (PDP) to amend PCD 88-0585; - Site Development Permit (SDP) to amend SDP No. 400602 (Project No. 118318); - Conditional Use Permit (CUP) to amend CUP 88-0585 (convention center and exhibit hall); (continued below) (From Cycle 9)
☐	11	- Vesting Tentative Map (VTM) for a nine lot subdivision; - Rezone (see "Rezone" below for additional comments) - Easement Vacations to vacate several easements as noted on Sheet 3. (From Cycle 9)
☐	12	Please verify the required permits and discretionary actions as listed above and list these on Sheet G-01 in accordance with the City's Project Submittal Requirements. (From Cycle 9)
☐	13	The applications shall be consolidated for processing and shall be reviewed by a single decision maker. The decision maker shall act on the consolidated application at the highest level of authority for this development (Process Five with the City Council as the decision maker) as set forth in SDMC 111.0105. The findings required for approval of each permit shall be considered individually, consistent with SDMC 126.0105. [Info Only - No Response Required] (From Cycle 9)
☐	14	The following are the required findings for the project: - PDP - SDMC 126.0604(a); - SDP - SDMC 126.0504(a) and (b). If deviations from the ESL regulations are proposed, additional findings may be required. If the project remains in the Mission Valley PDO, the findings in SDMC 1514.0201(d)(3)(A)-(D) are also required; - CUP - SDMC 126.0305; - VTM - SDMC 125.0440; and - Easement Vacations - SDMC 125.1040. (From Cycle 9)
☐	15	Please provide draft findings that detail how each of the required findings above can be supported based on the proposed project. (From Cycle 9)

ESL

Cleared?	Issue Num	Issue Text
☐	16	The project site contains a 100-year floodplain, floodway, and sensitive biological resources including wetlands and MHPA, and is subject to the Environmental Sensitive Lands (ESL) regulations in SDMC Chapter 14, Article 3, Division 1. (From Cycle 9)
☐	17	LDR-Planning will coordinate with the Environmental and MSCP reviewers for issues related to the MHPA and wetlands. Additional issues may be added if it is determined that the project proposes deviations to the ESL regulations. (From Cycle 9)
☐	18	For the purpose of SDMC 143.0146 (regulations for Special Flood Hazard Areas), the City Engineer is the designated Floodplain Administrator and shall administer, implement, and enforce these regulations. LDR-Planning defers to the Engineering reviewer on all Special Flood Hazard Area issues in SDMC 143.0146. LDR-Planning may add additional issues if it is determined that the project proposes deviations to the flood hazard requirements. (From Cycle 9)

Rezone

Cleared?	Issue Num	Issue Text
☐	19	The letter from Mr. Majcher to Jeffery Peterson with the Development Services Deparment, dated May 11, 2015, indicates a new Town and Country Specific Plan is proposed, however, another letter from Mr. Majcher, dated and addressed the same, does not indicate that a new specific plan is proposed. Please clarify. (From Cycle 9)
☐	20	In addition, no Rezone exhibit was submitted and it is unclear what the applicant is proposing. The project may not rezone the property MVPD-M with city-wide base zones as subzones. Staff will provide direction on this matter in the subsequent consolidated review of the draft master plan as mentioned above. (From Cycle 9)

Other Corrections

Cleared?	Issue Num	Issue Text
☐	21	Number all the sheets sequentially (e.g. Sheet 1 of 35). (From Cycle 9)
☐	22	Revise the legend on Sheet 4. The dotted symbol should show the existing easements as indicated on note 43 on the same sheet not an existing right of way dedication (verify). (From Cycle 9)
☐	23	Clearly show the limits all existing ESL as noted above (i.e. floodway, floodplain, MHPA, wetlands, etc.), the limit of disturbance, and limit of work on all civil, architectural and landscape plans. (From Cycle 9)
☐	24	Show the proposed zone boundaries on the architectural site plans. (From Cycle 9)

1st Exp Rev

Cleared?	Issue Num	Issue Text
☐	25	Long-Range Planning has provided the applicant additional direction. LDR-Planning will wait until the applicant and Long-Range Planning agree on specific scope in order to provide adequate comments at that time. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Environmental	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Shearer-Nguyen, Liz**	**Assigned:**	10/09/2015	
	(619) 446-5369	**Started:**	11/13/2015	
	eshearer@sandiego.gov	**Review Due:**	10/21/2015	
Hours of Review:	6.00	**Completed:**	11/13/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for LDR-Environmental on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 27 outstanding review issues with LDR-Environmental (25 of which are new issues).
. Last month LDR-Environmental performed 84 reviews, 44.0% were on-time, and 38.8% were on projects at less than < 3 complete submittals.

MIR Review 6/15

Cleared?	Issue Num	Issue Text
☒	1	New Issue (9161364) (From Cycle 9)

Previous Environmental

Cleared?	Issue Num	Issue Text
☒	2	A Mitigated Negative Declaration (No. 118318 / 2011041092) was prepared for the Town and Country Parking Lot in order to permit the prior unauthorized construction of a 112-space paved parking lot along with remediation and mitigation for the unauthorized placement of soil into sensitive biological resources during the unauthorized construction. (From Cycle 9)
☒	3	The violation occurred in September 2005 when dirt was removed from the project area (approximately 1.7-acres in size with 1.0-acre for the parking lot) and was stockpiled by the contractor adjacent to the bank of the San Diego River and to the east of the expansion area. Temporary impacts occurred as a result of the placement of fill along the river and in the open area behind the Union Tribune parking lot. (From Cycle 9)
☒	4	Permanent impacts resulted from the construction of the parking lot expansion. Prior to the paved parking lot expansion, the area was effectively a dirt parking lot that was used to capture overflow parking and large vehicle parking from special events and conventions. (From Cycle 9)
☒	5	The history of the violation includes the issuance of a Notice of Violation (NOV), dated December 12, 2005, which was prepared by the Neighborhood Code Compliance Department and issued to the property owner; a Cleanup and Abatement Order (COA) issued by the Regional Water Quality Control Board (RWQCB) and an Enforcement Case opened by the U.S. Army Corps of Engineers (USACE). (From Cycle 9)
☒	6	A component of the project was to a restoration and mitigation plan that included wetland enhancement and creation (refer to the final MND). To date, the restoration and mitigation plan has not been implemented. The project is required comply with the stipulated judgment dated March 22, 2007, that outlines the requirements. (From Cycle 9)

Land Use

Cleared?	Issue Num	Issue Text
☒	7	The project site is in the Atlas Specific Plan and is identified as a 39.4-acre area with hotel, convention center/meeting space, and pre-function area uses. The project site is also within the Mission Valley Community Plan Area. On February 19, 2015, Planning Commission approved the initiation request to amend the Atlas Specific Plan and Mission Valley Community Plan (Planning Commission Report PC-15-012, Resolution No. PC-4658). EAS defers to Plan-Long Range Planning on community plan issues; refer to their comments for further direction. (From Cycle 9)
☒	8	Additionally, EAS defers to Planning Review on Land Development Code (LDC) issues; refer to their comments for further direction. (From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	9	Per the City's Significance Determination Thresholds an inconsistency with a plan is not in of itself a significant environmental impact; the inconsistency would have to result in a secondary physical impact. Please refer to Planning Review and Plan-Long Range for additional information and/or clarification. EAS will coordinate with staff to determine what, if any, impacts would result with implementation of the project. (From Cycle 9)

Circulation

Cleared?	Issue Num	Issue Text
☒	13	Transportation is currently reviewing the traffic study prepared for the project (prepared by Linscott Law Greenspan Engineers, March 16, 2015); refer to their comments for further direction. please has determined that the project requires the preparation of a traffic study. Should revisions be required, please provide EAS with a revised version of the study. EAS will coordinate with Transportation to determine what, if any, impacts and/or mitigation would be required. (From Cycle 9)
☒	14	As the review progresses, please be aware that any revisions to the traffic study may require changes to other technical studies (i.e., air quality, GHG, noise) in order to incorporate revised information to ensure consistency. Furthermore, based on the analysis/conclusions, new studies and/or analysis may need to be requested based on locale of impact. (From Cycle 9)

Air Quality/Odor

Cleared?	Issue Num	Issue Text
☒	15	EAS has reviewed the air quality report prepared by AECOM (April 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (From Cycle 9)

Biological Resources

Cleared?	Issue Num	Issue Text
☒	16	EAS has reviewed the biological technical report prepared by AECOM Technical Services (April 2015); staff is providing the following general comments: (From Cycle 9)
☒	17	1. There is no discussion of the outstanding code violation on the property (except for a reference in Bio-9). Impacts should be assessed according to what vegetation should be there, not the disturbed vegetation that still exists because the code violation was not addressed. This applies to the analysis of indirect impacts as well. The proposed project impacts (direct and indirect) should be evaluated against the habitat that would exist had the restoration occurred for the code violation. (From Cycle 9)
☒	18	2. How will impacts related to storm channel and rip rap occur without impacts to necessary staging and access areas? (From Cycle 9)
☒	19	3. There is no discussion of existing wetlands functions and values. This analysis will direct what the necessary buffer will be to protect the sensitive wetland areas. (From Cycle 9)
☒	20	4. The discussion of impacts to vegetation does not include an analysis of impacts from the construction of the river pathway and improvements to an existing pedestrian bridge. Construction of a river pathway would permanently change the existing habitat. (From Cycle 9)
☒	21	5. The justification for a 30-foot buffer is the U.S. Army Corps of Engineers Fischer and Fischenech (2000) document. Page 2 of the biological technical report refers to a 30-foot buffer in the Atlas permit and a 15-foot buffer according to the F and F (2000) document. The project is proposing a Land Use Amendment to remove the project site from the Atlas Specific Plan; (From Cycle 9)
☒	22	5. [CONTINUED] therefore would the Atlas permit still be relevant? Also, in reviewing the F and F (2000) document and the recommended width for riparian habitat (see Table 4) is 30 to 500 meters. A 5 to 30 meter buffer is recommended when the buffer is being established only for water quality protection. (From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	23	5. [CONTINUED] According to page 10 of the City Biology Guidelines, "the wetland buffer shall be maintained as around all wetlands as appropriate to protect the functions and values of the wetland." The criteria provided for consideration when evaluating wetlands functions and values should include wildlife habitat (spawning, nesting, rearing and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection from storm and floodwaters. (From Cycle 9)
☒	24	5. [CONTINUED] The F and F document (2000) states that "Recommended widths for ecological concerns in buffer strips typically are much wider than those recommended for water quality concerns." The City's criterion of wildlife habitat provided above, it would follow that Tables 2 and 3 from F and F (2000) apply to the Town and Country project. (From Cycle 9)
☒	25	5. [CONTINUED] Table 2 from the F and F (2000) document suggests that the minimum recommended widths of corridors and vegetated buffer strips for vegetation, reptiles, amphibians, mammals, fish, and invertebrates range between 30 and 165 meters (roughly 90 to 495 feet). Based on Table 3 of that document, it would appear that the recommended buffer width for birds ranges between 40 and 500 meters (roughly 120 to 1500 feet). (From Cycle 9)

Geologic Conditions

Cleared?	Issue Num	Issue Text
☒	26	Geology has requested that an addendum geotechnical report be prepared. Additionally, staff has raised issues related to remedial grading, liquefaction, and storm water BMPs; refer to their comments for further direction. Please provide EAS with a copy of the requested technical study along with any other documentation submitted for review. EAS staff will coordinate with Geology staff to assess potential geological impacts and determine what, if any, mitigation is required. (From Cycle 9)

GHG

Cleared?	Issue Num	Issue Text
☒	27	EAS has reviewed the greenhouse gas emissions report prepared by AECOM (April 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (From Cycle 9)

Hist Resources (archy)

Cleared?	Issue Num	Issue Text
☒	28	The project site is located within a high sensitivity area on the City of San Diego's Historical Resources Sensitivity Maps. Furthermore, the project site is located within a recorded archaeological site. Although most of the archaeological site has been disturbed due to development of the area, qualified City staff conducted a record search of the California Historic Resources Information System (CHRIS) digital database and reviewed archaeology site forms and determined that could be a potential for the site to be present beneath the street and existing residences. (From Cycle 9)
☒	29	Therefore upon project resubmittal, written acknowledgement by the applicant to implement the specific historical resources (archaeology monitoring) mitigation, monitoring and reporting program is required prior to a formal environmental document determination being made. (From Cycle 9)

Hist Resources (built env)

Cleared?	Issue Num	Issue Text
☒	30	Plan-Historic is requesting additional information in order to facilitate the 45-year review of the existing structures to be demolished; refer to their comments for further direction. EAS defers to Plan Historic on issues related to the built environment; please provide copies of the additional information requested to EAS. EAS will coordinate with staff. (From Cycle 9)

Hydrology/Drainage

Cleared?	Issue Num	Issue Text
☒	31	LDR Engineering Review is requesting revisions to the hydrology/drainage study; please provide a copy of the revised technical study to EAS. Additionally, refer to comments provided by LDR Engineering Review for further direction. EAS will coordinate with staff. (From Cycle 9)

Noise

Cleared?	Issue Num	Issue Text
☒	32	EAS has reviewed the noise report prepared by AECOM (March 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (From Cycle 9)

Paleontological Resources

Cleared?	Issue Num	Issue Text
☒	33	The project site is underlain by Undocumented Fill, Alluvium, and Stadium Conglomerate. Both Undocumented Fill and Alluvium have zero to low moderate potential for recovery of paleontological resources; whereas Stadium Conglomerate has been categorized as having a high sensitivity rating and a potential for recovery of paleontological resources in the project area. (From Cycle 9)
☒	34	Paleontological monitoring during grading activities may be required if it is determined that the project's earth movement quantity exceeds the Paleontological threshold (if greater than 1,000 cubic yards and 10 feet deep for formations with a high sensitivity rating; and, 2,000 cubic yards and 10 feet deep for formations with a moderate sensitivity rating). I (From Cycle 9)
☒	35	In addition, monitoring may be required for shallow grading (less than ten feet) when a site has previously been graded and/or unweathered formations are present at the surface. Please be aware that monitoring is always required when grading occurs on a known fossil recovery site in the same geologic formation. (From Cycle 9)
☒	36	In order for staff to determine if a potential impact would result to paleontological resources, please provide the total amount of grading and/or disturbance (import/export, amount of fill, and depth of cut) proposed for the entire project. This information is advisory, no reports or surveys are required to assist us in our evaluation of potential paleontological impacts. (From Cycle 9)

Public Facilitites (parks)

Cleared?	Issue Num	Issue Text
☒	37	Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Parks. (From Cycle 9)
☒	38	Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with Long-Range and Park and Recreation staff to identify, what if any impacts would result and any required mitigation. (From Cycle 9)

Public Facilitites (schools)

Cleared?	Issue Num	Issue Text
☒	39	Senate Bill (SB) 50 was enacted on August 27, 1998 which authorized a K-12 school and higher education bond to be presented to the voters of California and subsequently on November 3, 1998. SB 50 revised developer fees and mitigation procedures for school facilities as set forth in Government Code Section 65996. (From Cycle 9)
☒	40	The legislation holds that the statutory fees are the exclusive means of considering and mitigating schools impacts. SB 50 limits the scope of review and the findings to be adopted for school impacts. Once the appropriate fee is paid, the impact would be mitigated because provisions that the statutory fees constitute full and complete mitigation. (From Cycle 9)
☒	41	The environmental document should include information provided by the appropriate school district(s) about the existing conditions and capacities, but should conclude that impacts are mitigated through implementation of SB 50. (From Cycle 9)

Public Facilitites (libraries)

Cleared?	Issue Num	Issue Text
☒	42	Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Parks. (From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	43	Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with Long-Range staff to identify, what if any impacts would result and any required mitigation. (From Cycle 9)

Public Services (police/fire)

Cleared?	Issue Num	Issue Text
☒	44	The project would exceed the 75 unit thresholds and consequently would need to be reviewed by the Police and Fire Departments. Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Police and Fire rescue services. (From Cycle 9)
☒	45	Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with appropriate staff to identify, what if any impacts would result and any required mitigation. (From Cycle 9)

Public Utiltites

Cleared?	Issue Num	Issue Text
☒	46	In view of the continued growth experienced within the City of San Diego, it is the City's goal to ensure that public utilities will be made available on an equitable basis, without jeopardizing human health and safety. Utility providers are typically a combination of City, quasi-public agencies, and privately owned companies and corporations. (From Cycle 9)
☒	47	Electrical power and natural gas is commonly provided by San Diego Gas and Electric throughout the San Diego metropolitan area. Forecasting future needs is performed on a continued basis. Direct impacts are addressed and mitigated by SDGE at the time incoming development projects occur. Please provide any correspondence from SDG&E with respect to demand and availability of electrical power and natural gas consumption for the proposed expansion. (From Cycle 9)
☒	48	Per Appendix G of the CEQA Guidelines the evaluation of impacts should focus on physical effects of constructing, altering, or installing the utilities. (From Cycle 9)

Public Utilities (solid waste)

Cleared?	Issue Num	Issue Text
☒	49	The California Public Resources Code requires each city within the state to divert at least 50 percent of its solid waste from landfill disposal through source reduction, recycling, composting, and transformation. (From Cycle 9)
☒	50	The City of San Diego has enacted codes and policies aimed at helping achieve a 75 percent diversion level. Projections indicate that diversion rates achieved by the various City of San Diego regulations and ordinances alone will not be sufficient to achieve the 75 percent diversion level. At this rate of waste disposal, the City's only landfill, the Miramar Landfill, will be filled to capacity by 2016, making efforts that preserve landfill space especially important. (From Cycle 9)
☒	51	Based on the City of San Diego's Significance Determination Thresholds, a project that includes 40,000 square-feet or more of building space may generate 60 tons of waste or more and are considered to have a cumulative impact on solid waste facilities. (From Cycle 9)
☒	52	Construction of project would exceed the threshold for solid waste generation; therefore the project must prepare a conceptual waste management plan that is reviewed and accepted by Environmental Services Department and EAS. Please refer to the City of San Diego Significance Thresholds for what items and/or information is required in the waste management plan. (From Cycle 9)
☒	53	While all projects are required to comply with the City's waste management ordinances, cumulative impacts are mitigated to below a level of significance through the implementation of the project-specific waste management plan. (From Cycle 9)

Public Utilities (water)

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☒	54	Senate Bill 610 requires that the environmental document prepared for a project of this size contain a discussion regarding the availability of water to meet the projected water demands of the proposed project for a 20-year planning horizon, including single and multiple dry years. Senate Bill 221 requires the decision-maker to make a finding that the project's water demands for the planning horizon be met before approving a Tentative Map. (From Cycle 9)
☒	55	The types of project subject to Senate Bills 610 and 221 are the following: a. Residential developments of more than 500 units; b. Shopping center or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space; c. Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space; d. Hotels or motels having more than 500 room (From Cycle 9)
☒	56	e. Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 square feet of floor space; f. Mixed use projects that include one or more of the above types of projects; g. Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project. (From Cycle 9)
☒	57	Once a formal project submittal is made, EAS will coordinate with the applicant and the Public Utilities Department in order to process the necessary water availability report. Should additional information be required, staff will contact the applicant. (From Cycle 9)

Water Quality

Cleared?	Issue Num	Issue Text
☒	58	Engineering Review is requesting revisions to the water quality technical report; please provide a copy of the technical study to EAS. Furthermore, LDR Engineering is requesting various revisions/clarification pertaining to the plan set; refer to their comments for further direction. EAS will coordinate with staff. (From Cycle 9)

Other (offsite)

Cleared?	Issue Num	Issue Text
☒	59	- -INFORMATIONAL ONLY- - Should it be determined that off-site improvements are necessary, please ensure that the plans reflect all areas of work (on and off the site) so that quantification of all potential impacts can occur. (From Cycle 9)

Other (sustainable)

Cleared?	Issue Num	Issue Text
☒	60	- -INFORMATIONAL ONLY- - The applicant is encouraged to utilize energy efficiency factors in the design of the proposed project following the Leadership in Energy and Environmental Design (LEED) rating system. If energy efficient features will be incorporated into the project design, please describe them. (From Cycle 9)

Other (deviations)

Cleared?	Issue Num	Issue Text
☒	61	- -INFORMATIONAL ONLY- - Should it be determined by Planning Review that deviations are required, please complete and provide the Affordable/In-Fill Housing & Sustainable Buildings Deviation Request Form so that the information can be included within the appropriate environmental document. This information is necessary prior to distribution of the environmental document for public review. (From Cycle 9)

Environmental Det

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☒	62	Until the requested information has been provided, staff is not able to complete the environmental review for the project and the environmental processing timeline will be held in abeyance. EAS will coordinate with the other reviewers as the review progresses regarding any additional potential environmental impacts. (From Cycle 9)
☒	63	Please be aware that the environmental review may change in response to any project changes and/or new information. Additionally, the new information may lead to the requirement of new and/or additional technical studies. A determination as to the appropriate environmental document will be made based on all reviewed and submitted information. (From Cycle 9)

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Land Use

Cleared?	Issue Num	Issue Text
☐	64	EAS defers to Plan-Long Range Planning on community plan issues; refer to their comments for further direction. Additionally, EAS defers to Planning Review on Land Development Code (LDC) issues; refer to their comments for further direction. EAS will continue to coordinate with staff to determine what, if any, impacts would result with implementation of the project. (New Issue)

Land Use (MSCP)

Cleared?	Issue Num	Issue Text
☐	65	MSCP have requested various revisions/clarifications to the biological technical report prepared by AECOM Technical Services Inc. (September 2015); refer to their comments for further direction. EAS staff will coordinate with MSCP staff to assess overall impacts in this area. (New Issue)

Circulation

Cleared?	Issue Num	Issue Text
☐	66	Transportation is coordinating with the consultant regarding the traffic analysis (prepared by Linscott Law Greenspan Engineers, March 16, 2015); refer to their comments for further direction. Should revisions be required, please provide EAS with a revised version of the study. EAS will coordinate with Transportation to determine what, if any, impacts and/or mitigation would be required. (New Issue)
☐	67	As the review progresses, please be aware that any revisions to the traffic study may require changes to other technical studies (i.e., air quality, GHG, noise) in order to incorporate revised information to ensure consistency. Furthermore, based on the analysis/conclusions, new studies and/or analysis may need to be requested based on locale of impact. (New Issue)

Air Quality

Cleared?	Issue Num	Issue Text
☐	68	EAS has reviewed the air quality report prepared by AECOM (September 2015); redlines will be provided directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (New Issue)

Biological Resources

Cleared?	Issue Num	Issue Text
☐	69	EAS has reviewed the biological technical report prepared by AECOM Technical Services Inc. (September 2015); redlines will be provided directly to the consultant. (New Issue)

Geologic Conditions

Cleared?	Issue Num	Issue Text
☒	70	Geology has requested that an addendum geotechnical report be prepared; refer to their comments for further direction. Please provide EAS with a copy of the requested technical study along with any other documentation submitted for review. Staff will coordinate with Geology to assess potential geological impacts and determine what, if any, mitigation is required. (New Issue)

GHG

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☐	71	EAS has reviewed the greenhouse gas emissions report prepared by AECOM Technical Services Inc. (September 2015); redlines will be provided directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (New Issue)

Hist Resources (archy)

Cleared?	Issue Num	Issue Text
☐	72	EAS has reviewed and accepted the archaeological resources report prepared by AECOM Technical Services Inc. (September 2015), the study determined that there is a possibility that intact archaeological deposits may exist in undisturbed soils beneath the developed area, consequently monitoring during demolition and grading activities is required. Therefore upon project resubmittal, written acknowledgement by the applicant to implement the specific historical resources mitigation, monitoring and reporting program is required prior to a formal environmental document determination being made. (New Issue)

Hist Resources (built env)

Cleared?	Issue Num	Issue Text
☐	73	Plan-Historic is currently reviewing a historical resources technical report prepared by AECOM (October 2015) as part of the 45-year review of the existing structures to be demolished; refer to their comments for further direction. Should revisions be required, please provide EAS with a revised copy along with any other documentation submitted for review. EAS will coordinate with staff. (New Issue)

Hydrology/Drainage

Cleared?	Issue Num	Issue Text
☐	74	LDR Engineering Review is requesting revisions to the hydrology/drainage study; refer to their comments for further direction. Please please provide a copy of the revised technical study to EAS. (New Issue)

Noise

Cleared?	Issue Num	Issue Text
☐	75	EAS has reviewed the noise report prepared by AECOM (March 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study. (New Issue)

Paleontological Resources

Cleared?	Issue Num	Issue Text
☐	76	EAS has reviewed and accepted the paleontological resources assessment prepared by PaleoServices (September 11, 2015). The study determined that no impacts (construction or operational) would result; therefore, mitigation measures are not required. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue. (New Issue)

Public Facilities (parks)

Cleared?	Issue Num	Issue Text
☐	77	Information related to public facilities (parks) will be included within the appropriate environmental document. Staff will continue to work directly with the applicant through project review process. (New Issue)

Public Facilitites (schools)

Cleared?	Issue Num	Issue Text
☐	78	Information related to public facilities (schools) will be included within the appropriate environmental document. Staff will continue to work directly with the applicant through project review process. (New Issue)

Public Facilities (libraries)

Cleared?	Issue Num	Issue Text
☐	79	Information related to public facilities (libraries) will be included within the appropriate environmental document. Staff will continue to work directly with the applicant through project review process. (New Issue)

Public Services (police/fire)

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☐	80	Information related to public services (police/fire) will be included within the appropriate environmental document. Staff will continue to work directly with the applicant through project review process. (New Issue)

Public Utilities

Cleared?	Issue Num	Issue Text
☐	81	Information related to public utilities will be included within the appropriate environmental document. Staff will continue to work directly with the applicant through project review process. (New Issue)

Public Utiltites (waste)

Cleared?	Issue Num	Issue Text
☐	82	Environmental Services Department (ESD) is currently reviewing the waste management plan; refer to their comments for further direction. Should revisions be required, please provide EAS with a revised copy along with any other documentation submitted for review. EAS will coordinate with staff. (New Issue)

Pub Utilities (water/sewer)

Cleared?	Issue Num	Issue Text
☐	83	EAS defers to the Public Utilities Department; refer to their comments for further direction. Should revised technical studies be required, please provide EAS with copies. EAS will coordinate with staff. (New Issue)

Pub Utilitites (WSA)

Cleared?	Issue Num	Issue Text
☐	84	EAS will prepare a memo to the Water Department initiating the preparation of water supply assessment. EAS will continue to coordinate with the Water Department and the applicant in order to process the necessary water availability report. Please ensure that all documentation provided directly to the Water Department is provided to EAS. (New Issue)

Other (redesign)

Cleared?	Issue Num	Issue Text
☐	86	Plan-Long Range Planning has identified various issues pertaining to the master plan that could result in a potential redesign/change in scope of the proposal. Should a redesign/scope change occur, please ensure that all technical studies are revised accordingly, including those that have been reviewed and accepted. (New Issue)

Land Use (MSCP)

Cleared?	Issue Num	Issue Text
☐	10	The project site located within and adjacent to the City of San Diego Multi Habitat Planning Area (MHPA) of the Multiple Species Conservation Program (MSCP) Subarea Plan and would need to be evaluated for conformance with the final MSCP Plan (August 1998) and the City's MSCP Subarea Plan (March 1997). (From Cycle 9)
☐	11	An evaluation of the should be conducted within a biological resources report that include conformance to the Land Use Adjacency Guidelines (Section 1.4.3) in terms of land use, drainage, toxic substances in runoff, lighting, noise, invasive plant species, and brush management requirements for the portions of the proposed development which lie adjacent to the MHPA. (From Cycle 9)
☐	12	EAS staff will coordinate with MSCP staff to assess overall impacts in this area. In addition, should the applicant require a MHPA boundary line adjustment and/or correction, MSCP staff should be consulted to determine what steps and/or additional information may be needed. Please refer to additional comments provided by MSCP staff. (From Cycle 9)

Water Quality

Cleared?	Issue Num	Issue Text
☐	85	Engineering Review is requesting revisions to the water quality technical report; refer to their comments for further direction. Please provide a copy of the technical study to EAS. Staff will coordinate with staff. (New Issue)

Environmental Det

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☐	87	Until the requested information has been provided, staff is not able to complete the environmental review for the project and the environmental processing timeline will be held in abeyance. EAS will coordinate with the other reviewers as the review progresses regarding any additional potential environmental impacts. (New Issue)
☐	88	Please be aware that the environmental review may change in response to any project changes and/or new information. Additionally, the new information may lead to the requirement of new and/or additional technical studies. A determination as to the appropriate environmental document will be made based on all reviewed and submitted information. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Landscaping	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Neri, Daniel**	**Assigned:**	10/05/2015	
	(619) 687-5967	**Started:**	10/16/2015	
	Dneri@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	6.00	**Completed:**	10/19/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for LDR-Landscaping on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 19 outstanding review issues with LDR-Landscaping (16 of which are new issues).
. Last month LDR-Landscaping performed 51 reviews, 76.5% were on-time, and 37.5% were on projects at less than < 3 complete submittals.

Mandatory Prelim

Cleared?	Issue Num	Issue Text
☒	1	General Scope - Project proposes the conversion of an existing hotel and convention facility into a mixed-use development with residential, upgraded hotel, and related facilities and improvements. The project also includes a public park and restoration of the San Diego River. Project is located in the Mission Valley Planned District in the Atlas Specific Plan area.
☒	2	(From Cycle 9) Organization of Plans - Staff found navigating and cross-referencing between Civil, Architectural, and Landscape Plans tedious and confusing. To clarify progression of the plans, please include a general "sheet xx of 35" qualifyer in the title block area of each sheet.
☒	3	(From Cycle 9) Base Sheet Info, Civil and Landscape Plans - Show the existing and proposed grading contours with spot elevations for all areas within the scope of the project. Show and identify the Special Flood Hazard Area boundaries, MHPA boundary, San Diego River Park Master Plan boundary, required Land-use Adjacency buffers, and any easements restricting development or use of the subject property. To orient the viewer, label perimeter and internal streets on the Landscape Plans consistent with the Civil and Architectural Site plans.
☒	4	(From Cycle 9) General Site Design - As detailed in reviews by Long-range Planning. MSCP, and Park Planning, project shall need to be redesigned to meet the intent of the Atlas Specific Plan, San Diego River Park Master Plan, and to demonstrate compliance with the MSCP Land-use Adjacency Guidelines. Adjust layout of proposed landscape improvements and plant palettes accordingly.
☐	5	(From Cycle 9) Landscape Area/Point Requirements - The proposed Mixed-use project includes both commercial and residential components, which have different landscape criteria. Based on the current iteration of the plans, it appears that the Commercial criteria have been applied exclusively throughout the site. Prior to resubmittal, staff strongly recommends a meeting with the Project Landscape Architect to develop a strategy for meeting the intent of the Code as adapted to a Mixed-use Project. Provide formulas with the updated calculations to demonstrate how area and point quantities have been achieved.
☐	6	(From Cycle 9) Vehicular Use Area Requirements - It is not clear from the submitted plans whether top levels of proposed parking structures will be exposed to the sky. If so, they shall be treated as "surface parking" per LDC 142.0560(k)(1) and subject to the Vehicular Use Area requirements of the Landscape Regulations, 142.0406, to include one 24-in box canopy tree in a raised planter within 30-ft of each exposed parking stall. Shade structures can be proposed in lieu of or in combination with canopy trees. (From Cycle 9)
☒	7	[cont. from above] Where shade structures are used, they shall cover a minimum of 50% of each exposed parking stall and and have a minimum 50% opacity to the shading element. Applicant is encouraged to consider incorporating solar panels into the shade structures to contribute towards meeting sustainability goals. (From Cycle 9)

For questions regarding the 'LDR-Landscaping' review, please call Daniel Neri at (619) 687-5967. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☒	8	Tree Root Zones - Provide a minimum 40 s.f. permeable root zone for all canopy trees. It appears that tree wells shown in the surface parking lot north of the Royal Palm Towers do not meet this requirement. (From Cycle 9)
☒	9	Landscape Legends (sht. 20 / LP-02, sht. 22 / LP-04) - Provide a cross-reference note on the Landscape Legend and Notes plan, sht. LP-02, pointing to the Revegetation Notes plan, sht. LP-04, for proposed planting within the restoration and enhancement areas of the river itself.For areas adjacent to the river, plant palette shall feature locally indigenous species. Acer macrophyllum is endemic to Douglas Fir and Redwood Forests and Riparian Pine Forest. (From Cycle 9)
☒	10	[cont. from above] Riparian species shall be reserved for the river and adjacent banks, transitioning to compatible, drought-tolerant species in adjacent parking lots and developed areas. Note that cultivars are not appropriate within the MHPA or other native areas. Update plant palette accordingly. Azalea and Camelia are listed under the Shrubs and Groundcovers categories. While limited use of these water-intensive species may be appropriate, they should not be featured. It is strongly recommended that palettes be expanded to include mroe groundcover species. (From Cycle 9)
☒	11	Washingtonia robusta / Mexican Fan Palm - Washingtonia is considered invasive, especially in/adjacent to drainage courses and riparian areas. In addition, their fruits have been documented as causing blockage issues with the City's storm-drain system. Further use of the trees has therefore been banned within the City. While relocation of existing palms on-site and away from the river may be supported, new plantings of the species will not. Revise plant palette accordingly. (From Cycle 9)
☒	12	Existing Landscape to Remain - Provide an inventory of existing trees to remain on-site and those proposed for transplantation. Identify by species and caliper size. Note that existing landscape to remain can be used towards satisfying landscape area and point requirements. (See part 2 of table 142-04B in the Landscape Regulations of the Land Development Code.) (From Cycle 9)
☒	13	Landscape Vignettes - Plans and the Design Guidelines are general in nature and do not give a clear depiction of how plant material, other than trees, would be incorporated into the project. Short of detailing out the entire site, please provide plan-view vignettes to illustrate typical treatment of key areas (e.g. featured entries, vehicular use areas, open space amenities, courtyards, etc.), inclusive of trees, shrubs, groundcovers, and hardscape improvements. (From Cycle 9)
☐	14	Project Phasing - Master Plan Design Guidelines indicate that the project is to be developed in phases. Please address on the Landscape plans, anticipating interim conditions until build-out of the project. (From Cycle 9)
☒	15	Design Guidelines, Landscape - See above regarding the Plant Palette and reuse of Existing Plant material. Note that most of the Landscape criteria discussed in the Master Plan is actually contained in section 8, Architectural and Site Design Guidelines. Provide cross-references and/or reorganize the document to consolidate. (From Cycle 9)

Cycle 16 - Review 10/16/2015

Master Plan

Cleared?	Issue Num	Issue Text
☐	16	Streetscapes (Section 5.3.4., pg. 75, column 1, paragraph 1): Verbiage states, "¿the parking will interrupt the planting buffer and the sidewalk will remain continuous. Is this suggesting contiguous sidewalks? (New Issue)
☐	17	Streetscapes (cont'd from above): Please clarify how this is in line with Section 5.3.5, pg. 75, column 3, bulletpoint 9 which states, "where the parkway is adjacent to street parking and is planted with a material other than turf, the 18-inch area adjacent to the curb will be concrete, decomposed granite, gravel, or pavers to allow for foot traffic to/from parked vehicles." The use of concrete would be an unacceptable treatment in these areas as it is an impervious surface which might encroach into tree root zones. (New Issue)

Cleared?	Issue Num	Issue Text
☐	18	Streetscapes (Section 5.3.4., pg. 75, column 1, paragraph 2, 12th line): There is an extra "the" at the end of this line. Please remove. (New Issue)
☐	19	Street Trees (Section 5.3.5, pg. 75): Verbiage indicates that "the minimum dimension of a tree well is 4 feet wide by 4 feet long." Please adjust verbiage to indicate that the minimum area for street trees shall be 40-sq. ft. with a minimum dimension of 5-ft. for tree wells and parkway planting areas, in accordance with SDMC §142.0403((b)(5). This would therefore make this section consistent with the verbiage in Section 3.2.3 in which no planting area has a dimension less than 5-ft. (New Issue)
☐	20	Parking Structures (Section 5.3.10, pg. 81): As per applicant response to the previous cycle issues, please add a guideline which states: "Shade structures shall be provided over rooftop exposed parking. The shade structures will be designed to integrate photovoltaic panels." This elaborates on item #5, but specifically addresses the incorporation of shade structures. (New Issue)
☐	21	Suggestion - Overall Guidelines for New Buildings (Section 5.3.3, pg. 73): The project should provide podium level open/ green-spaces/ common areas to provide visual relief so that upper story residences do not look down on blank rooftops. (New Issue) [Recommended]

Plans

Cleared?	Issue Num	Issue Text
☐	22	Property Line: There is a like stroke symbol for the Property Line in the legend on Shts DP-01 - DP-12, however, there is no property line shown. Show Property Line on G-01 and G-02. The Property Line on Shts. DP-51 and LP-01 appears to be inconsistent with the Civil sheets, particularly along Fashion Valley Road and Camino de la Reina. (New Issue)
☐	23	Parking Lot (G-02, DP-01N, DP-12N): The parking lot between Golden Pacific Ballroom and Royal Palm Towers is missing. Please correct. (New Issue)
☐	24	Parking Structure (DP-01S, DP-12S): Label the new parking structure next to the Grand Exhibit Hall. (New Issue)
☐	25	VUA Tree Canopy Coverage (LP-01N): In the Parking Lot between Golden Pacific Ballroom and Royal Palm Towers, please provide one 24-In. Box canopy tree within 30-ft. of each parking stall. (New Issue)
☐	26	Parking Structure Shade Structure (LP-01S): Staff acknowledges the shade structure note on the parking garage. However, it is still unclear whether the Parking Structures on Camino de la Reina and Private Drive D are open to the sky and will therefore require the shade structure note as well. Shade structures and parking stalls shall be shown on the landscape and architectural plans. (New Issue)
☐	27	Tree Root Zones (DP-12N): Per previous comment 8, it appears that the tree wells in the surface parking lot north of the Royal Palms Towers still do not comply to the required 40-sq.ft. root zone. The interior area measured from the inside of the curb must be 40-sq.ft. Currently, they appear to measure under 36-sq. ft. Also, show the landscape area at the south end of this same parking lot, next to the Towers. (New Issue)
☐	28	Street Labels (LP-01N, LP-01S): Please label Private Drive D, Fashion Valley Road, and Camino de la Reina. (New Issue)
☐	29	Street Trees (LP-01S, LP-08): Street Trees shall be located in the parkway between the street and the side walk. Street Trees may not be used to satisfy street yard calculations. (New Issue)
☐	30	Street Yard / Street Wall Line: The street wall line needs to be fixed on both Fashion Valley Road and Camino de la Reina. The Street Wall Line crossing Private Drive B should be in line with the New Residential Building and cross towards the Grand Exhibit Hall. Also, the Street Wall Line crossing Private Drive D should extend from the corner of the residential building across Private Drive D parallel to Camino de la Reina. (New Issue)

Cleared?	Issue Num	Issue Text
☐	31	Landscape Calculations (LP-10): Correct the property line and adjust street yard (street yard is shown outside of the property line). Please differentiate between with commercial and residential street yard as follows: Residential Street Yard shall run the entire frontage of Camino de la Reina, and on Fashion Valley Rd, from center line of Private Dr. B to Camino de la Reina. Commercial Street Yard shall run on Fashion Valley Rd. from the Center line of Private Dr. B to north end of Private Dr. E. Label bldgs to show associated use. Use Landscape Calculations Worksheets DS-04 and DS-06. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Engineering Review	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Canning, Jack**	**Assigned:**	09/29/2015	
	(619) 446-5425	**Started:**	10/16/2015	
	jcanning@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	5.00	**Completed:**	10/27/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for LDR-Engineering Review on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 38 outstanding review issues with LDR-Engineering Review (10 of which are new issues).
. Last month LDR-Engineering Review performed 70 reviews, 81.4% were on-time, and 36.9% were on projects at less than < 3 complete submittals.

Engineering 1st Review

Cleared?	Issue Num	Issue Text
☒	1	The Engineering Review Section has reviewed the subject development and have the following comments that need to be addressed prior to a Public Hearing. Upon resubmittal, we will complete our review of the Tentative Map Exhibit and Site Development Permit Plans. (From Cycle 9)
☒	2	The San Diego Water Board adopted Order No. R9-2013-0001, NPDES No. CAS0109266, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds within the San Diego Region. This project will be required to adhere to the City of San Diego Storm Water Standards in effect at the time of approval of ministerial permit. (continued below) (From Cycle 9)
☒	3	The new Storm Water Development Regulations will become effective later this year on December 24, 2015 and this project will be subject to those regulations unless this project has prior lawful approval as defined in the permit. A discretionary approval is not an approval of full design rather an acceptance of conceptual design and thus does not qualify for prior lawful approval under the permit definition. (From Cycle 9)
☐	4	Project shall adhere to all requirements of the Atlas Specific Plan approved by the City of San Diego City Council on December 13, 1988 by Resolution No.R-272571. Revise all Development Plans to show and call out the required River Improvement Elements. (From Cycle 9)
☐	5	Revise the Grading Plan Sheet 5. Show and call out the limits of the Proposed 49,000 cfs Floodway per the Atlas Specific Plan. (From Cycle 9)
☐	6	Revise the Grading Plan Sheet 5 and Sheet 6. Add details and sections to verify that the project site has been designed to include the required Flood Control Improvements per Figures No.8 thru 13 of the Atlas Specific Plan. (From Cycle 9)
☐	7	Revise the Grading Plan Sheet 5. Show and call out the removal of the existing culverts at Fashion Valley Road and the construction of a bridge structure to accommodate the 10-year flow. Show and call out how the channel immediately upstream will be protected from scouring because of the high velocity of the floodwater, per the Atlas Specific Plan. (From Cycle 9)
☐	8	Revise the Grading Plan Sheet 5. Show the existing and proposed grading contours and spot elevations for all areas including the proposed landscaping areas on the north and south side of the San Diego River. Add a Grading Data Table with cut/fill and import/export quantities, plus the depths of cut and fill. Add a Data Table for the fill to be placed in the San Diego River floodway. All proposed areas shall adhere to the Atlas Specific Plan. Any proposed improvement that does not adhere to the Atlas Plan shall be removed from the design. (From Cycle 9)

For questions regarding the 'LDR-Engineering Review' review, please call Jack Canning at (619) 446-5425. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	9	Revise the Grading Plan Sheet 5. Show and call out the required new footbridge across the San Diego River located east of the existing footbridge to provide the required link to the Trolley Station. Add details to verify the footbridge has sufficient height to pass debris during the 100-year flood with a minimum of 2 feet of free board, per the Atlas Specific Plan.
☐	10	(From Cycle 9) A portion of this project has been identified as being within the floodway of a Special Flood Hazard Area. No increases to base flood elevations are allowed. A Registered Professional Engineer shall submit a no rise certification along with a detailed engineering analysis to substantiate the certification. The analysis is subject to the approval of the City Engineer. (continued below)
☐	11	(From Cycle 9) The development will alter the floodway and floodplain boundaries of the Special Flood Hazard Area. The developer must obtain a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency prior to the next submittal. The developer must provide all documentation, engineering calculations, and fees which are required by FEMA.
☒	12	(From Cycle 9) Revise the Grading Plan Sheet 5. Since the development will alter the floodway and floodplain boundaries of the Special Flood Hazard Area, Add a note that states: No certificates of occupancy will be granted or bonds released for development associated with this project until a Letter of Map Revision (LOMR) is obtained from FEMA. The LOMR is issued based upon as-built site conditions. Therefore the applicant must allow time to complete this process. The developer must provide all documentation, engineering calculations, and fees which are required by FEMA.
☒	13	(From Cycle 9) Revise the Grading Plan Sheet 5. Add a note that states: No structures except those allowed by Section 131.0222 (Use Regulations for Open Space Zones) of the Land Development Code shall be built within the floodway.
☒	14	(From Cycle 9) Revise the Grading Plan Sheet 5. Add a note that states: The property owner shall enter into an agreement to indemnify, protect and hold harmless City, its officials and employees from any and all claims, demands, causes or action, liability or loss because of, or arising out of flood waters.
☒	15	(From Cycle 9) Revise the Grading Plan Sheet 5. Add a note that states: Fill placed in the SFHA for the purpose of creating a building pad must be compacted to 95% of the maximum density obtainable with the Standard Proctor Test Fill method issued by the American Society for Testing and Materials (ASTM Standard D-698). Granular fill slopes must have adequate protection for a minimum flood water velocity of five feet per second.
☐	16	(From Cycle 9) Revise the Grading Plan Sheet 5. Show and call out "Subject to Inundation" all areas lower than the base flood elevation plus 2 feet.
☒	17	(From Cycle 9) Revise the Grading Plan Sheet 5. Add a note that states: The developer shall enter into an agreement with the City waiving the right to oppose a special assessment initiated for the construction of flood control facilities and their perpetual maintenance.
☒	18	(From Cycle 9) Revise the Grading Plan Sheet 5. Add a note that states: The developer shall grant a flowage easement, satisfactory to the City Engineer, over property within the floodway.
☐	19	(From Cycle 9) Revise the Grading Plan Sheet 5. Show and callout the Base Flood Elevations (BFE) per FEMA Panel No.06073C1618G. Show and call out the finished floor elevation and BFE for each proposed structure is a minimum of 2 feet above BFE.
☐	20	(From Cycle 9) Revise the Grading Plan Sheet 5. The TM Exhibit Sheet 4 shows and calls out a Parcel 7. Is this supposed to be an Open Space area granted to the City of San Diego? If so, no private structural treatment controls are allowed in the proposed City property. Revise all plans and Technical Reports accordingly.

(From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	21	Revise the Grading Plan Sheet 5 and Sheet 6. Show and call out the location of the roof drains and how they are directed to the treatment control BMPs.
☒	22	(From Cycle 9) Revise the Grading Plan Sheet C5.0. Add a Bench Mark per the City of San Diego Vertical Control Book. Include the elevation and required MSL Datum.
☒	23	(From Cycle 9) Revise the Grading Plan Sheet 6. Add what sheet reference the Sections details shown can be found.
☒	24	(From Cycle 9) Revise the Grading Plan Sheet 5 and Sheet 6. Call out to construct current City Standard curb, gutter and sidewalks, adjacent to the site on Camino De La Reina, Hotel Circle North, and Fashion Valley Road.
☐	25	(From Cycle 9) Revise the Grading Plan Sheet 5 and Sheet 6. Call out construct current City Standard curb ramp Standard Drawing SDG-130 and SDG-132 with truncated domes at all street corners adjacent to the project site. If Transportation Development Review allows the curb return entrance on Hotel Circle North, call to construct curb ramps as stated above.
☐	26	(From Cycle 9) Revise the Grading Plan Sheet 5 and Sheet 6. Add a following 5 Storm Water notes:
☐	27	(From Cycle 9) 1.Prior to the issuance of any construction permit, the Owner/Permittee shall enter into a Maintenance Agreement for the ongoing permanent BMP maintenance, satisfactory to the City Engineer.
☐	28	(From Cycle 9) 2. Prior to the issuance of any construction permit, the Owner/Permittee shall incorporate any construction Best Management Practices necessary to comply with Chapter 14, Article 2, Division 1 (Grading Regulations) of the San Diego Municipal Code, into the construction plans or specifications. (From Cycle 9)
☐	29	3.Development of this project shall comply with all storm water construction requirements of the State Construction General Permit, Order No. 2009-00090DWQ, or subsequent order, and the Municipal Storm Water Permit, Order No. R9-2007-0001, or subsequent order. In accordance with Order No. 2009-0009DWQ, or subsequent order, a Risk Level Determination shall be calculated for the site and a Storm Water Pollution Prevention Plan (SWPPP) shall be implemented concurrently with the commencement of grading activities.
☐	30	(From Cycle 9) 4.Prior to issuance of a grading or a construction permit, a copy of the Notice of Intent (NOI) with a valid Waste Discharge ID number (WDID#) shall be submitted to the City of San Diego as a proof of enrollment under the Construction General Permit. When ownership of the entire site or portions of the site changes prior to filing of the Notice of Termination (NOT), a revised NOI shall be submitted electronically to the State Water Resources Board in accordance with the provisions as set forth in Section II.C of Order No. 2009-0009-DWQ and a copy shall be submitted to the City.
☐	31	(From Cycle 9) 5.Prior to the issuance of any construction permit, the Water Quality Technical Report will be subject to final review and approval by the City Engineer.
☐	32	(From Cycle 9) Development Permit Conditions will be determined on the next submittal when all requested information is provided.
☐	33	(From Cycle 9) The TM Exhibit Sheet 4 shows and calls out a Parcel 7. Is this supposed to be the required Flowage Easement granted to the City of San Diego? Is so, call out the parcel accordingly. If this is to be the Flowage Easement show the correct alignment per the Atlas Specific Plan River Improvement Elements.
☒	34	(From Cycle 9) The Subdivider shall underground existing and/or proposed public utility systems and service facilities in accordance with the San Diego Municipal Code.
☒	35	(From Cycle 9) Revise the TM Exhibit Sheet 4. Call out Tentative Map No.1499943
		(From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	36	Revise the TM Exhibit Sheet 4 Legend. Change Proposed Lot/Boundary Line to Property Line/TM Boundary. List only those symbols that are shown on the plan view.
☒	37	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add a note that states: The Subdivider shall record a Declaration of Covenants and Reservation of Easements for all Shared Access Easements for the project sites currently held by the same owner. The Declaration of Covenants and Reservation of Easements shall state: Since the Mutual Access Easement agreement is a private and not a public issue, The City of San Diego is not responsible for any dispute that might arise in the future between the private parties.
☒	38	(From Cycle 9) Submit a Title Report.
☒	39	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add signature blocks for all the owners listed in the required Title Report. The owner and engineer need to sign the exhibit.
☒	40	(From Cycle 9) Call out a Mapping and Monumentation Note: ALL PROPERTY CORNERS WILL BE SET AND A FINAL MAP WILL BE FILED UPON APPROVAL OF THE TENTATIVE MAP. A DETAILED PROCEDURE OF SURVEY WILL BE SHOWN ON THE FINAL MAP.
☒	41	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add a Bench Mark per the City of San Diego Vertical Control Book. Include the elevation and required MSL Datum.
☒	42	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the adjacent Public Street cross sections.
☒	43	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add all Property lines bearing and distances.
☒	44	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the legal description.
☒	45	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the street lights, nearest the project site, in both directions and on both sides of the Public Streets. Include the spacing between the street lights and the project site. A determination will be made if the project is in compliance with current street light standards according to the City of San Diego Street Design Manual and Council Policy 200-18. The applicant may be required to, but not be limited to, install a new street lights.
☒	46	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the adjacent property Subdivision Map Numbers and Lot Numbers.
☒	47	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add a Vicinity Map.
☒	48	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the Assessor's Parcel No's (APN).
☒	49	(From Cycle 9) 1Revise the TM Exhibit Sheet 4. Add the Engineer of Work, Owner of Property, and /or Developer of Property.
☒	50	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the Lambert Coordinates.
☒	51	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the Acreage within the TM boundary.
☒	52	(From Cycle 9) Revise the TM Exhibit Sheet 4. Add the Number of lots existing and proposed.
☒	53	(From Cycle 9) Tentative Map Conditions will be determined on the next submittal when all requested information is provided.
		(From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	54	Additional comments may be recommended pending further review of any redesign of this project. These comments are not exclusive. Should you have any questions or comments, please call Jack Canning at 619 446-5425. (From Cycle 9)

Drainage Study

Cleared?	Issue Num	Issue Text
☐	55	The TM Exhibit Sheet 4 shows and calls out a Parcel 7. Is this supposed to be an Open Space area granted to the City of San Diego? If so, no private structural treatment controls are allowed in the proposed City property. Revise the Drainage Study accordingly. (From Cycle 9)
☐	56	Project shall adhere to all requirements of the Atlas Specific Plan approved by the City of San Diego City Council on December 13, 1988 by Resolution No.R-272571. Revise Drainage Study to discuss the required River Improvement Elements and how they were incorporated into the project design. (From Cycle 9)
☐	57	Add a discussion about the limits of the Proposed 49,000 cfs Floodway per the Atlas Specific Plan and how all portions of the proposed project are not in the proposed floodway. (From Cycle 9)
☐	58	Add a discussion how the project site has been designed to include the required Flood Control Improvements per Figures No.8 thru 13 of the Atlas Specific Plan. (From Cycle 9)
☐	59	Add a discussion regarding the removal of the existing culverts at Fashion Valley Road and the construction of a bridge structure to accommodate the 10-year flow. Discuss how the channel immediately upstream will be protected from scouring because of the high velocity of the floodwater. (From Cycle 9)
☐	60	Add a discussion how the proposed improvements to Fashion Valley Road will act as a drop structure for the 100-year flood. (From Cycle 9)
☐	61	Show and call out the required new footbridge across the San Diego River locate east of the existing footbridge to provide the required link to the Trolley Station. Add details to verify the footbridge has sufficient height to pass debris during the 100-year flood with a minimum of 2 feet of free board. (From Cycle 9)
☐	65	Previous comments have not been addressed. If it is determined that the project will be removed from the Atlas Specific Plan, that does not remove the requirements established in the Specific Plan for Public Safety, Flow Velocities, and Flood Management Program elements. Project must address how the project design coordinates with the FSDRIP east of the project site, and the Levi-Cushman Specific Plan west of the project site. (New Issue)
☐	66	Add a discussion how the project design will affect flooding depths at the Fashion Valley Shopping Center. (New Issue)
☐	67	Add a discussion how the project design will accommodate the Camino de la Reina crossing over the San Diego River without creating backwater problems for FSDRIP. (New Issue)
☐	73	Add a discussion stating if the proposed project is required to obtain approval from the Regional Water Quality Control Board Under Federal Clean Water Act (CWA) section 401 or 404. A complete explanation must be provided. Please note, if the proposed project is subject to regulations as set forth in CWA 401/404, approval from the California Regional Water Quality Control Board must be obtained prior to permit issuance. (New Issue)

WQTR

Cleared?	Issue Num	Issue Text

Cleared?	Issue Num	Issue Text
☐	62	The TM Exhibit Sheet 4 shows and calls out a Parcel 7. Is this supposed to be an Open Space area granted to the City of San Diego? If so, no private structural treatment controls are allowed in the proposed City property. Revise the WQTR accordingly. (From Cycle 9)
☒	63	In the event that this project may obtain Discretionary approval but not have Ministerial Building Permits issued before December 24, 2015, this project would be subject to the new Storm Water Standards where this project will not be exempt from Hydromodification Control requirements. Add a discussion how this project will adhere to the new Storm Water Standards in effect at the time of the Ministerial Review Approval. (From Cycle 9)
☐	68	Revise Treatment Control BMPs Section 4.3.1. Revise discussion regarding 9th Street. This project is not adjacent to 9th Street. (New Issue)
☐	69	Revise Treatment Control BMPs Section 4.3.1. Add a discussion that all Flow-Through Planters and Bio-retentions shall be lined with an impermeable liners. Revise all details accordingly. (New Issue)
☐	70	Project continues to show and call out Flow-Through Planters and Bioretention Basins in the areas designated as a Public Park, which is unacceptable. All required treatment controls BMPs must be located on private property and maintained by the owners of the private property. (New Issue)
☐	72	Project proposes to widen Hotel Circle North which will require Public Treatment Control BMPs. Revise Treatment Control BMPs Section 4.3.1. Add a discussion what BMPs will be built in the Hotel Circle North Right-of-Way to treat the storm water run-off from the new paved surface used for the transportation of vehicles. (New Issue)

Engineering 2nd Review

Cleared?	Issue Num	Issue Text
☐	64	Previous comments have not been addressed. If it is determined that the project will be removed from the Atlas Specific Plan, that does not remove the requirements established in the Specific Plan for Public Safety, Flow Velocities, and Flood Management Program elements. Project must address how the project design coordinates with the First San Diego River Improvement Program (FSDRIP) east of the project site, and the River Elements of the Levi-Cushman Specific Plan west of the project site. (New Issue)
☐	71	Project proposes to widen Hotel Circle North which will require Public Treatment Control BMPs. Revise the Development Plans to show and call out what is proposed in the Hotel Circle North Right-of-Way to treat the storm water run-off from the new paved surface used for the transportation of vehicles. (New Issue)

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Map Check	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Dowling, Chet**	**Assigned:**	09/28/2015	
	(619) 446-5393	**Started:**	10/26/2015	
	cdowling@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	8.00	**Completed:**	10/27/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
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First Review

Cleared?	Issue Num	Issue Text
☐	1	This is a partial review. There are lots which are not labelled as to intent of said lots, no easement documents were submitted, vesting deed to confirm ownership and legal description was not submitted. Many drafting issues including confusing line types and weight. (From Cycle 9)
☒	2	Please add the following to the title block all sheets: I.O. = 24005875 P.T.S. No. = 424475 CCS83 Coords= 1856-6277 L.C. Coords= 216-1717 (From Cycle 9)
☐	3	Supply all necessary reference materials. e.g. vesting deeds, title reports, all related maps, deeds and documents used to create the exhibit (From Cycle 9)
☐	4	All existing survey monuments shown on the exhibit must be tied to the property and clearly labelled. (From Cycle 9)
☐	5	Mapping Note: A Final Map will be filed at the County Recorder's office prior the expiration of the Tentative Map. A detailed Procedure of Survey will be shown on the Final Map and all property corners will be set on the Map. (From Cycle 9)
☐	6	Show and identify all public easements to be vacated on the exhibit. There are easements noted as "TO BE VACATED". Please note that any easement granted to any entity besides the City of San Diego will have to be QUITCLAIMED by that entity. The only easements to be vacated are easements or right of way for street granted to the City of San Diego. (From Cycle 9)
☐	7	Show all easements (existing and proposed) that are within the preliminary report. On separate easement sheet clearly show and identify all of the easements encumbering this project. State and label width where applicable. Clearly show and label all easements that are to be vacated or quitclaimed and provide copies of the maps or deeds that originally created them. (From Cycle 9)
☐	8	If any easements shown on the Tentative Map exhibit will be vacated pursuant to section 66434(g) of the Subdivision Map Act, clearly state and show limits of vacation area. (From Cycle 9)
☐	9	Provide a letter of intent that describes in detail the reasons and circumstances as to why you are requesting this vacation. (From Cycle 9)
☐	10	All proposed Public Service Easement Vacations within the TM boundary will be vacated pursuant to the Subdivision Map Act as a Process 5 vacation approval. (From Cycle 9)
☐	11	This is a VTM to create more than 4 lots. Please change labelling on all exhibit sheets to reflect Lot XX rather than Parcel XX. Do this particularly on proposed lot sheet(s). (From Cycle 9)
☐	12	See engineering comments regarding the configuration of the lots in the vicinity of San Diego River. Revise alignment/configuration accordingly and resubmit. (From Cycle 9)
☒	13	See redlines for additional comments and return with next submittal. (From Cycle 9)

Second Review

Cleared?	Issue Num	Issue Text
☐	14	This is a partial review. There are redline comments which were not addressed. Please address said comments and return this redlined set with the next review cycle. Previous redline comments have been transferred as 2nd request on this reviews redlines. No easement deeds have been submitted for review. (New Issue)

For questions regarding the 'LDR-Map Check' review, please call Chet Dowling at (619) 446-5393. Project Nbr: 424475 / Cycle: 16

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Cleared?	Issue Num	Issue Text
☐	15	2nd request: This is a VTM for a FINAL MAP. Please make all notes and references on the exhibit accordingly. This will not be a Parcel Map. See issue #5. (New Issue)
☐	16	Submit deeds prior to March 4, 1972 or other evidence to support those portions of Lot 4 of Partition of Pueblo Lot 1105 as being legal lots. (New Issue)
☐	17	All survey monurments are to be described as to what type of monument and stamping on said monument. (New Issue)
☐	18	See redlines for additional comments and return with next submittal. (New Issue)

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Transportation Dev	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Khaligh, Kamran**	**Assigned:**	09/28/2015	
	(619) 446-5357	**Started:**	10/19/2015	
	khalighK@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	8.00	**Completed:**	10/19/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for LDR-Transportation Dev on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 11 outstanding review issues with LDR-Transportation Dev (11 of which are new issues).
. Last month LDR-Transportation Dev performed 41 reviews, 90.2% were on-time, and 42.9% were on projects at less than < 3 complete submittals.

6/15 Review:

Cleared?	Issue Num	Issue Text
☒	1	TRAFFIC IMPACT ANALYSIS (TIA)-We are currently reviewing the first draft traffic impact analysis for this project prepared by Linscott Law & Greenspan Engineers, dated March 16, 2015, and received on May 29, 2015. Upon completion of our review, we will provide our comments to the City's project manager to be forwarded to the applicant. (From Cycle 9)
☒	2	GENERAL-Plans should provide breakdown of all different components of the project such as the mix of the proposed multifamily units with number of bedrooms in each unit, and the specific uses and square footage of each of the non-residential components of the project before, after, with the net change preferably in tabulation forms. Also, please include copies of all previous permits and approved site plans. (From Cycle 9)
☒	3	PARKING-Parking calculations with their applicable rates and reference to City's requirements should be listed for each use, and the entire project. The required and provided number of accessible spaces, bicycle, motorcycle, and loading spaces with their applicable rates and calculations should also be provided. Loading spaces and loading bays should be designed in a manner not requiring backing into or out of a public roads. The current proposal may need to be revised accordingly. (From Cycle 9)
☒	4	PARKING-Parking spaces and drive aisles should be dimensioned on the plans. The minimum parking stalls dimensions and aisle width should comply with the SDMC section 142.0560 for any new or restriped parking space. All the proposed parking spaces within each site should be shown and sequentially numbered for that site. Further, adequate backing area should be provided at the end of drive aisles or one of the spaces at the end of the isle marked as "No Parking/Turn Around". Provision of adequate turn around areas at the end of private driveways should also be demonstrated. (From Cycle 9)
☒	5	SHARED PARKING/ACCESS-If the required parking for all the proposed uses within each parcel is not provided within that parcel, or sharing the on-site parking supply is proposed between the uses, a shared parking agreement would be required. Shared access agreement would also be required if access is being shared between any of the parcels or adjacent lots. (From Cycle 9)
☒	6	FRONTAGE-Plans should show and dimension all existing and proposed property line to center line, property line to curb line, property line to property line, and curb to curb distances on all fronting streets. All existing and proposed curb, gutter, sidewalk, driveways, and striping with their dimensions and lane width should also be shown on the fronting and internal roads, and cross-section drawings provide for all. (From Cycle 9)
☒	7	FRONTAGE-We cannot accept or fully evaluate any of the proposals or revisions to the public roadways, site access, and site's internal roadways and circulation until final review and acceptance of the traffic impact analysis (TIA). All private driveways connection with public streets should be via curb cuts unless the access is proposed to be signalized (subject to qualification) where it can have curb returns. Additional frontage improvements and right-of-way dedications may be required pending provision of the above requested frontage information, and upon approval of the TIA. (From Cycle 9)

10/15 Review:

Cleared?	Issue Num	Issue Text
☐	8	PREVIOUS COMMENTS-Although we have checked off all previous comments, some have not been fully addressed, and are reiterated below. (New Issue)
☐	9	GENERAL-Plans should provide breakdown of all components of the project including the unit mix of the proposed residential units with its unit mix, and the specific uses and square footage of each of the non-residential components of the project before, after, and the net change preferably in tabulation forms. Although, we realize that some of the detailed information and floor plans may not be available or developed yet, it would be needed before final review and acceptance of plans. Also, please include copies of any relevant previous permits and plans. (New Issue)

For questions regarding the 'LDR-Transportation Dev' review, please call Kamran Khaligh at (619) 446-5357. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	10	PARKING-Parking calculations with their applicable rates and reference to City's requirements should be listed for each use, and the entire project. The required and provided number of accessible spaces, bicycle, motorcycle, and loading spaces with their applicable rates and calculations should also be provided. Loading spaces and loading bays should be designed in a manner not requiring backing into or out of public roads. Even though, the Traffic Impact Analysis provides parking data, site plans should be revised, and provide detailed and comprehensive parking data as well. (New Issue)
☐	11	PARKING-The minimum parking stall dimensions should comply with the SDMC section 142.0560 for any new or restriped parking space. Parking spaces should be dimensioned on the plans, or a typical space dimensions shown. All the proposed parking spaces within each area, lot, or parking garage should be shown and sequentially numbered for that area. The proposed number of spaces within each area and the entire site should also be provided in a tabular format. (New Issue)
☐	12	PARKING-All private drives, and drive aisles should be dimensioned on the plans. The minimum drive aisle width should comply with the SDMC section 142.0560 for any new or restriped one, with adequate backing area at the end of it. The width of all on-site private drives should be adequate to handle the on-site traffic and circulation, and should be consistent with the Sections A-1 through H-1 shown on the plans. The key maps should also show these sections. If any of these roads are proposed as one-way roads, they should be clearly marked and called out on the plans. (New Issue)
☐	13	SHARED PARKING/ACCESS AGREEMENTS-If the required parking for all the proposed uses within each parcel is not provided within that parcel, or sharing the on-site parking supply is proposed between the uses, a shared parking agreement would be required. Shared access agreement would also be required if access is being shared between any of the parcels or adjacent lots unless all lots will be tied together. (New Issue)
☐	14	FRONTAGE-Plans should show and dimension all existing and proposed property line to center line, property line to curb line, property line to property line, and curb to curb distances on all fronting streets. All existing and proposed curb, gutter, sidewalk, pedestrian ramps, driveways, and striping with their dimensions and lane width should also be shown on the fronting and internal roads. Although some of this information is included on the plans, it should include additional details including all related dimensions, right-of-way dedications, and off-site transitions. (New Issue)
☐	15	FRONTAGE-Plans should clearly show how the widening and re-aligning Camino De La Reina along the project frontage will match, transition, and re-align with the road, curb line, and striping east of the site. This transition should smooth out the curb line difference shown between the private drive D and the driveway east of it. Plans should also consider the proposed developments east of the site (Union Tribune Mixed Use Project No. 277550) which may affect the above, such as the plans to angle and re-align the lower portion of the driveway east of Drive D further east. (New Issue)
☐	16	FRONTAGE-Plans should also show and call out inclusion of raised center median on Camino De La Reina along the site's frontage with transition to the proposed raised center median east of the site by the proposed developments to its east. As a result, the private drive D at Camino De La Reina access should be limited to right- in/right-out only movements. (New Issue)
☐	17	FRONTAGE-Although we have had some discussions and agreements with the applicant as to the extent of site's frontage dedications, improvements, and access; we cannot accept or fully evaluate or accept the proposed until final review and acceptance of the traffic impact analysis (TIA). Additional frontage improvements and right-of-way dedications may be required pending provision of the above requested frontage information, and upon approval of the TIA. Plans also do not show any widening or bike lanes on Fashion Valley Road along the site's frontage as previously requested. (New Issue)
☐	18	MASTER PLAN-We have reviewed the second draft Master Plan dated September for this project, and have some written comments on some pages of it, which we will provide a copy of to the City's project manager to be forwarded to the applicant. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Plan-Long Range Planning	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Graham, Nancy**	**Assigned:**	09/29/2015	
	(619) 236-6891	**Started:**	10/19/2015	
	NHGraham@sandiego.gov	**Review Due:**	10/30/2015	
Hours of Review:	4.00	**Completed:**	10/28/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for Plan-Long Range Planning on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 21 outstanding review issues with Plan-Long Range Planning (15 of which are new issues).
. Last month Plan-Long Range Planning performed 15 reviews, 86.7% were on-time, and 46.2% were on projects at less than < 3 complete submittals.

Amendment Initiation (June 201

Cleared?	Issue Num	Issue Text
☒	1	The project site is currently included in the Atlas Specific Plan which includes a mix of residential, retail, office, hotel, and recreational uses, served by a the Fashion Valley Transit Center (light-rail transit station), and encompasses approximately 86 non-contiguous acres, west of Mission Center Road and south of Friars Road. The project site is also within the Mission Valley Community Plan Area. (From Cycle 9)
☒	2	On February 19, 2015, Planning Commission approved the initiation request to amend the Atlas Specific Plan and Mission Valley Community Plan by a vote of 7-0 (Planning Comission Report PC-15-012, Resolution No. PC-4658). Resolution No. PC-4658 from Planning Commission directs the applicant to consider the following issues in addition to all of the issues identified in Report No. PC-15-012. (From Cycle 9)
☒	3	Any improvements identified as part of the code enforcement shall not be counted as a positively contributing factor towards open space requirements or in-lieu fees. The code enforcement improvements are required in conjunction with permit issuance. Include a sheet that identifies specific improvements required as they relate to the San Diego River, revegetation, and open space restoration. Include any calculations for population based park provided on site. (From Cycle 9)

CPA process (June 2015)

Cleared?	Issue Num	Issue Text
☒	4	The General Plan identifies criteria that City Staff uses in processing plan amendments (See GP Amendment Manual). These criteria include the following: Level and diversity of community support, Appropriate size and boundary for the amendment site; Provision of additional benefit to the community; Implementation of major General Plan and community plan goals, especially as related to the vision; Guiding Principles and City of Villages Strategy; Provision of public facilities. See next (From Cycle 9)
☒	5	The proposed site plan for the Town & Country site when compared to the site plan identified in the ASP should demonstrate additional benefit to the community with respect to the policies of the General Plan (GP), Atlas Specific Plan (ASP), San Diego River Park Master Plan (SDRPMP), Transit Oriented Development Guide (TOD Guide), and all other City adopted policies since 1988. (From Cycle 9)
☒	6	Due to significant inconsistencies from the policies identified in the GP, SDRPMP, and TOD Guide, along with the requirement to meet or exceed the vision and objectives of the ASP, the current site plan as presented cannot be recommended for approval. (From Cycle 9)

Missing Item (June 2015)

Cleared?	Issue Num	Issue Text
☐	7	Please submit a document in the form of a table that identifies item by item how the proposed project is specifically addressing each of the Planning Commission comments/issues made on Resolution No. PC-4658 and PC-15-012, and is providing a greater public benefit. (From Cycle 9)

Additional Review Pending (Jun

Cleared?	Issue Num	Issue Text
☒	8	Due to the inclusion of a specific plan/community plan amendment and extensive length of the document (209 pages), the submitted Master Plan will be reviewed by June 25, 2015. This review is preliminary and all additional comments submitted at that time shall also be considered part of this initial review. (From Cycle 9)

For questions regarding the 'Plan-Long Range Planning' review, please call Nancy Graham at (619) 236-6891. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☒	9	Due to the inclusion of a specific plan/community plan amendment and extensive length of the document (262 pages), the submitted Atlas Specific Plan strike out version will be reviewed by June 25, 2015. This review is preliminary and all additional comments submitted at that time shall also be considered part of this initial review. (From Cycle 9)

Prelim Comments on MPDP (June

Cleared?	Issue Num	Issue Text
☒	10	The applicant has chosen to submit a Master PDP rather than a specific plan. The document should succinctly and clearly communicate implementation policies, regulations, and requirements related to land use, urban design, parks and recreation (open space and San Diego River), conservation, transportation, public facilities, landscape plans specific to the project site plan and subsequent development. For ease of use, general recommendations include removing the Z-fold sheets and orienting to a landscape layout for graphics. (From Cycle 9)
☒	11	Additionally, 209 pages is exceedingly long for the proposed project, the content includes information unrelated to implementing the project, and the content is repetitive. Comments submitted on June 25 will further address this issue. (From Cycle 9)
☐	12	The applicant has requested the removal of the project site through a plan amendment and master plan development permit. As a result of this request, the project site would revert to a base zone and be subject to the Mission Valley Planned Development Ordinance as identified in the LDC. The submitted master plan should succinctly identify requirements for the proposed project as it relates to land use, urban design treatments including architecture and streetscape, open space requirements and San Diego River frontage treatments, transportation improvements, public facilities, & implementation. (From Cycle 9)
☒	13	In the implementation chapter, identify the following: a.Include a zoning and land use map. b. Include a table (Master PDP Deviation Table) that summarizes any deviations from the base zone as it relates to the following as applicable: structure height. setbacks, floor area ratio for specific lot and overall development, minimum open space, minimum usable open space, off street parking, dimension distance of garage from sidewalk, retain wall height, and any other areas discussed in the municipal code that is applicable. (From Cycle 9)
☐	14	c. Include a zoning and development intensity table that includes the phase number or area identifier, land use, net area of the phase/area, zoning according to the LDC, intensity range (du/ac), target density, commercial square footage. d. Include a table that identifies trip generation rates per land use. e. If phases are anticipated, provide a phasing plan and summary of each phase in table format. The table should include land use assumptions, on-site improvements, and off-site improvements per phase. (From Cycle 9)
☒	15	f. Submit a development project review process table that identifies how the proposed project should be reviewed. Headings should include project category, description of the development project/phase, and desire city review process. g. Submit a succinct one-paragraph that identifies strategy for lot reconfiguration/consolidation and maintenance requirements for private and public open space. (From Cycle 9)

Comments on Sheet Set (June 20

Cleared?	Issue Num	Issue Text
☒	16	The Atlas Specific Plan (ASP) includes site specific design solutions for each of the six different property areas in the specific plan. ASP includes a land use element, river improvement element, urban design element, transportation element, public facilities element, and conservation element. Although the applicant is requesting removal of the Town & Country project area from the ASP, it should meet the purpose and intent of the ASP, and proposed project shall now be subject to all current planning documents. (From Cycle 9)
☒	17	The proposed site plan does not meet the purpose and intent of the ASP or the San Diego River Park Master Plan (SDRPMP) as it relates to building orientation and development near the river. The ASP includes sections 5. River Corridor (p. 5-45-5-48), 7. Open and Space Considerations (p. 5-49-5- 50), 9. Architectural Considerations (p.5-60-5-65), and 10. Visual Conservations (p.5-65-5-67)) that address development at the San Diego River. The SDRPMP also includes criteria for development near the river. These sections emphasize the importance of the accessibility and views to river. See next. (From Cycle 9)
☒	18	These sections emphasize the importance of the accessibility and views to river. The following comments are specific criteria that are highlighted in the ASP and in current plans for which the proposed site plan is not consistent: (From Cycle 9)
☒	19	Land Use Element: The proposed project generally decreases intensity of use when compared to the ASP. The proposed land uses are consistent with the purpose and intent identified in the ASP, GP, and MVCP, however, the placement and orientation of land uses and urban design are not consistent with the ASP or current policies identified in the SDRPMP and TOD Guide. Additionally, the TOD Guide calls for attractive and walkable retail and other neighborhood uses as part of the proposed mixed-use development that will reduce vehicle trips. (From Cycle 9)

Cleared?	Issue Num	Issue Text
☐	20	... "TODs must have a mixed-use core area containing a minimum of 10% ground floor retail commercial space. A minimum of 10,000 s.f. of retail space shall be provided within 1/8 mile of the transit stop." Increased residential development adjacent to the river would be a preferred land use. (From Cycle 9)
☒	21	Land Use (UD Element): Page 5-8 of the ASP calls for "developments along the river corridor to have at least two orientations: one to the river and the other to the freeway and hotel circle. Service access and utility areas are not appropriate uses for either frontage." The SDRPMP states that "New development should face the river and act as a "front door", provide views of the natural river habitat, and activate the river with cafes and plazas that are directly accessed from the river trail. (p. 30)" (From Cycle 9)
☒	22	... The two parking lots adjacent to the river are not consistent with the ASP or the current guiding plans. Additionally, the existing hotel does not have sufficient windows that face the river and does not enhance visibility to the river or create a "front door." The proposed project does not meet the policy requirements for the site. Remove parking lots and redesign as open space, or ensure development faces the river as a "front door." (From Cycle 9)
☒	23	San Diego River: The ASP includes a Flood Management Program, Revegetation Program, and Management Program. Since the adoption of the ASP plan, the accepted flooding mitigation techniques have changed, however, the primary objective of the River Improvement Element in the ASP was to provide "coordinated flood control and wetlands management programs (p. 4-1)" from the Town & Country Site to Hanalei Hotel Site (approx. east of Motel 6)... (From Cycle 9)
☒	24	... Page 4-8 and 4-9 discuss the proposed improvements for the Town & Country site area and coordination for the flood control improvements with the Levi-Cushman and FSDRIP plan areas. The River Improvement Element specifically highlights that the implementation of the programs were to be constructed at cost and expense concurrently with the development of the Town & Country Site (p. 4-46)... (From Cycle 9)
☒	25	... Additionally, the ASP calls out that an assurance of bond funding for the river channel improvements and revegetation program would be submitted to the City's satisfaction prior to the issuance of building permits for the Town & Country site. The SDRPMP also highlights the importance of hydrology stating, "Future development should incorporate hydrology and water quality considerations in all planning and guidance and monitor water quality following implementation (p. 38)."... (From Cycle 9)
☐	26	The applicant shall submit a hydrology study and feasibility study that extends from the original coordinated flood control study area. The master PDP should include a flood management program, revegetation plan, and on-going maintenance and management program. (From Cycle 9)
☒	27	San Diego River: The ASP focuses on the San Diego River as an open space amenity, resource for the community, and part of the regional system of trails and walkways (5.17). The importance of the river is emphasized through bicycle and pedestrian connections identified in the concepts and criteria of UD Element. Sheet DP-51N and DP 51-S highlight the accessibility plan. However, the separation between the north and south make this difficult to ensure intra-site connectivity. (From Cycle 9)
☒	28	... Please submit one sheet that shows the whole site plan and the planned pedestrian routes that are available without key fob or passing through a gate system. (From Cycle 9)
☒	29	Circulation: The ASP requires a minimum 10 ft. ped/bike trail from SR-163 to Fashion Valley Road, connection to FSDRIP improvements, and connection to ped/bike path associated with Levi-Cushman Plan. The SRPMP requires a minimum 14 ft. path with min. 10 ft. wide path with 2 ft. shoulder. Additionally, the SRPMP states that the purpose of these areas is to "Create an unbroken San Diego River Pathway system connecting the river to existing and future open spaces and adjacent neighborhoods. (p.26)"... (From Cycle 9)
☒	30	...Sheet set does not call out a 14 ft. multi-modal trail - please identify width of trail and actual physical connection to the Union Tribune site on the new requested sheet. (From Cycle 9)
☒	31	San Diego River: ASP includes a 30 ft. buffer from south side of the river. SRPMP -includes a 35 ft. buffer from floodway. SRPMP states "Development should not occur within the River Corridor Area. A River Influence Area extends 200 ft. from the River Corridor Area. Development will occur in this area but should be designed to celebrate the presence of the river and treat it as an amenity (p. 42)." Because the proposed project is removed from the ASP, please identify a 35 ft. buffer from the floodway on the new requested sheet. Demonstrate consistency with the 35 ft. buffer. (From Cycle 9)
☒	32	Building Height: ASP identifies maximum 42 ft. building height limit within 150 ft. of the river corridor and maximum 250 ft. building height for other areas not in the design sensitive zone. Stepbacks are encouraged. SRPMP requires numerous required setbacks as identified in the MVPDO. Elevations and section identified in DP61-DP-66 do not demonstrate compliance with required setbacks per the San Diego River Park Master Plan. Demonstrate consistency with the setbacks identified in the municipal code or identify deviations in the implementation section. (From Cycle 9)
☒	33	View Corridors: ASP identifies that visual access to the river shall be at least 20% of the length of the corridor improvements. View should occur from the ground level view. SRPMP states "maximize view corridors to the river, the upper levels of the structure to diminish in size to create a slimmer silhouette than the lower levels of the structure. The building width facing the river at and above 70 ft. in height above finish grade should be reduced by a minimum of 30 percent of the width of the building at the ground floor fronting the river." ... (From Cycle 9)
☒	34	... Elevations and section identified in DP61-DP-66 do not demonstrate compliance with purpose and intent of either plan to create view corridors through the proposed site. Demonstrate consistency with the criteria identified. (From Cycle 9)

Cleared?	Issue Num	Issue Text
☒	35	Parking: ASP identifies that parking areas should be placed below grade, tucked under, or inconspicuous above grade parking structures that are out of view. SRPMP - Off-street surface parking should be screened for the full length of the surface parking area with residential, commercial, industrial and/or mixed use development. Proposed site plan, elevations and section identified in sheet set do not demonstrate compliance with purpose and intent of either plan to respect the river buffer or create front doors that open to the river. Demonstrate consistency with the criteria identified. (From Cycle 9)
☒	36	See Previous. "Alternatively, off-street surface parking can be located a minimum of 20 ft. from the River Corridor Area and screened by a landscape buffer. Demonstrate consistency with the criteria identified. See SDRPMP for additional alndscape requirements. (From Cycle 9)
☒	37	Ped Bridge: The ASP also includes the replacement and enhancement of the existing multi-modal bridge from the project site to the Fashion Valley Transit Center. This is not identified on the sheet set. Add and resubmit. (From Cycle 9)
☒	38	Urban Design: The Urban Design Element includes concepts and criteria for following topics: land use, circulation, streetscape, site planning, river corridor, land form alternation, open space and recreation, planting, architectural, visual, energy and conservation. As the proposed project area is removed from the ASP, it is subject to the Urban Design Element of the General Plan and the Mission Valley PDO as well as all other plan documents. LDR Planning will provide review for consistency with MV-PDO. Additional urban design comment will be provided based on full review of the Master PDP. (From Cycle 9)
☒	39	Circulation: The ASP recognizes the planning area as a highly urbanized area. "Because of the highly urbanized nature and character of the ASP area, the individual transportation systems (i.e. light rail public transit, bus, automobile, intra-valley shuttle, bicycle, foot) must carefully interrelate (p.5-10)." The General Plan and TOD Guide provides criteria for TOD development in addition to the purpose and intent of the ASP... (From Cycle 9)
☒	40	... The TOD Guide states "arrange the intensity and location of residential homes to encourage and maximize the use of transit; incorporate on-site affordable housing near transit; incorporate methods to shift from vehicular travel to other modes of transportation." (From Cycle 9)
☒	41	According to the TOD Guide, the project site is identified as an Urban TOD. Because Urban TODs are adjacent to the major spine of the regional transit system, these TODs may have a higher percentage of job-generating uses and may be developed at higher commercial intensities and residential densities. Additionally, the project site is a "redevelopable site" and should follow design guidelines section 1, 2, 4-5,7-11 of the TOD Guide. (From Cycle 9)
☒	42	Incorporate pedestrian connections that are visually identifiable through physical design as pedestrian paths and encourage residents to access Fashion Valley Mall and Transit Center. Access from the residential homes to the TOD is not clearly delineated on the sheet set and does not appear to be designed to encourage easy walking to the Trolley. Submit a sheet that identifies pedestrian routes that are not controlled or deterred by buildings or gates. (From Cycle 9)
☒	43	Circulation: In consideration of the site's edge conditions, and incorporate enhanced and safe pedestrian circulation facilities throughout the site and to nearby destinations. The ASP includes roadway improvements to Hotel Circle North and Fashion Valley Road that would greatly enhance ped/bicycle safety and connectivity, which would potentially increase developable area. Address proposed sidewalk and roadway improvements that will enhance multi-modal connectivity. Traffic impact analysis addressing VMT and ADT, and anticipated ADT totals should be included in the Master PDP. (From Cycle 9)
☐	44	Circulation: The ASP calls for Class 2 Bike Lanes on Fashion Valley and Hotel Circle North. Additionally the Bicycle Master Plan and the San Diego Regional Bike Plan (SANDAG 2010) identify the importance of bicycle connectivity. Sheet set does not specifically call out bicycle amenities or improvements. Address bicycle improvements as part of the roadway improvements. (From Cycle 9)
☒	45	Circulation: TOD is an important component of this site, including parking analysis, which is not included in this submittal. Provide a parking analysis based on Transit Overlay Zone. Excess parking shall be eliminated and Transit Demand Management Plan (TDM Plan) shall be included and should identify a shared parking strategy between hotel and residential uses. (From Cycle 9)
☒	46	Setback: The ASP also calls for a 30 ft. setback from residential units along Hotel Circle North and Fashion Valley Road. This is emphasized by the General Plan Noise Element. Include criteria for building articulation and architecture design requirements that will limit noise and air pollution. (From Cycle 9)
☒	47	Address the Community's infrastructure improvements needs, including proactive measures within the Public Facilities Financing Plan to fund these improvements. Require incremental improvements as part of an amendment to the Public Facilities Financing Plan. (From Cycle 9)

New Issue Group (2315074)

Master Plan Comments (October

Cleared?	Issue Num	Issue Text
☐	53	At the City of San Diego, the Planning Department and Development Services Department are separate departments. All references should reflect the separation. (New Issue)

Cleared?	Issue Num	Issue Text
☐	54	The Master Plan does not include a lot of details on the specific design requirements that are included in the site plan and were committed to during project meetings. These will be conditions on the permit and should be included in the Master Plan. This includes ground floor units having individual walk-ups that face the river (please call out specifically), detailed information on the activation of the ballroom area next to the river (add design guidelines), and description of façade improvements on the existing hotel towers (add design guidelines). (New Issue)
☐	58	In section 5.3.9, please provide a diagram demonstrating where each building edge occurs. (New Issue)
☐	55	The Master Plan does not identify the two-way cycle track as required by SANDAG. Please provide an alternate Figure 3-7 that includes the cycle track. (New Issue)
☐	56	The Hotel District section needs to identify minimum square footage for retail and restaurants to ensure the 10% ground floor retail requirement of the TOD Guide. (Previous comment 20) (New Issue)
☐	59	Please include text in the San Diego River Park Subdistrict that allows for the possible inclusion of an aerial tram/skyway station adjacent to the Fashion Valley Trolley station. (New Issue)
☐	62	Although a component of the project is to remove the site from the Atlas Specific Plan, the removal does not alleviate the responsibility to deal with flooding issues associated with the property. It is understood that channelizing the river as identified in the Atlas Specific Plan will not likely be allowed per the resource agencies. However, because the project will alter the floodplain, a clear strategy for dealing with flooding needs to be identified in the Master Plan. (New Issue)

Zoning/Implementation (October

Cleared?	Issue Num	Issue Text
☐	48	There is some misinformation about zoning included in the Master Plan. There is a statement on page 91 that says the Mission Valley PDO would no longer apply. This is incorrect. All areas of Mission Valley are in the PDO, and the site can only revert to City-wide base zoning if the PDO is dissolved through the Community Plan Update. Remove any similar language throughout the plan. (See previous comment 12) (New Issue)
☐	49	The plan identifies MVPD MV-M as the proposed zoning for the developed portion of the site. This zone can only be used with MVPD uses, not City-wide base zones as identified in the Master Plan. (New Issue)
☐	50	The MVPD MV-M zone requires that one land use shall not account for more than 60 percent of the zone area. The current master plan allocates over 60 percent of the MV-M to the Hotel District, which is a Commercial Visitor designation. The hotel district cannot be more than 16.608 acres in the MV-M. (New Issue)
☐	57	The Cycle Issue Response indicates a Table 2-4 Land Use Summary to respond to previous comment 12. This table is not in the Master Plan document. (New Issue)
☐	52	Residential Intensity Transfer on page 93 cannot be accomplished without a discretionary action. Please revise. (New Issue)
☐	51	Suggest having a meeting with Long Range and LDR Planning to resolve zoning and implementation issues, and develop alternate text should the Mission Valley PDO be dissolved as part of the Mission Valley Community Plan Update. (New Issue)

Site Plan Comments (October 20

Cleared?	Issue Num	Issue Text
☐	60	Private Drive E should be rerouted through the parking area to limit drives aisles in the River Corridor Area, which will free up additional space for landscape buffering of the parking lot. (New Issue)

Atlas SP (October 2015)

Cleared?	Issue Num	Issue Text
☐	61	Due to the length and complexity of the amendment to the Atlas Specific Plan, comments will be provided in a follow-up memo. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Code Enforcement	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Richmond, Michael**	**Assigned:**	10/16/2015	
	(619) 533-6302	**Started:**	10/16/2015	
	mrichmond@sandiego.gov	**Review Due:**	10/08/2015	
Hours of Review:	1.00	**Completed:**	10/16/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. We request a 2nd complete submittal for Code Enforcement on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month Code Enforcement performed 31 reviews, 83.9% were on-time, and 96.8% were on projects at less than < 3 complete submittals.

New Issue Group (2208846)

Cleared?	Issue Num	Issue Text
☒	1	This project is subject to the terms and conditions set forth in the STIPULATION IN FULL SETTLEMENT FOR FINAL JUDGMENT OF PERMANENT INJUNCTION; JUDGMENT THEREON, Case No. GIC880884, dated March 22, 2007, Superior Court. This Stipulation required repair and restoration of disturbed wetland areas along the river. All required restoration must be completed to comply with the Stipulation. (From Cycle 9)

For questions regarding the 'Code Enforcement' review, please call Michael Richmond at (619) 533-6302. Project Nbr: 424475 / Cycle: 16

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Plan-MSCP	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Forburger, Kristen**	**Assigned:**	09/30/2015	
	(619) 236-6583	**Started:**	10/15/2015	
	kforburger@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	4.00	**Completed:**	10/27/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for Plan-MSCP on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 3 outstanding review issues with Plan-MSCP (2 of which are new issues).
. Last month Plan-MSCP performed 14 reviews, 35.7% were on-time, and 35.7% were on projects at less than < 3 complete submittals.

MSCP review 6/9/15

Cleared?	Issue Num	Issue Text
☐	1	MSCP reviewed "Biological Technical Report, Town and County Project City of San Diego, California" Prepared by AECOM (April 2015) It has been determined that revisions to this report are required. Please address the following comments in a revised Biological Technical Report (BTR) and incorporate any further comments provided by EAS. (From Cycle 9)
☒	2	Figure 3 depicts Proposed Project Design. The "kids lot" is not included, please show all uses on Figure 3. Uses within and directly adjacent to the MHPA are to be passive in nature. Please include a detailed description and analysis of all adjacent park uses (River pathway, neighborhood park, tot lot ect..) (From Cycle 9)
☒	3	Table 1. Omit the existing wetland buffer discussion. This is not a sufficient wetland buffer analysis pursuant to the City's Biology Guidelines. Please provide on-site wetland functions and values discussion and wetland buffer analysis consistent with the following (CON'T) (From Cycle 9)
☒	4	A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b)(2) of the U.S. Army Corps of Engineers General Regulatory Policies (33CFR 320- 330) list criteria for consideration when evaluating wetland functions and values. These include wildlife habitat (spawning, nesting, rearing, and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection from storm and floodwaters. (From Cycle 9)
☒	5	A wetland buffer is an area or feature(s) surrounding and identified wetland that helps to protect the functions and values of the adjacent wetland by reducing physical disturbance from noise, activity and domestic animals, and provides a transition zone where one habitat phases into another. The buffer will also protect other functions and values of wetland areas including absorption and slowing of flood waters for flood and erosion control, sediment filtration, water purification, ground water recharge, and the need for upland transition habitat. (From Cycle 9)
☒	6	Table 1 states "Approximately 7.46 acres within and adjacent to MHPA would be restored and enhanced.." Per SDP 400602 and MND 118318, the entire area depicted on the Project Plan sheet LP-03 are obligated to be restored and enhanced per the approved documents and no "additional" acreage exists. According to GIS mapping systems 7.46 acres of enhancement and restoration does not appear to exist in this area. Please justify this discussion or revise accordingly. (From Cycle 9)
☒	7	The report shall be revise to disclose how the proposed project would comply with previous mitigation obligations not yet implemented, as well as, permit conditions 15, 18, 22, 24, and 25 of SDP 400602. (From Cycle 9)
☒	8	The City of San Diego Biology Guidelines only recognize "impacts" and does not decipher between temporary and permanent impacts to wetland. Impacts associated with installation of drainage systems into the San Diego River are not considered temporary in nature. Page 48 states 0.03 acre of impact would result in areas within the MHPA. This impact would be significant. Please revise (From Cycle 9)
☒	9	Revise the BTR to include an analysis relative to the City's Environmentally Sensitive Lands (ESL) Regulations. Please include a section to reflect the Biology Guidelines 2012 requirements of ESL Wetland Deviations. The City recently amended (5/7/12) ESL regulations to further clarify the wetland deviation process. This project would be considered under the Biologic Superior Option for private development pursuant Land Development Code Section 143.0150 (d)(1)A)(ii). (From Cycle 9)

For questions regarding the 'Plan-MSCP' review, please call Kristen Forburger at (619) 236-6583. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☒	10	Please include a discussion of how the project would implement the area specific management directives (ASMD's)as stated in Appendix A of the City's MSCP Subarea for MSCP Covered Species with a high to moderate potential to be impacted by the project. The project must demonstrate how ASMD's (or Conditions of Coverage) would be implemented in order for the species to be considered "covered" by the MSCP. Particularly, Least Bell's Vireo (LB V) and Southern Willow Flycatcher (SWF) habitat exist adjacent to project site (From Cycle 9)
☒	11	Provide focused protocol surveys for LBV and SWF pursuant to the MSCP which states "Jurisdictions must require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be impacted and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project." (From Cycle 9)
☒	12	MSCP will provide further comment based upon project redesign (per Long Range Planning) and revised Biological Technical Report. MSCP would not support the project as proposed. (From Cycle 9)

MSCP review 10/22/15

Cleared?	Issue Num	Issue Text
☐	13	Please depict the MHPA Boundary on sheets 4, 6, 8, 29, and 40 of 40. Revise description of MHPA to "Multi-Habitat Planning Area" omit "Multi-Habitat Preservation Area". (New Issue)
☐	14	MSCP is in review of "Biological Technical Report Town and Country Project" prepared by AECOM (September 2015) in corrdination with EAS and DSD Biologist. Detailed comments will be forwarded under seperate cover. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	SANDAG-Land Use & Transportati	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Peterson, Jeff**	**Assigned:**	10/16/2015	
	(619) 446-5237	**Started:**	10/16/2015	
	japeterson@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.15	**Completed:**	10/20/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: First Review Issues.
. We request a 2nd complete submittal for SANDAG-Land Use & Transportation on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 7 outstanding review issues with SANDAG-Land Use & Transportation (7 of which are new issues).
. Last month SANDAG-Land Use & Transportation performed 2 reviews, 50.0% were on-time, and 50.0% were on projects at less than < 3 complete submitta

MIR Review Comments

Cleared?	Issue Num	Issue Text
☒	1	SANDAG provided a letter dated June 10, 2015, regarding their comments on the proposed project. This letter has been forward on to the applicant. If you have you questions, you may contact: Sarah A. Strand Regional Planner SANDAG 401 B Street, Suite 800 San Diego, CA 92101 Phone: (619)595- 5609 E-mail: sarah.strand@sandag.org (From Cycle 9)

First Review Comments

Cleared?	Issue Num	Issue Text
☐	2	Thank you for the opportunity to review the applicant's response to comments SANDAG provided. While page 18 of the Town and County Issues Cycle Draft acknowledges receipt of the SANDAG letter SANDAG dated June 10, 2015, there is no reference to the items discussed when SANDAG, the City and the developer met on August 17, 2015. Page 49 of the Second Draft Master Plan states the widening of Camino De La Reina and the inclusion of six foot wide Class II bike lanes on the roadway will comply with improvements proposed in the San Diego Regional Bike Master Plan. (cont) (New Issue)
☐	3	(cont) SANDAG has consistently communicated that the conceptual design of the portion of the regional bikeway corridor along these portions of Hotel Circle and Camino De La Reina consist of a two-way protected bikeway (cycle track) design. (New Issue)
☐	4	At the August 17 meeting we discussed the opportunity to coordinate project construction schedules to provide for the construction of a two-way protected bikeway, buffer/planting strip and sidewalk adjacent to the Town and Country property on Camino De La Reina whereby the developer would pay for the construction of this preferred design along the portion of Camino De La Reina adjacent to its property. (cont) (New Issue)
☐	5	(cont) This improvement would also necessitate coordination between SANDAG and the City related to the deferred improvement agreement between the City and the Union Tribune for half the width of a four lane modified major along Camino De La Reina. (New Issue)
☐	6	To further document the coordination discussed, SANDAG would like to request the City require the Town and Country developer provide an alternative cross section to Figure 3-7 on page 38 of the Second Draft Master Plan. The alternative cross section would accommodate a twelve foot two-way bikeway between the sidewalk and planting buffer. (cont) (New Issue)
☐	7	(cont) This alternative cross section and corresponding revisions to section 3.4.3 on page 49 would provide the necessary documentation and allow for the continued coordination between the City, the developer and SANDAG related to improvements Camino De La Reina as well as the Hotel Circle intersection. (New Issue)

For questions regarding the 'SANDAG-Land Use & Transportation' review, please call Jeff Peterson at (619) 446-5237. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	8	Please contact me or Chris Kluth should you have any questions. Thanks again, Beth Robrahn Project Manager | Associate Planner Active Transportation Program | SANDAG 619.699.6980 (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	LDR-Geology	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Quinn, Jim**	**Assigned:**	09/28/2015	
	(619) 446-5334	**Started:**	09/28/2015	
	jpquinn@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	2.00	**Completed:**	10/19/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: New Document Required.
. We request a 2nd complete submittal for LDR-Geology on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 5 outstanding review issues with LDR-Geology (5 of which are new issues).
. Last month LDR-Geology performed 93 reviews, 52.7% were on-time, and 70.0% were on projects at less than < 3 complete submittals.

424475-9 (6/10/2015)

References

Cleared?	Issue Num	Issue Text
☒	1	Update Preliminary Geotechnical Report, Town & Country Resort Hotel, 500 Hotel Circle North, San Diego, California, prepared by Geocon, Inc., dated December 16, 2013, revised March 18, 2015 (their project no. G1675-52-01) Mandatory Initial Review (MIR) Draft, Town & Country Resort, 500 Hotel Circle North, San Diego, CA 92108, prepared by AECOM, dated - December 19, 2014 (their project no. 60329917) Preliminary Grading Plans, 500 Hotel Circle North, San Diego, CA 92108, prepared by Fuscoe Engineering, plot dated December 18, 2014 (From Cycle 9)

Comments

Cleared?	Issue Num	Issue Text
☒	2	Submit an addendum geotechnical report or update letter that provides or addresses the following: (From Cycle 9)
☒	3	Show the anticipated limits of recommended remedial grading and ground improvement on the geologic map and cross section(s). (From Cycle 9)
☒	4	The project's geotechnical consultant has recommended possible options to mitigate potential seismic settlement and liquefaction impacts. Clarify if the measures are project features or measures intended to "mitigate" CEQA impacts. (From Cycle 9)
☒	5	If the measures intended to "mitigate" soil liquefaction and related phenomena are CEQA mitigation address the following: Where potential impacts may be mitigated in more than one specific way, the consultant should provide performance standards for these measures to mitigate the potential impacts. (See CEQA Guidelines, Section 15126.4(a)(1)(B).) (From Cycle 9)
☒	6	Indicate if the liquefaction hazards can be mitigated on each of the proposed lots/parcels independent of the other proposed lots/parcels. (From Cycle 9)
☒	7	The project's civil engineer should provide details of the proposed storm water BMPs on the plans. (From Cycle 9)

424475-16 (10/19/2015)

References

Cleared?	Issue Num	Issue Text
☐	8	Response to City Comments, Town & Country Hotel and Convention Center, Transit Oriented Development Project, 500 Hotel Circle North, San Diego, California, prepared by Geocon Inc., dated June 19, 2105 (their project no. G1675-52-010) Preliminary Grading Plans, 500 Hotel Circle North, San Diego, CA 92108, prepared by Fuscoe Engineering, plot dated September 2015 Town & Country Resort, 500 Hotel Circle North, San Diego, CA 92108, prepared by AECOM, plot dated September 24, 2015 (their project no. 60329917) (New Issue)

Comments

Cleared?	Issue Num	Issue Text
☐	9	The submitted response letter dated June 19, 2015 (referenced above) contains reduced copies of Figures 1 and 2, which are poorly legible. Please submit an original quality print of the response letter with full-size figures. (New Issue)
☐	10	Submit an addendum geotechnical report or update letter that addresses the development as currently proposed. (New Issue)
☐	11	The project's geotechnical consultant indicates that the area of ground improvement required for the planned development will be evaluated when additional information is made available. That information should be provided at this time if necessary to determine the anticipated limits of remedial grading and ground improvement. (New Issue)
☐	12	Address if the proposed project or measures to mitigate liquefaction potential will adversely impact groundwater flow or quality. (New Issue)

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

L64A-003A

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Park & Rec	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Hooker, Craig**	**Assigned:**	09/29/2015	
	(619) 446-5041	**Started:**	10/08/2015	
	Chooker@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	6.00	**Completed:**	10/14/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for Park & Rec on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 27 outstanding review issues with Park & Rec (16 of which are new issues).
. Last month Park & Rec performed 17 reviews, 88.2% were on-time, and 80.0% were on projects at less than < 3 complete submittals.

Park and Rec Review 6/8/2015

San Diego River Park Master Pl

Cleared?	Issue Num	Issue Text
☒	1	The Town & Country Master Plan as proposed cannot be supported by Park Planning Staff as it does not provide a planning framework by which the project site can be brought into conformance with the current planning framework of the City, namely the vision and principles contained in the San Diego River Park Master Plan and the regulations of the Mission Valley Planned Development Ordinance (MV PDO). The following are key policy issues and regulations that would need to be addressed: (From Cycle 9)
☒	2	Principle One- Restore and Maintain a Healthy River System: The plan needs to address the establishment of a healthy river through the site. This means an improved hydrologic design that addresses the constrained character of existing improvements and offers a long term solution to flooding and the effects this has on the community and natural resources. (From Cycle 9)
☒	3	Principle Two- Unify fragmented lands and habitats: Existing and proposed uses in the River area do not adequately address the current fragmentation in the flooway and river corridor area. (From Cycle 9)
☒	4	Principle Five- Reorient Development toward the river: Existing uses and architecture hinder opportunities for people to connect with the river. Existing structures have little to no windows or openings to the river and existing parking adjacent to the river create a barrier visually and physically. The plan should identify how these uses could be redesigned or relocated on site to address Principle 5. (From Cycle 9)
☒	5	San Diego River Park Master Plan (SDRPMP) Section 3.1 General Recommendations: E. Rehabilitate the Channel to Encourage Meander and Braiding- Where possible and practical, the channel should be rehabilitated to remove concrete or artificial structures and shaped to meander and provide a wider river channel. Further relocation of existing parking particularly north of the river, could allow for channel widening as described in the SDRPMP. (From Cycle 9)
☐	6	F. Expand the River Recharge Area: Further relocation of existing parking particularly north of the river, could allow for greater recharge area as described in the SDRPMP. (From Cycle 9)
☐	7	(SDRPMP) Section 3.1.2 Unify Fragmented Lands and Habitats: D: Naturalize floodway areas. Existing uses retained in the floodway do not allow the floodway to naturalize over time and restore river channel dynamics to a more natural hydrologic regime. (From Cycle 9)

Mission Valley PDO River Subdi

Cleared?	Issue Num	Issue Text
☐	8	Include new sheet(s) to the package titled "San Diego River Park(SDRP)-River Corridor and River Influence Areas ". This sheet should include in plan view: The Multi-Habitat Planning Area (MHPA) boundary, Wetland Boundary, Wetland Buffer, 100 year Floodway, River Corridor Area and the River Influence Area, provide a section that shows implentation of the River Influence Area Setbacks-Height and Massing (LDC Table 1514-03C),Compliance with Maximum Lot Coverage 1514.0302 (D)(1) in plan view, Additional items to include for PDO River Subdistrict Regulations compliance below: (From Cycle 9)
☒	9	LDC 1514.0302(c)(B)- San Diego River Subdistrict ("River Subdistrict")- River Corridor Area- Remove Structures from the River Corridor Area. (From Cycle 9)
☐	10	LDC 1514.0302(c)(3)- River Subdistrict- River Pathway: Provide a section of the River Pathway ion the SDRPMP, include design requirements of this section such as pathway width, paving materials, (concrete and DG). (From Cycle 9)

For questions regarding the 'Park & Rec' review, please call Craig Hooker at (619) 446-5041. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	11	LDC 1514.0302(c)(3)(C)- River Sundistrict- River Pathway- Recreation Easements. Show the locations of proposed River Pathway easements on the SDRPMP Exhibit and on the proposed parcel map (Sheet 4). (From Cycle 9)
☒	12	LDC 1514.0302(c)(4)- Trails: Add note to plans that trails to be determined through park design process Council Policy 600-33. (From Cycle 9)
☒	13	LDC 1514.0302(c)(5)- Picnic and Overlooks: Show locations of Picnic Areas and Overlooks on the SDRPMP Exhibit. Provide a section of the areas that are intended to meet this requirement and the intended furniture/amenities. (From Cycle 9)
☒	14	LDC 1514.0302(c)(7)- Site Furniture: Provide this section as notes on the SDRPMP Exhibit (From Cycle 9)
☒	15	LDC 1514.0302(c)(7)- Signs: Show the locations of kiosks and signs on the SDRPMP Exhibit consistent with the requirements of the MV PDO. Include a section of intended designs and descriptine notes on the SDRPMP Exhibit. (From Cycle 9)
☒	16	LDC 1514.0302(c)(9) and LDC 1514.0302(d)(13)- Fences: Show fence locations and schematic detail/elevations on the SDRMP Exhibit to show consistency with the design requirements of these sections. Add a note that split rail fencing along the MHPA (required per the Town and Country Mitigation Plan) can be removed when mitigation is accepted and sufficient vegetation has been established to prevent trespassing accpetable to the City Manager. (From Cycle 9)
☐	17	LDC 1514.0302(d)(1&2)- River Influence Area: Lot Coverage and Building Height and Massing- The proposed residenntial and associated lot does not conform to lot coverage or setback requirements. Redesign structure to conform. (From Cycle 9)
☐	18	Diagram 1514-03C- River Influence Area Building Height and Setback: Provide a Section showing compliance with these setbacks on the SDRPMP Exibit and/or Development Plan Package Site Sections. (From Cycle 9)
☐	19	LDC 1514.0302(d)(6 &7): Provide notes on Building Transparency and Building reflectivity on the SDRPMP Exhibit. (From Cycle 9)
☐	20	LDC 1514.0302(d)(9): Show Building pathways, and Public Access Pathways on the SDRPMP Exhibit. Use legend to show where signs will occur and show the location of easements for Public Access Pathway on the SDRPMP Exhibit and the Proposed Parcel Map. (From Cycle 9)
☐	21	LDC 1514.0302(d)(10): Off Street Surface Parking: Project proposes surface parking within 20' of the River Corridor Area which is not allowed. (From Cycle 9)
☒	22	LDC 1514.0302(d)(12) Lighting: Provide as a note on the SDRPMP Exhibit. (From Cycle 9)
☐	23	LDC 1514.0302(d)(15): Identify location and elevation of signs on the SDRPMP exhibit consistent with this section. (From Cycle 9)

Population Based Park Requirem

Cleared?	Issue Num	Issue Text
☒	24	This project was reviewed for conformance with the City's General Plan standards for population-based parks, the Mission Valley Community Plan Recreation Element and the Public Facilities Financing Plan (PFFP) This review pertains to the Development Plan sheets and additional comments addressing the T & C Master Plan will be provided in the future as part of an official memo. (From Cycle 9)
☒	25	The City's General Plan standard for population-based parks is 2.8 acres per 1,000 persons in the form of neighborhood and community parks (e.g., neighborhood parks of 3 to 13 acres for every 5,000 residents and community parks a minimum of 13 acres for every 25,000 residents). Community recreation facilities are provided as follows: a Recreation Center for every 25,000 residents and an Aquatic Complex for every 50,000 residents. (From Cycle 9)
☒	26	The General Plan defines "useable" park land as: "A graded pad not exceeding two percent rough grade, as required to provide for structured, public recreational programs of an active nature common to local parks in the City of San Diego (such as ball games or court games, (Cont. below) (From Cycle 9)
☒	27	(Cont from above) of gently sloping land not exceeding ten percent grade for unstructured public recreational activities, such as children's play areas, appreciation of open spaces, or a combination, thereof, unconstrained by environmental restrictions that would prevent its use a park and recreation facility, free of structures, roads or utilities, and unencumbered by easements of any kind." (From Cycle 9)
☒	28	The development proposes 840 residential units that are currently not within the Community Plan, therefore, the 840 residential units will require 3.28 acres of "useable" park land to serve the proposed new residents within this proposed development. (cont. below) (From Cycle 9)
☒	29	(Cont from above) The park area requirement is calculated using the following population estimate factors, vacancy rate of 7.1% (SANDAG Current Estimates for Multi-Family Vacancy Rate), and population density factor of 1.5 persons per multifamily household (SANDAG's 2012 American Community Survey). (From Cycle 9)
☒	30	Per General Plan, the proposed development is required to provide a pro rata share of the cost of a Community Recreation Facility and an Aquatic Complex. The estimated fees are approximately: Pro rata share of Recreation Facility: $479,941 Pro rate share of Aquatic Complex: $158,657 Total : $638,598 (From Cycle 9)

For questions regarding the 'Park & Rec' review, please call Craig Hooker at (619) 446-5041. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☒	31	Population based parks are designed based on a community design, review, and approval process, consistent with Council Policy 600-33. In keeping with this City requirement, remove park design specifics from the site and landscape plan base information and revegetation exhibits such as the children play area and multi-purpose turf area. Only show the outline of the useable public park area on the plan. (From Cycle 9)
☒	32	Population based park useable acreage must exclude any private storm water detention/treatment facilities to the extent these devices would not be useable park land. (From Cycle 9)
☒	33	The River Corridor area of the site that contains the San Diego river pathway can be counted towards the population-based acreage requirement as a Park Equivalency if recreation amenities are located along the river pathway. To receive 100% credit for the total acreage, the pathway shall be in compliance with accessibility guidelines, provide for multi-use (pedestrian and bicyclist) and provide one major recreation amenity and two minor recreation amenities within each mile of the pathway. (From Cycle 9)

Park and Rec Review 10/14/2015

Cleared?	Issue Num	Issue Text
☐	34	Previous Issue 6 and 7 and 17: Parking and drive access to the north parking (existing Royal Palms tower and proposed residential parcel 4) can be reduced by eliminating private drive e. and incorporating the access drive into north parking area. (New Issue)
☐	50	Previous Issue 6 and 7: Parking Area north of the existing Palm Towers should be re-designed to include larger planting areas that can support the growth of mature large scale native trees such as Quercus agrifolia, CA Sycomre, Cottonwoods, Alder, etc. Evidence shows a direct relationship between the mature size of trees and the open planting area that is provided. Suggested planting area is minimum 10' by 10' free of vehicular and pedestrian use spaced such that a complete canopy is developed for the parking area and the appearance of the existing buildings and river setting is more unified. (New Issue)
☐	35	Previous Issue 17: Lot 4 does not meet the Maximum Structural Development Coverage (d)(1)(2) add plans sections and elevations to show conformance or add deviation to Design Guidelines. (New Issue)
☐	36	Previous Issue 20: Please add section and or elevation such that the proposed design can be better evaluated for conformance in terms of elevation. (New Issue)
☐	37	Previous Issue 21: Drive access in corridor area can be further reduced see previous comment and Long Range Planning comment. For parking and drive access through River Corridor Area a deviation must be requested in the Design Guidlines. (New Issue)
☐	38	Previous 23: Provide a sign location at the proposed park area on the north west corner of the site. (New Issue)
☐	40	VTM: (sheet 34) Identify if the park areas will be privately owned or deeded to City . (New Issue)
☐	41	VTM: (sheet 34) No Recreation easement easement is shown for pedestrian pathway through the site or for the San Diego River Pathway. (New Issue)
☐	42	Wetland buffer will need to be supported by City and in particular MSCP Staff prior to a final determination on proposed park acreage. (New Issue)
☐	43	Please provide a note on the plans as well as information in the design Guidelines as to creative elements that will be used for the pathway and include criteria. (New Issue)
☐	44	Include language regarding Bridge design elements and conformance with SDRPMP design guidelines p 101. (New Issue)
☐	45	(MVPDO 1514.0302 (10) Plant Materials Provide a note on visual openings to the Landscape Plan and SDRP Corridor and Influence Area sheet and Design Guidelines (New Issue)
☐	46	35' Path Corridor. Remove reference to "35' path corridor" from project plans and sections as well as Design Guidelines when it refers to areas INSIDE the floodway. The River Corridor Area by definition is OUTSIDE the 100 year Floodway (MVPDO Diagram 1514-03B. (New Issue)
☐	47	1514.0302(d)(10)Landscape Buffer along Parking areas in the River Influence Area: MVPDO. If areas cannot be screened then a deviation must be requested. (New Issue)
☐	48	Provide additional information on the Development Plans and in the Design Guidelines Section 4.4.3 Design Regulations how the new residential parcel 4 is meeting the SDRPMP Section 4.4.4.2 Fences and Walls. (New Issue)
☐	49	Add additional information on the Plans and within the design Guidlines how the plant materials requirement in the SDRPMP section 4.4.4.3 are being met. (New Issue)

For questions regarding the 'Park & Rec' review, please call Craig Hooker at (619) 446-5041. Project Nbr: 424475 / Cycle: 16

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Plan-Airport	**Cycle Distributed:**	09/28/2015	
Reviewer:	**White, Victoria**	**Assigned:**	10/02/2015	
	(619) 533-3945	**Started:**	10/06/2015	
	Vwhite@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.50	**Completed:**	10/06/2015	**COMPLETED ON TIME**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for Plan-Airport on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 2 outstanding review issues with Plan-Airport (1 of which are new issues).
. Last month Plan-Airport performed 7 reviews, 100.0% were on-time, and 83.3% were on projects at less than < 3 complete submittals.

ALUCP First Review

Cleared?	Issue Num	Issue Text
☐	5	AIRSPACE: However, the proposed structures are in proximity to a navigation facility and may impact the assurance of navigation signal reception; therefore, provide notification to the FAA or submit the FAA notification self certification agreement with the required language and signature on the project plans. Refer to Information Bulletin 520: http://www.sandiego.gov/development-services/pdf/industry/infobulletin/ib520.pdf and the FAA obstruction evaluation site: https://oeaaa.faa.gov/oeaaa/external/portal.jsp (From Cycle 9)

ALUCP Second Review

Cleared?	Issue Num	Issue Text
☐	7	AIRSPACE: Regarding Issue 5 - A copy of an FAA Determination letter for the proposed master plan must be provided to Plan-Airport staff in order to determine project compatibility with SDIA ALUCP airspace protection policies. Please provide a copy of the FAA Determination letter in the next review cycle. (New Issue)

For questions regarding the 'Plan-Airport' review, please call Victoria White at (619) 533-3945. Project Nbr: 424475 / Cycle: 16

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	PUD-Water & Sewer Dev	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Ruiz, Alejandro**	**Assigned:**	09/29/2015	
	(619) 446-5414	**Started:**	10/14/2015	
	Aruiz@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	7.00	**Completed:**	10/20/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. The reviewer has indicated they want to review this project again. Reason chosen by the reviewer: Partial Response to Cmnts/Regs.
. We request a 2nd complete submittal for PUD-Water & Sewer Dev on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Your project still has 29 outstanding review issues with PUD-Water & Sewer Dev (20 of which are new issues).
. Last month PUD-Water & Sewer Dev performed 105 reviews, 97.1% were on-time, and 75.5% were on projects at less than < 3 complete submittals.

PR Commets, cycle 9:

Cleared?	Issue Num	Issue Text
☐	13	Additional comments may be made at the time of Discretionary Review. (From Cycle 9)
☐	14	Utility Plan, sheet 8, shows a proposed on-site 12-inch public water main. This proposal will not be accepted. Please show the on-site water main as Private. (From Cycle 9)
☐	15	The private water main will require a master meter (or meters if looped) in public right-of-way next to the property line. Please revise the utility plan. (From Cycle 9)
☐	16	All water services to the site, including domestic, irrigation and fire, will require private, above ground back flow prevention devices (BFPDs). BFPDs shall be located on private property, in line with the service and immediately adjacent to the right-of-way. The Public Utilities Department will not permit the required BFPDs to be located below grade or within the structure. Please show the required BFPDs for the proposed private water main. (From Cycle 9)
☐	17	A separated on-site private fire line loop for the on-site private fire hydrants and fire sprinkler connections will be required. Please revise. (From Cycle 9)
☐	18	Please show the required backflow preventer devises for the private fire line. (From Cycle 9)
☐	19	Sheet 8, shows raised medians on top of the existing 8-inch AC water main on Hotel Circle North. Medians on top of water mains are not permitted. Commercial areas require 12-inch water mains. The existing 8-inch water main will be required to be upsized to a 12-inch and relocated at least 3.5 feet from face of curve. (From Cycle 9)
☐	20	Please show the on-site sewer main as private. (From Cycle 9)
☐	21	The propose 8-inch private sewer main will require an Encroachment Maintenance and Removal Agreement (EMRA). Please revise the plans. (From Cycle 9)

2nd Review, Cycle 16:

Cleared?	Issue Num	Issue Text
☐	22	Second request: Utility Plan, sheets 37 and 38, shows a proposed on-site 12-inch public water main. This proposal will not be accepted. Please show the on-site water main as Private. (New Issue)
☐	23	Second request: The private water main will require a master meter (or meters if looped) in public right-of-way next to the property line. Please revise the utility plan. (New Issue)
☐	24	Second request: All water services to the site, including domestic, irrigation and fire, will require private, above ground back flow prevention devices (BFPDs). BFPDs shall be located on private property, in line with the service and immediately adjacent to the right-of-way. The Public Utilities Department will not permit the required BFPDs to be located below grade or within the structure. Please show the required BFPDs for the proposed private water main. (New Issue)
☐	25	Second request: A separated on-site private fire line loop for the on-site private fire hydrants and fire sprinkler connections will be required. Please revise. (New Issue)
☐	26	Second request: Please show the required backflow preventer devises for the private fire line. (New Issue)
☐	27	Second request: Sheet 37 and 38, shows raised medians on top of the existing 8-inch AC water main on Hotel Circle North. Medians on top of water mains are not permitted. (New Issue)
☐	28	Second request: Commercial areas require 12-inch water mains. The existing 8-inch water main will be required to be upsized to a 12-inch and relocated at least 3.5 feet from face of curve. (New Issue)
☐	29	The existing 8-inch water main in North Hotel Circle will need to be upsized, from Fashion Valley Rd to Camino del la Reina, until the existing 10-inch water main is reached. Please revise the plans. (New Issue)
☐	30	At the time of Ministerial Review, the developer will be required to show on the plans new 16-inch and 12-inch water valves. (New Issue)

For questions regarding the 'PUD-Water & Sewer Dev' review, please call Alejandro Ruiz at (619) 446-5414. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☐	31	Second request: Please show the on-site sewer main as private. (New Issue)
☐	32	Second request: The propose 8-inch private sewer main will require an Encroachment Maintenance and Removal Agreement (EMRA). Please add a note to the plans. (New Issue)

Comments to the Water Study:

Cleared?	Issue Num	Issue Text
☐	33	The water study is proposing an 8-inch public water main. Public water mains in private property are not acceptable. (New Issue)
☐	34	The water study doesn't match the plans. (New Issue)
☐	35	The private water main will require a master meter (or meters if looped) in public right-of-way next to the property line. Please revise. (New Issue)
☐	36	All water services to the site, including domestic, irrigation and fire, will require private, above ground back flow prevention devices (BFPDs). BFPDs shall be located on private property, in line with the service and immediately adjacent to the right-of-way. The Public Utilities Department will not permit the required BFPDs to be located below grade or within the structure. Please show the required BFPDs for the proposed private water main. (New Issue)
☐	37	A separated on-site private fire line loop for the on-site private fire hydrants and fire sprinkler connections will be required. Please revise. (New Issue)
☐	38	Please show the required backflow preventer devises for the private fire line. (New Issue)
☐	39	Commercial areas require 12-inch water mains to meet the 4,000 gpm fire requirement. The existing 8-inch water main in North Hotel Circle will need to be upsized, from Fashion Valley Rd to Camino del la Reina, until the existing 10-inch water main is reached. Please revise the water study. (New Issue)

Comments to the Sewer Study:

Cleared?	Issue Num	Issue Text
☐	40	The proposed wastewater flow was estimated based on 1.5 persons per dwelling unit. Please revise the hydraulic calculation to reflect the actual number of units including number of bedrooms, fixture units if available and etc. (New Issue)
☐	41	Please schedule a meeting at your earliest convenience with the Water and Sewer review staff. (New Issue)

Review Information

Cycle Type:	16 Submitted (Multi-Discipline)	**Submitted:**	09/28/2015	Deemed Complete on 09/28/2015
Reviewing Discipline:	Fire-Plan Review	**Cycle Distributed:**	09/28/2015	
Reviewer:	**Sylvester, Brenda**	**Assigned:**	09/30/2015	
	(619) 446-5449	**Started:**	10/21/2015	
	bsylvester@sandiego.gov	**Review Due:**	10/19/2015	
Hours of Review:	0.00	**Completed:**	10/21/2015	**COMPLETED LATE**
Next Review Method:	Submitted (Multi-Discipline)	**Closed:**	11/13/2015	

. The review due date was changed to 10/30/2015 from 10/26/2015 per agreement with customer.
. We request a 2nd complete submittal for Fire-Plan Review on this project as: Submitted (Multi-Discipline).
. The reviewer has requested more documents be submitted.
. Last month Fire-Plan Review performed 55 reviews, 56.4% were on-time, and 86.8% were on projects at less than < 3 complete submittals.

Fire Department Issues

Cleared?	Issue Num	Issue Text
☒	1	Provide a single sheet labeled "Fire Access Plan" . Refer to policy A-08-01 for access requirements. http://www.sandiego.gov/fire/pdf/access.pdf (From Cycle 9)
☒	2	Provide Fire Access Plan per Engineering Scale 20, 30, 40, 50. Turn radius 30 ft. inside, 50 ft. outside. (From Cycle 9)
☒	3	Show all building heights from grade to top of eave/parapet/roof line - When adjacent to buildings that are greater than 35 feet in height above natural grade, the access roadway shall have a minimum clear width of 26 feet. The location shall be 15-25 feet from face of building and shall be positioned parallel to one entire side of the building. (See FPB Policy A-08-1) (From Cycle 9)
☒	4	Show location of all existing hydrants, within 600' on the Fire Access Plan. Show all proposed hydrants. Show a 300 ft. radius from hydrants to all portions of the exterior of building/buildings. (From Cycle 9)
☒	5	Show required hose pulls to all portions of the exterior of the building/buildings. (From Cycle 9)
☒	6	Clearly define all red curb/No parking sign areas. The required width of access roadways shall not be obstructed in any manner, including the parking of vehicles. Where no space is provided for parking along access roadways, they shall be kept clear by the posting of signs or the painting of curbs per policy A-08-1. (From Cycle 9)
☒	7	Show knox box locations per Fire Department Policy K-12-2 - http://www.sandiego.gov/fire/pdf/knox.pdf (From Cycle 9)
☒	8	San Diego Municipal Code Section §55.0507 item (c) hydrant locations shall be identified by the installation of reflective blue colored markers. Such markers shall be affixed to the roadway surface, approximately centered between curbs, and at a right angle to the hydrant. (From Cycle 9)
☒	9	Provide building address numbers, visible and legible from the street or road fronting the property per FHPS Policy P-00-6 - Provide as a note on the Fire Access Plan. (From Cycle 9)
☒	10	Post indicator valves, fire department connections, and alarm bell are to be located on the address/access side of the structure. Provide as a NOTE on the Fire Access Plan. (From Cycle 9)
☒	11	If buildings share the same address: Provide the following note on the Fire Access Plan: An illuminated directory, in accordance with FHPS Policy I-00-6, shall be provided. http://www.sandiego.gov/fire/pdf/illum.pdf (From Cycle 9)
☒	12	Approved stairway identification signs shall be located at each floor level in all enclosed stairways in buildings four or more stories in height. Provide a Note on Fire Access Plan. (From Cycle 9)
☒	13	A Class I (or I and II or III) standpipe outlet connection is required in occupancies of 4 or more stories at every floor-level connection of every required stairway above or below grade. Outlets at stairways shall be located within the exit enclosure or, in the case of pressurized enclosures, within the vestibule or exterior balcony, giving access to the stairway. There shall be at least 1 outlet above the roof line when the roof has a slope of less than 4 /12 units horizontal. In bldgs where more than 1 standpipe is provided, the standpipes shall be interconnected. Provide as Note (From Cycle 9)
☒	14	"Stairways exiting directly to the exterior of a building four or more stories in height shall be provided with a means for emergency entry for fire department access." Provide as a fire NOTE on Fire Access Plan. Also, SHOW on the floor plans and the Door Schedule which doors comply with this requirement. (From Cycle 9)
☒	15	PROVIDE NOTE ON FIRE ACCESS PLAN: Fire apparatus access roads and water supplies for fire protection, shall be installed and made servicable prior to and during time of construction. CFC CH 33 (From Cycle 9)
☒	16	CBC Sec. 3002.4a - General Stretcher Requirements - All buildings and structures with one or more passenger service elevators shall be provided with not less than one medical emergency service elevator to all landings meeting the provisions of Section 3002.4a Provide as a note on Fire Access Plan. (From Cycle 9)
☒	17	New buildings four or more stories above grade plane, shall be provided with a stiarway to the roof. Such stairway shall be marked at street and floor levels with a sign indicating that the stiarway continues to the roof. CFC Sec. 504.3 (From Cycle 9)

For questions regarding the 'Fire-Plan Review' review, please call Brenda Sylvester at (619) 446-5449. Project Nbr: 424475 / Cycle: 16

Cleared?	Issue Num	Issue Text
☒	18	At least one fire extinguisher with a minimum rating of 2-A-10-BC shall be provided withing 75 feet maximum travel distance for each 6,000 square feet or portion thereof on each floor. CFC Sec. 906 (Provide as a Note). (From Cycle 9)
☒	19	Decorative materials shall be maintained in a flame-retardant condition. CFC Sec. 804(Provide as a note on Fire Access Plan) (From Cycle 9)
☒	20	Vegetation shall be selected and maintained in such a manner as to allow immediate access to all hydrants, valves, Fire Department connections, pull stations, extinguishers, sprinkler risers, alarm control panels, rescue windows, and other devices or areas used for firefighting purposes. Vegetation or building features shall not obstruct address numbers or inhibit the functioning of alarm bells, horns or strobes. (Provide as a Note) (From Cycle 9)
☒	21	CFC 105.4.4 - Construction documents approved by the Fire Code Official are approved with the intent that such construction documents comply in all respects with this code. Review and approval by the Fire Code Official shall not relieve the applicant of the responsibility of compliance with this code. (Provide as a Note) (From Cycle 9)

Bldg. determined High Rise

Cleared?	Issue Num	Issue Text
☒	22	FIRE COMMAND CENTER shall comply with NFPA 72 and shall contain the features listed in CFC 2013, Section 508. (provide as a note on Fire Access Plan) (From Cycle 9)
☒	23	Minimum room size for Fire Command Center is 200 Square Feet in area with a minimum dinension of 10 Ft. CFC 508.1.3 (Provide as a note on Fire Access Plan). (From Cycle 9)
☒	24	Complete plans and specifications for the operation of elevators under fire or other emergency conditions shall be submitted to Life Safety for review and approval prior to installation. CBC Sec. 3003 (Provide as a Note on Fire Access Plan) (From Cycle 9)
☒	25	Upon activation of any fire protection or detection system, an automatic voice alarm shall sound on the alarming floor, the floor above, and the floor below. CFC 907.5.2.2 (Provide as a Note on Fire Access Plan) (From Cycle 9)
☒	26	Emergency systems conforming with CFC Section 604 and the California Electrical Code shall be provided. (Provide as a Note). - NOTE - Fuel Tanks require plan check and approval from the Technical Services Section of the Fire-Rescue Department. Obtain permit /TA Number at 1010 2nd Ave. Ste. 300 (619) 533-4477. Building Final will not be approved until the tank permit has been approved. (From Cycle 9)
☒	27	Show fuel supply calculations for the standby power generator on the plans. Fuel supply must be sufficient for six hours of full demand power CFC 604.2.14.1.1 or eight hours if a fire pump is required. CFC 913.6 Standby power shall comply with the requirements of CBC 403.4.8 (From Cycle 9)
☒	28	Show the location, type, and size of the Fire Pump. CFC Sec. 913-913.6 (From Cycle 9)
☒	29	Show the location of the standby power/generator on the plans. CFC 604.1.1 For Fuel Oil Storage comply with requirements of CFC 603.3 - 603.3.2.1 (From Cycle 9)
☒	30	A two-way communication system between the central control station and elevators, elevator lobbies, emergency and standby power rooms, and entries into enclosed stairways shall be provided for Fire Department use. CFC 1007.8 (Provide as a Note on Fire Access Plan) (From Cycle 9)
☒	31	Provide Emergency Responder Radio Coverage per CFC Section 510 - Provide as a Note on Fire Access Plan (From Cycle 9)
☒	32	NOTE ON PLANS: Every building four stories or more in height shall be provided with not less than one standpipe for use during construction installed in accordance with CFC 3313.1. Standpipe shall be installed when the progress of construction is not more than 40 feet in height above the lowest level of Fire Department access. CFC 3313.1 (From Cycle 9)
☒	33	A telephone or other two way communications system connected to an approved constantly attended station shall be provided at not less than every 5th floor in each stairway where the doors to the stairway are locked. CBC 403.5.3.1 (Provide as a note) (From Cycle 9)
☒	34	Show the location and size of the emergency secondary water supply. CFC 903.3.5.2 (From Cycle 9)
☒	35	Required fire pumps shall be supplied by connections to a minimum of two water mains located in different streets. (Provide as a note) CBC 403.3.2 (From Cycle 9)

LETTER A
ATTACHMENT 10

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Town and Country

MASTER PLAN

DRAFT

City of San Diego
August 2016

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Town and Country

MASTER PLAN
DRAFT

City of San Diego
August 2016

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1

INTRODUCTION

Town and Country

1 INTRODUCTION

The Town & Country Master Plan (Master Plan) revitalizes a 39.72-acre site within the Mission Valley Community Plan area in the City of San Diego. This Master Plan revitalizes and consolidates the Town & Country Hotel and Convention Center and transforms the remaining site to create a cohesive, walkable residential neighborhood immediately adjacent to public transit and the San Diego River.

Master Plan Vision

The vision of the Town & Country Master Plan is to create a vibrant, mixed use TOD compromising a renovated hotel and new, residential neighborhood and public park focused on a restored riparian open space adjacent to the existing MTS Fashion Valley transit center.

The Master Plan provides an updated planning vision that acknowledges Mission Valley's ongoing transformation and changing needs. The vision for the comprehensive redevelopment of this infill site restores the San Diego River as a visible public amenity, providing key connecting segments of the San Diego River Pathway, and establishing a network of pedestrian and bicycle connections that seamlessly link to the San Diego Metropolitan Transit System (MTS) Bus and Trolley network. This Master Plan creates a new mixed-use transit-oriented development (TOD) that increases opportunities to live-work-play in Mission Valley.

1.1 PURPOSE

This document, referred to as a Master Plan, is a Master Planned Development Permit (Master PDP) as recognized by the City of San Diego Municipal Code (SDMC), City of San Diego Land Development Code (LDC). The PDP approval establishes design guidelines, development standards, and allows for minor variations to the selected zones, as necessary, to implement the vision for the Town & Country Master Plan Area (Plan Area). The City of San Diego General Plan (General Plan) and its Strategic Framework Element, the Mission Valley Community Plan (MVCP), and the City of San Diego Land Development Code (LDC) form the planning and development framework for this Master Plan.

The purpose of the Master Plan is to guide the development of three integrated Plan Area Districts. Based on the land uses, design guidelines, and applicable City zoning regulations, modified as necessary for specific application to this Master Plan, this Master Plan ensures the future build out of the Plan Area is consistent with City of San Diego (City) planning policies and the regulatory framework. Regulatory functions for the Plan Area will be implemented through the City's LDC and the Master PDP policies and standards in effect as of the date the Vesting Tentative Map for this Master Plan is deemed complete.

1.2 LOCATION AND SETTING

1.2.1 Location

The 39.72-acre Plan Area is located within the city limits of the City of San Diego, San Diego County, California (*see Figure 1-1 Vicinity Map*). The Plan Area is located in the heart of Mission Valley with easy access to Interstate 8 highway. The Plan Area is bounded by Hotel Circle North and Camino de la Reina to the south, Fashion Valley Road to the west, Riverwalk Drive to the north and the upstream property line crossing the San Diego River and San Diego Union-Tribune property to the east.

1.2.2 Site History

Until the 1940s Mission Valley remained rural and largely undeveloped, consisting of dairy farms and other agricultural land uses.

In 1953, the Town and Country Hotel was the first hotel built in Mission Valley. John J. Sherman Company of San Diego planned and designed the original Town and Country Hotel buildings. Town & Country Development, Inc., headed by landowner Charles Brown, constructed the buildings from 1953-1955. Construction of new facilities and significant renovation of many existing buildings has occurred incrementally from 1955 through 2007 to accommodate expansion and upgrades.

With construction of the Atlas Ballroom in 1970, the Town & Country Hotel became the first major convention center

Source USGS 7.5' USGS La Jolla Quadrangle; AECOM 2016

Figure 1-1

VICINITY MAP

Image 1-1 The 39.72-acre Master Plan Area features the existing Town & Country Hotel and Convention Center. The San Diego River runs across the northern portion of the site. A light rail and bus transit center is directly to the north adjacent to a regional shopping center.

hotel in San Diego. Convention facilities underwent major additions in 1975 and 2007. In 1975, the Town & County Hotel acquired the Le Baron Hotel (constructed 1965-1968) on the eastern 5.9-acre portion of the site. The current 39.72-acre site is illustrated in *Figure 1-2 Existing Parcel Map*.

1.2.3 Setting

Key features of the Plan Area setting include the MTS Fashion Valley transit center and the San Diego River. The MTS Fashion Valley transit center is immediately north of the Plan Area and the entire Plan Area is within convenient walking distance to the transit center via sidewalk connections and an improved pedestrian bridge over the San Diego River. The transit center comprises a transfer hub for buses and an elevated light rail station. This transit center is the primary opportunity that facilitates the Master Plan vision of transforming the Town & Country site into a TOD neighborhood.

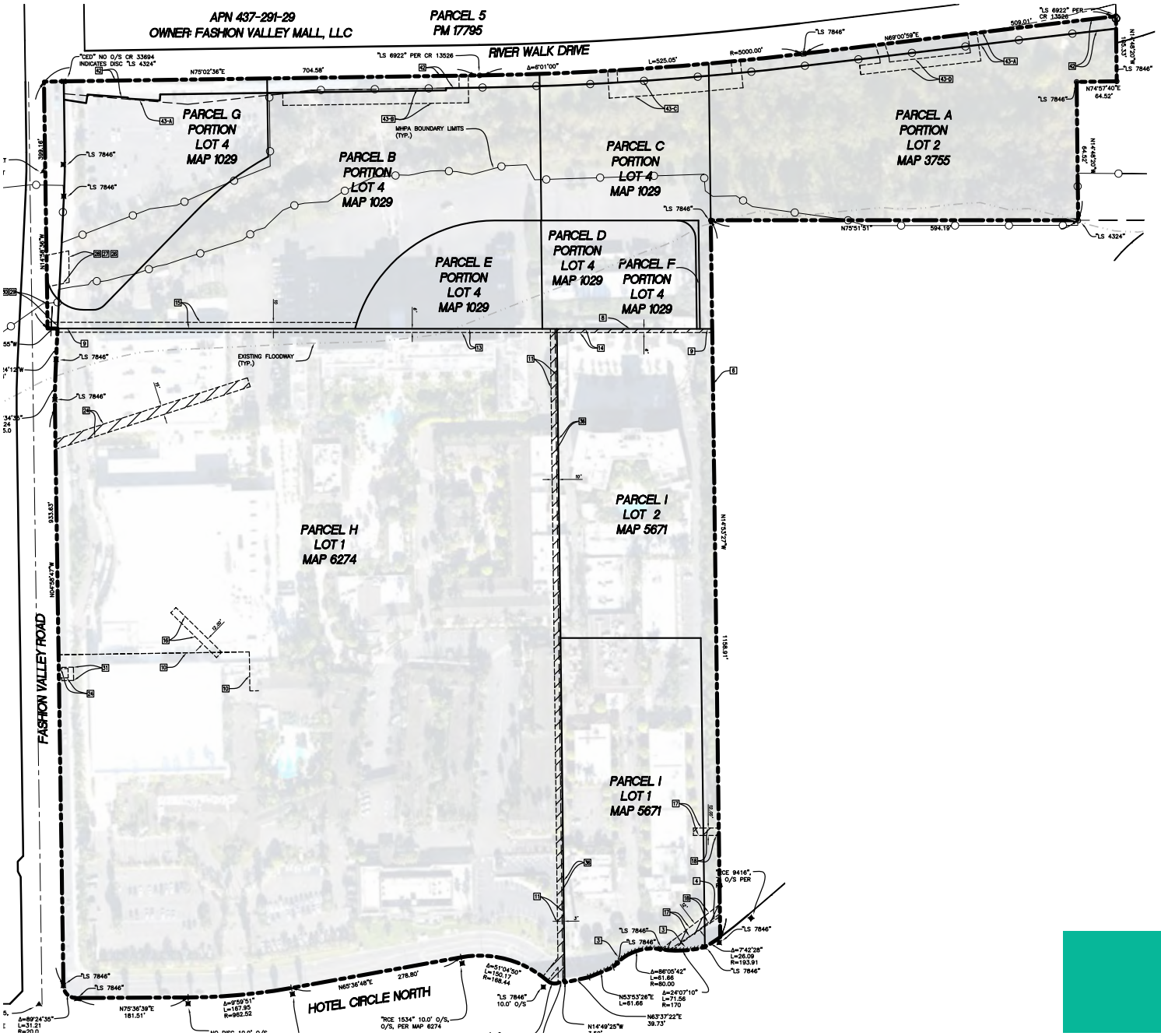
The San Diego River flows east to west through the northern portion of the Plan Area. The River channel and adjacent open space are important natural resources that have greatly influenced the design of the Master Plan and the orientation of Plan Area buildings and improvements to create a front door to the San Diego River.

1.3 VISION, OBJECTIVES AND ANALYSIS

The vision for the Plan Area is to create a vibrant, mixed-use TOD adjacent to the MTS Fashion Valley transit center and restore the San Diego River open space.

The objectives to achieve this vision were developed early in the planning process based on City staff's recommendations and validated by multiple technical studies completed in association with the creation of the Master Plan. The following objectives, in concert with the City's planning framework, will guide the implementation of the Master Plan.

- **Create a compact mixed-use TOD** with hotel, residential, a public park, and restored San Diego River habitat all connected by a pedestrian access network to the MTS Fashion Valley transit center.
- **Increase ridership on existing transit infrastructure** and reduce reliance on personal vehicles by building a compact TOD adjacent to the existing MTS Fashion Valley transit center.
- **Reinvent the image of the hotel** to create an enhanced visitor experience for hotel guests and neighbors that increases value for the hotel and transient occupancy tax revenue for the City.



LEGEND

Existing Town & Country Property Boundary (includes existing and future ROW dedication areas)

Easement

Existing Caltrans Restricted Access (at Parcel 1, Lot 1, MAP5671)

Easement to be Vacated

ACREAGE SUMMARY

Parcel No.	Area
A	4.06 AC
B	4.26 AC
C	1.61 AC
D	1.00 AC
E	0.98 AC
F	0.02 AC
G	2.21 AC
H	19.7 AC
Parcel I LOT 1	2.71 AC
Parcel I LOT 2	3.17 AC
TOTAL	**39.72 AC**

Source Fuscoe Engineering; AECOM 2016

N

0 50 100 200 300

Figure 1-2

EXISTING PARCEL MAP

Image 1-2 The Master Plan responds to the context of Mission Valley with compact urbanized areas focused on the ecological amenity of the San Diego River. This created an urban river corridor.

- **Demonstrate a high level of quality planning, design and construction** through the implementation of the Master Plan.
- **Establish cohesive land uses to create a unique sense of place** though site design and architectural guidelines.
- **Encourage healthy lifestyle choices** by creating a network of easily accessible trails, sidewalks, and bicycle facilities linked to enhanced open space amenities.
- **Strengthen the connection to the San Diego River** by orienting new buildings and improvements toward the River where feasible and creating public open space accessed by trails to and along both banks of the River.
- **Restore and enhance areas of San Diego River habitat** to improve the long-term value of this important ecosystem.
- **Construct the San Diego River Pathway** on both sides of the River and rebuild the existing pedestrian bridge to complete a key link in a regional recreational amenity, and provide convenient access to transit, shopping and entertainment.
- **Fulfill public parkland requirements on-site** or directly adjacent to the Plan Area to create a public recreation amenity in Mission Valley.
- **Improve storm water quality** by reducing the existing amount of impervious surfaces and utilizing sustainable design features such as bioswales and Low Impact Development (LID) features.
- **Reduce energy use and water consumption** through sustainable site design and passive design features for buildings.
- **Create an attractive mixed-use neighborhood that is integrated into the Mission Valley visual landscape.**

1.3.1 Site Analysis

Multiple technical studies have been prepared to support the Master Plan objectives, provide data and analysis for comprehensive environmental review of the Master Plan, and inform subsequent design and planning decisions as the Master Plan is implemented. The report topics include:

- Air Quality
- Biological Resources
- Geotechnical Conditions
- Health Risk Assessment
- Potential Historical Resources
- Archaeology
- Greenhouse Gas
- Hydrology and Hydraulics
- Noise
- Water Systems
- Sewer Systems
- Storm Water Quality
- Traffic Impact
- Water Systems
- Phase I Environmental Site Assessment

1.4 AUTHORITY

The City of San Diego Planning Department and Development Services Department directed the development of this Master Plan document. The Master Plan demonstrates consistency with the General Plan, MVCP, SDMC, San Diego River Park Master Plan (SDRPMP) and Transit Oriented Development Design Guidelines (TOD Guide). The Master Plan includes standards and guidelines, in text and graphic form, to control the implementation of the Master Plan.

The LDC specifically provides for the use of a Master PDP (in this document referred to as the Master Plan) in SDMC Chapter 12 Article 06 Division 06, Planned Development Permit Procedures and SDMC Chapter 14 Article 03 Division 04, Planned Development Permit Regulations and SDMC §143.0480 Master Planned Development Permit Criteria. The purpose of these regulations, as noted in the LDC, is to provide flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project. The intent of the PDP regulations is to accommodate, to the greatest extent possible, an equitable balance of development types, intensities, styles, site constraints, project amenities, public improvements, and community and City benefits (SDMC §143.0401).

The Master Plan is subject to adoption by City legislative action in accordance with the LDC. The Town & Country site is currently zoned MVPD-MV-M/SP. The MVPD-MV-M/SP zone is a multiple use zone that is guided by an approved specific plan, the Atlas Specific Plan (1988), under SDMC Chapter 15, Article 14 Mission Valley Planned District. With the adoption by ordinance of the Town & Country Master Plan through City legislative action, the Atlas Specific Plan will no longer apply to the Plan Area. The Plan Area will be zoned to MVPD-MV-M, a multiple use zone that requires a mix of residential and commercial uses and OF-1-1 within the San Diego River floodway.

Deviations from the base zone development regulations are allowed as part of this Master Plan upon approval by City legislative action (see Section 7 Implementation). Where the SDMC Chapter 15, Article 14 Mission Valley Planned District is silent, the intent, objectives, guidance, and standards of the Master Plan shall rule. All future development plans, maps, or other entitlements for this Plan Area must be consistent with the regulations put forward in this document.

All regulations, conditions, and programs contained herein shall be deemed separate, distinct, and independent provisions of the Town & Country Master Plan. In the event that any provision is held invalid or unconstitutional by a state or federal court of competent jurisdiction, the validity of all remaining provisions of this Master Plan shall not be affected.

In the event of a conflict between the provisions of the Master Plan, the more restrictive requirements shall apply.

1.5 PLANNING CONTEXT

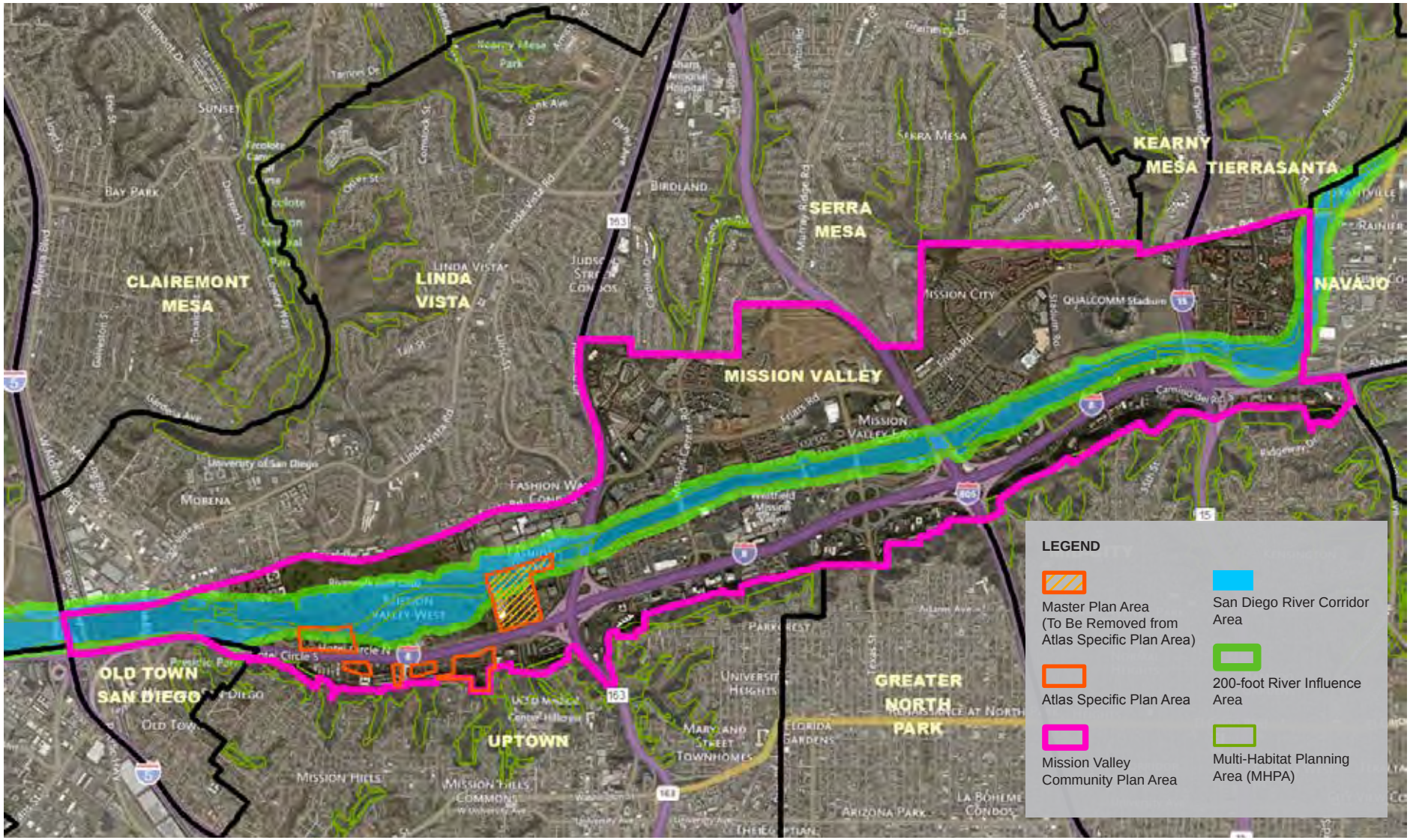
The Master Plan implements the policies and guidelines of the following documents:

- 2008 General Plan
- Mission Valley Community Plan (MVCP)
- Mission Valley Public Facilities Financing Plan (MVPFFP)
- San Diego River Park Master Plan (SDRPMP)
- Transit-Oriented Development Design Guidelines (TOD Guide)
- Multiple Species Conservation Program (MSCP) Subarea Plan

Refer to *Figure 1-3 Planning Context* for a graphic summary of the planning policy overlays that influence the Plan Area.

1.5.1 City of San Diego General Plan

The General Plan is the foundation for development in the City of San Diego. It provides a set of city-wide policies to further the City of Villages smart growth strategy that focuses growth into dense mixed-use pedestrian-friendly districts linked to the regional transit system. It also encourages the incremental redevelopment of aging buildings and sites.



Source City of San Diego Planning Department; SANGIS 2015; Microsoft 2015; AECOM 2016

Figure 1-3

PLANNING CONTEXT

1.5.2 Mission Valley Community Plan

The 39.72 acre Plan Area is located within the MVCP area. The site is designated as Commercial Recreation in the MVCP. The MVCP was in the process of being updated by the City Planning Department at the time of the approval of this Master Plan.

1.5.3 Atlas Specific Plan

City Council adopted the Atlas Specific Plan (ASP) on December 13, 1988. The ASP Area comprised six separate sites, including the Town & Country site, held under a single ownership. The functionality of the ASP was based on the concept that the six separate sites would be developed together to fund improvements to the San Diego River. However, the separate sites are no longer under single ownership and implementation strategies related to the San Diego River improvements are no longer consistent with current guidance and requirements of the City of San Diego, State of California and Federal Agencies.

On February 19, 2015, the process was initiated for a Specific Plan Amendment to remove the Town & Country site (Plan Area) from the ASP Area. The Town & Country site will become the Town & Country Master Plan Area and this Master Plan document will replace in full the authority and policies of the ASP within the Master Plan Area. The Master Plan is consistent with the guidance of the SDRPMP and the MSCP Subarea Plan to restore and enhance the San Diego River consistent with the desires of environmental agencies.

1.5.4 Mission Valley Public Facilities Financing Plan

The Master Plan will fulfill the Development Impact Fee obligations per agreement with the City in accordance with the MVPFFP. This fee will help mitigate the cost of public facilities e.g. transportation, library, park and recreation, and fire.

1.5.5 San Diego River Park Master Plan

The San Diego River flows through the northern portion of the Plan Area. The Plan Area is located in the River Subdistrict as identified in the SDRPMP as implemented by SDMC Chapter 15, Article 14 Mission Valley Planned District. The Plan Area is subject to the SDRPMP guidelines and Mission Valley Planned District regulations.

1.5.6 Transit-Oriented Development Design Guidelines

The entire Plan Area is within a 2,000-foot walking distance of the MTS Fashion Valley transit center. Thus, the Plan Area meets the definition of a transit-oriented development per the TOD guide. The Plan Area is also identified as an urban TOD and a redevelopable site. The Plan Area is subject to the TOD Guide (in particular Sections 1, 2, and 4-11).

1.5.7 Multiple Species Conservation Program Subarea Plan

A portion of the Plan Area is designated as Multiple Habitat Preservation Area (MHPA) per the Plan Area Biological Technical Report (AECOM 2015a). The area designated as MHPA and areas directly adjacent to it are subject to the MSCP Subarea Plan implementing regulations and development guidelines.

1.6 DISCRETIONARY ACTIONS

The following discretionary actions provide a pathway for development and implementation of the Master Plan. These discretionary actions take into account one or more levels of required government review relevant to the following:

- Regulatory Floodway and Floodplain
- Regulated Waters and Wetlands
- Threatened and Endangered Species
- Cultural Resources
- Signage
- Regional Environmental and Planning Policies

The Master Plan, supporting technical reports, and Vesting Tentative Map (VTM) define the planning process for

design, implementation and permitting. Refer to Chapter 7 Implementation of this document for a description of the planning process.

1.6.1 General Plan Amendment

The Master Plan requires an amendment to the General Plan Figure LU-2: General Plan Land Use and Street System Map. On this Figure, the Plan Area will be revised from the current designation of Commercial Employment, Retail, & Services to the designation of Multiple Use.

1.6.2 Community Plan Amendment

While the land uses set by this Master Plan would be consistent with the current MVCP land use designation, the Master Plan requires an amendment to the MVCP. This is due to the fact that amendment of the ASP to remove the Town & Country site (Plan Area) from the ASP constitutes an amendment the MVCP. Furthermore, amendment to the MVCP constitutes an amendment to the General Plan.

1.6.3 Atlas Specific Plan Amendment

The Master Plan requires an amendment to remove the Town & Country site (Plan Area) from the ASP. The Master Plan replaces in full authority all the guidelines and development standards of the ASP for the Plan Area.

1.6.4 Rezone

Concurrent with the approval of the VTM, the Plan Area has been rezoned to implement this Master Plan. Zones identified in SDMC Chapter 15, Article 14 Mission Valley Planned District are applied by this Master Plan (Master Planned Development Permit). A portion of the Plan Area will be rezoned from the designation of MVPD-MV-M/SP (pursuant to the Atlas Specific Plan) to the multiple use zone, MVPD-MV-M.
Consistent with the LDC §131.0205, the Open Space-Floodplain Zone (OF-1-1) also applies to a portion of the site. (Refer to Section 4 River Park District).

1.6.5 Vesting Tentative Map

A VTM including easement vacations will be processed concurrent with the Master Plan. The VTM has been prepared in accordance with the guidelines and development intensities presented in this Master Plan, the State Subdivision Map Act, and City of San Diego requirements. Modifications to the VTM or processing of a new Tentative Map shall require an amendment to this Master Plan.

1.6.6 Master Planned Development Permit

The Master Plan complies with the primary and supplemental PDP regulations and incorporates the development criteria in compliance with the Master PDP Criteria as set by the LDC. The City legislative adoption of this Master Plan establishes the design guidelines, development standards, and minor variations to the selected zones, as necessary, to realize the vision for the Master Plan.

1.6.7 Comprehensive Sign Plan No. 2

The City of San Diego Planning Commission passed and adopted Comprehensive Sign Plan No. 2 (CSP No. 2) on February 22, 1979. CSP No. 2 applies to the entire Town and Country Hotel complex (the Master Plan Area) and constitutes a covenant running with the lands and the terms, conditions and provisions thereof are binding upon the Permittee and any successor or successors thereto. CSP No. 2 will be amended separately from the Master PDP to update certain elements to align it with the design features and implementation of the Hotel District while preserving the rights of the permittee.

1.6.8 Site Development Permits

First, the Plan Area includes MHPA and Environmentally Sensitive Lands (ESL) as identified by the City MCSP and ESL ordinance, LDC §143.0100. The ESL ordinance requires the concurrent processing of a Site Development Permit (SDP).
Second, a portion of the property is subject to existing SDP #400602 resulting from a code violation by a prior owner. The existing SDP requires implementation of a restoration and enhancement plan, includes a covenant of easement and

the provision of an easement for a future multi-modal trail, prior to development of the Town & Country site (Plan Area). The City certified the related Mitigated Negative Declaration (MND) No. 118318 and adopted the associated Mitigation, Monitoring, and Reporting Program (MMRP). A SDP is required to amend SDP#400602 to implement the Master Plan.

Third, a SDP is required for the project deviation from the Mission Valley Planned Development Ordinance and zoning and development deviations from the San Diego Municipal Code. Deviations are outlined in Table 7-6 of this document.

1.6.9 Environmental Impact Report

Concurrent with preparation of the Master PDP and associated discretionary actions, an Environmental Impact Report (EIR) for the Master Plan shall be prepared in accordance with the provisions of the California Environmental Quality Act (CEQA). The EIR (Project No. _____, SCH No._____) evaluates the land use, circulation, and infrastructure improvements resulting from the implementation of the Town & Country Master Plan.

1.6.10 General Development Permit

Concurrent but separate from the MPDP, a General Development Permit will be processed by the City for the portion of the Master Plan Area delineated within the recreation easement providing for a population-based public park. The design of the park and its components will be determined per City Council Policy 600-33 for community notification and input for city-wide park development.

1.6.11 Conditional Use Permit Amendment

A Conditional Use Permit (CUP) is required to amend and supersede Planned Commercial Development/ Conditional Use Permit No. 88-0585 (1989). This pertains to the convention center and exhibit hall. This action will remove all conditions of approval for requirements of the ASP because they are not applicable to the project.

1.6.12 Conditional Use Permit

A CUP is required to permit separately regulated uses per SDMC §131.0102 is required to implement the Master Plan Hotel District.

1.6.13 Land Use Plan Amendment

A Land Use Plan Amendment within the Airport Land Use Compatibility Overlay Zone per SDMC §132.1502 is required to implement the Master Plan.

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2

LAND USE

Town and Country

2 LAND USE

2.1 LAND USE

The Master Plan is organized around a land use plan to allow an integrated mixed-use area of open space, visitor-oriented commercial, recreation, and residential uses as identified in the MVCP. The perimeter of the 39.72-acre Town & Country site also includes approximately 1.1 acres of existing or proposed right-of-way dedication or roadway easement. The remaining Master Plan Area is organized into three districts that are connected to the San Diego River open space and the new public park by the pedestrian network. *Figure 2-1 Land Use Plan* illustrates the organization of the three districts and depicts the land uses within each district. Land use is guided by the MVCP and SDMC Chapter 15, Article 14 Mission Valley Planned District; *Figure 2-2 Proposed Zoning Map* illustrates the zoning applied to the Plan Area.

2.1.1 River Park District

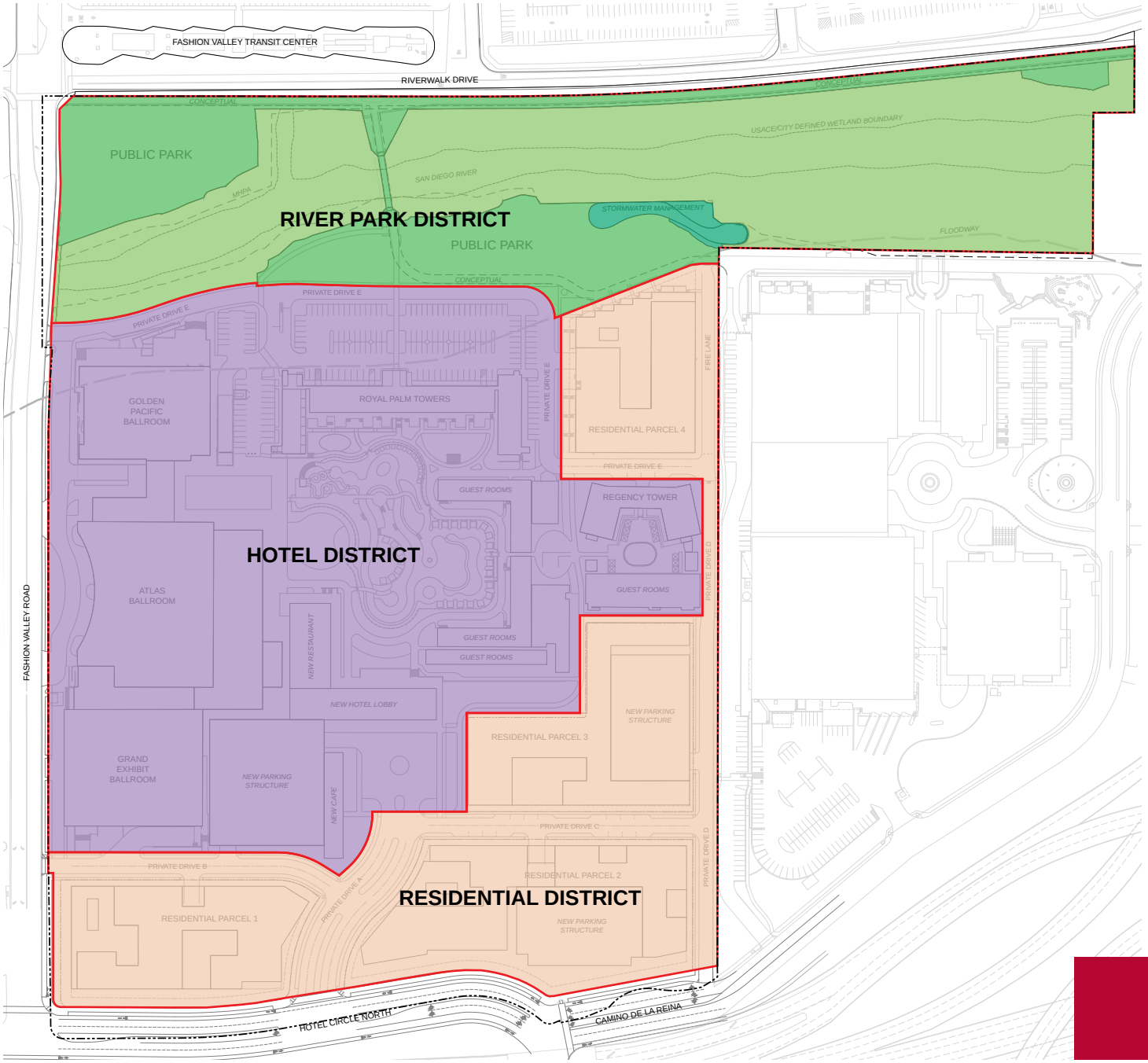
The River Park District encompasses approximately 12 acres of San Diego River open space habitat and public park. The San Diego River serves as the spine for the River Park District and focal point for recreation opportunities. There are few places where the San Diego River is accessible to the public and there are even fewer population-based parks in Mission Valley. The River Park District includes over 7 acres of restored and enhanced riparian open space habitat. New sections of the San Diego River Pathway provide a multi-use trail along both sides of the San Diego River leading to a reconstructed pedestrian bridge crossing point. In addition, over 3.5 acres of new on-site public park land replace 271 existing surface parking spaces to create passive recreation space for the community and improve storm water quality. Land uses identified in the LDC OF-1-1 (Open Space – Floodplain) Zone are permitted within the River Park District and include the open space habitat and public park space developed as part of the Town & Country Master Plan.

River Park District will include a new public park, restored and enhanced open space habitat, and multi-use trails.

2.1.2 Hotel District

The approximately 17-acre Hotel District consists of the consolidated and upgraded Town & Country Hotel and Convention Center. The Hotel District is an important tax revenue producing use and is an employment center in Mission Valley that is accessible by transit. The Hotel District responds to the adjacency of the San Diego River through building and site design features and circulation improvements. The renewed Town & Country Hotel includes renovated 700 guest rooms, 177,000 square feet of conference and meeting spaces, a new hotel water amenity, new lobby, dining options for guests and neighborhood residents, and accessory uses including a new parking structure. The MVPD-MV-M (Multiple Use) zone allows for mixed use development in Mission Valley. The MVPD-MV-M zone requires a mix of land uses from MV-CV, MV-CO, MV-CR, MVR-1, MVR-2, MVR-3, MVR-4, and MVR-5 in order to apply the MVPD-MV-M zone, provided that the predominant land use, in this case Commercial Recreation, is consistent with the MVCP. The Hotel District is consistent with the Commercial Recreation land use designation and the mix of commercial land uses is a key as part of the Master Plan.

The renovated Hotel District facilities will enhance service to the tourist and visitor market.



LEGEND

Property Line
(including R.O.W. easements)

Master Plan Area

Open Space Habitat

Passive Recreation

Stormwater Management

Commercial - Visitor

Residential - Multiple Unit

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

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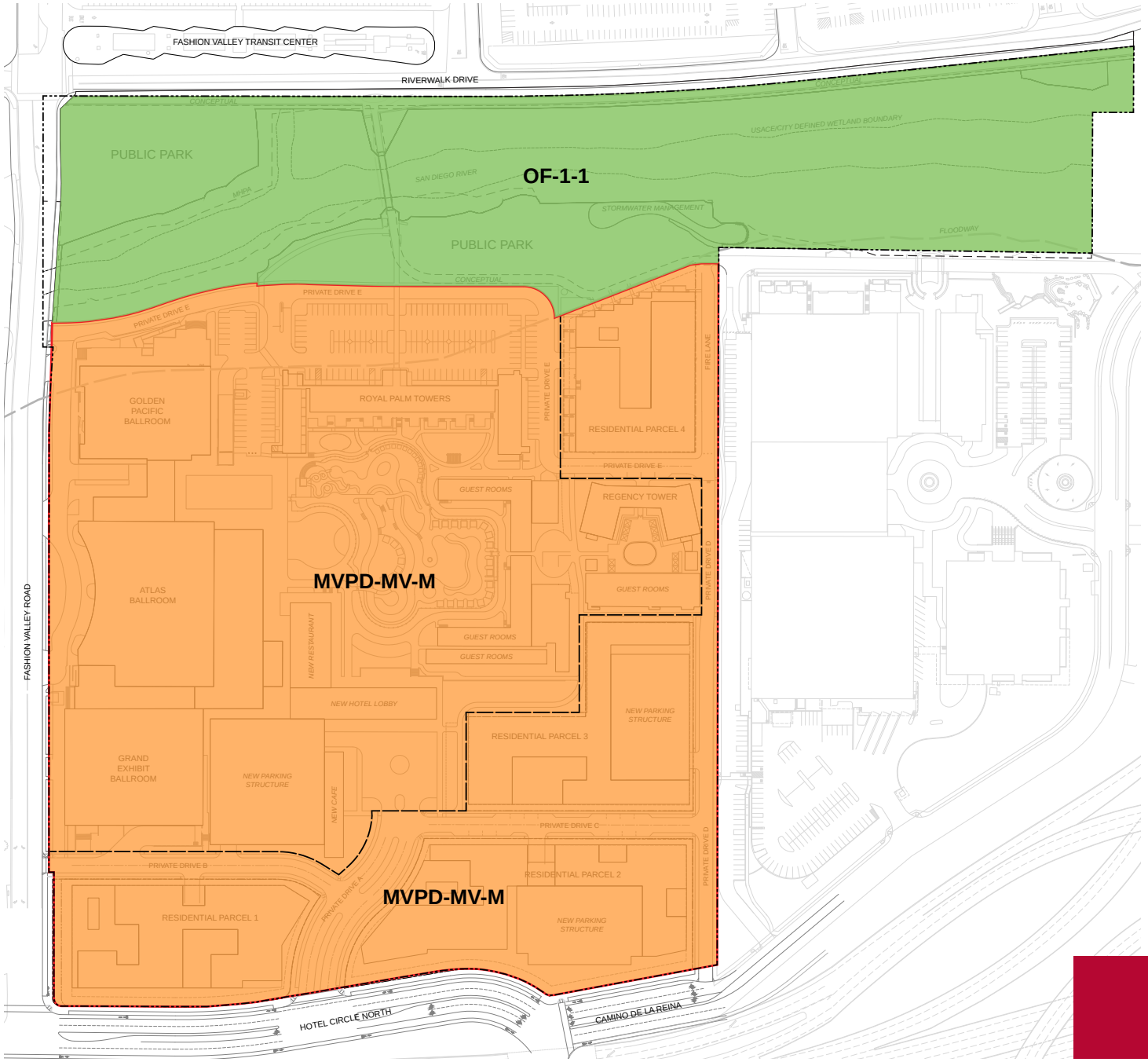
0 50 100 200 300

Figure 2-1

LAND USE PLAN



LEGEND

Open Space – Floodplain
(OF-1-1)

Mission Valley Planned District –
Multiple Use
(MVPD-MV-M)

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

N

0 50 100 200 300

Figure 2-2

PROPOSED ZONING MAP

2.1.3 Residential District

The approximately 10-acre Residential District provides up to 840 multi-family dwelling units in a walkable, bicycle-friendly, pedestrian-scale configuration. Responding to the surrounding neighborhood context and site features, this area includes features to transition and orient to the San Diego River. These features offer excellent views to the public park and restored San Diego River open space habitat. The design of the district is focused on enhanced sidewalks that are part of the public realm and seamlessly weaving multi-use paths that extend from the River Park District and Hotel District with ultimate connections leading to the MTS Fashion Valley transit center. The Residential District includes residential use consistent with the MVR-5 subzone identified by the MVPD-MV-M zone. In addition, this mix of land uses that fosters residential near shopping, transit, and hotels, and restaurants is consistent with guidelines set by the MVPD-MV-M zone.

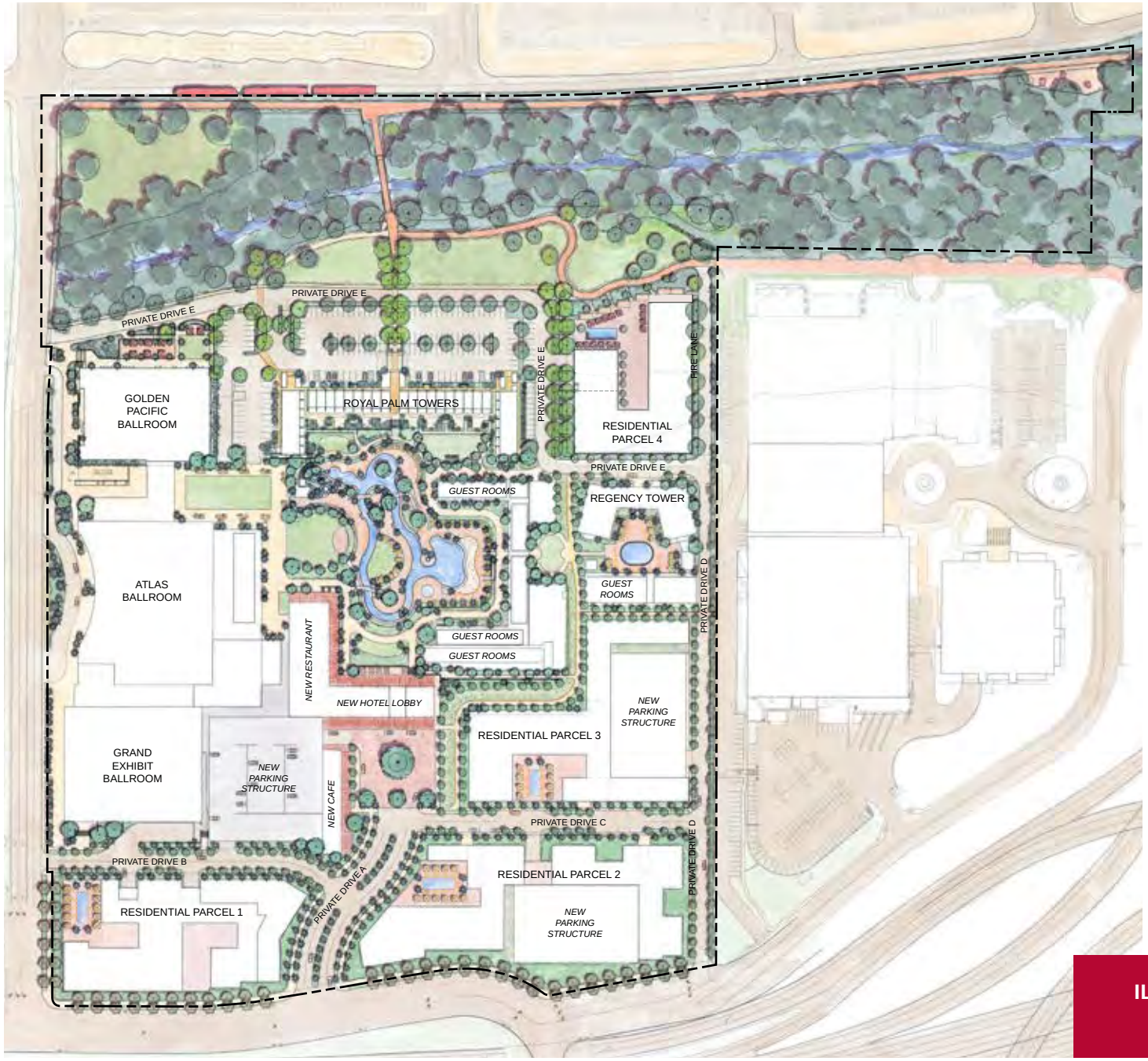
The Residential District will have views to the restored riparian open space and easy pedestrian access to the San Diego River Pathway and the MTS Fashion Valley Transit Center.

2.2 MASTER PLAN

The overall Master Plan illustrated in *Figure 2-3* includes the consolidation of the hotel and convention center facilities within the Hotel District, the construction of up to 840 dwelling units in the four parcels that comprise the Residential District, the restoration and enhancement of habitat and construction of a public park in the River Park District, and a cohesive landscape concept for the overall Plan Area.

LOT	ACRES	TARGET UNITS (DUs)	PERMITTED DU RANGE	ESTIMATED SQUARE FEET (S.F.) FOR TARGET UNITS
1	1.80	160	80 - 420	128,000
2	2.53	275	142 - 420	220,000
3	1.99	255	127 - 420	204,000
4	1.37	150	75 - 420	120,000
Lot A (Private Drives)	2.44	N/A	N/A	N/A
TOTAL	**10.13**	**840 MAX TOTAL**	**424 DU - 840 DU MAX TOTAL**	**672,000**

Table 2-1 Residential Development Summary



Note Layout of proposed buildings, River Pathway, and site improvements are for illustrative purposes only. The final configuration may vary from this concept plan.

Source Burton Studio; AECOM 2016

N

0 50 100 200 300

Figure 2-3

ILLUSTRATIVE MASTER PLAN

3

CIRCULATION

Town and Country

3 CIRCULATION

The Master Plan supports the goals of the General Plan Mobility Element by facilitating a balanced, multi-modal transportation network. The Plan Area is served by an established road network and transit service is readily accessible. The existing and planned circulation system for Mission Valley meets the vehicular circulation needs of the Master Plan. The project provides improvements to Hotel Circle North as well as pedestrian and bicycle facilities to achieve the circulation goals and objectives of the MVCP.

> Villages should increase personal transportation choices and minimize transportation impacts through design that pays attention to the needs of people traveling by transit, foot, and bicycle, as well as the automobile. Focused development and density adjacent to transit stops and stations helps make transit convenient for more people... As such, the City of Villages land use pattern is transportation, as well as a land use strategy.
>
> (City of San Diego General Plan, 2008)

A Traffic Impact Analysis (TIA) was completed by Linscott, Law & Greenspan to ensure the accommodation of future residents, visitors, and employees traveling to and from the Plan Area. At the time of the preparation of the Master Plan, the City of San Diego Planning Department was in the process of updating the Mission Valley Community Plan. The Master Plan was developed in close coordination with City staff to address existing and future circulation in a way that allows for the greatest amount of flexibility for the following Mission Valley Community Plan Update.

3.1 ACCESS TO TRANSIT

One of the key site features of the Plan Area is the adjacency of the Fashion Valley transit center. The Master Plan is designed as a Transit Oriented Development (TOD) implementing the City of Villages strategy for higher density development in mixed-use and walkable projects adjacent to transit stations.

3.1.1 Light Rail

The MTS Fashion Valley transit center provides regional light rail service (San Diego Trolley) to residents, hotel guests and employees, conventioneers, and visitors with as convenient and efficient mode of transportation. The San Diego Trolley service frequency is approximately every 15 minutes.

The MTS Fashion Valley trolley station is on the MTS Trolley Green Line, which runs between Santee and downtown San Diego. The intermediate stops include Alvarado Medical Center, San Diego State University (SDSU), Qualcomm Stadium, Mission Valley Center, Linda Vista, Old Town and Convention Center. Transfer stations in downtown San Diego connect the Green Line to the Blue Line (downtown San Diego to San Ysidro) and the Orange Line (downtown San Diego to El Cajon). SANDAG is planning a future extension of the Blue Line from the Old Town transit center northward approximately 11 miles to the University of California, San Diego (UCSD) and University City.

The residents and employees of the Plan Area have convenient access to transit services. All of the site is within a six-minute walk of the transit center (*see Figure 3-1 Walking Distance to Transit*)

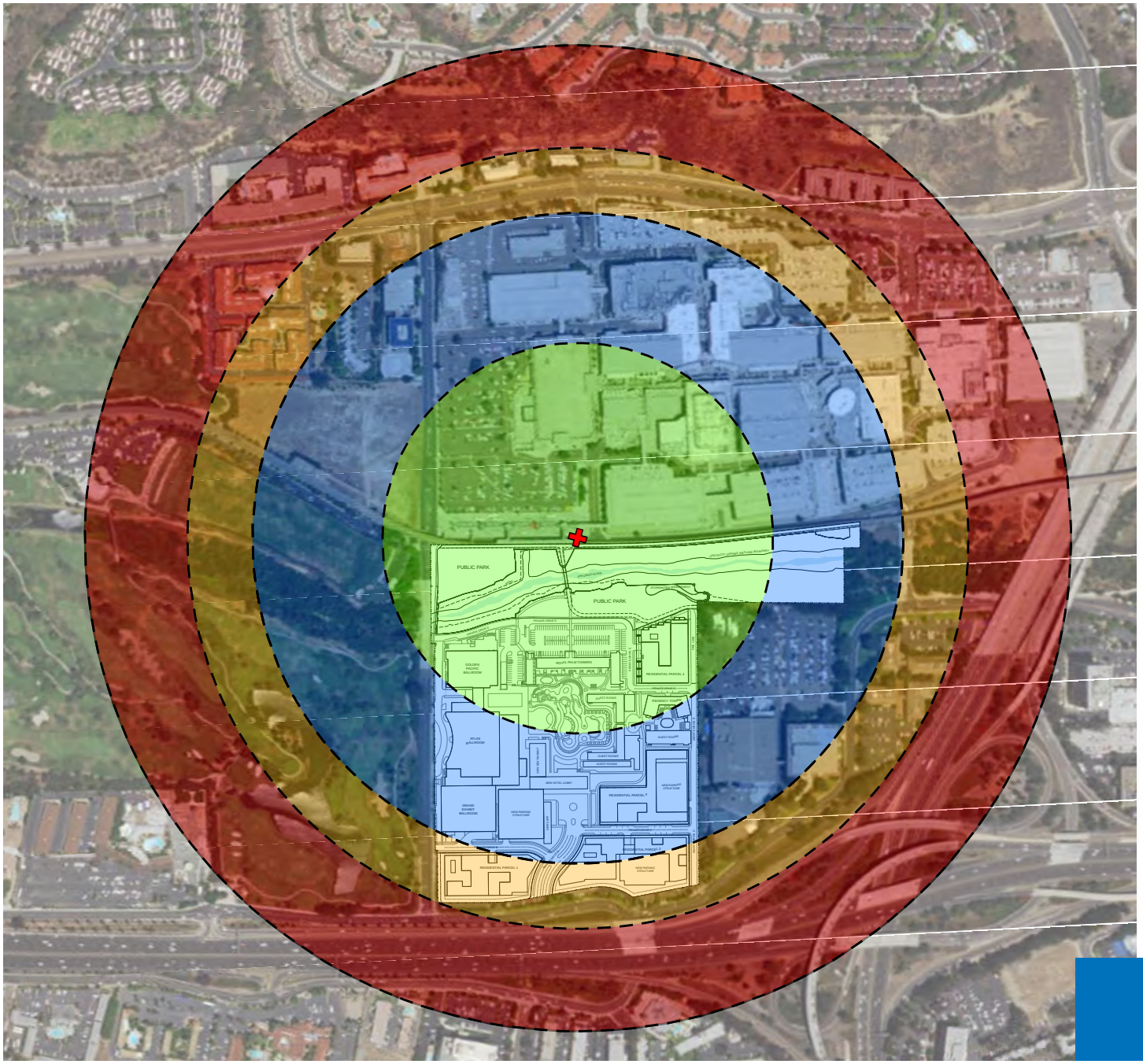
3.1.2 Bus Service

The Plan Area is surrounded by bus stops that are part of the extensive MTS city-wide bus network. The Fashion Valley transit center is served by seven bus routes (6, 20, 25, 41, 88, 120, and 928). These bus routes connect the Plan Area to Kearny Mesa, UCSD, Old Town, Downtown, Del Lago, and North Park.

There are MTS bus stops along the Plan Area frontage on Hotel Circle North and Fashion Valley Road. MTS Route 88 services the bus stop on Hotel Circle North, connecting the MTS Fashion Valley transit center to the MTS Old Town transit center. MTS Route 88 and MTS Route 120 service the bus stop on Fashion Valley Road, connecting the MTS Fashion Valley transit center to Kearny Mesa. Generally, the MTS bus routes within the project vicinity operate with a frequency of approximately 10 to 15 minutes on both weekdays and weekends.

3.2 EXISTING VEHICULAR CIRCULATION

The Plan Area is located in the center of the Mission Valley community at the northeast corner of the Hotel Circle North/ Fashion Valley Road intersection (see *Figure 1-2 Project Vicinity Map*). Regional vehicular access to the Plan Area is



LEGEND

MTS Fashion Valley transit center Entrance

3 Minute Walk
(792' Radius)

5 Minute Walk
(1/4 mile Radius)

6 Minute Walk
(1,584' Radius)

Transit-Oriented Development
(2000' Radius)

Note One mile = 5,280 feet. Average walking speed of 3 miles per hour or 264 feet per minute. (SANDAG, 2015).

Source SANDAG, 2015; City of San Diego, 1992; AECOM, 2016

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0 150 300

Figure 3-1

WALKING DISTANCE TO TRANSIT

provided by Interstate 8 (I-8) and State Route 163 (SR 163).

The existing roadways in the Plan Area are part of the roadway network serving Mission Valley, a highly urbanized mixed-use corridor in central San Diego. Local vehicular access to the Plan Area is provided by Friars Road, Riverwalk Drive and Fashion Valley Road from the north and west, and Hotel Circle North, Hotel Circle South and Camino de la Reina from the south (see *Figure 3-2 Existing Vehicular Circulation*).

Internal Site Vehicular Circulation

At present, access to vehicular circulation within the Plan Area occurs at multiple points along existing roadways. An internal system of private driveways and parking facilities currently provides access to the hotel, convention center, restaurants, spa, and other hotel services and support facilities. The incremental expansion and modification of the facilities over many years has produced an inefficient arrangement of buildings amidst numerous surface parking lots. A low-speed network of access driveways, parking lot drive aisles and alleyways currently provides internal site circulation.

3.2.1 Hotel Circle North

This roadway forms a portion of the southern boundary of the Plan Area. On-street parking is not permitted on this roadway. The MVCP classifies Hotel Circle North as a planned four-lane Collector between Camino de la Reina and the I-8 westbound on- and off-ramps to the west. Hotel Circle North is currently a two-lane undivided roadway (Collector) with a two-way left-turn lane west of the I-8 ramps, a three-lane undivided roadway (Collector) between the I-8 ramps and Fashion Valley Road and a two-lane undivided roadway (Collector) with a two-way left-turn lane between Fashion Valley Road and Camino de la Reina.

The roadway name transition from Hotel Circle North to Hotel Circle South occurs at the roadway's underpass at I-8. Currently, Hotel Circle North is primarily an east-west undivided roadway (Collector) except at its brief north-south orientation at the I-8 underpass.

3.2.2 Hotel Circle South

Hotel Circle South is an east-west oriented roadway on the south side of I-8 and is roughly parallel to Hotel Circle North. It crosses back over I-8 as Hotel Circle Drive to the west.

The MVCP classifies this roadway as a four-lane Collector between Camino de la Reina and the I-8 eastbound on- and off-ramps. Hotel Circle South is currently a two-lane undivided roadway (Collector).

Intersections on Hotel Circle North and Hotel Circle South are controlled by traffic signals or stop signs. The posted speed limit is 35 miles per hour (mph). Curbside parking is not permitted. Class II Bikeways (bicycle lanes) are on Hotel Circle South and for a short distance on Hotel Circle North just west the I-8 underpass. In the traffic study area, Hotel Circle North, Hotel Circle South, and Hotel Circle Drive are within the jurisdiction of the City of San Diego with the exception of the I-8 interchanges, which are within the jurisdiction of the California Department of Transportation (Caltrans).

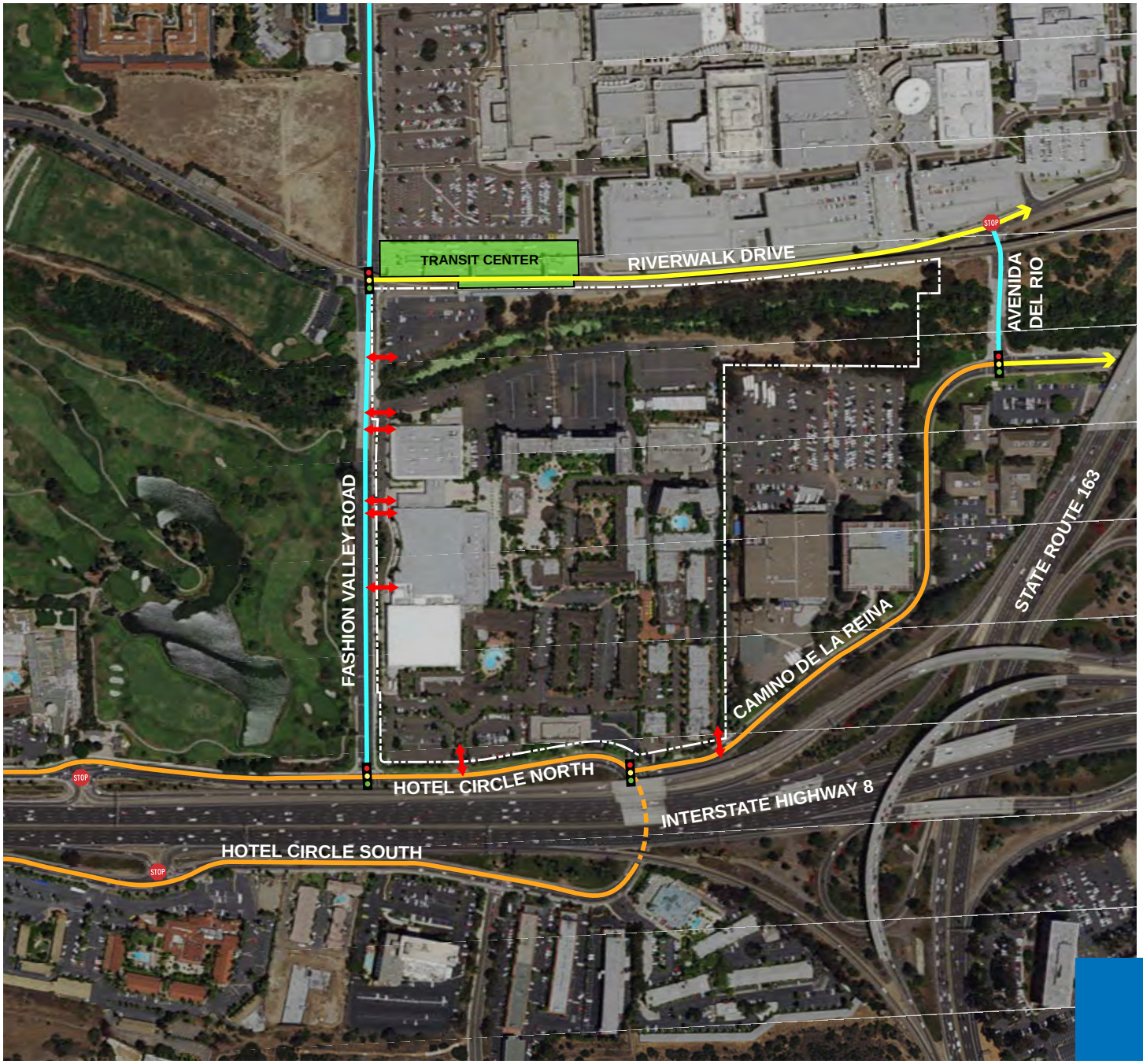
3.2.3 Fashion Valley Road

This roadway forms the western boundary of the Plan Area. The MVCP classifies Fashion Valley Road as a four-lane Major Arterial.

Currently, Fashion Valley Road is a four-lane undivided roadway (Collector) between Friars Road and Hotel Circle North. Fashion Valley Road is under City of San Diego jurisdiction in the traffic study area. Intersections on Fashion Valley Road are controlled by signals except for parking lot driveways to commercial/retail uses, which are controlled by stop signs. The posted speed limit is 35 mph. On-street parking is not permitted.

3.2.4 Riverwalk Drive

This roadway is just north of the northern boundary of the Plan Area. The MVCP classifies Riverwalk Drive as a four-lane Collector. Currently, Riverwalk Drive is a two-lane undivided roadway (Collector). Riverwalk Drive is under City of San Diego jurisdiction in the traffic study area. Riverwalk Drive provides access to Fashion Valley Mall and the MTS Fashion Valley transit center. Curbside parking is not permitted on this roadway.



LEGEND

2-Lane Collector with 2-Way Left Turn Lane

2-Lane Collector

4-Lane Collector

MTS Fashion Valley transit center

Existing Vehicular Ingress/Egress (one-way stop control)

Existing Traffic Signal

Existing All-way stop control intersection

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source Linscott, Law & Greenspan; AECOM 2016

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Figure 3-2

EXISTING VEHICULAR CIRCULATION

3.2.5 Camino de la Reina

This roadway forms a portion of the southern boundary of the Plan Area. The MVCP classifies Camino de la Reina as a four-lane Major Arterial. It is currently a two-lane undivided roadway (Collector) with a two-way left-turn lane between Hotel Circle and Avenida del Rio. Camino de la Reina is under City of San Diego jurisdiction in the traffic study area. Intersections are signalized except at intersecting driveways serving commercial uses, which are controlled by stop signs. The posted speed limit is 35 mph.

3.3 MASTER PLAN VEHICULAR CIRCULATION

Proposed improvements to the external roadways and internal Plan Area drives will provide a safe and efficiently designed circulation system that minimizes environmental and neighborhood impacts.

Curb Extensions narrow the width of street at an intersection by extending the curb into roadway at the corner(s) of an intersection. This reduces the speeds of right-turning vehicles, increases the visibility of pedestrians, and creates a shorter crossing distance, reducing pedestrians' exposure to moving vehicles.

(City of San Diego General Plan Mobility Element, 2008)

The Master Plan internal vehicular system consists of five private drives that provide clear and efficient access to the hotel, convention center, and residential parcels.

The Master Plan external roadway and internal drive system will achieve a high degree of balance, context, and compatibility between land uses and transportation needs (see *Figure 3-3 Proposed Vehicular Circulation*).

Cross sections for public streets and private drives may be modified due to changing circumstances, provided the modification complies with City standards and the Master Plan. Any modification must be shown on the approved Town & Country Vesting Tentative Map (VTM). Such modifications will not require an amendment to this Master Plan.

3.3.1 Intersection Traffic Control

Traffic signals are proposed at major intersections on Hotel Circle North, Camino de la Reina, and Fashion Valley Road to handle vehicular demand and provide dedicated and controlled crossing points for pedestrians and bicyclists (see *Figure 3-4 Intersection and Traffic Control Plan*).

Plan Area intersection traffic control will include stop signs to calm traffic and reduce vehicular speeds. Enhanced paving will identify crosswalks, promoting safety and improve the pedestrian experience within the Plan Area.

3.3.2 Public Streets

Figure 3-5 Public Street Cross Section Key references the existing and proposed cross sections of the Public streets adjacent to the Plan Area.

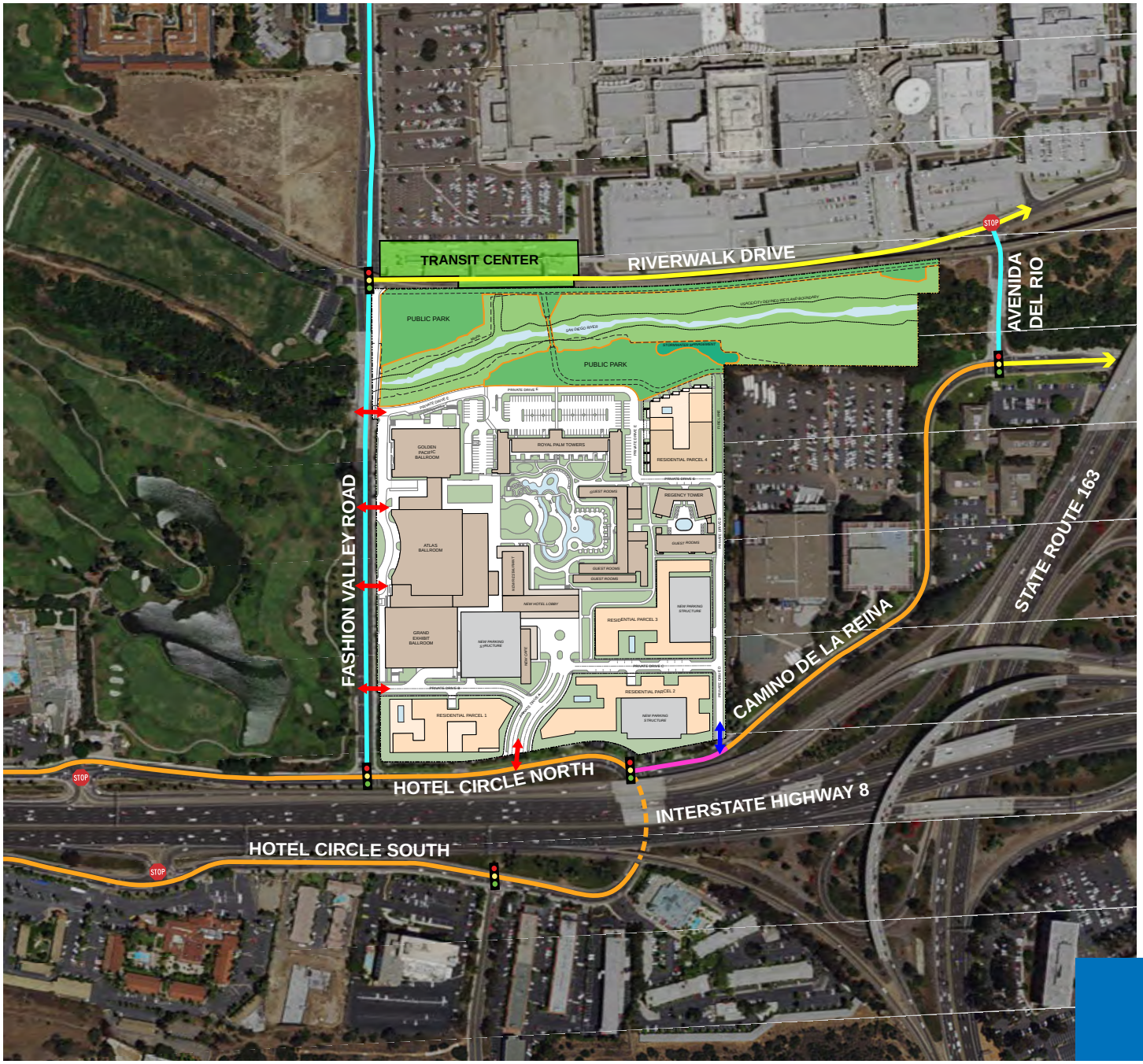
Hotel Circle North

Hotel Circle North has a 100-foot right-of way (ROW) and forms a portion of the Plan Area southern boundary. It is currently a two-lane Collector along the Plan Area frontage with a two-way left-turn lane between Fashion Valley Road and Camino de la Reina. Improvements will widen Hotel Circle North up to 39 feet to meet the MVCP classification for a four-lane Collector. This widening would add two travel lanes plus Class II bicycle lanes on both sides (see *Figure 3-6 Hotel Circle North Proposed Cross Section*)

The parkway on the north side of Hotel Circle North along the Plan Area frontage will include an 8-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk.

Camino de la Reina

Camino de la Reina forms a portion of the project's southern boundary. It is currently a two-lane Collector along the project frontage with a two-way left-turn lane between Hotel Circle North and Private Drive D. Camino de la Reina improvements will include adding a travel lane in each direction within up to 34 feet of curb widening to meet the MVCP classification of a 74-foot curb-to-curb four-lane Major. The parkway on the north side of Camino de la Reina along the Plan Area frontage will include a 8-foot-wide sidewalk and an 6-foot-wide planting area between the curb and sidewalk.



LEGEND

2-Lane Collector with 2-Way Left Turn Lane

2-Lane Collector

4-Lane Collector

4-Lane Major

MTS Fashion Valley transit center

Plan Area vehicular Ingress/Egress (one-way stop control)

Right In/Right Out Plan Area Vehicular Ingress/Egress (one-way stop control)

Signalized Intersection

Stop-Controlled Intersection (all-way stop control)

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source Linscott, Law & Greenspan; AECOM 2016

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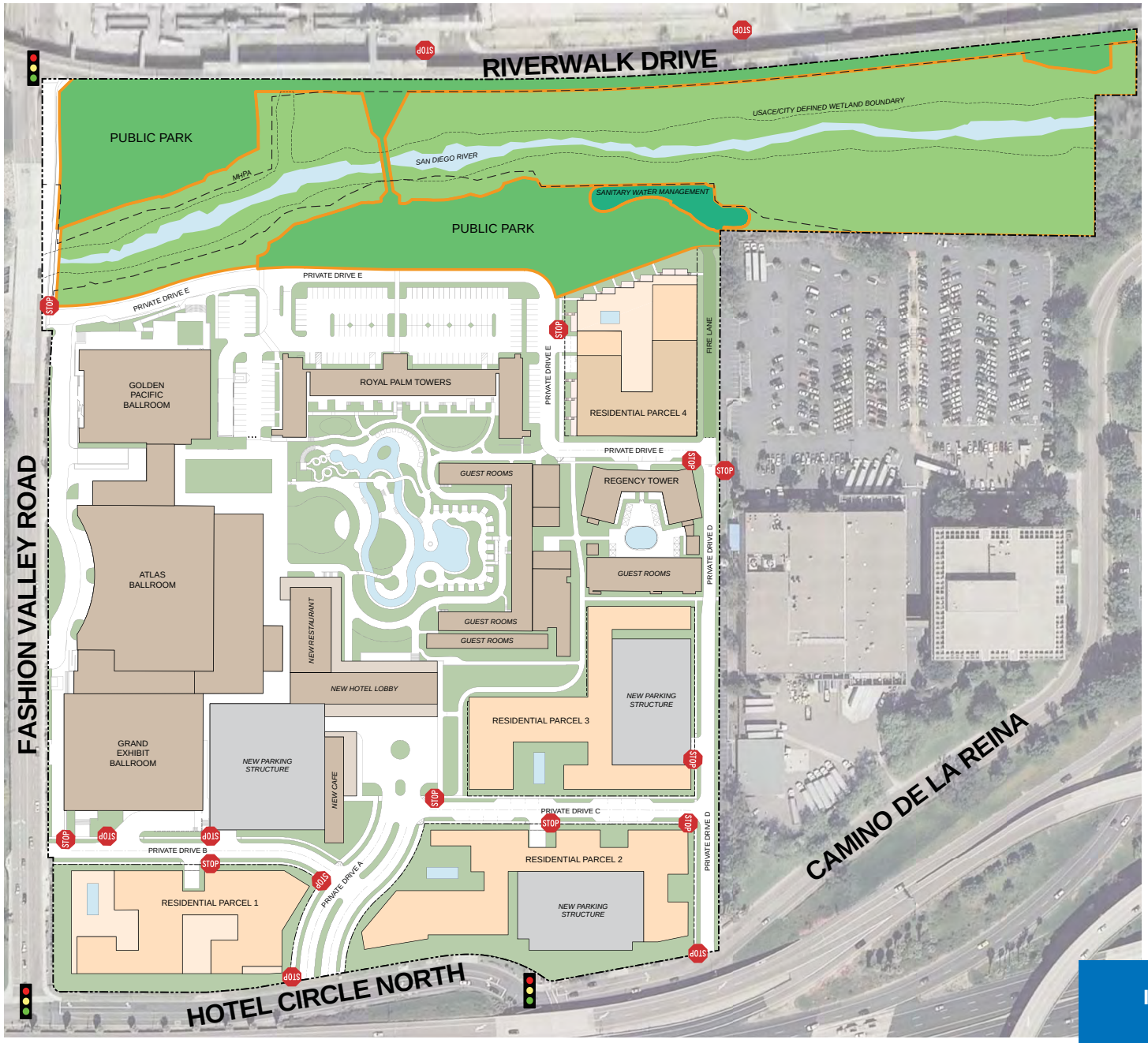
Figure 3-3

PROPOSED VEHICULAR CIRCULATION



LEGEND

STOP
Stop-controlled intersection

Signalized Intersection

Note Location of access points to residential parcels to be determined upon completion of final building layout and architecture.

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source Linscott, Law & Greenspan; AECOM 2016

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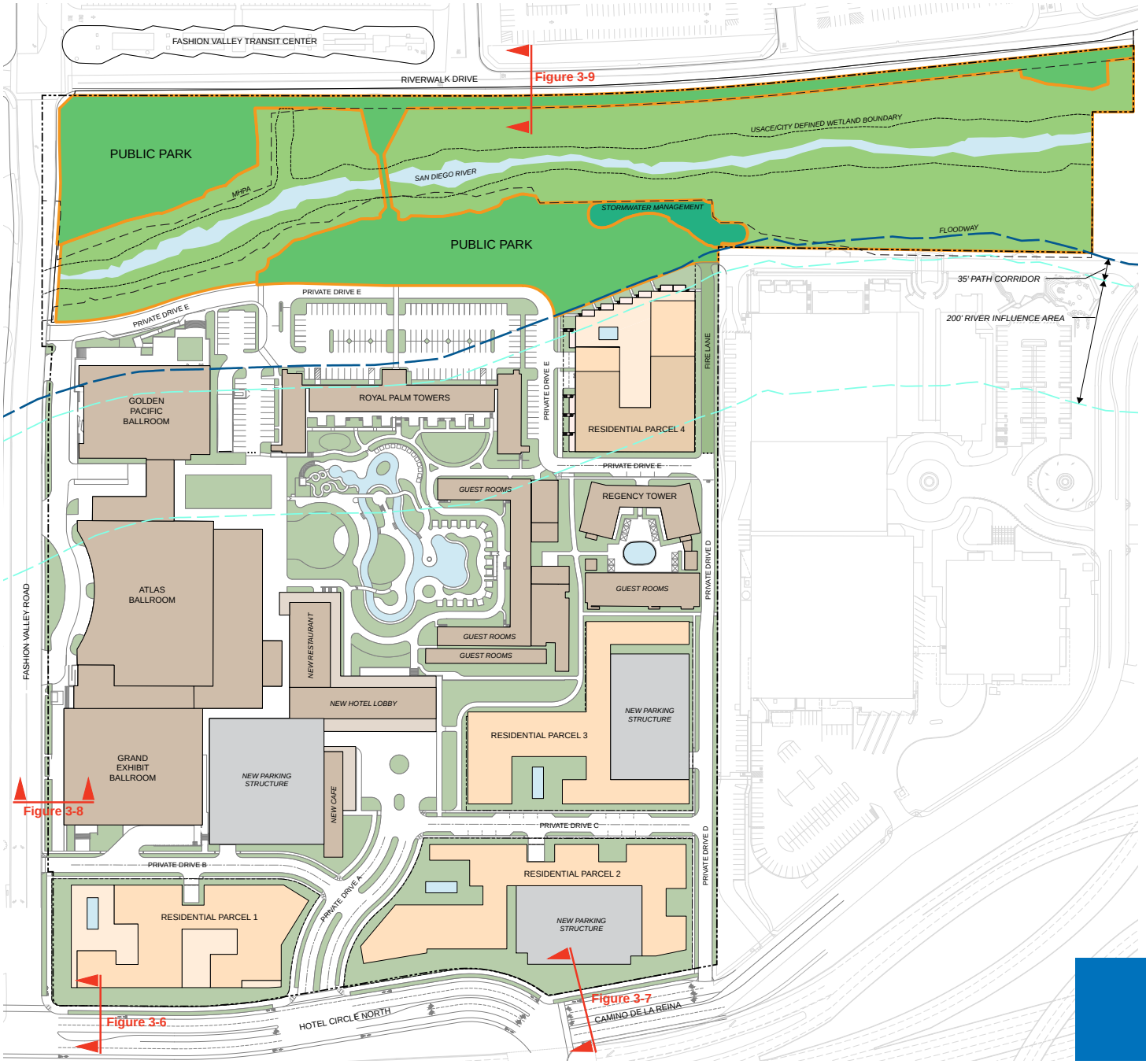
Figure 3-4

INTERSECTION AND TRAFFIC CONTROL PLAN



LEGEND

Cross Section

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

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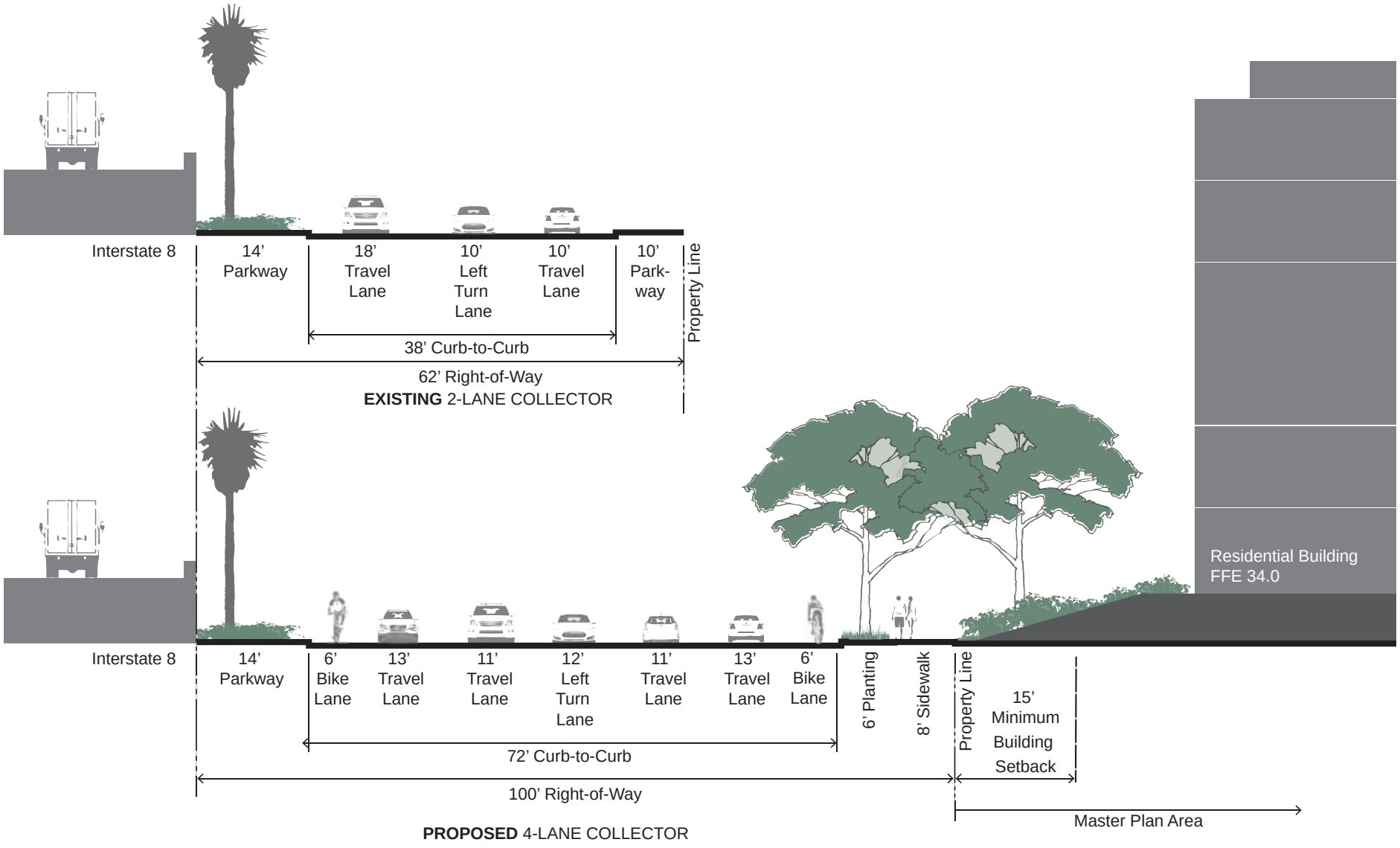
Figure 3-5

PUBLIC STREET CROSS SECTION KEY



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-6

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HOTEL CIRCLE NORTH
PROPOSED CROSS SECTION

The proposed improvements include three options for bicycle accommodation.

Option A would add 6-foot Class II bicycle lanes on both sides (see *Figure 3-7A Camino De La Reina Proposed Cross Section – Option A*).

Option B would add a 12-foot Cycle Track (2-way) separated from the northern travel lanes by a 3-foot Cycle Buffer (see *Figure 3-7B Camino De La Reina Proposed Cross Section – Option B*).

Option C would add a 12-foot Class I Bikeway (2-way) separated from the northern travel lanes by a 3-foot wide planting area between the curb and the Bikeway (see *Figure 3-7C Camino De La Reina Proposed Cross Section – Option C*).

Fashion Valley Road

Fashion Valley Road forms the western boundary of the Plan Area. It is currently a four-lane Collector between Riverwalk Drive and Hotel Circle North. Improvements to Fashion Valley Road will include restriping the travel lanes per City of San Diego Street Design Manual standards for a four-lane Collector to accommodate a Class III bicycle route on both sides of the roadway (see *Figure 3-8 Fashion Valley Road Proposed Cross Section*). To accommodate possible future widening if the Convention Center were to be redeveloped at some time in the future, a 23-foot wide Irrevocable Offer of Dedication is provided along the eastern edge of the existing right-of-way with a further 15-foot building setback for new construction.

Riverwalk Drive

The southern edge of the Riverwalk Drive right-of-way forms the northern boundary of the Plan Area. It is classified as a four-lane Collector in the MVCP. It is currently a two–lane undivided roadway (Collector) that terminates into Fashion Valley Mall internal circulation (east of Avenida Del Rio). The right-of-way is generally 50 feet wide but varies toward the east end of the Master Plan Area. Curbside parking is not permitted (see *Figure 3-9 Riverwalk Drive Proposed Cross Section*).

3.3.3 Private Drives

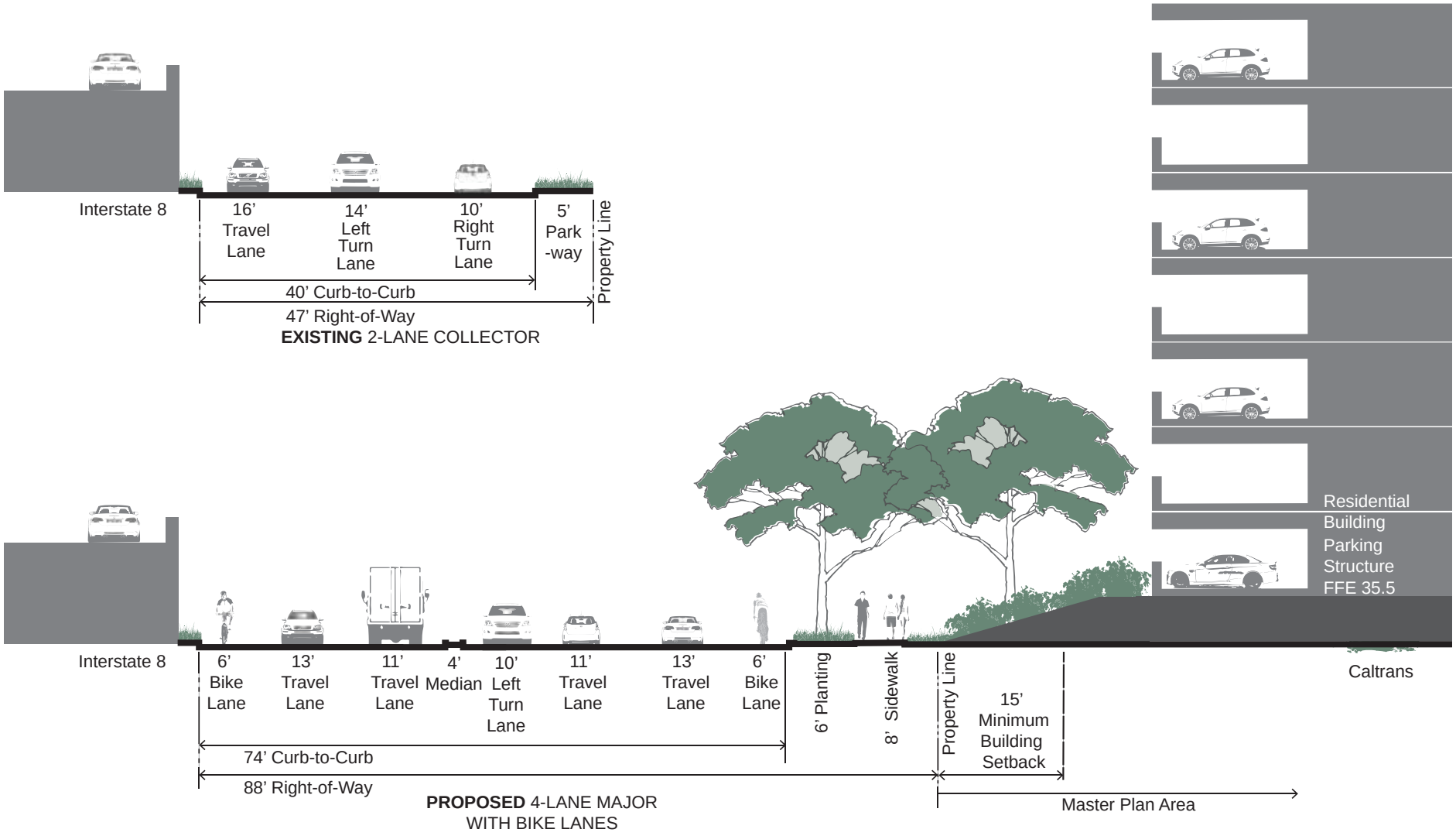
Private Drives internal to the Plan Area will provide access to the Hotel District and the Residential District from the primary public roadways described above. Private drives:

- Provide direct access to abutting property
- Carry low vehicular movement, low-to-heavy pedestrian movement, and low-to-moderate bicycle movement
- Have the same overall standards, design and construction as public streets with the exception that the responsibility for maintenance is private (City of San Diego Street Design Manual, 2002)

Figure 3-10 Private Drive Cross Section Key references the proposed cross sections for Private Drives within the Plan Area. Plan Area private drives will conform to the City of San Diego Street Design Manual or as approved by the City Engineer. Residential homeowners associations or the hotel as applicable will maintain Plan Area private drives (see Section 7.5 Maintenance Program and Requirements). The internal drives will feature trees, landscape areas, and noncontiguous sidewalks to enhance the sense of place and pedestrian scale.

Private Drive A

Private Drive A is a proposed north-south drive that will intersect with Hotel Circle North and serve as the primary access for the Town & Country Hotel. It is essentially a relocation of the existing access point to the west. Private Drive A will connect the new hotel arrival court and new hotel/convention center parking garage entrance to the public street system at Hotel Circle North. Private Drive A will also provide access for Residential Parcels 1 and 2 via Private Drives B and C. Private Drive A will include four travel lanes and a landscaped median. The parkways along Private Drive A will consist of a 8-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk on each side (see *Figure 3-11 Private Drive A Cross Section*).



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-7A

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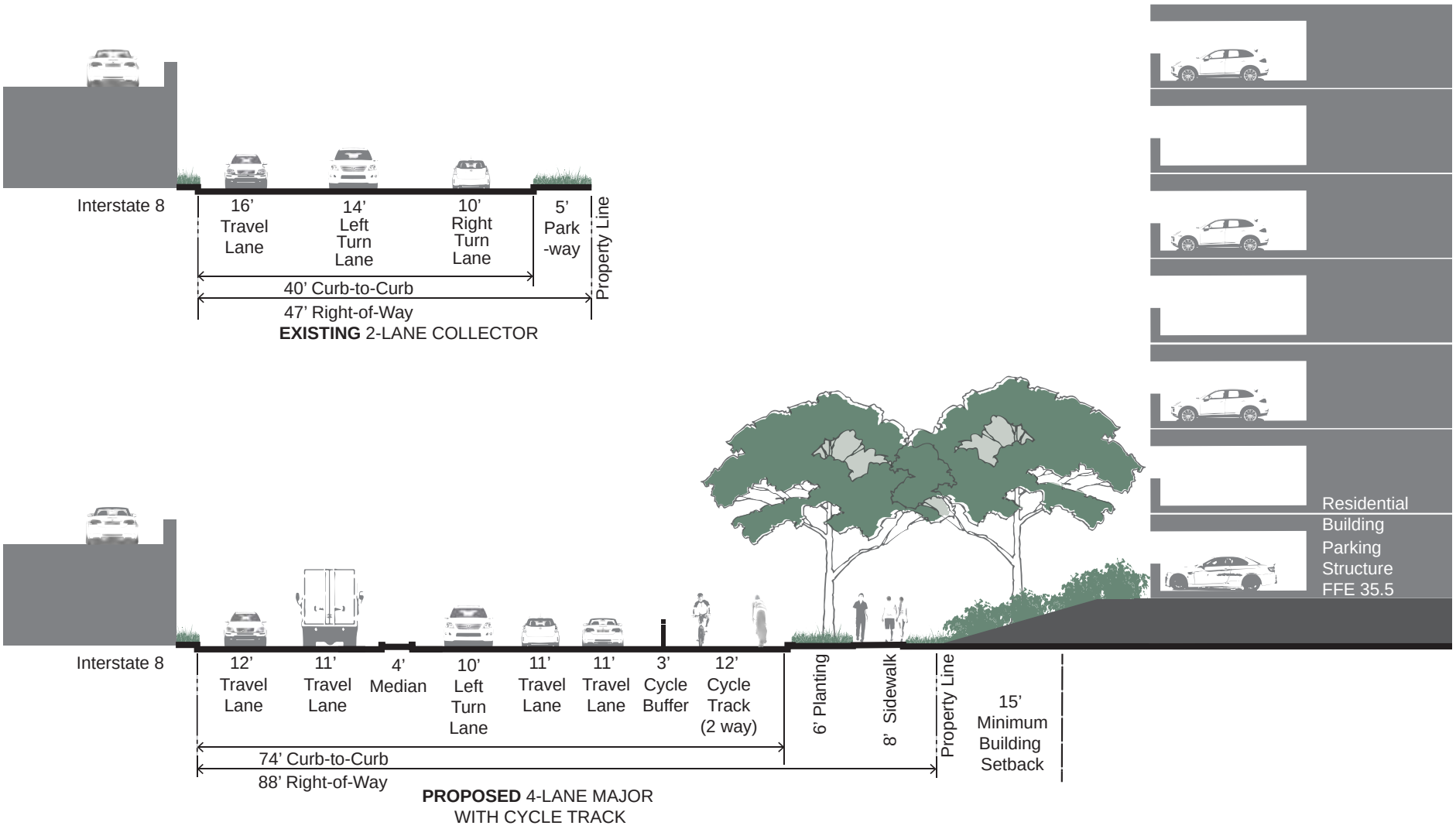
CAMINO DE LA REINA PROPOSED CROSS SECTION - OPTION A



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-7B

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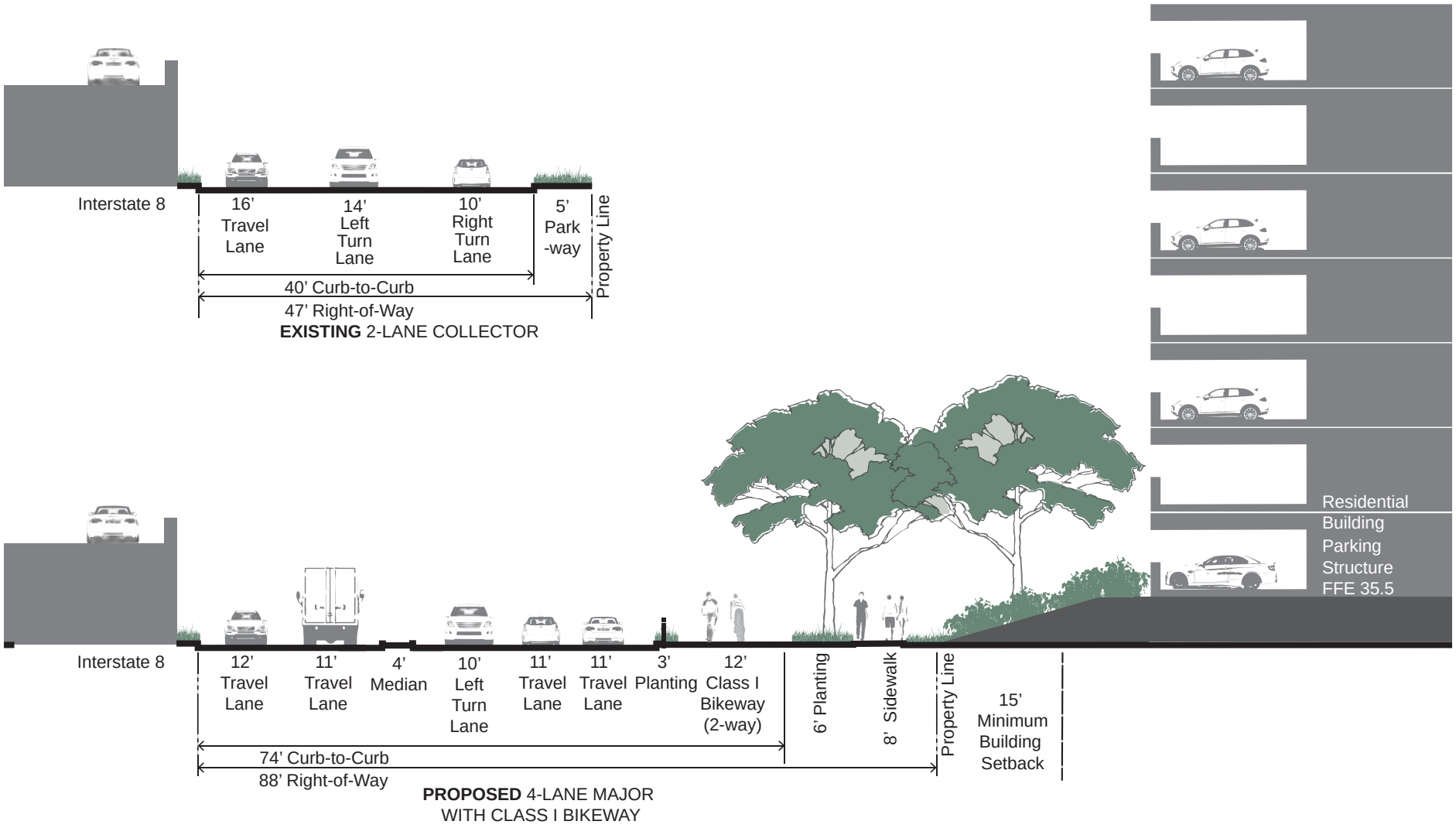
CAMINO DE LA REINA PROPOSED CROSS SECTION - OPTION B



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-7C

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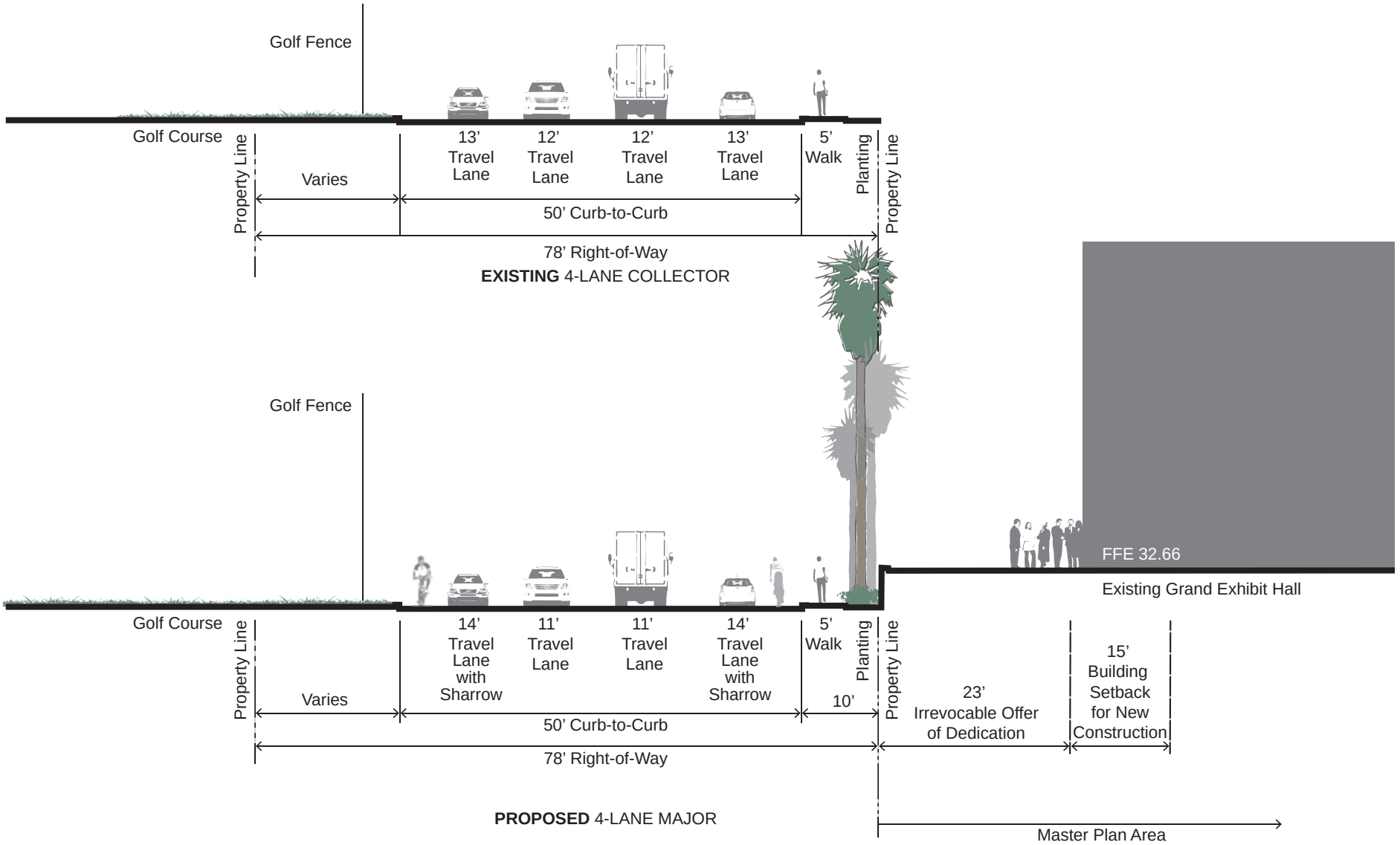
CAMINO DE LA REINA PROPOSED CROSS SECTION - OPTION C



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-8

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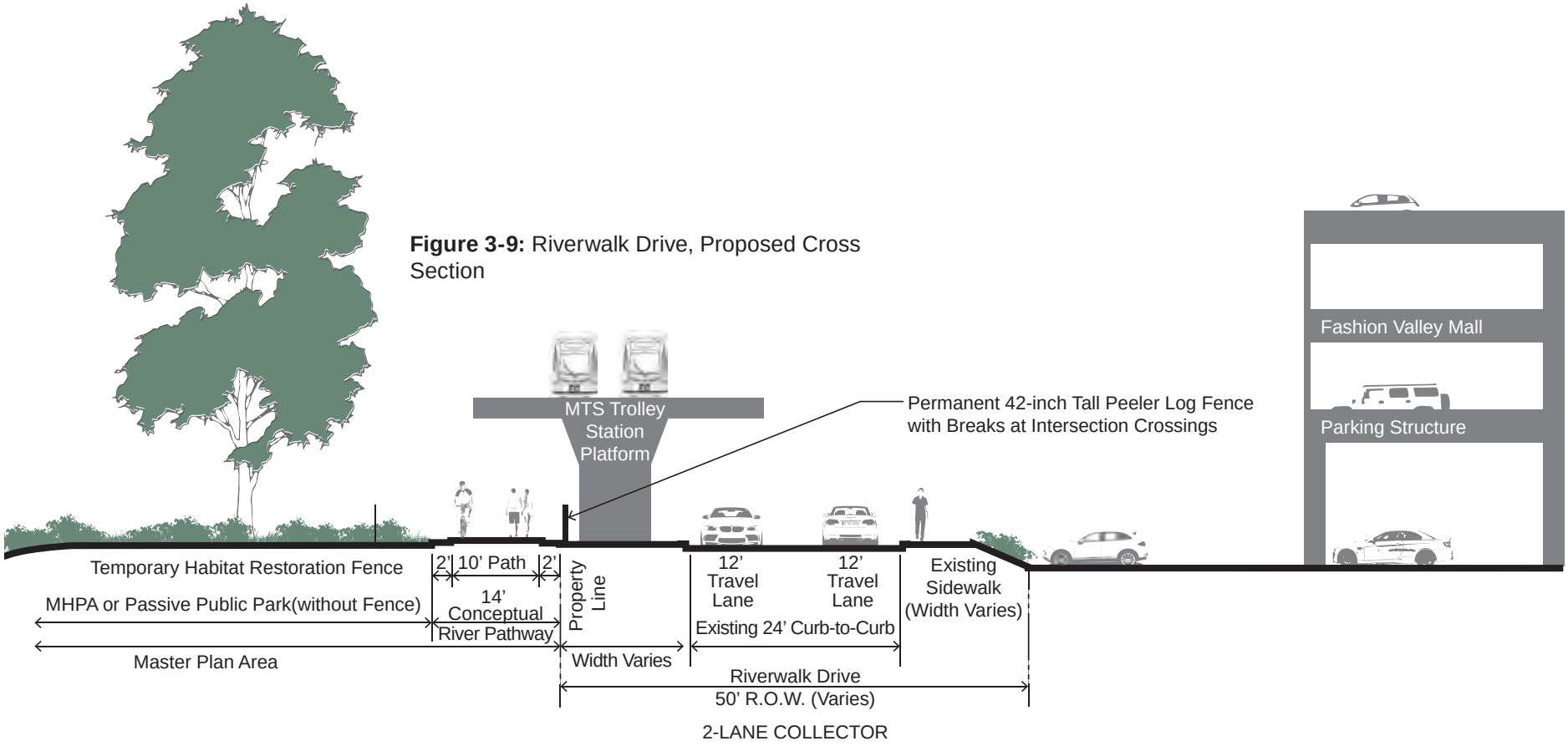
FASHION VALLEY ROAD PROPOSED CROSS SECTION

Figure 3-9: Riverwalk Drive, Proposed Cross Section



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-9

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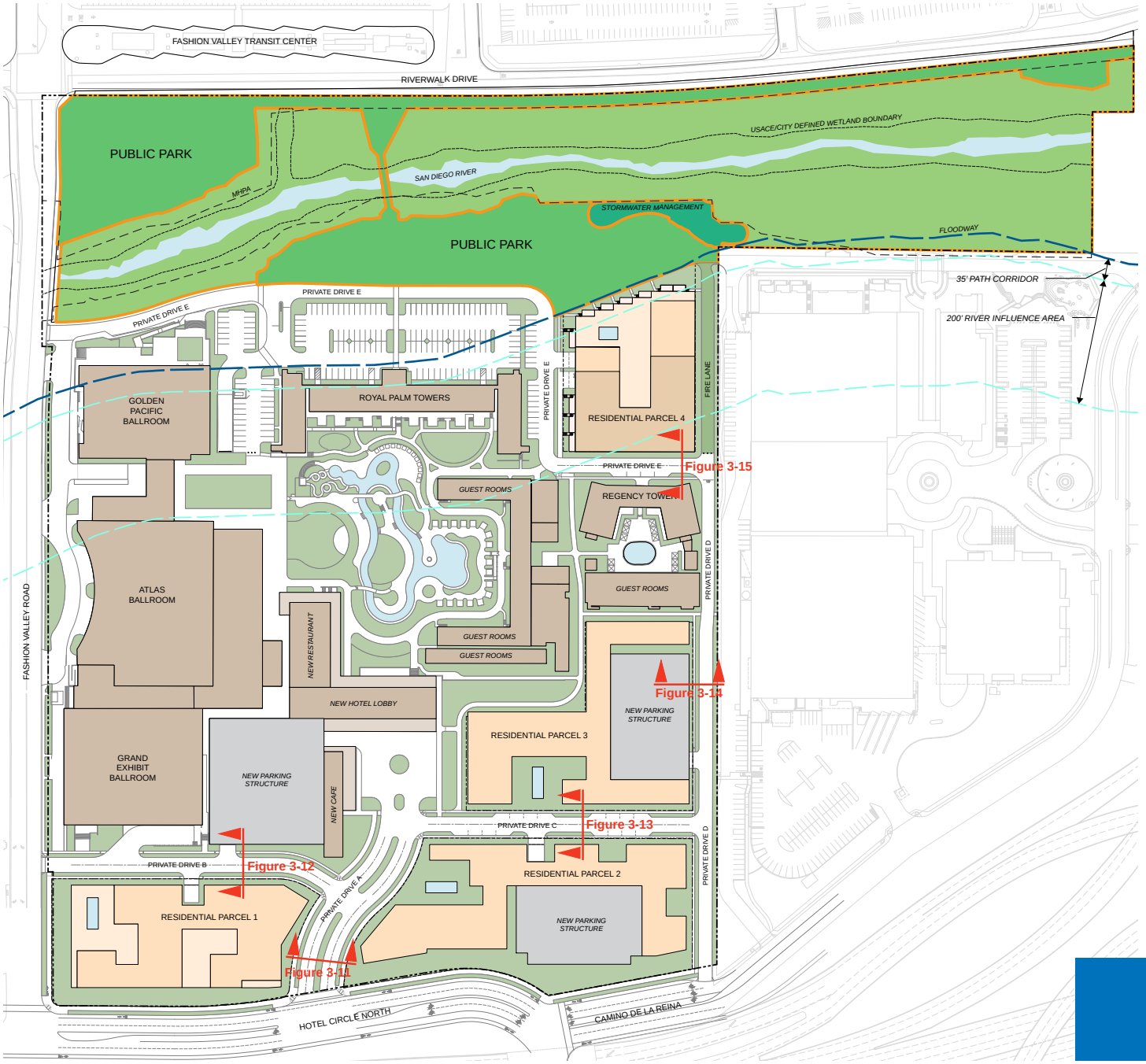
RIVERWALK DRIVE PROPOSED CROSS SECTION



LEGEND

Cross Section

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

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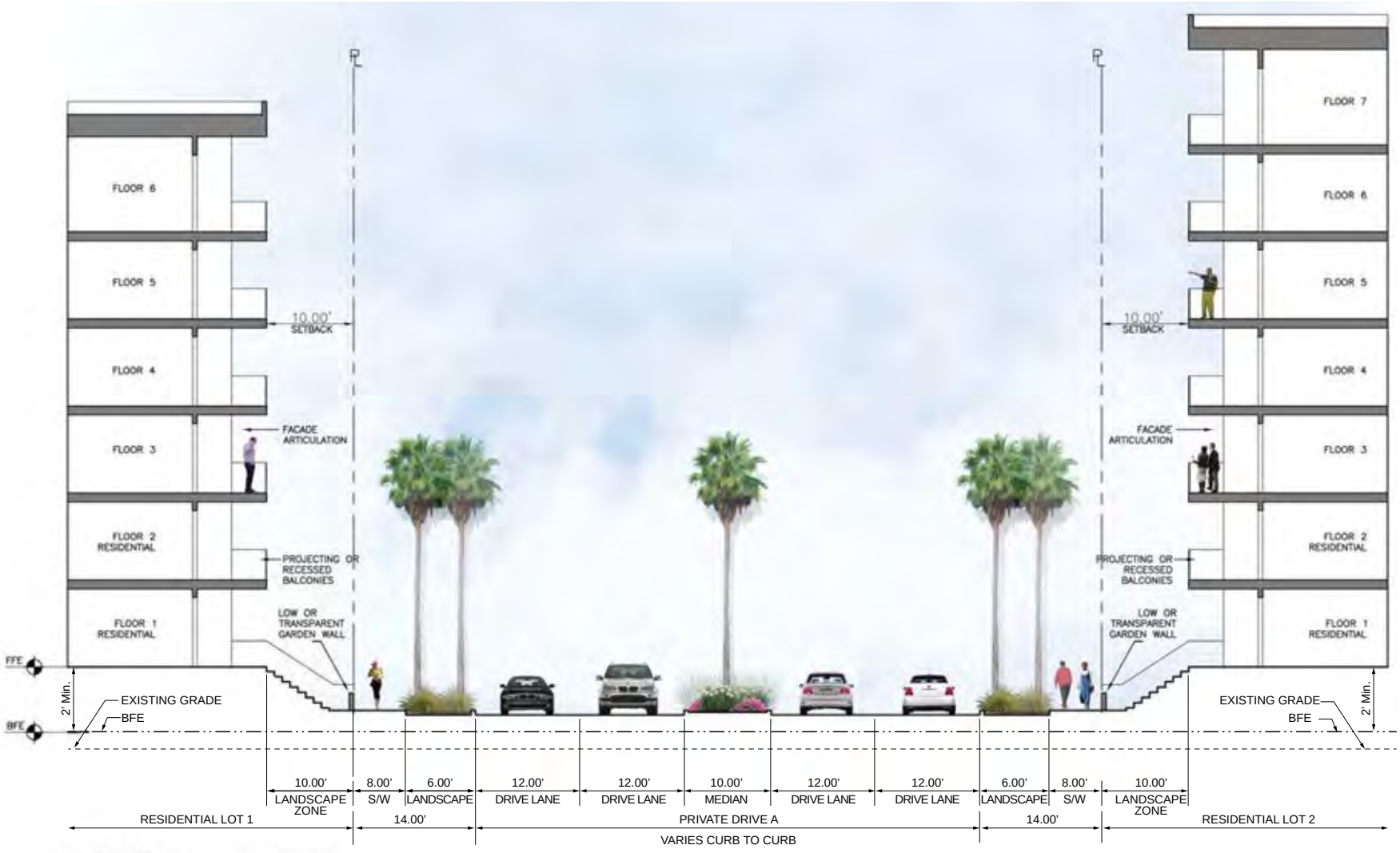
Figure 3-10

PRIVATE DRIVE CROSS SECTION KEY



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-11

0 10 30

PRIVATE DRIVE A CROSS SECTION

Private Drive B
Private Drive B is a proposed east-west drive that will intersect with Fashion Valley Road and serve the hotel, convention center, and Residential Parcel 1. Private Drive B will include two travel lanes. The parkways on Private Drive B will consist of a 4-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk on each side (see *Figure 3-12 Private Drive B Cross Section*).

Private Drive C
Private Drive C is a proposed east-west drive that will connect Private Drive A off Hotel Circle North to Private Drive D. Private Drive C will provide access to Residential Parcels 2 and 3 and will include two travel lanes. The parkways on Private Drive C will consist of a 4-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk on each side (see *Figure 3-13 Private Drive C Cross Section*).

Private Drive D
Private Drive D is an existing north-south private driveway that will intersect with Camino de la Reina. Access from/to Camino De La Reina will be right-in/right-out only. Private Drive D will provide access to Residential Parcels 2, 3, and 4. It will also provide access to the hotel via Private Drive E and will include two travel lanes. The parkways on Private Drive D will consist of a 5-foot-wide sidewalk contiguous to the curb where required by site constraints and where feasible, a 4-foot-wide sidewalk and 6-foot-wide planting area between the curb and sidewalk along its western edge (see *Figure 3-14 Private Drive D Cross Section*).

Private Drive E
Private Drive E is a proposed generally east-west drive that will intersect with Fashion Valley Road and lead to an access control point at the surface parking area north of the hotel's Royal Palm Towers. Private Drive E will provide controlled access to the hotel and Residential Parcel 4 and will include two travel lanes the cross section varies (see *Figure 3-15 Private Drive E Cross Section*).

3.4 PEDESTRIAN CIRCULATION

The pedestrian circulation network consists of a neighborhood network of sidewalks, pedestrian corridors, pathways, and the reconstructed multi-use bridge across the San Diego River (see *Figure 3-16 Pedestrian Circulation*).

3.4.1 San Diego River Pathway

The Master Plan proposes the construction of the San Diego River Pathway on the north and south sides of the San Diego River connected by a bridge across the river. This pathway improvement will further the SDRPMP vision of completing the planned 17.5-mile multi-use San Diego River Pathway from the Pacific Ocean to the City of Santee (SDRPMP, 2013).

North Side of San Diego River
A 14-foot wide multi-use San Diego River Pathway is proposed along the full extent of the northern Plan Area boundary. It will be constructed within the Plan Area but outside the MHPA and wetland buffer.

Pedestrian and bicycle crosswalks at Riverwalk Drive intersections will provide access from the north to the San Diego River Pathway.

Multi-use Bridge over the San Diego River
The San Diego River Pathway will be constructed southward to the north end of the existing pedestrian bridge leading to the new public park on the south side of the river. The existing pedestrian bridge will be replaced and improved to a width of 10 feet as a multi-use facility to accommodate pedestrians and bicyclists.

South Side of San Diego River
A 14-foot wide multi-use San Diego River Pathway is proposed from the south end of the new bridge but outside the MHPA and wetland buffer. This section of the San Diego River Pathway will meander eastward through the new public park to a point at the eastern Plan Area boundary. The San Diego River Pathway is planned

Complete Streets

- Increase priority and safety for bicyclists and pedestrians by providing supportive facilities and amenities.
- Provide desirable connections for all users to public parks, main shopping areas, entertainment facilities, major attractions, the waterfront, surrounding communities, and the regional transportation network
- Support reductions in greenhouse gas emissions

(City of San Diego Draft Downtown Mobility Plan, 2015)

Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-12

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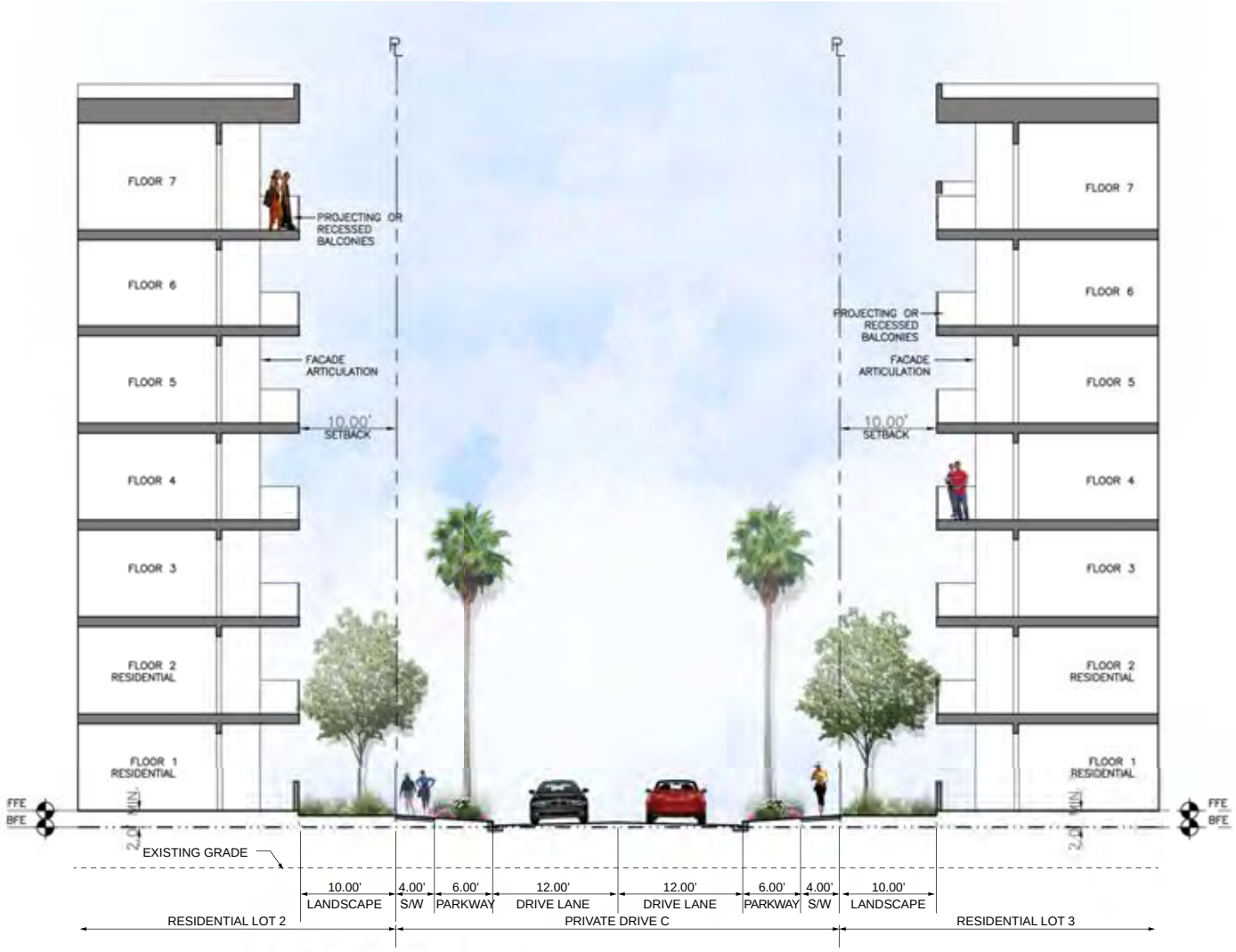
PRIVATE DRIVE B CROSS SECTION

Figure 3-13: Private Drive C, Cross Section

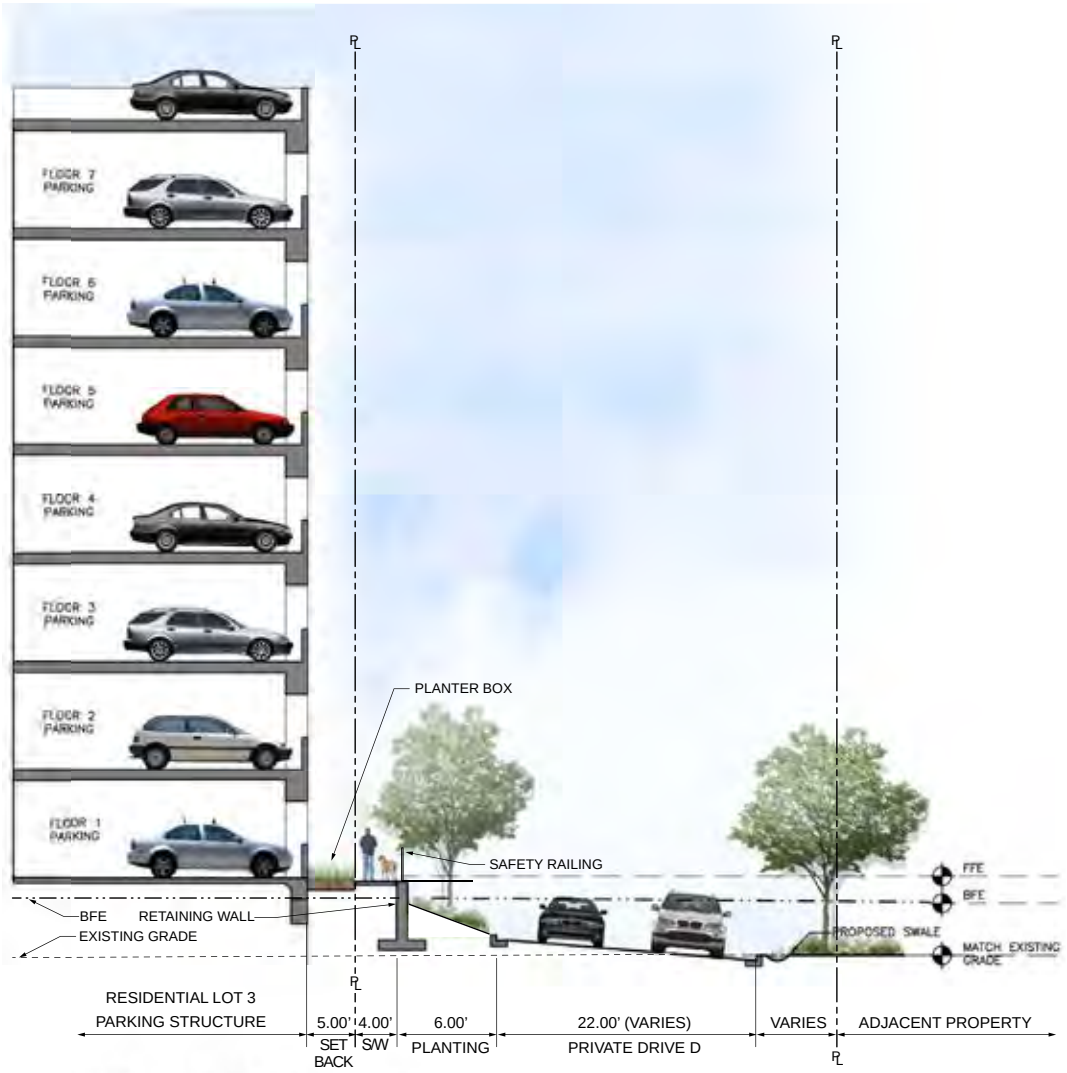


Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-13

0 10 30

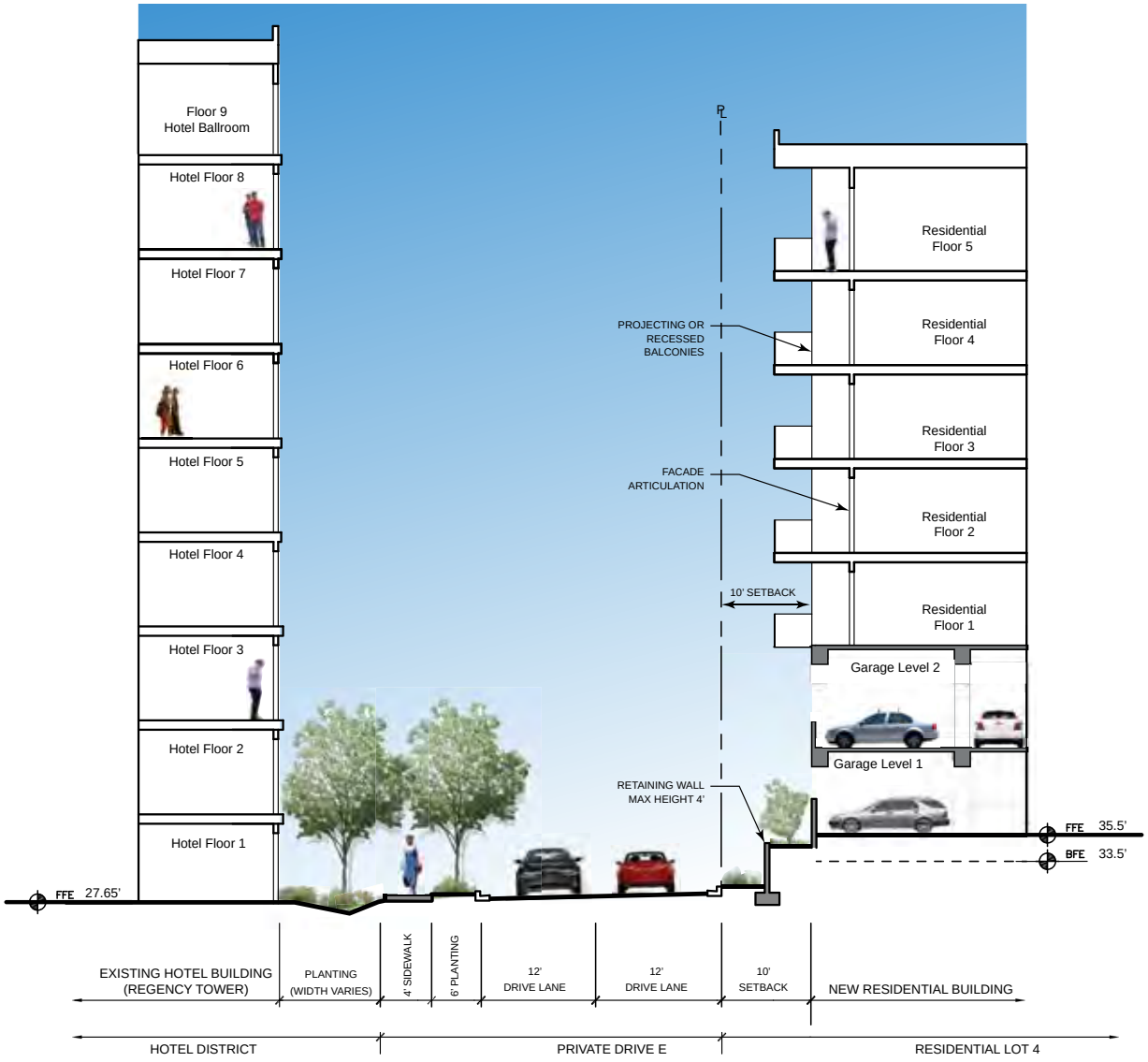
PRIVATE DRIVE C CROSS SECTION



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-14

PRIVATE DRIVE D CROSS SECTION



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-15

0 10 30

PRIVATE DRIVE E CROSS SECTION

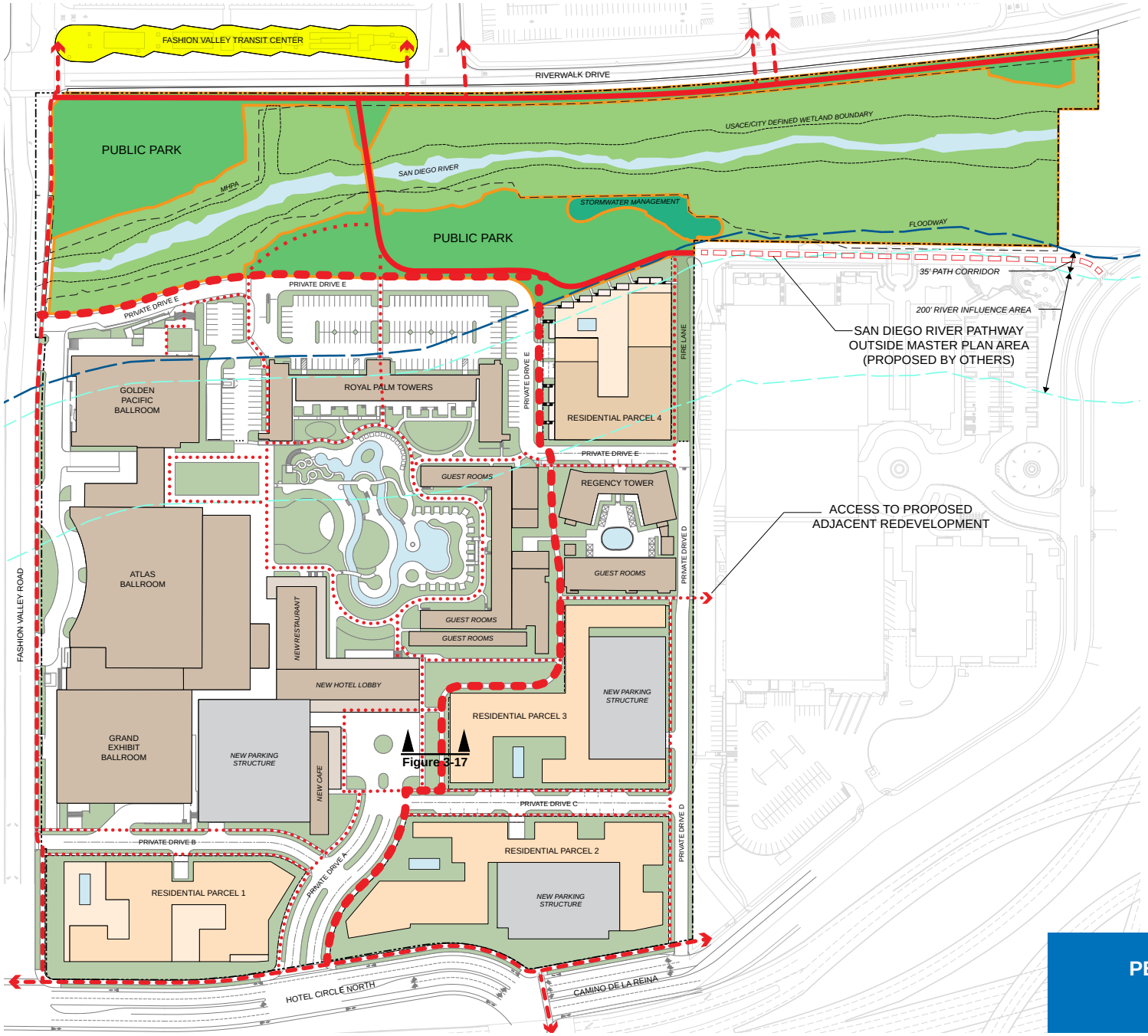


Figure 3-17

LEGEND

- Habitat Area
- Public Park
- Conceptual Alignment of San Diego River Pathway (Multi-Use)
- Public Access Corridor (Pedestrian Only)
- Plan Area Edge Sidewalks
- Public Walkways (Pedestrian Only)
- Park Trails
- Cross Section

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Note A River Pathway alignment depicted is conceptual. Population-based parks are designed through a community design, review and approval process consistent with Council Policy 600-33.

Source Burton Studio; AECOM 2016

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0 50 100 200 300

Figure 3-16

PEDESTRIAN CIRCULATION

to continue eastward to Camino de la Reina as part of a separately planned development proposed for the adjacent property (the San Diego Union-Tribune site).

3.4.2 Enhanced Pedestrian Facilities

The Master Plan provides sidewalks along drives, access ways to specific locations, public corridors, and trails, creating a network of pedestrian access to and within the Plan Area.

Street Sidewalks

The Master Plan will enhance sidewalks outside the Plan Area, where feasible, to provide a safe and pleasant pedestrian experience on Hotel Circle North, Camino de la Reina, and Fashion Valley Road.

Landscaped parkways will separate sidewalks from the travel lanes, setting the pedestrian path away from the roadway and providing a buffer between pedestrians and moving vehicles along Hotel Circle North and Camino de la Reina. The San Diego River Pathway is proposed to be constructed along Riverwalk Drive in lieu of a sidewalk given space limitations along the right-of- way.

A network of sidewalks along drives (see *Figure 3-16*) and pedestrian corridors create strong connections between the Residential District, Hotel District, and River Park District.

In addition to the sidewalk improvements, intersection traffic calming measures complement the walkability of the street network through the use of curb extensions at select intersections. All proposed sidewalks and traffic calming measures conform to the City of San Diego Street Design Manual (2002).

Hotel Building Access Ways

Hotel building access ways at two locations provide hotel guests and visitors access to the public park, San Diego River Pathway, MTS Fashion Valley transit center, and Fashion Valley Mall.

A landscaped pedestrian public access corridor will extend north-south across the Plan Area (see *Figure 3-17 Pedestrian Access Corridor Cross Section*). This central pedestrian corridor will provide safe, pleasant, and convenient access to residents and visitors in the Mission Valley community to and through the Residential District, Hotel District, and River Park District, and directly to the San Diego River Pathway, MTS Fashion Valley transit center and the shops, restaurants, and entertainment amenities in Fashion Valley Mall.

3.5 BICYCLE CIRCULATION

Bicycling is a healthy and active form of travel. Bicycle facilities support sustainable community development and provide for complete streets, paths, trails, and activity centers accessible to everyone. (City of San Diego Bicycle Master Plan, 2013).

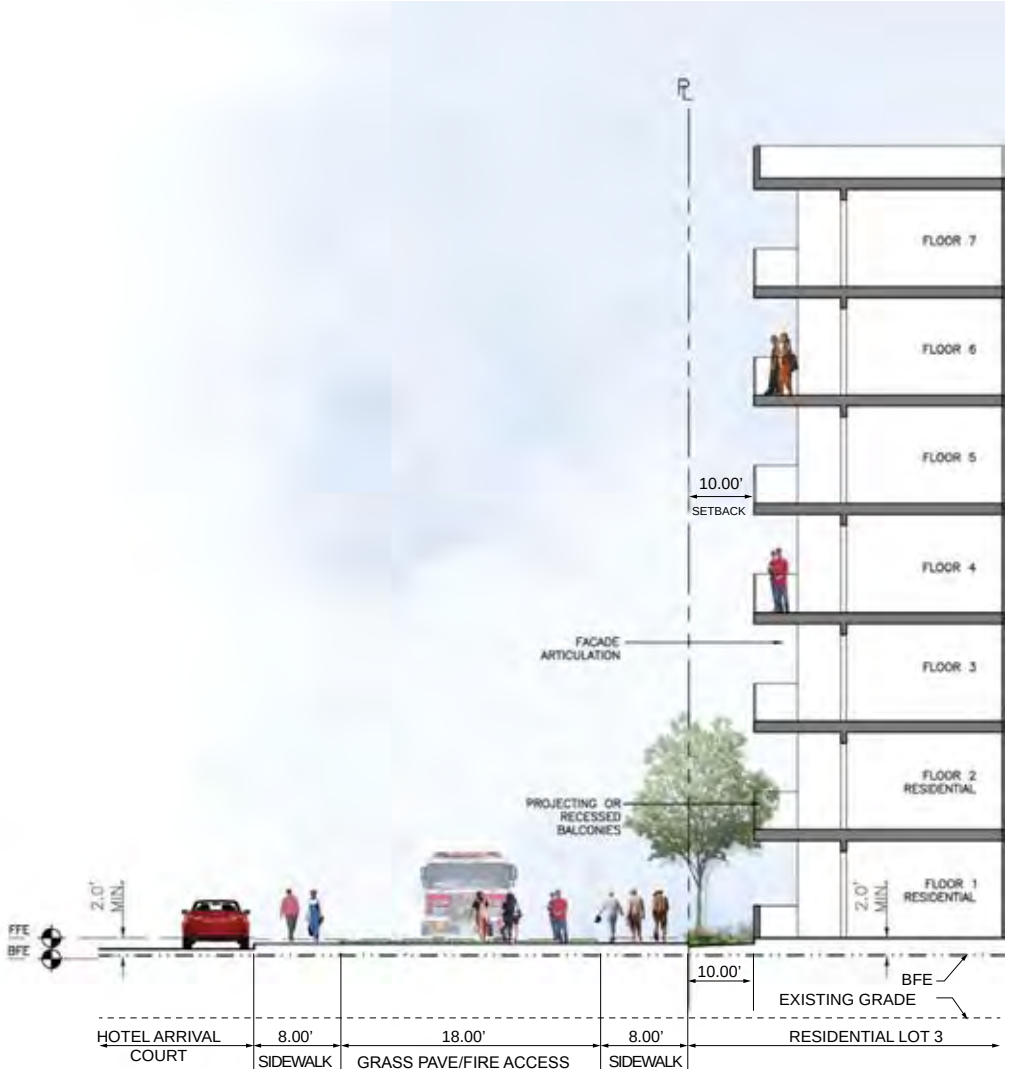
The intent is to create a neighborhood that supports and encourages bicycling as a safe, viable travel choice and links the local bicycle network to the regional network.

The Master Plan encourages bicycle travel along the multi-use San Diego River Pathway, key external roadways, and designated internal private drives. The Plan Area meets this goal by providing improvements for a network of Class I, Class II, and Class III bikeways (see *Figures 3-17* through *3-19*).

3.5.1 Class I Bike Path

Bike paths, also termed shared-use or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in roadway right-of-way or exclusive right-of-way (City of San Diego, 2013).

The 14-feet wide San Diego River Pathway is a Class I bike path that includes a 10-feet wide paved path with a 2-feet wide clear zone on each side. The Master Plan provides this Class I bike path along both the north and south sides of the river with a connecting segment via the rebuilt 10-foot wide multi-use bridge across the river.



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-17

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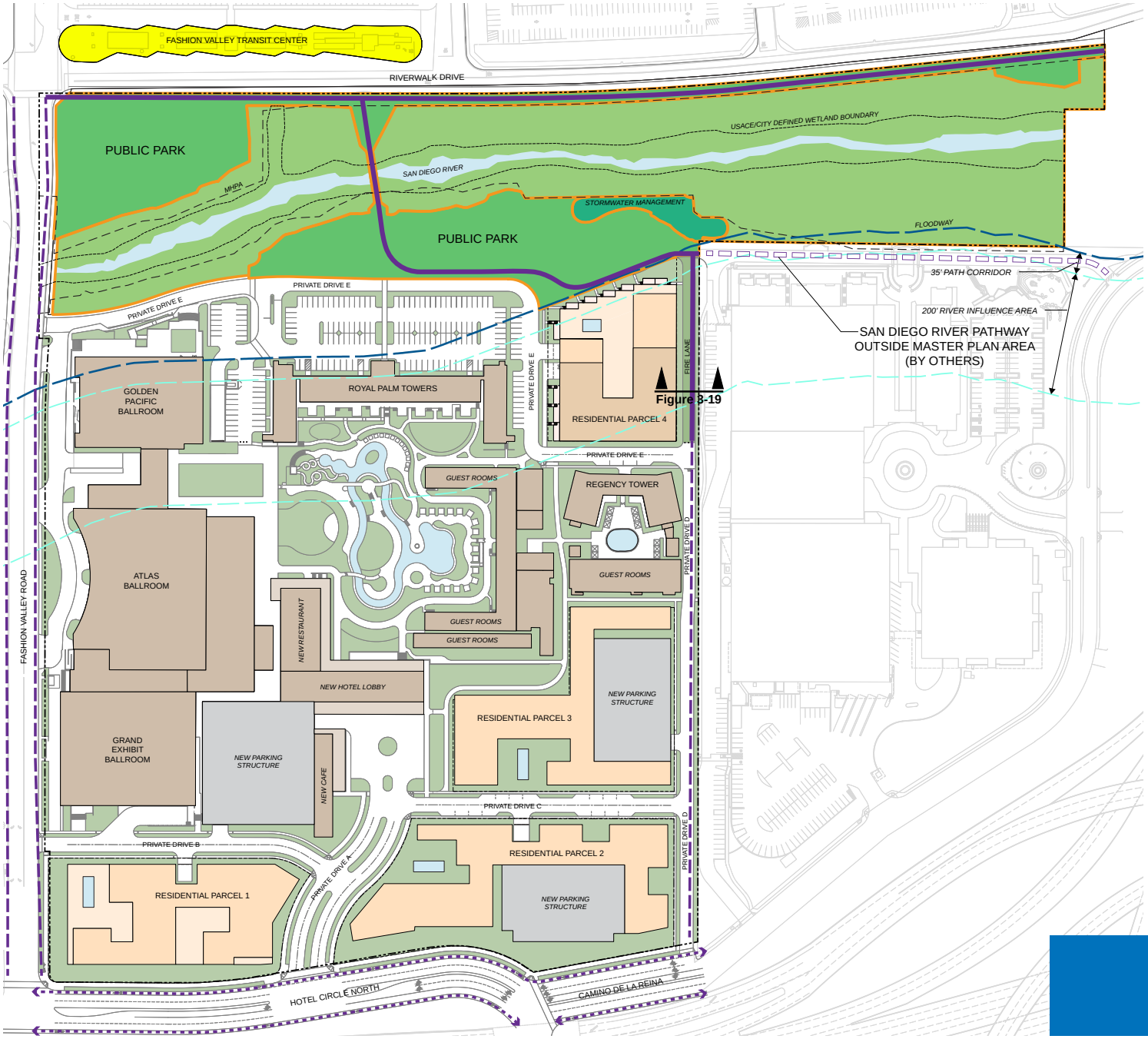
PEDESTRIAN ACCESS CORRIDOR CROSS SECTION



LEGEND

Conceptual Alignment of Class I Bikeway

Class II Bikeway

Class III Bikeway
(Sharrow)

Cross Section

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Note A River Pathway alignment depicted is conceptual. Population-based parks are designed through a community design, review and approval process consistent with Council Policy 600-33.

Source Linscott, Law & Greenspan; AECOM 2016

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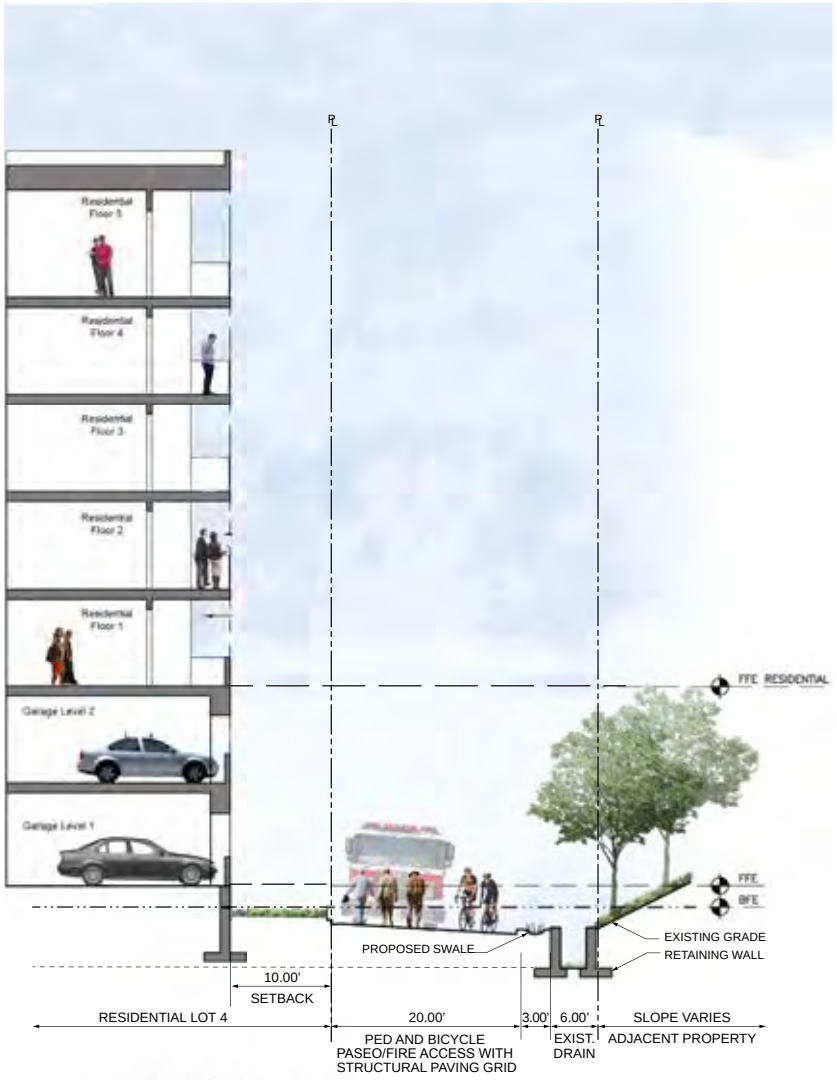
Figure 3-18

BICYCLE CIRCULATION



Source Linscott, Law & Greenspan; Burton Studio; AECOM 2016

Figure 3-19

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BIKEWAY AT FIRE LANE PASEO CROSS SECTION

The Class I bike path on the south side of the river extends to a specific point along the Plan Area boundary. At this point, the Class I bike path would continue eastward to Camino de la Reina as part of a separate planned development proposed for the adjacent property (the San Diego Union-Tribune site).

3.5.2 Class II Bike Lane

Pavement striping and signage allocate a portion of a roadway for exclusive or preferential bicycle travel. Bike lanes are one-way facilities on either side of a roadway (City of San Diego, 2013).

In addition to the Class I bike path described above, the project will widen Hotel Circle North and Camino de la Reina along the project frontage to comply with the improvements proposed in the San Diego Regional Bicycle Master Plan (SANDAG, 2010). The widening of Hotel Circle North and Camino de la Reina will include 6-foot-wide Class II bicycle lanes on both sides of the roadway.

3.5.3 Class III Bike Route

Bike routes provide shared use with motor vehicle traffic within the same travel lane. Designated by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Whenever possible, treatments should enhance the safety and connectivity of bike routes. For example, the use of “Sharrows” or shared lane markings can delineate that the road is a shared-use facility (City of San Diego, 2013).

The Master Plan provides a Class III bike route with shared lane markings on Private Drive D. This bike route will provide a north-south connection between the Class I multi-use San Diego River Pathway and the Class II bike lanes on Camino de la Reina. In addition, the project also proposes to restripe Fashion Valley Road between Riverwalk Drive and Hotel Circle North with Class III bike route with shared lane markings.

Secure and convenient bicycle parking racks or storage areas are essential to facilitating bicycle travel as an alternate mode of transportation. The Master Plan proposes such facilities in parking structures in the Residential District, in the Hotel District for hotel employees, and in the public park within the River Park District.

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4

RIVER PARK DISTRICT

Town and Country

4 RIVER PARK DISTRICT

4.1 DESIGN OBJECTIVES

The Master Plan themes include indoor/outdoor living, healthy lifestyles, and embracing the natural beauty, ecology, and history of the San Diego River. Outlined below are specific objectives of the River Park District:

- Embrace the river as a vital natural amenity by reinforcing the five principles of the San Diego River Park Master Plan (SDRPMP)
- Orient buildings and public spaces within residential land use areas, where feasible, to embrace the San Diego River as a major amenity
- Enhance Convention Center facilities adjacent to the San Diego River where feasible
- Acknowledge and enhance the natural attributes and ecology of the San Diego River ecosystem
- Create well-conceived public park areas with a corresponding trail system that supports passive recreation and provides access to regional recreational amenities.
- Provide the required residential population-based public parkland within the Plan Area
- Enhance land use compatibility along the San Diego River by replacing some existing parking lot areas with habitat open space and park land use
- Improve the existing pedestrian bridge over the river to strengthen the connection between the transit center and the Plan Area.

4.2 LAND USE

The land use plan for the approximately 11.7-acre River Park District is illustrated in *Figure 4-1* and the acreage listed in *Table 4-1*. It is comprised of restored existing habitat areas, new habitat areas, a public park, and, adjacent to the southerly edge of the habitat areas, a small area for storm water management.

4.3 PARKS AND OPEN SPACE

4.3.1 Regulatory Overlay Zones

Development adjacent to the San Diego River is subject to SDMC Chapter 15, Article 14 Mission Valley Planned District, SDMC §1514.0302 San Diego River Subdistrict, FEMA and City floodplain and floodway regulations, the Multiple Species Conservation Program (MSCP) Subarea Plan including Multi-Habitat Planning Areas (MHPA) and Wetland Buffer regulation. The Master Plan is in compliance with all applicable regulations except in cases of specific deviations as detailed in Table 7-6 Master Planned Development Permit Deviations.

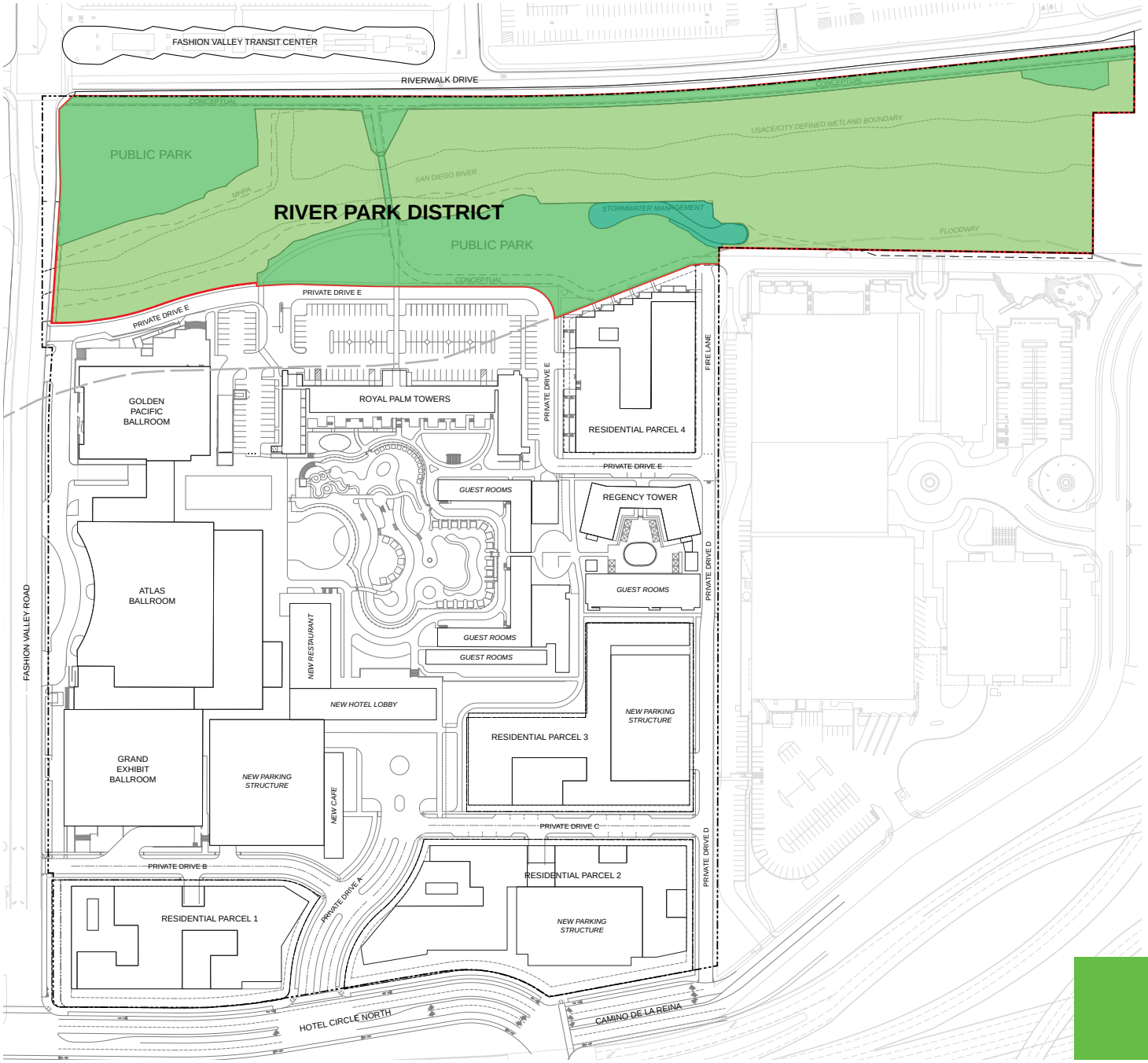
Floodplain and Floodway

The entire existing project site is within FEMA Flood Zone AE (100-year floodplain) also referred to as the Special Flood Hazard Area (SFHA). Also, the northern 13.31 acres of the Plan Area is within the 100-year Regulatory Floodway), as delineated on the FEMA Flood Insurance Rate Map (FIRM). The River Park District is almost entirely within the Regulatory Floodway.

The Municipal Code regulates floodway encroachments including fill, new construction, structures, modifications, and other development in the floodway such that the base flood elevation is not increased. The Master Plan will meet these criteria. To allow for the construction of new buildings, some areas of the Hotel District and Residential District will be removed from the floodplain through the FEMA Letter of Map Revision (CLOMR/LOMR) process. The Master Plan will primarily maintain or lower the existing grades with the floodplain in order to increase flood conveyance and storage. This will maintain or reduce the base flood elevations and flow velocities, which will lessen flood inundation and sediment transport impacts. Refer to SDMC §143.0146 Supplemental Regulations for Special Flood Hazard Areas.

MSCP/MHPA

The Master Plan complies with the MSCP, which preserves a network of habitat and open space, protects bio-diversity, and enhances the region's quality of life. The City is one of several jurisdictions participating in the MSCP and has entered into an Implementing Agreement with federal and state Wildlife Agencies,



LEGEND

RIVER PARK DISTRICT

Open Space Habitat

Passive Recreation

Stormwater Management

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

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Figure 4-1

RIVER PARK DISTRICT LAND USE PLAN

Table 4-1 River Park District

LAND USE	ACRES
Public Park	
Parkland (north of river)	2.08
Parkland (south of river)	1.74
Pathway Bridge Credit	0.02 *
Total Public Park	**3.84**
Open Space/Habitat	
SDP# 400602 Required Area	2.76
Additional Habitat Restoration and Enhancement	4.74
Water Quality Basin	0.25
Total Open Space/Habitat	**7.75**
TOTAL RIVER PARK DISTRICT *	**11.57**

* River Park District does not include 0.02 acres of acreage credit for reconstructing the Pathway Bridge.

All acreage is approximate.

including United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) to ensure implementation. The City's MSCP Subarea Plan establishes the MHPA. Refer to the Biological Technical Report (AECOM, 2016) for more detail.

Wetland and Wetland Buffers

A wetland buffer is an area or feature(s) surrounding an identified wetland that helps to protect the functions and values of the adjacent wetland by reducing physical disturbance from noise, activity, and domestic animals. The buffer provides a transition zone where one habitat merges into another.

The buffer also protects other functions and values of wetland areas, including absorption and slowing of floodwaters for flood and erosion control, sediment filtration, water purification, ground water recharge, and the need for upland transitional habitat. Wetland Buffer setbacks vary based on functions and values of the existing wetland habitat as recommended in the Biological Technical Report.

4.3.2 Existing Site Development Permit

A portion of the property is subject to SDP #400602, adopted by the City on February 20, 2013 (City of San Diego, Report No. HO 13-013). At that time, the City certified the related MND No. 118318 and adopted the associated Mitigation, Monitoring, and Reporting Program.

The SDP requires implementation a restoration and enhancement plan for a 2.76-acre area, includes a Covenant of Easement and the provision of an Easement for a future River Path.

The Master Plan will meet all SDP and MND requirements. Furthermore, an additional 4.74 acres of habitat (in excess of the requirements) will be restored and enhanced in the River Park District. *Figure 4-2* illustrates these areas.

4.3.3 Open Space Habitat

The core of the River Park District is the restored and enhanced riparian habitat area, which includes the MHPA and an additional Wetland Buffer setback measured from the top of the riverbank. The Master Plan will meet the intent of the SDRPMP and comply with noted deviations and SDMC §1514 Mission Valley Planned District by restoring and maintaining a healthy river ecosystem in several ways:

Improved Habitat Quality

The Master Plan will restore and enhance portions of the Plan Area within the boundaries of the MHPA and wetland buffers.

- Restore and enhance approximately 7.5 acres of riparian open space habitat.
- Restore approximately 4.42 acres of existing disturbed areas within the MHPA and wetland buffers by removing invasive exotic species and establishing native habitats.
- Restore and enhance approximately 2.76 acres per Mitigated Negative Declaration No. 118318 and Site Development Permit (SDP) No. 400602 approved by the Mission Valley Unified Planning Committee on April 2, 2008.
- Enhance approximately 0.32 acres of existing native habitats by removing exotic species and establishing native species.
- Clear all these areas of litter and solid waste on a regular basis under an ongoing maintenance and monitoring program.
- Enclose the habitat area with a two-rail peeled log temporary habitat restoration fence and provide access points for maintenance of habitat and existing river drainage structures.

Enlarged Habitat Area

The Master Plan will increase the width of native habitats at the most constricted section of the river from approximately 80 feet up to 210 feet. Some of the existing paved surface parking areas and unpaved surface parking areas will be removed and replaced with native habitat, wetland buffers, or public parklands.

Improved Water Quality

The Master Plan will establish a 30-foot wetland buffer and a variety of Low Impact Development (LID) strategies adjacent to the riparian corridor.

Compatible Adjacent Land Use

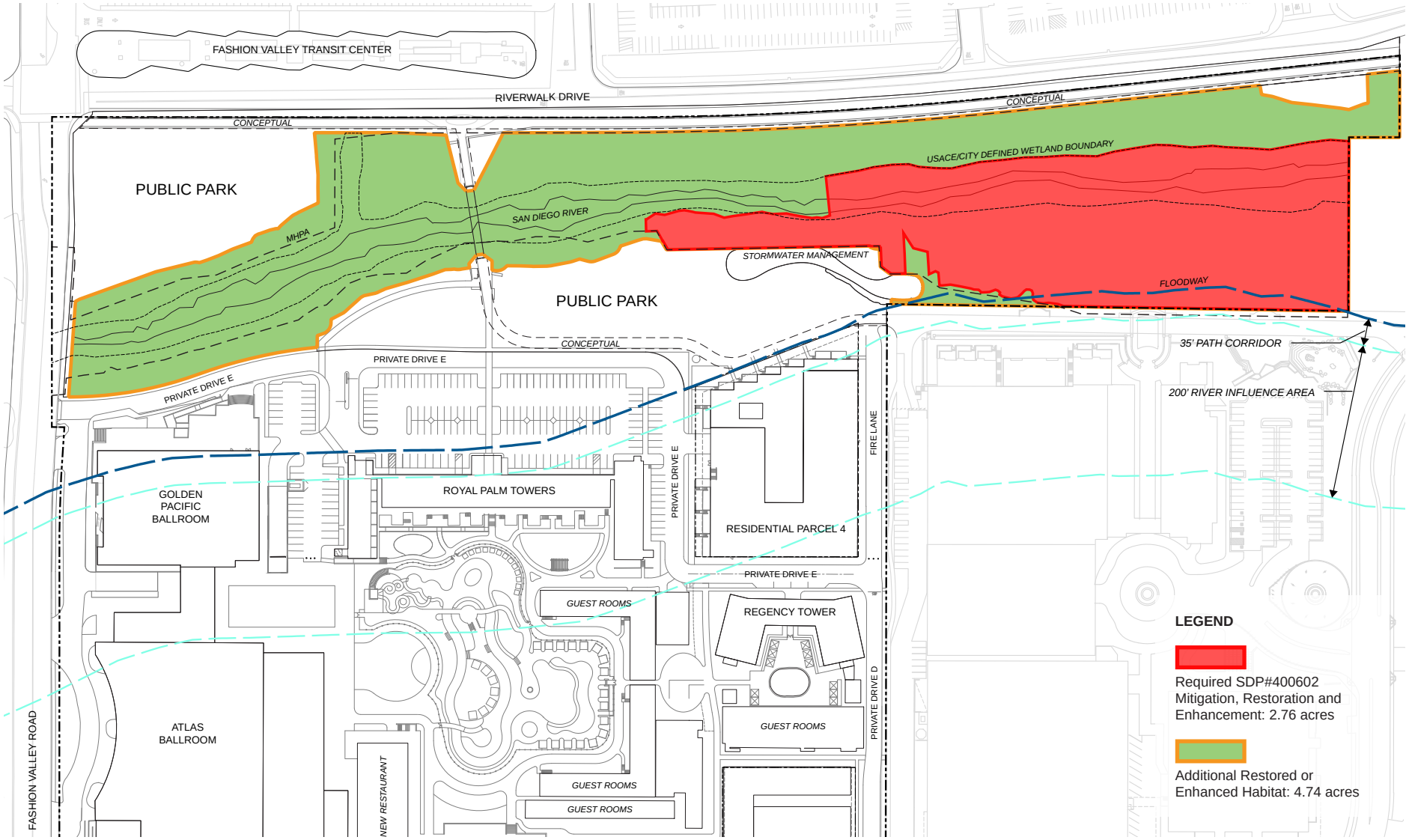
The Master Plan will replace approximately 1.2 acres of existing surface parking north of the river and approximately 1.7 acres of existing surface parking area south of the river with native habitat and/or public park lands. This improved native riparian vegetation will create an enlarged habitat area for wildlife. The public park and adjacent areas will provide bioswales for filtration of urban storm water runoff.

4.3.4 Population Based Park

The Master Plan includes a population-based public park in accordance with the City of San Diego's General Plan Recreation Element. *Figure 4-3* illustrates the area of the public park and the conceptual alignment of the River Pathway. The population-based park acreage requirement is shown in *Table 4-2*. The Park Area summary is shown in *Table 4-3*. The publicly accessible recreational facilities and amenities of the Park District will include:

River Pathway

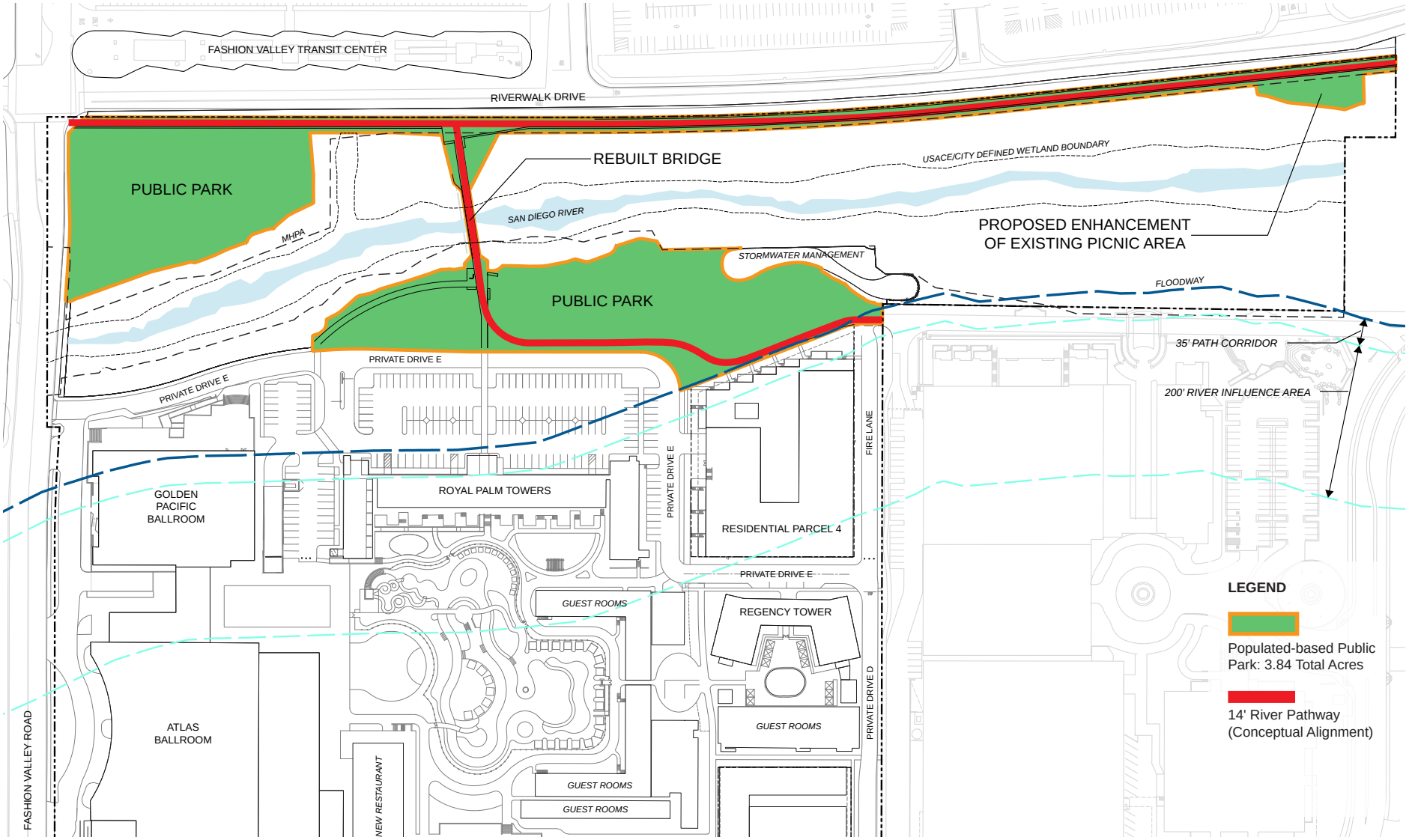
- 14-foot-wide San Diego River Park Pathway (10-foot-wide concrete path with 2-foot-wide decomposed granite on each side)
- Rebuilt pedestrian bridge across the river (10-foot wide)
- Lighting along the River Pathway



Source AECOM 2016

Figure 4-2

MITIGATION, RESTORATION AND ENHANCEMENT AREAS



Source Burton Studio; AECOM 2016

Note A River Pathway alignment depicted is conceptual. Population-based parks are designed through a community design, review and approval process consistent with Council Policy 600-33.

Figure 4-3

POPULATION-BASED PUBLIC PARK

Table 4-2 Park Requirement

Park Requirement Formula:

$$\frac{[DU - (DU \times \text{Vacancy Rate})] \times (\text{Population Density})}{1000} \times \text{Park Requirement} = \text{PARK ACRES REQUIRED}$$

PARK REQUIREMENT CALCULATION	VALUE
Dwelling Units (DU)	840
Multi-family Vacancy Rate [1]	6.3%
DU Adjusted for Vacancy Rate	787
Population Density per Multi-family DU [2]	1.5
Adjusted Population	1,181
Park Requirement (Acres/1000 Population)	2.8
Park Requirement (Acres)	3.31

[1] Vacancy rate of 6.3% per City of San Diego.

[2] Multi-family population density of 1.5 persons per household (PPH) per City of San Diego.

Table 4-3 Park Plan

PARK AREA	ACRES PROVIDED
Developed Park (Within Plan Area) including Bridge Credit	3.84
TOTAL PARK PLAN	**3.84**

- Temporary Habitat Restoration fence (two-rail peeled log, maximum 42 inches tall) along the MHPA boundary

Public Park

The design of the public park and its components and amenities will be determined per City Council Policy 600-33 Public Notification and Input for City-wide Park Development Projects. Facilities consistent with requirements of the floodway zone (see *Table 7-6 Master Planned Development Permit Deviations*) and passive Neighborhood Park guidelines per the General Plan may include:

- Play areas, equipment, and furnishings for children
- Multipurpose turf area (native or water-wise grass species) for informal games, gatherings, and scheduled events
- Picnic tables, waste and recycled materials receptacles
- Benches
- Trails
- Bike Station dock (as part of the City bike sharing program)
- Planting of native trees, shrubs, and groundcover

- Aerial tram/skyway landing area (as part of possible future public transportation program) adjacent to the MTS Fashion Valley transit center and would be permitted and consistent with the goals of this Master Plan

4.3.5 San Diego River Park Master Plan Guidelines

The SDRPMP is implemented by the Mission Valley Planned District SDMC §1514.0302 San Diego River Subdistrict regulations. The Master Plan be in compliance these regulations except as detailed in Table 7-6 Master Planned Development Permit Deviations.

As a policy document, the SDRPMP provides guidelines that complement the vision and objectives of the Master Plan. As such, the Master Plan shall comply with the intent of the SDRPMP guidelines.

The SDRPMP establishes five principles that support the stated vision to "reclaim the valley as a common synergy of water for wildlife and people." The SDRPMP further recommends general and specific strategies to achieve the five principles. It also states that "it is important to note that while each recommendation fits into the vision for the river, no single recommendation is meant to address every location or every situation along the length of the river."

The site boundary and floodway configuration and the existing hotel buildings to remain are major spatial constraints that pose a challenge to the achievement of full compliance with the River Subdistrict regulations. For example, the southern limit of the Regulatory Floodway and River Corridor Area overlays a portion of the existing 10-story hotel building (Royal Palm Towers) and the existing Convention Center (both buildings are to remain as key components of the Master Plan).

The Master Plan will conform to the River Subdistrict Regulations where feasible or meet the intent of the River Subdistrict Regulations where dimensional standards and site constraints make full compliance infeasible. Deviations to these regulations are detailed in Table 7-6 Master Planned Development Permit Deviations.

The Master Plan shall implement the intent of the River Corridor Area and River Influence Area where feasible as follows:

River Corridor Area Intent

The intent of the River Corridor Area is to restore the health of the San Diego River by:

- Cleaning the river
- Improving its hydrologic function
- Providing a continuous movement corridor that varies in width and provides a diversity of wildlife habitat and native vegetation.

River Influence Area Intent

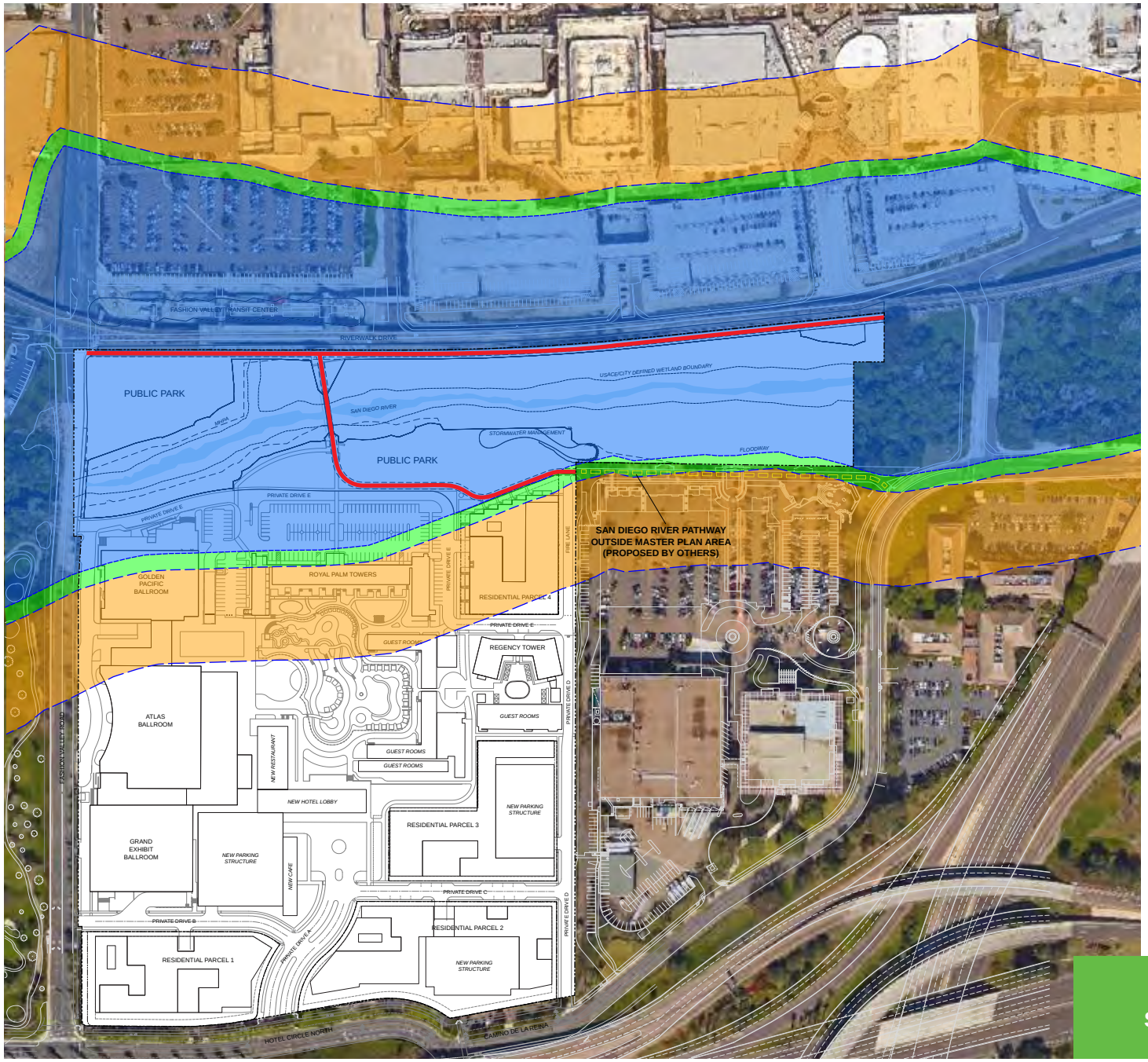
The intent of the River Influence Area is to create a quality backdrop to the River Corridor Area through design that:

- Treats the river as an amenity
- Orients development toward the river
- Encourages active uses adjacent to the River Corridor Area
- Encourages public access to the San Diego River Pathway

4.3.6 San Diego River Pathway

The River Pathway will be part of a regional multi-use trail proposed for both sides of the San Diego River (see *Figure 4-4 San Diego River Subdistrict Components*).

The San Diego River Pathway will become a Regional amenity.



LEGEND

Master Plan Area

Regulatory Floodway

35' Path Corridor Location per Mission Valley Planned Development Ordinance

200' River Influence Area Location per Mission Valley Planned Development Ordinance

Conceptual Alignment of River Pathway

Note A River Pathway alignment depicted is conceptual. Population-based parks are designed through a community design, review and approval process consistent with Council Policy 600-33.

Source Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 06073C1618G, revised May 16, 2012; San Diego River Park Master Plan; GoogleEarth; AECOM 2016

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Figure 4-4

SAN DIEGO RIVER SUBDISTRICT COMPONENTS

The River Pathway is a 10-foot-wide concrete surface with a 2-foot width of decomposed granite on each side of the concrete. It is a multi-use trail for pedestrians and bicyclists. The River Pathway on the north side extends the width of the property. The River Pathway on the south side extends from the adjacent property (Union-Tribune site) to the existing pedestrian bridge.

River Pathway Alignment

The conceptual alignment of the River Pathway depicted in the Master Plan is entirely within a recreation easement for a population-based public park. As such, the final alignment will be determined per City Council Policy 600-33 Public Notification and Input for City-wide Park Development Projects.

The proposed River Pathway on the north side of the river aligns between the MHPA boundary and the northern Plan Area boundary.

The River Park District includes approximately over 2,500 linear feet of River Pathway plus interconnecting pedestrian trails, adding significantly to the emerging pathway system along the San Diego River and providing a variety of trail experiences.

Multi-Use River Pathway Bridge

The existing pedestrian bridge over the San Diego River will be reconstructed in the existing location and at the same elevation. The new multi-use bridge (suitable for use by both pedestrians and bicycles) will be 10 feet wide, consistent with the width of the River Pathway and guidance in the SDRPMP. It will allow users of the River Pathway to cross from one side of the river to another and strengthen the connection between the Fashion Valley transit center and the Plan Area to further support Master Plan TOD objectives.

Conceptual Amenities and Interpretive Signage

The Master Plan for the River Pathway includes a wayfinding and interpretative education component. The detailed wayfinding plans will be coordinated with the final alignment of the River Pathway and the public process for design of the public park. The view point location of four concept sketches of the River Pathway are shown on *Figure 4-5*. The conceptual sketches are illustrated in *Images 4-1* through *4-4* to convey the sense of place and the conceptual vision for these amenities along the River Pathway.

4.4 FLOODWAY AND STORM WATER

4.4.1 Regulatory Floodway

The entire Plan Area is currently mapped within the Federal Emergency Management Agency (FEMA) floodplain, designated as Zone AE per Flood Insurance Rate Map (FIRM) Map Number

Interpretive signage enriches the walking trail experience.

06073C1618G, revised May 16, 2012. The northern portion of the site, comprising the River Park District, is almost entirely within the regulatory 100-year floodway. Preserving the floodway as an open corridor for the continued passage of floodwaters is critical. The Code of Federal Regulations sections related to FEMA, as well as the City of San Diego's Municipal Code impose requirements and restrictions on any proposed improvements within the floodway and floodplain. The San Diego Municipal Code, prohibits development in the FEMA floodway areas "unless certification by a registered professional engineer is provided demonstrating that encroachments will not result in any increase in flood levels." A portion of

Source Burton Studio; AECOM 2016

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Figure 4-5

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CONCEPTUAL RIVER PATHWAY SKETCH KEY

Image 4-1 Conceptual Sketch A – River Pathway at Transit Station

Note Conceptual depiction for illustrative purposes only. Population-based parks are designed through a community design, review, and approval process, consistent with Council Policy 600-33.

Source Burton Studio

Image 4-2 Conceptual Sketch B – River Pathway near riparian habitat and interpretive station

Note Conceptual depiction for illustrative purposes only. Population-based parks are designed through a community design, review, and approval process, consistent with Council Policy 600-33.

Source Burton Studio

Image 4-3 Conceptual Sketch C – Pathway bridge landing and wayfinding signage

Note Conceptual depiction for illustrative purposes only. Population-based parks are designed through a community design, review, and approval process, consistent with Council Policy 600-33.

Source Burton Studio

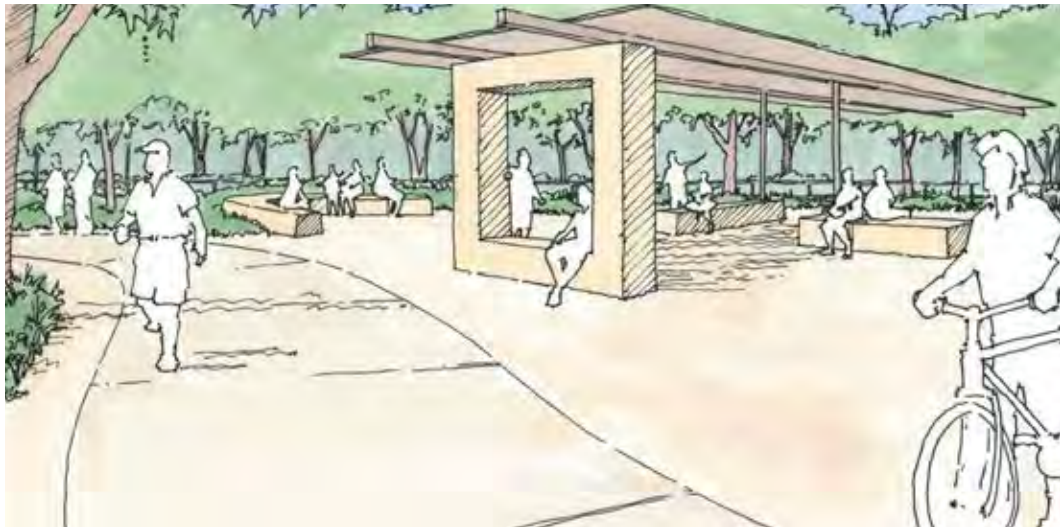


Image 4-4 Conceptual Sketch D – Way station

Note Conceptual depiction for illustrative purposes only. Population-based parks are designed through a community design, review, and approval process, consistent with Council Policy 600-33.

Source Burton Studio

the existing convention center and the existing Royal Palm Towers are within the floodway.

The existing site conditions include surface parking within the floodway. The Master Plan proposes to retain a small portion of the surface parking and replace the remainder of this area with restored habitat, public recreation facilities, including a new public park with trails and passive recreation areas.

At the Plan Area boundary adjacent to the northwest corner of the Union-Tribune site, grading and fill in the River Park District is required to provide a compulsory connection of the San Diego River Pathway from the Plan Area to the proposed River Pathway continuation on the Union-Tribune site.
Any structure constructed within the floodway will meet the criteria of Municipal Code Section 143.0146 Supplemental

Regulations for Special Flood Hazard Areas unless indicated in Table *7-6 Master Planned Development Permit Deviations*.

The hydraulic analyses of the Master Plan Area as certified by a registered engineer show that the overall site grading mitigates fill, so that no increase in the 100-year water surface elevations will result.

4.4.2 Storm Water Management Facilities

The proposed storm drain system adjacent to the River Park District will provide a separate system for any new development, while maintaining the existing storm drain infrastructure required for the existing hotel areas to remain.

The storm drain design will include two separate systems. One system will serve the Residential District, which will treat storm water on-site before it discharges into the collection system. Therefore, water entering this system will be clean and can be discharged directly to the river. The second system will serve the new hotel development, including parking structure, café, lobby, and restaurant buildings. This system will be treated at the storm water management water quality basin adjacent to the habitat area north of Residential Parcel 4 (see *Figure 4-1 River Park District Land Use Plan*). This water quality basin is connected to the clean water system near the outfall to the river (refer to Vesting Tentative map and Water Quality Technical Report, Fuscoe 2016).

The storm drain system will be designed per the City of San Diego's Drainage Design Manual. The mains will be sized to accommodate the 100-year event flows.

Because the extent of ground disturbance is less than 50% of the Plan Area, the Master Plan is exempt from the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) National Pollutant Discharge Elimination System (NPDES) permit and waste discharge requirements for discharges from the Municipal Separate Storm Sewer Systems (MS4s) including recent changes to the new MS-4 permit with more stringent requirements for implementation of source control and site design practices to minimize pollution generation.

Site water quality requirements will be based on City of San Diego's current Storm Water Standards dated January 20, 2012. In the City standards, Table 5.1 Priority Development Project Determination establishes that the proposed Master Plan will be a Priority Development Project subject to the MS-4 permit requirements.

The Master Plan will be subject to the second-tier BMP requirements due to the proximity of groundwater and the degree of soil permeability. The project will integrate LID features into the site design methodology and will use small-scale biofiltration to minimize pollutants conveyed by runoff. The County of San Diego's Standard Urban Storm Water Mitigation Plan (SUSMP) outlines several LID methods, including bioretention basins, vegetated swales, flow-through planters, and cisterns. The Master Plan will incorporate a combination of practices to address storm water quality treatment (refer to Vesting Tentative Map).

4.5 RIVER CORRIDOR AREA AND RIVER INFLUENCE AREA

The San Diego River Park as described in the River Subdistrict regulations follows San Diego's tradition of unique regional resource-based public parks. The San Diego River Park is a public effort to complete the vision of the SDRPMP through requirements and incentives on the redevelopment of private property. The Master Plan meets the intent of the five principles that support the SDRPMP vision as implemented by the SDMC River Subdistrict regulations.

The physical constraints of the site, the objective to provide a seamless transition of the River Pathway to the proposed alignment on the adjacent property (Union-Tribune site), and the implementation of Master Plan TOD objectives require deviations from the SDMC River Subdistrict regulations. Deviations to these regulations are detailed in *Table 7-6 Master Planned Development Permit Deviations*.

5

RESIDENTIAL DISTRICT

Town and Country

5 RESIDENTIAL DISTRICT

5.1 DESIGN OBJECTIVES

The approximately 10-acre Residential District includes up to 840 multi-family dwelling units (see *Figure 5-1 Residential District Land Use Plan*). The northern portion of this district offers residents views to the immediately adjacent public park and restored riparian open space. Upper floors of other residential buildings will offer oblique views of the San Diego River, and mountains to the east.

The Residential District will have a unique identity but clearly relate to the Hotel District in its style and aesthetic. The architecture style may be more similar to the new hotel additions. The Residential District objectives are as follows:

- Use building massing to create indoor-outdoor living spaces with access to light, air and views.
- Situate building entries and front doors to activate and engage the street and the pedestrian realm.
- Make residential amenities visible and accessible and open to daylight and air.
- Scale fenestration and façade articulation appropriately to indicate individual residences, but consider the rooflines and silhouettes as seen from the pedestrian realm, hotel towers, and the elevated freeway and transit line.
- Orient buildings and pedestrian facilities to embrace and connect to the River District where feasible.

5.2 SITE PLANNING

All residential lots will have easy pedestrian and bicycle access to the River Park District and transit station. The northern portion of this district offers residents views to the immediately adjacent public park and restored riparian open space. Upper floors of other residential buildings will offer oblique views of the San Diego River, and mountains to the east.

The residential land uses are configured as four lots in the southern and eastern portions of the site. The anticipated building construction types are either “podium’ or “wrap” style. A podium configuration generally consists of residential units built on top of a parking structure. A wrap configuration partially conceals the sides of a freestanding, connected parking structure with residential units.

The Residential District may be constructed in phases over a period of years. The Master Plan permits the transfer of development intensity and residential density between lots, as long as the overall project does not exceed 840 dwelling units. Refer to Chapter 7 Implementation for more detail.

5.3 DESIGN GUIDELINES

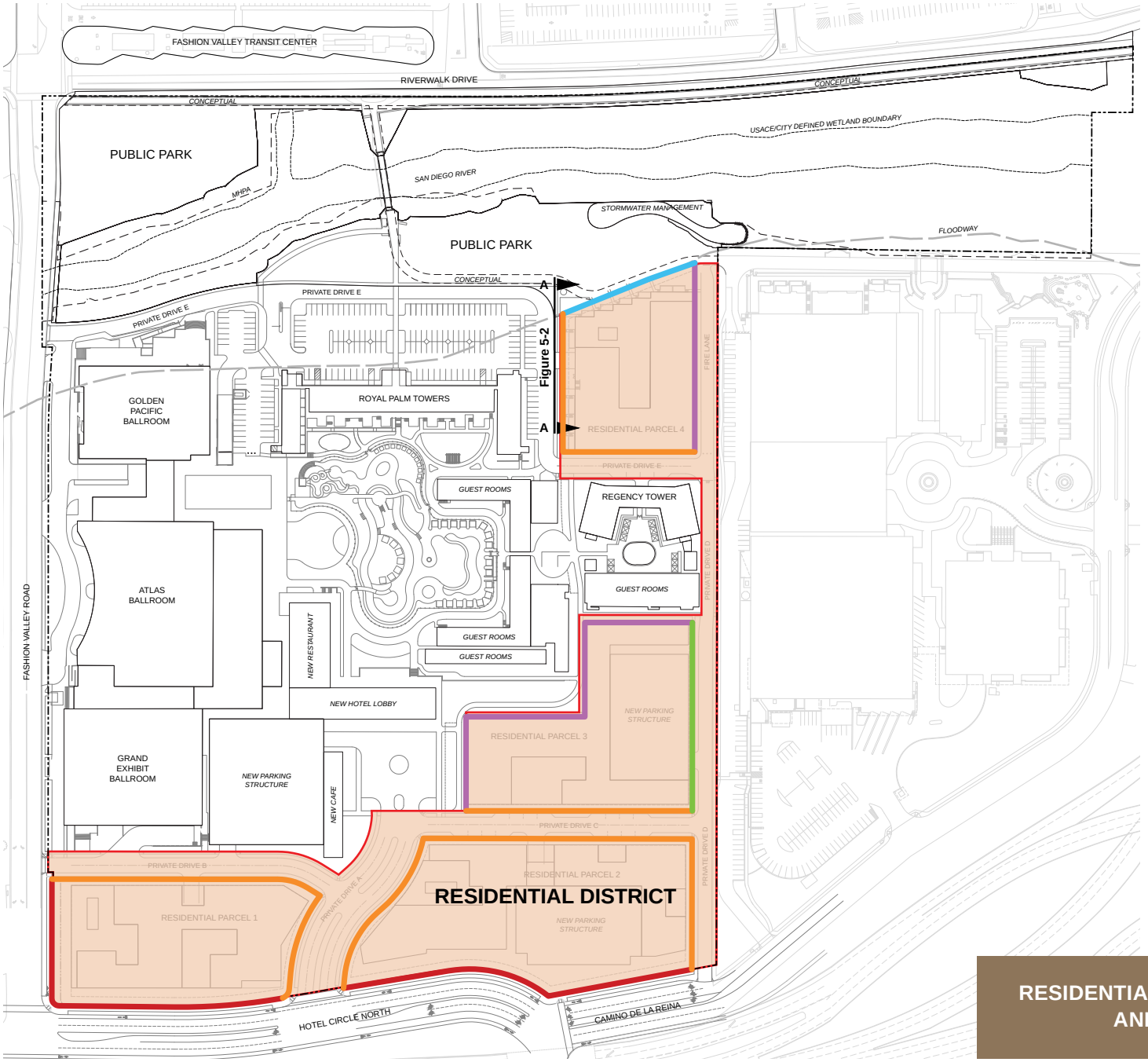
Well-designed buildings are the building blocks of great streets and neighborhoods. The Master Plan establishes standards and guidelines to shape good buildings, great streets, and memorable places. These design standards and guidelines are not indicative of any particular style, but encourage innovation and the design of high-quality architecture and urban form.

The existing Town & Country property has no overriding or dominant architectural character. It was built and assembled over several decades in multiple styles and scales, resulting in an ad-hoc assemblage of buildings scattered across the site. The proposed hotel renovations and site improvements will create a more unified appearance for the Hotel District.

5.3.1 Site Massing

The Master Plan design strategy will stitch together the architectural fabric of new buildings and open spaces to the scale and style of the existing hotel buildings to remain and be renovated. The residential massing strategy reinforces this effort. It shifts building mass to the edges of the Master Plan Area so that daylight and fresh air penetrates the interior open space areas of the Master Plan Area.

This residential massing establishes a cohesive neighborhood built around pedestrian-friendly private drives lined with front doors and stoops, private gardens, and tree-lined sidewalks. The design of Residential District along the



LEGEND

RESIDENTIAL DISTRICT

Residential - Multiple Unit

Cross Section

Setback Type A (incremental)

Setback Type B (10-feet)

Setback Type C (5-feet)

Setback Type D (10-feet)

Setback Type E (10-feet)

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

N

0 50 100 200 300

Figure 5-1

RESIDENTIAL DISTRICT LAND USE PLAN AND SETBACK REQUIREMENTS

Well designed mutlifamily residential buildings use massing, scale, and variation to convey a clear theme. Appropriate materials and colors complement authentic details and contribute to the pedestrian scale of the street.

southern and eastern edges of the property minimizes shading of public open spaces in the center of the Master Plan Area and maintains access to daylight and surrounding views of Mission Valley.

The southern residential parcels frame the main Master Plan Aresa entry and will orient builidng entries and architectural articulation to face and enhance the human scale of the internal private drives. This residential lot configuration will create a neighborhood focal point at the hotel lobby and arrival court.

Each residential lot will accommodate the required parking spaces within the lot. Residential parking structures on the south side of the property will create a buffer between the freeway and residential units. The overall focus of the Residential District is toward the internal open space and courtyards within the site. These open spaces are equally important as viewed from within the units and as viewed at ground level. The central openness of the site provides views across the Plan Area to light and vegetation and oblique views to the River and the Mission Valley community.

5.3.2 Building Character

The design objective for the Plan Area as a whole is to complement but not copy the diverse architecture of the renovated Town & Country Hotel. The Residential District will support this design objective.

The following unifying characteristics, elements, and concepts should be considered to achieve a unified character for all buildings within the Residential District.

- Offsetting planes on building facades
- Indoor-outdoor spaces
- Large expanses of glass
- Deep planar roof or balcony overhangs
- Building siding material and finishes
- Recurring patterns that may appear on various architectural features of buildings
- Filigree screens, railings, etc.
- Furnishing style
- Outdoor furnishings
- Water efficient landscape design

5.3.3 Design Guidelines for New Residential Buildings

The following overall guidelines will apply to all residential lots:

1. Consider the scale of adjacent structures and respond to their massing and bulk in an appropriate manner.
2. Avoid simple box-like monolithic structures without architectural

Streetscapes provide a pleasant pedestrian-scaled realm and complement the adjacent building streetwall.

articulation that would not relate to adjacent buildings.

3. Design ground floors to contribute to a pedestrian-oriented development.
4. Incorporate detail and higher quality materials at lower levels more visible to pedestrians.
5. Vary materials and massing in the horizontal plane to emphasize entrance lobbies and differentiate uses.
6. Use finish texture and color of materials that are compatible and consistent with the overall architectural approach and style.
7. Use simple color palettes that reinforce building massing and the building's structural form.
8. Consider color appropriate for San Diego's solar conditions. Unusual or very bright color palettes should be tested on-site to confirm appropriateness for the neighborhood.
9. Use authentic construction details that are integral to the building structure and apply with consistency, avoiding faux applied elements.

5.3.4 Residential Streetscapes

Good landscape design is an essential part of any development, streetscape, or district. Well-designed layout and careful selection of plants, paving, lighting, and site furnishings can help to create vibrant, functional, and beautiful outdoor spaces. The term streetscapes refers to both public streets and private drives.

These landscape design guidelines will supplement the standards in the zoning code for streetscapes, building setbacks, required open spaces, and parking lots. Implementation should focus on construction standards, the integration of sustainable practices and solutions, and the use of landscape design to create and maintain strong district identities.

Sidewalks and parkways along the public right-of- way will follow those standards dictated by the City of San Diego governing codes.

Sidewalks and parkways along internal private drives will follow the same basic tenets of the Urban Parkways outlined in the San Diego Municipal Code Street manual. The Plan Area internal streetscapes perform multiple functions and contribute to the Plan Area sense of place. The private drives accommodate vehicular traffic, bicycle circulation, fire access, pedestrian circulation, and street trees. In addition, the streetscapes function as the front yard for many residential units. The following figures in Chapter 3 Circulation illustrate several of the different building setback, landscape, and pedestrian realm conditions:

- Figure 3-10 Private Drive Section Key
- Figure 3-11 Private Drive A
- Figure 3-12 Private Drive B
- Figure 3-13 Private Drive C
- Figure 3-14 Private Drive D
- Figure 3-15 Private Drive E

When parallel parking is provided on private drives in limited locations, the parking will interrupt the planting buffer and the sidewalk will be directly adjacent to the curb.

5.3.5 The Pedestrian Zone

The pedestrian zone treatment, between the street curb and edge of right-of-way (or curb and edge of private drive easement or lot), should vary according to its width, adjacent uses, and volume of traffic. Shade, seating, and appropriately sized amenities will improve the experience for pedestrians.

- Provide trees along all streets within the pedestrian zone. (Refer to Street Trees discussion below).
- Provide landscaping within the pedestrian zone, either in a contiguous parkway between the sidewalk and street, in planted tree wells, or in large pots (where ground planting is not feasible).

Street Trees

Street trees enhance the pedestrian and vehicular experience throughout the Plan Area and should be in substantial conformance with the following guidelines.

- Plant parkway trees at a minimum 36-inch box size. Other trees within setbacks and open spaces will be a minimum 24-inch box.
- Space street trees a maximum of 25 feet on center, per City zoning code.
- Consider potential conflicts between tree canopies and building signage.
- Contiguous planted parkways are preferred along residential streets.
- Provide large tree wells in lieu of contiguous parkways along retail or commercial streets. In all cases, the tree well should provide space adequate for that particular species' long-term growth. The minimum planting area per street tree shall be 40 square feet with a minimum dimension of five feet for tree wells and parkways, in accordance with SDMC 142.0403(b)(5). Where feasible, provide wider and longer tree wells.
- Avoid tree grates and root barriers that severely stunt tree growth. Exceptions may be made due to space limitations or utility conflicts.
- Provide a double row of street trees (of the same species) where sidewalks/setbacks are wide enough.
- Provide automatic irrigation systems for all street trees. Design systems using spray heads to avoid overspray and spray on tree trunks.
- Properly stake trees according to City of San Diego standards to ensure healthy growth.
- Provide appropriate soil area to support a tree growth to full size.
- Street trees will be of a species designated for that particular street. Discourage the variation of street tree species within any block.
- Choose trees from the list of approved species for non-designated streets.
- Planting within public and semi-public spaces should be visually interesting, low maintenance, and drought tolerant.
- Minimize the use of turf in the parkway and setbacks, and in publicly accessible open spaces.
- Where the parkway is adjacent to street parking and is planted with a material other than turf, the 18-inch area adjacent to the curb will be decomposed granite, gravel, or sand-set pavers to allow for foot traffic to/from parked vehicles.
- Parkway planting should not exceed 30 inches in height.
- Plants should require moderate, low, or very low amounts of water per WUCOLS (Water Use Classification

of Landscape Species), wherever possible.

- Appropriate plant species should be selected for any given space, preventing plants from becoming overgrown.

Hardscapes

- Sidewalks, crosswalks, and other hardscape should be of a high-quality material and lasting style.
- Stained concrete and surface-colored concrete (other than integral colored concrete) should not be used.
- Standard grey concrete or earth-toned pavers should be used for paving sidewalks.
- Paving accents, such as banding along the curb or perpendicular to the sidewalk, may be used if consistent with the established style for the district.
- All crosswalks will be of a consistent material and color.
- A limited hardscape palette should be used in public and semi-public spaces to help minimize visual clutter and promote a cohesive identity.

Street Furnishings and Lighting

Street furnishings and lighting should enhance the comfort, safety, and character of the Plan Area.

The following guidelines apply to site furnishings and lighting.

- Benches and trash receptacles should be thoughtfully located to enhance the pedestrian experience without cluttering the streetscape.
- Site furnishings should be recess mounted to paving, as opposed to surface mounted.
- Include lighting along all streets, sidewalks, and pedestrian connections, and on private property to ensure comfort and safety.
- Employ full cutoff fixture design for al lighting to contribute to a dark night sky and avoid glare into guest rooms and residential units.
- In corporate additional pedestrian-scale lighting into the streetscape where street lights are provided.
- Consider providing lighting of a certain family, color, and style within a given area.

5.3.6 Streetwall and Setbacks

The following guidelines relate to general urban design, streetwalls, and building setbacks along both public streets and private drives. These guidelines promote development of an urban neighborhood with an inviting street environment for pedestrians.

Minimum Streetwall

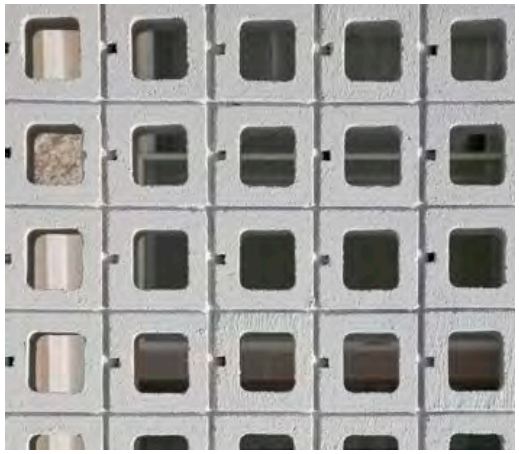
A minimum streetwall height on key corridors ensures consistency along the "public room of the street" (as shaped by buildings on both sides). This requirement should eliminate the underdevelopment of parcels along the edges and interruption of attractive and engaging street conditions within the Plan Area's most identifiable corridors. Minimum streetwall is generally measured as building height on both sides of the street should be equal to the distance between the two building facades facing each other across the street or private drive. Streetwall requirements will be measured on a parcel-by-parcel basis.

Streetwall Design

The streetwall of a building is the most visible component seen by pedestrians, bicyclists, and motorists and is the biggest contributor to district character and sense of place. The way in which the mass of the building "meets the street" should be well detailed.

1. Buildings should maintain a generally consistent streetwall so the three-dimensional public room of the street is consistent and creates a well-defined space.
2. The streetwall should reinforce the building's presence at major corners, public entrances, terminus of a view corridor, or as way finding when viewed from key locations within the Plan Area.

Privacy and sun screens can be used in various situations including screening parking structures and loading areas to reinforce the overall Plan Area architectural theme.



3. The streetwall should include design features that screen podium parking and parking structures.
4. The streetwall should visually highlight paseos, existing and proposed pedestrian walks and alley system, and any points where pedestrians can walk through a block.

Variation with the Streetwall

1. Monotonous stretches of uninterrupted façade are highly discouraged. The street wall façade should exhibit variation in the street wall (by including offsetting planes which provide a significant shadow line) through materials and colors, massing, fenestration, storefronts, public art, or other architectural elements that are well composed.
2. Treatments such as changes in materials and/or colors, moldings, or planters should differentiate the base of the building (the first 2 to 5 feet above the sidewalk) from the rest of the building façade.
3. Limit physical breaks in the streetwall to those necessary to accommodate pedestrian paseos, public plazas, entry forecourts, permitted vehicular access driveways, and hotel drop-offs.
4. Building entrances will be well designed and emphasized with changes in materials and graphics. Private and public entrance points should be treated differently.

5.3.7 Streetwall Articulation

Private Entrances and Patios

1. Private residential drive level entrances should be set back to provide for front porches or small entry courts.
2. The design of patio walls should be well integrated into the overall architectural idea and utilize the highest quality materials. Translucent materials are encouraged to provide a lighter visual barrier between the public and private realm.

Windows and Doors

1. Entrances and windows, not garages, should be the dominant elements of the front façades. Window and door placement, size, material, and style should help define a building's architectural style.
2. Windows and doors should reflect the overall design idea of the building and be well crafted and constructed.

A well-designed urban streetscape combines appropriate setbacks, architectural detail, variation, clearly distinguishable private entry areas, and well-scaled pedestrian and landscape areas.

3. True divided lights or quality simulation should be included when using insulated glazing.

Awnings, Canopies, and Marquees

Encroachments such as trellises, awnings, canopies, and marquees are encouraged but must be well designed and proportioned to avoid adverse impacts to the sidewalk environment.

1. The minimum vertical clearance between the ground or street level and the encroachment will be 10 feet.
2. Encroachments that are designed to require ground support are prohibited. Awnings, canopies, and marquees should not project past the setback line in areas where setbacks are required.
3. Horizontal dimensions should relate to the bays of the building façade. The awning or canopy may encroach over the sidewalk, provided at least 2 feet of clearance is maintained from the private drive curb line.
4. The materials, shape, rigidity, reflectance, color, lighting, and signage for awnings and canopies should relate to the architectural design of the building.

Neighborhood Identity

Each residential lot should be distinguished as a unique neighborhood, yet tightly linked to the Plan Area through the extensive network of open spaces, streets, and patios. The pedestrian paths from the residence to the public recreational spaces will enhance the livability of the Residential District.

Spatial nodes and architectural landmarks should create identity and hierarchy throughout the community experience. Careful location of residential lobbies, intermixed with individual stoop entries, will activate the ground plane and create a safe, engaging, and walkable neighborhood.

Articulated Roofline

The roofline treatment is critical to a sense of dimension and appropriate architectural detail.

- Vary height and silhouette of roofline
- Use a variety of roof treatments, such as parapets, deep overhangs, and pitched roofs.
- Use small tower elements for punctuation
- Step massing down where appropriate

5.3.8 Setbacks and Landscape Design

Treatment of the ground plane within the setback may be either planting or a combination of planting and hardscape, and will be well designed and maintained.

1. Landscape treatment of setbacks should vary along a street.
2. Setbacks should engage the pedestrian and act as an extension of the public realm.
3. The setback should include porches, patios, gardens, and stoops adjacent to ground-floor residential units.
4. Setbacks should include planting (in pots, planters, or the ground) and outdoor dining areas adjacent to convention center, hotel, restaurant, and retail.
5. Provide pots or planters along the building face to add life and character to the sidewalk where no setback is required.
6. Landscaping at the building wall is permitted, provided the planter is part of the building façade and the earth level for planting is at least 1 foot above sidewalk level.
7. Recesses, bases, and projections may be employed if the landscape setback is not more than 5 feet.
8. Additional guidelines specific to each setback are identified on the following pages.

5.3.9 Specific Lot/Building Setbacks

Each parcel of the Residential District is characterized by its unique location and adjacency. See Figure 5-1 Residential District Land Use Plan and Setback Requirements for illustration of all building setbacks. Also, refer to the Vesting Tentative Map for full size 1"=40' development plans which delineate all building setbacks. Parcels 1 & 2 serve as gateways to the larger community so these sites will complement each other. Parcel 3 is characterized by its adjacency to the public access corridor (see *Figure 3-16*) with great physical and visual connectivity to its surroundings. Parcel 4 is marked by its direct adjacency to the River Park District, thereby taking advantage of a highly unique amenity.

Residential development will activate the edges shared with all districts by using front doors, balconies, and site features to blur the lines where the districts come together.

Setbacks along public rights-of-way shall follow the governing codes of the City of San Diego. Town and Country site conditions require different orientations of the building envelope to the public edge. Projections are allowable within the setback area per San Diego Municipal Code.

Type A

Incremental Setbacks: along the public rights-of-way, per SDMC (see *Figure 3-5*). This applies to:

- Parcel 1 at south and west edges along Hotel Circle North and Fashion Valley Road (*see Figure 3-6 and Figure 3-8*).
- Parcel 2 at south edge along Hotel Circle North and Camino De La Reina (*see Figure 3-6, Figure 3-7A and Figure 3-7B*).

Incremental setbacks occur along the public rights-of-way. Consult San Diego Municipal Code for requirements. The setbacks will be taken from the original, pre-dedication property boundaries.

1. Provide sufficient buffers to mitigate potential external noise and air impacts where direct unit entries front a public right-of-way.
2. Provide a 2-foot planting buffer between the sidewalk and the residential porch or patio.
3. Provide sufficient landscape buffers in combination with architectural treatment to screen the garage walls where parking garages are visible from public view.

Type B

10’-0” setback adjacent to main vehicular circulation (see *Figure 3-10*). This applies to:

- Parcel 1 at east and north edges along Private Drive A and Private Drive B (*see Figure 3-11 and Figure 3-12*).
- Parcel 2 at west and north edges along Private Drive A and Private Drive C (*see Figure 3-11 and Figure 3-13*).
- Parcel 2 at east edge along Private Drive D (see Figure 3-14).
- Parcel 3 at south edge along Private Drive C (*see Figure 3-13*).
- Parcel 4 at south and west edges along Private Drive E (*see Figure 3-15*).

10-Foot setbacks occur at Private Drive A (main project entry drive with no parking) and for internal street conditions and where residential entries occur at Private Drives B, C, and E. A combination of landscaped parkways and on-street parking creates a buffer between car and pedestrian. The 10-foot setback allows for a comfortable pedestrian transition from the public right-of-way to the semi-private stoop or porch of the residential unit.

1. Ground-floor activation is encouraged.
2. Locate main residential lobbies for each building.
3. Locate direct stoop entries for individual units.
4. Provide a 2-foot planting buffer between the sidewalk and residential porch or patio.
5. The elevation of the setback zone should be no more than 36 inches above sidewalk elevation.
6. The setback zone should be landscaped, and may include walkways, steps, patios, solid walls up to 3 feet above sidewalk elevation, and transparent fences up to a height of 5 feet above sidewalk elevation.

Type C

5'-0" setback adjacent to secondary vehicular circulation (see Figure 3-10). This applies to:

- Parcel 3 at east edge along Private Drive D (*see Figure 3-14*).

Setbacks occur at Private Drive D. A 5-foot setback is identified for Private Drive D at Residential Parcel 3. This serves primarily as vehicular access to the parking garage where pedestrian activity is minimized.

1. Provide sufficient landscape buffers in combination with architectural treatment to screen the garage walls where the parking garage is visible from public view.
2. The setback zone should be landscaped, and may include walkways, steps, patios, solid walls up to 3 feet above sidewalk elevation.

Private Drive D is an existing drive that abuts the Union-Tribune property and is bounded on its eastern side by an existing retaining wall. The setback applies only along the western side of the drive (*see Figure 3-14 Section D*). Also along Private Drive D, at the existing Regency Tower, the space between the existing building and the property line is not sufficient to accommodate the intended driveway design and setback. At this location, the design will reduce the setback and maintain the sidewalk as close to the prescribed width as possible.

Type D

10'-0" setback adjacent to pedestrian promenade (*see Figure 3-16*). This applies to:

- Parcel 3 at southern west facing edge and both north facing edges (*see Figure 3-17*).

10-Foot setbacks occur at pedestrian street conditions adjacent to residential entries and at building faces with no entries.

1. Ground-floor activation is encouraged.
2. Locate direct stoop entries for individual units.
3. Provide a 2-foot planting buffer between the sidewalk and the residential porch or patio.

4. The elevation of the setback zone should be no more than 36 inches above sidewalk elevation.
5. The setback zone should be landscaped, and may include walkways, steps, patios, solid walls up to 3 feet above sidewalk elevation, and transparent fences up to a height of 5 feet above sidewalk elevation.
6. Raise balconies and patios above adjacent sidewalk grade to provide increased privacy.
7. Maintain building separation for optimal sun, air, and views, proportionate to massing of surrounding buildings.
8. Activate the ground plane with building and unit entries:
    - Residential lobbies
    - Stoops and porches
    - Landscape buffer
9. Create consistent street wall:
    - Provide architectural breaks to achieve residential scale
    - Building plane requirements shall follow San Diego Municipal Code.
10. Residential scale and details:
    - Fenestration and architectural elements
    - Balconies and canopies
    - Modulate facade to convey residential use
    - Alternate different textures, colors, material, and distinctive architectural treatments

Type E

10'-0" setback from floodway (see *Figure 5-2 River Influence Area Building Height Setback*). This applies to:

- Parcel 4 at northern facing edge.
- Parcel 4 will have ground level units with entrances that connect directly to the River Pathway or a public access way leading a short distance to the River Pathway in the case of a building corner unit. Upper level units will have balconies overlooking the park and river.

5.3.10 Parking and Parking Structures

Parking shall be provided as required by the San Diego Municipal code for both vehicles and bicycles. Parking for all residential parcels will be provided on-site and in accordance with the following minimum standards:

1. Minimum overall parking spaces per dwelling unit (DU) ratio of:
    - 1.0 per studio DU up to 400 SF
    - 1.25 per 1 bedroom or studio DU over 400 SF
    - 1.75 per 2 bedroom DU
    - 2.0 per 3 or 4 bedroom DU
2. Minimum of 1.0 parking space will be for the exclusive use of each DU.
3. Up to 25% of the total on-site parking spaces may be for common use by both residents and guests.

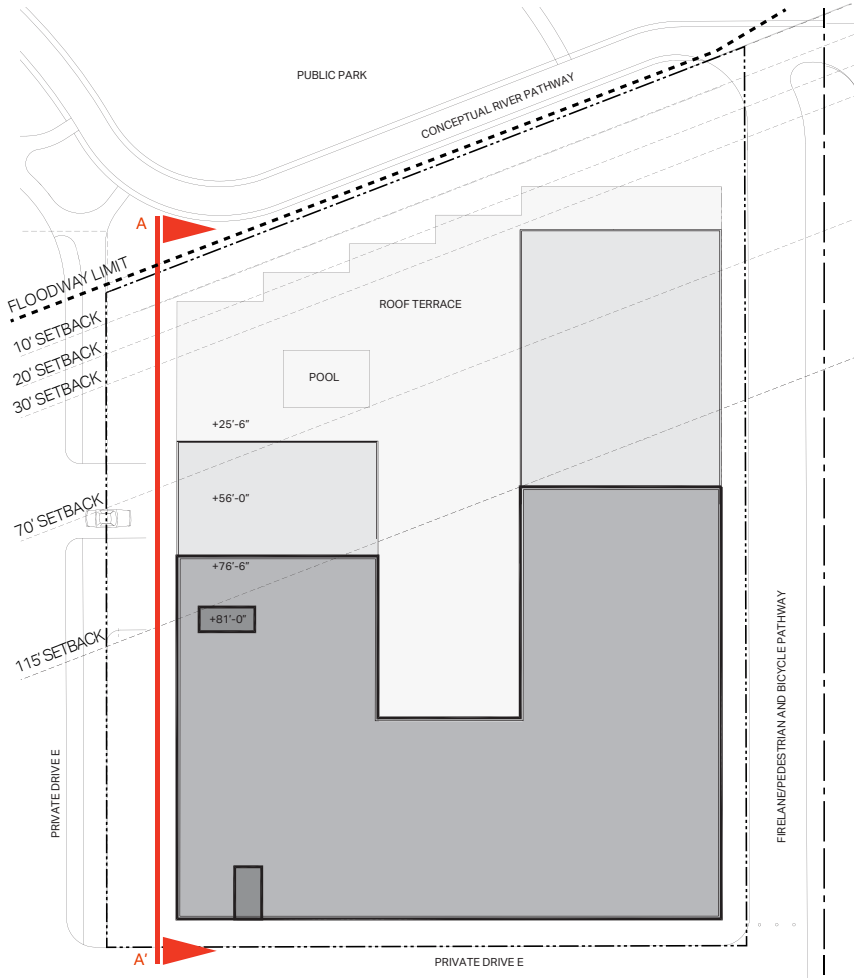
The design will minimize the visibility of the parking garage by integrating it architecturally with the residential buildings.

- Screen open garages
- Provide sufficient space for landscape screening along public edges
- Provide liner units along public edge when possible

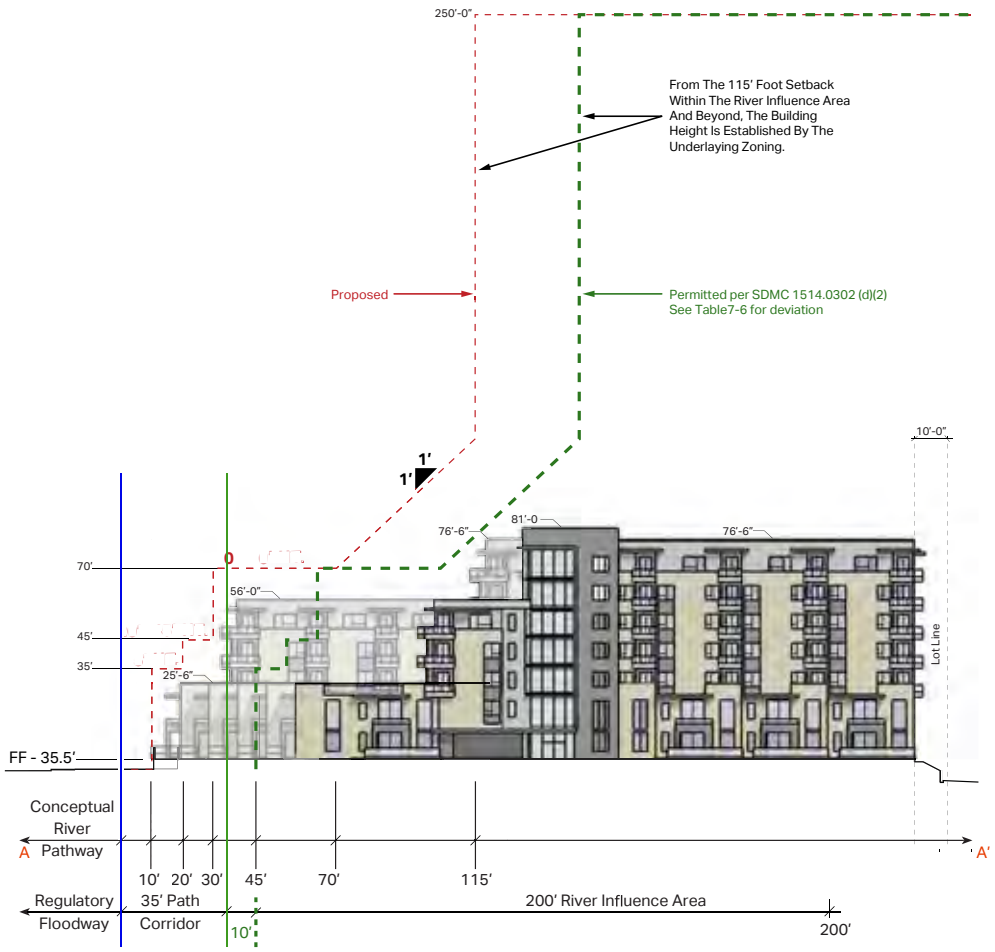
Parking structures for all projects should be screened from view to the extent feasible—ideally by wrapping it with active uses along the public frontages. Whether parking is public or private, design should treat freestanding parking structures and integrated podiums as buildings and follow the principles of good building design.

Architectural Treatment

Providing an exterior façade composed of high-quality materials will elevate the building's stature and contribute to the overall quality of the Plan Area architecture.



RESIDENTIAL LOT 4 - PLAN VIEW



RESIDENTIAL LOT 4 - ELEVATION A-A'

Source TCA Architects; AECOM 2016

Figure 5-2

0 20 40 80

RIVER INFLUENCE AREA BUILDING HEIGHT SETBACK

The following guidelines apply to new freestanding parking structures or structures with a major presence on the street.

1. Parking structures should be compatible in architectural treatment with the group of buildings they serve.
2. Integrate signage and way finding with parking structure.
3. Parking structure entryways will not disrupt the pedestrian right-of-way on primary streets.
4. Parking structures should have an external skin designed to improve the building's appearance, including metal screens, precast concrete panels, or laminated glass.
5. Architectural shade structures shall be provided which cover 50% of each rooftop parking space at 50% opacity.
6. Vertical circulation cores (elevator and stairs) should be on the primary pedestrian corners and highlighted architecturally to increase visibility and accessibility.
7. Integrate the design of public art and lighting with the architecture of the structure to reinforce its unique identity. This is especially important for public parking structures to aid visitors upon arrival.
8. Interior garage lighting should provide safe and adequate lighting levels per code, while avoiding glare toward adjacent residential units.

Landscape Treatment

Parking structures and surface lots within the Plan Area should be located or screened to minimize visual impact on the public realm.

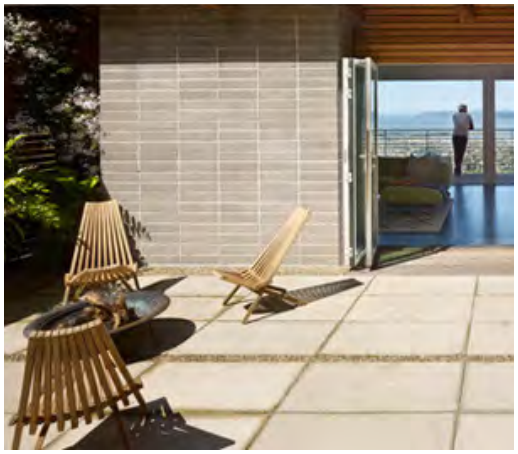
1. Landscape should be cohesively designed with the building or garage. If a garage has a well-designed exterior, then screening by dense landscaping is unnecessary.
2. A landscape screen should be integrated (and be visually consistent with the existing or proposed streetscape) when architectural solutions are not possible to screen a parking structure.
3. Surface parking lots should include ample trees to reduce the heat island effect and mitigate views from surrounding buildings and streets.
4. Landscape screens or "green screen" elements may be integrated with the architecture of the building or structure and coordinated with any streetscape improvements.

Regulations related to the configuration and screening of service, loading, and refuse and recycling areas shall follow the San Diego Municipal Code.

5.3.11 Common Amenities

Courtyards, roof terraces, and other common areas within individual residential developments should be landscaped to accommodate a variety of informal activities, such as barbecues, small gatherings, gardening, relaxation, and children's games.

1. Courtyards should have a minimum dimension of 30 feet in any direction (building face to building face).
2. A minimum of 25 percent of the courtyard space (including courtyards that are on-structure) should be landscaped.
3. Provide at-grade planting areas to accommodate large trees and landscaped areas that are not separated by planter walls where feasible.
4. Raised planters should have a minimum soil depth of 36 inches and be a minimum size of 40 square feet, where trees are located on-structure.
5. Trees should be planted as 24 inches box minimum.
6. Provide large potted plants where raised planters or at-grade planting



Common amenities and shared open space enhances the sense of community, reinforce the overall Plan Area architectural and site design theme, and encourage indoor/outdoor lifestyles.

is not feasible (such as on a roof deck).

7. Private patios may be located in a courtyard if they are defined by a low wall (36 inches maximum) or hedge.
8. Provide a variety of seating options, such as benches, picnic tables, and seat walls.
9. Courtyards should be fronted by doors, windows, and balconies. Use landscape treatments such as vines, lattices, or plants with vertical form to soften blank walls facing a courtyard.
10. Consider use of water features to activate courtyard spaces and engage residents and visitors. Water features may count toward a maximum of 10 percent of a courtyard's landscape area requirement, and should be located in shade or partial shade to reduce evaporation.
11. Consider alternate configurations or approaches on a limited project-by-project basis, if such changes are found to be consistent with the goals of the Master Plan. Refer to Chapter 7 Implementation for more detail.
    - Orient primary recreational courtyards for optimal sun, air, views, southern, and western exposures
    - Indoor/outdoor amenities
    - Variety and hierarchy of amenity spaces

Regulations related to common and private open space for residential development shall follow the San Diego Municipal Code except where a specific deviation is included in the Master Plan.

5.3.12 Residential Signage

Signage scale and lettering should be appropriate for the intended viewer and distance. Larger scaled, graphically strong signage is appropriate at the entries and public ways. Smaller, more intimate, subdued pedestrian-scaled signage will occur within the Plan Area and along pathways.

1. Signs should be integrated with the design of the project's architecture and landscaping. Signs should be consistent with the design approach and convey a clear hierarchy of information.
2. Signs should identify primary entrances, addresses, and necessary information for visitors.

Signs shall be designed as a part of a cohesive signage package, with each signage type appropriately addressing a specific situation. This contributes to the creation of a sense of place.

5.3.13 Outdoor Lighting

Outdoor lighting should carry a uniform theme or aesthetic throughout the site with possible variations in each district.

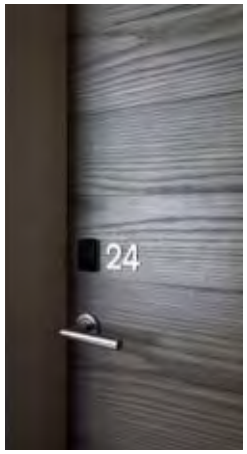
Illumination should ensure safety around buildings but avoid significant light trespass onto adjacent properties. All signage should employ full cutoff fixtures to contribute to a dark night sky and reduce glare to adjacent hotel guest rooms and other residential units.

5.3.14 Sustainable Features

Various sustainable features are integrated into the architectural and site design including:

- Land Use Design
- Transportation
- Landscape and open Space
- Water Quality Management
- Energy Management
- Materials Management
- Photovoltaic panels on rooftops of multi-family residential structures.

In addition, the residential buildings will be designed to be consistent with LEED Silver standards.



6

HOTEL DISTRICT

Town and Country

6 HOTEL DISTRICT

The approximately 17-acre Hotel District is an integral component of the Master Plan (see *Figure 6-1 Hotel District Land Use Plan*).

6.1 DESIGN OBJECTIVES

The Hotel District site design and architecture will provide design cues from the existing vernacular styles and architectural fabric, including modern interpretations of those styles. This will enhance and modernize the existing identity and character of the hotel. The new hotel buildings will complement the existing architectural themes and styles of the building that will remain. The Hotel District design objectives are as follows:

- Update the image of the hotel and enhance the visitor experience.
- Capture additional leisure market guests.
- Establish a cohesive theme for all land uses to unify site and building architectural language and create a unique sense of place.
- Create a unique a destination for hotel guests and the community alike.

6.2 SITE PLANNING

The Master Plan reduces hotel capacity from 954 to 700 guest rooms and the size of conference facilities from approximately 213,000 to 177,000 gross square feet.

New structures will be constructed as part of the renovated hotel. New facilities will include new lobby, food and beverage, convenience shop, hotel parking structure, main pool area, water-wise landscaping, and other site amenities. The Master Plan will replace the loading dock at the northern end of the Convention Center with an exterior function area for the Golden Pacific Ballroom. This elevated terrace will have views to the public park and restored riparian open space. Primary access to the Hotel District will be via a new entryway (Private Drive A) from Hotel Circle North to an arrival courtyard at the new hotel lobby. Private Drive A also directly connects to the new hotel parking structure adjacent to the arrival courtyard. Secondary access to the Hotel District will be via Private Drive E from Fashion Valley Road.

The Royal Palm Towers will remain as a visual focal point with updates to the exterior visual appearance.

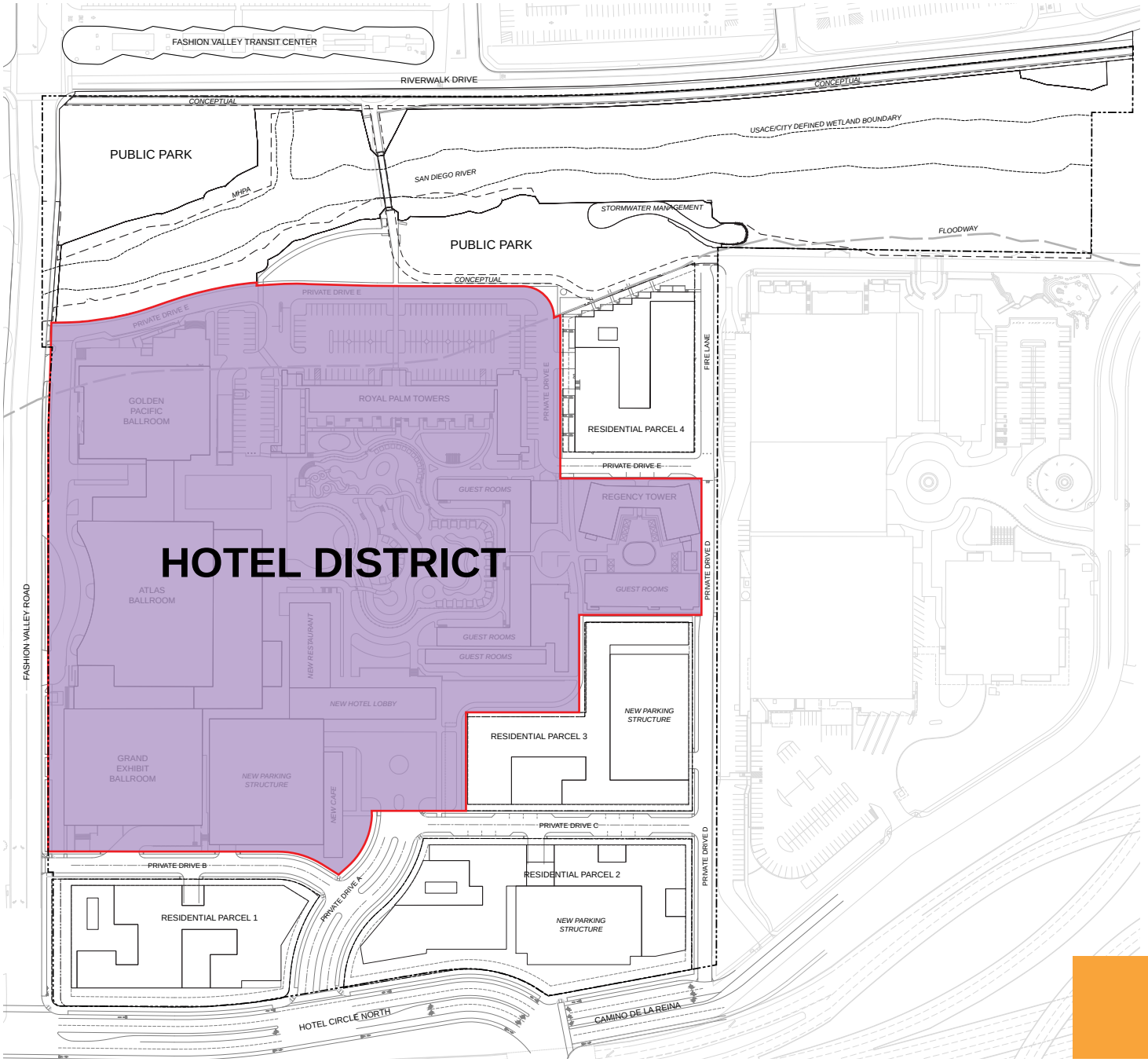
The Regency Tower and nearby low-rise hotel rooms will frame the east side. The new lobby, food and beverage facility, and parking structure will define the south side of the Hotel District. Collectively, these existing and new buildings will create the edges surrounding a vibrant new central courtyard and pool amenity.

6.3 DESIGN GUIDELINES

The Hotel District design guidelines will establish an architectural and urban design fabric for the new buildings and open spaces that complement and unify the disparate scale and style of the existing hotel buildings to be renovated.

A Destination for Everyone

A key element of the site design of the Hotel District is the new hotel lobby and vehicular arrival court. The hotel lobby will create a new arrival experience to the hotel and include a convenience



LEGEND

HOTEL DISTRICT

Commercial - Visitor

Note Layout of proposed buildings is for illustrative purposes only. The final configuration may vary from this concept plan.

Source AECOM 2016

N

0 50 100 200 300

Figure 6-1

HOTEL DISTRICT LAND USE PLAN

shop, café, bar and restaurant. These amenities will be available to residents in the Residential District, providing a central gathering place for the community and the co-mingling of guests and residents. This active and lively central area will be the heart of the Town & Country Master Plan Area and provide a social and entertainment destination.

Hotel District design guidelines and features will be in compliance with SDMC Article 14 Mission Valley Planned District and are as follows:

1. Cohesive open space, an improved pool amenity, new lobby, food and beverage, entry court, and parking structure.
2. The western edge of the Hotel District will continue to be an additional site entry point and arrival area for Conference Center activities.
3. The exterior courtyards and event areas will be enhanced to include new hotel food and beverage services, and outdoor breakout spaces for conference services. This will also include a new pool amenity.
4. Pedestrian access will be improved to hotel rooms, hotel amenities, the River Park District and Residential District.
5. The southern edge of the Hotel District will remain the formal entry and arrival for visitors to the hotel. It will also be an important interface with the new Residential District. The main portal and focal point will be the new hotel lobby, bar, café, and restaurant. Pedestrian access to these amenities and passage through the building to the central hotel amenities are seen as important links between the adjacent Residential District and Hotel District.
6. The eastern edge of the Hotel District will be defined by a continuous north-south public access corridor providing access all the way through the Plan Area to the River Park District, San Diego River, MTS Fashion Valley transit center, and Fashion Valley Mall beyond.
7. The northern edge of the Hotel District will be enhanced to encourage physical and visual connections to the River Park District. A new outdoor terrace at the northern end of the Convention Center will overlook the riverine open space. Terrace amenities will include shade structures, planter boxes, and/or enhanced paving. The terrace will be used for convention center gatherings. The northern façade of the residential building on Parcel 4 will have vertical step backs to provide balconies and terraces to provide outdoor open spaces for private and semi-private enjoyment as well as provide passive visual surveillance since these spaces directly overlook the new park and restored riverine open space.
8. The exterior visual appearance of the Royal Palm Towers will be updated. The porte cochere at the building's main entrance facing the park and river open space will be renovated and directly connect to a landscaped corridor in the River Park District leading to the pedestrian bridge over the San Diego River. In addition, the 10-story building façade will be painted with a graphic design of colors and patterns to increase its visual interest and perceived depth. This treatment will break up the monolithic visual mass of the existing building and provide an updated appearance that echoes the new overall design theme of the Hotel District.
9. The glass curtain wall exterior of the Regency Tower will remain. Adjacent landscape planting will reduce the visual scale of the building and help tie it into the new design theme of the Hotel District.
10. The other renovated hotel buildings to remain will be painted to reinforce a cohesive new design theme throughout the Hotel District.

7

IMPLEMENTATION

Town and Country

7 IMPLEMENTATION

The implementation strategy for the Master Plan will facilitate an efficient open space restoration, hotel renovation/ construction, and residential construction process and provide reasonable flexibility to adjust the development program to changing market conditions.

7.1 DECISION PROCESS

The Master Plan establishes the standards and guidelines by which development proposals within the Plan Area will be evaluated for substantial conformance with the Master Plan and implementing Master Planned Development Permit in accordance with the City review process outlined in City of San Diego Municipal Code (SDMC) §126.0112.

7.1.1 Decision Process Applicability

Future discretionary actions necessary for project implementation will require an administrative review by the City as outlined in SDMC §112.0501 Overview of Decision Process. *Table 7-1 Project Review Process* itemizes the development scenarios that may occur in relation to the Town & Country Master Plan and the review process required by the City.

7.1.2 Lot Reconfiguration and Consolidation

Lots within the Master Plan Area may be reconfigured through consolidation and/ or boundary adjustment if the resulting lot configuration does not conflict with the intent of this Master Plan and the Subdivision Map Act and is in compliance with the base zone as identified and modified by this Master Plan and the implementing Master PDP.

Subdivision of existing lots is allowed by this Master Plan and does not require an amendment to the Master PDP. Any lot subdivision must be in compliance with City regulations and the Subdivision Map Act.

Lot line adjustments and lot consolidations may be processed by the City administratively and do not require an amendment to this Master Plan, the Vesting Tentative Map, or the Master PDP. In addition, the Master Plan allows construction of buildings straddling a lot line, provided both parcels are under the same ownership.

7.2 ZONING

The following discretionary actions are processed concurrently to implement and rezone the Town & Country Master Plan.

- **Amendment to the Atlas Specific Plan** (ASP) (1988) removes the 39.72-acre Town & Country site from the Specific Plan area.
- **Approval of the Town & Country Master Planned Development Permit** (Master PDP) replaces the authority of the ASP, implements the Master Plan, and rezones the 39.72-acre Master Plan Area.
- **Amendment to the Mission Valley Community Plan** (MVCP) is necessitated by the amendment to the ASP to reflect the rezone from MVPD-MV-M/SP Mission Valley Planned District Specific Plan (pursuant to the ASP) to MVPD-MV-M Mission Valley Planned District Multiple Use and OF-1-1 Open Space - Floodplain (pursuant to the Master PDP).
- **Amendment to the General Plan** is necessitated by the amendment to the MVCP to reflect the changes to the MVCP.
- **Amendment to Planned Commercial Development/ Conditional Use Permit No. 88-0585** (1989) to remove all conditions of approval from the project since they are requirements of the ASP and not applicable to the project.
- **Amendment to existing Site Development Permit No. 400602** (2013) to combine it with a new Town & Country Master Plan SDP required for development on a property in the Mission Valley Planned District that contain Environmentally Sensitive Lands.
- **Approval of the Vesting Tentative Map** details the lot configuration, easement vacations, land development, grading, and infrastructure for the Master Plan Area.

Table 7-1 Project Review Process

PROJECT CATEGORY	DEVELOPMENT PROJECT	CITY REVIEW
1	• Consistent with land uses and development intensity as identified by the Master Plan • Consistent with intent of development guidelines established by the Master Plan • Consistent with design standards established by the Master Plan • Consistent with allowable deviations established by the Master PDP • Transfer of dwelling units or development intensity between lots within the Residential District	Process One Substantial Conformance Review
2	• Meets the requirements for a Project Category 1 approval • Consistent with Commercial Recreation and Open Space land uses as identified the Mission Valley Community Plan and/or • Transfer of development intensity between the Residential District and the Hotel District • Consistent with land uses permitted in MVPD MV-M and OF-1-1 zones but not specifically stated in the Master Plan	Process Two Substantial Conformance Review
3	• Consistent with this Master Plan • Incorporates a use that requires a Conditional Use Permit as required by the applicable zone	Process Three
4	• Requires Master PDP Amendment	Process Four
5	• Requires change to Land Use Designation or development intensity • Requires Rezone	Process Five

- **Amendment to Comprehensive Sign Plan No.2** (adopted 1979) will update certain elements of this covenant running with the lands (the entirety of the Master Plan Area) to align it with the design intent and clarify implementation of the Hotel District signage program while preserving the rights and responsibilities of the permit holder.
- **Approval of a General Development Permit** for the environmental review, design, planning, and construction of the population-based public park in conformance with City Council Policy No. 600-33 Community Notification and Input for City-wide Development Projects.
- **Approval of a separate agreement** with the master developer, the adjacent property owner and the City to implement landscape improvements on the 0.5-acre area between the northern Master Plan Area boundary and the southerly back of curb of Riverwalk Drive and inclusion of this area as part of the population-based park.

The Master Plan land use is graphically depicted in *Figure 2-1 Land Use Plan*. The Master Plan zoning is graphically depicted in *Figure 2-2 Proposed Zoning Map*. These zones are established by SDMC Chapter 13 Zones and SDMC Chapter 15, Article 14 Mission Valley Planed District as modified by the approved Master PDP implementing this Master Plan.

The San Diego Municipal Code shall be the governing regulatory document for development within the Master Plan Area. Permitted uses and development regulations of the designated zone will govern development of the lot or group of lots, unless as modified by the approved Master PDP.

7.3 DEVELOPMENT INTENSITY

The Master Plan establishes a target number of dwelling units in the Residential District and a target amount of gross square footage in the Hotel District. These targets are based on the Master Plan vision, objectives, and guidelines; traffic generation projections, existing infrastructure, proposed improvements, site constraints, environmental considerations, other applicable regulations.

The maximum development intensity allowed in the Mission Valley Planned District is based on the amount of traffic generated by the development per SDMC §1514.0301 Development Intensity Overlay District. The development intensity and average daily trips (ADTs) generated for each use is calculated using Development Intensity Factors detailed in SDMC §1514.0301 Table 1514-03B. The overall maximum ADT has been determined based on the overall land use concept and vision for the Master Plan, as studied in a Traffic Impact Analysis prepared by Linscott, Law & Greenspan, Engineers (May 2016).

7.3.1 Maximum Development Intensity

The maximum development intensity for the Master Plan Area is based on the Traffic Impact Analysis of the development program as outlined in the Master Plan. A goal of the Master Plan is to accommodate the development program on the site with zero net increase in ADT over the existing 14,985 ADT.

The Master Plan development program includes renovation of some hotel facilities, construction of some new hotel facilities, and demolition of some existing hotel facilities which results in a reduction in the number of hotel guest rooms. The development program also includes open space restoration, a recreation easement to accommodate a public park and the construction of a maximum of 840 multi-family dwelling units. Based on the Traffic Impact Analysis, the development program development intensity would result in a total of 14,985 ADT (see *Table 7-2 Development Program Summary*). This represents a zero net increase in Master Plan ADT versus the current ADT generated by the existing hotel complex.

Within the Residential District, the maximum density shall be 84 dwelling units per gross acre of the entire residential zone. However, due to the reduction in the number of hotel rooms and associated ADT, the total Master

Table 7-2 Development Program Summary

MASTER PLAN AREA (1)	ACRES	DU TARGET	PER MITTED DU RANGE (2)	GROSS FLOOR AREA SF (3)	HOTEL GUEST ROOMS	DEVELOPMENT INTENSITY ADT (4)	PARKING SPACES REQUIRED	PARKING SPACES PROVIDED
Lot C Habitat	7.75							
Lot B Public Park (Partial)	1.74							
Lot D Public Park (Partial)	2.08							
Subtotal River Park District *(OF-1-1 Zone)*	**11.57**							
Lot 1 Residential	1.80	160	80-420			816	224	224
Lot 2 Residential	2.53	275	142-420			1,402	385	443
Lot 3 Residential	1.99	255	127-420			1,301	356	410
Lot 4 Residential	1.37	150	75-420			765	210	210
Lot A (Private Drives)	2.44	0	0					
Subtotal Residential District *(MVPD-MV-M Zone)*	**10.13**	**840**	**424 DU - 840 DU**			**4,284**	**1,175**	**1,287**
Lot 5 Hotel District	16.89							
Subtotal Hotel District *(MVPD-MV-M Zone)*	**16.89**			**847,541**	**700**	**10,701**	**856**	**921**
Fashion Valley Road Easement	0.25							
Hotel Circle North R.O.W. Dedication	0.88							
Subtotal Public Roadways	**1.13**							
Total Master Plan Area	**39.72**	**840**		**847,541**	**700**	**14,985**	**2,031**	**2,208**

(1) Acreage amounts, gross floor area as measured in Square Feet (SF) and number of dwelling units (DU) are conceptual and based on the development scenario detailed in this Master Plan.
(2) A maximum of 840 dwelling units are allowed in the Master Plan Area. Dwelling units are counted by number of units (not by gross floor area) for purposes of development intensity and density calculations.
(3) Gross floor area of Hotel District includes 677,741 SF of existing renovated facilities and 169,800 SF of new structures.
(4) Non-Residential Development Intensity expressed as Average Daily Traffic (ADT) as detailed in Traffic Impact Analysis (TIA) prepared by Linscott, Law & Greenspan, Engineers (May 2016).

Plan maximum development intensity is 1,578 ADT below the maximum permitted development intensity of 16,563 ADT which would otherwise be permitted by SDMC §1514.0301.

SDMC §1514.0301(d)(2)(A) Threshold 2 – Discretionary Mission Valley Development Permit. Per Table 1514-03A, the 39.72-acre Master Plan Area (located in Development Intensity District (DID) C) has a maximum allocation of 16,563 ADT to meet Threshold 2 for a Discretionary Mission Valley Development Permit. The Master Plan establishes the maximum ADT below this threshold so there is zero net increase in Master Plan ADT versus the current ADT generated by the existing hotel complex. This supports the Master Plan Objective of creating a compact mixed-use TOD that does not add to existing traffic challenges within Mission Valley.

7.3.2 Minimum Development Intensity

The City Transit-Oriented Development Design Guidelines encourage higher development intensity in the immediate vicinity of light rail transit stations. The Master Plan shall have a minimum density of 25 dwelling units per gross acre of entire residential zone.

7.4 DEVELOPMENT INTENSITY TRANSFER

The Master Plan details the conceptual plan upon which all the technical studies are based. As the Master Plan is implemented and market trends change the plan may change as well. A process to accommodate such change has been established.

The Master Plan details the target conceptual development scenario upon which all the technical studies are based. As the Master Plan is implemented and market trends change, other development scenarios, MVPD-MV-M zone combinations, distribution of development intensity between Master Plan Districts, configuration of Master Plan Districts, or other adjustments may be considered. These alternative scenarios may result in more or less development intensity than the development intensity on certain individual lots as currently detailed by the Master Plan.

7.4.1 Development Intensity Transfer Criteria

The transfer of development intensity from residential to commercial (retail and/or office) uses shall be limited to street or private drive-facing ground floor commercial within residential buildings or live/work units. Any commercial uses within the Residential District shall be neighborhood serving uses that do not directly compete with any use within the Hotel District. The transfer of development intensity from commercial uses back to residential use is allowed only within the Residential District.

An alternative development scenario is allowed provided that all the following criteria are met.

- It can be demonstrated that the maximum 14,985 ADT for the overall Master Plan Area as detailed in the original approved Traffic Impact Analysis shall not be exceeded.
- It can be demonstrated that any and all traffic impacts shall be fully mitigated by the improvements and mitigation measures detailed in the Traffic Impact Analysis prepared for the original approved Town & Country Master Plan.
- The minimum density of 25 dwelling units per gross acre of the total residential zone within the Master Plan area shall be met.
- The maximum density of 84 dwelling units per gross acre of the total residential zone within the Master Plan area shall not be exceeded.
- The requirements and standards of the OF-1-1 zone and MVPD-MV-M zone as described and deviated from in the approved Master Plan shall be met.
- It can be demonstrated that the intent of the Master Plan vision,

objectives and guidelines shall be achieved.

- It can be demonstrated that any alternative development scenario or action shall be consistent with SDMC Chapter 15, Article 14 Mission Valley Planed District as modified by the approved Master PDP implementing this Master Plan.

7.4.2 Monitoring Development Intensity Transfer

A development intensity transfer chart is required to accurately reflect and record the subsequent transfer of dwelling units or gross floor area throughout the Master Plan Area as it is built to completion over time per SDMC §143.0480(a)(9).

As such, the master developer or its successor shall maintain, review and approve an updated copy of *Table 7-3 Development Intensity Transfer*. Development Intensity is expressed in Average Daily Trips (ADT) based on total trip generation at project completion per Traffic Impact Analysis prepared by Linscott, Law & Greenspan, Engineers (May 2016). Each project applicant shall complete and update the table for master developer review before submittal to the City.

7.4.3 Intensity Transfer Tracking Process

If an update to the Development Intensity Transfer Table is needed, the applicant shall complete the following steps.

- Enter the number of ADT proposed for each Master Plan District in column [B].
- Compare the number in column [B] with the number in column [A].
- If the number in column [B] is greater than the number in column [A], copy the number in column [B] to column [C]. This indicates an overage of the development intensity proposed to be built versus target for the District as detailed in the Master Plan.
- If the number in column [B] is less than the number in column [A], copy the number in column [B] to column [D]. This indicates that the development intensity proposed to be built is below the target for the District as detailed in the Master Plan.
- Copy any number from column [C] to column [E]
- Copy any number from column [D] to column [E] as a negative number.
- Update the total ADT row for all columns.

A letter request must be submitted to and approved by the master developer or its successor for a development application to deposit or withdrawal ADT to/from the tracking pool using the table. Each project applicant shall complete and update the table for master developer review before submittal to the City.

Before issuing any building permit within the Master Plan Area, City staff shall review the proposed project and an updated copy of *Table 7-2 Development Program Summary* and *Table 7-3 Development Intensity Transfer* to ensure compliance.

Additionally, a “Notice of Development Intensity Transfer” shall be recorded against the development to ensure that, should the development proposal not be implemented, a potential future buyer is aware that the development intensity ADTs allowed for that particular development area has been adjusted.

These monitoring and tracking procedures will assist the master developer and the City in ensuring that the development intensity does not exceed the established 14,985 ADT maximum or fall too short of the established maximum indicating less dense development that would not achieve Master Plan TOD goals.

7.5 RESIDENTIAL DENSITY TRANSFER

Furthermore, this Master Plan provides for the ability to transfer density between lots within the Residential District. This will allow flexibility in the actual dwelling unit density and building types selected for each development action on each particular residential lot in response to changing market trends.

Table 7-3 Development Intensity Transfer

MASTER PLAN DISTRICT	[A] TARGET ADT (1)	[B] AS BUILT ADT	[C] ADT OVERAGE IF [B] > [A]	[D] UNUSED ADT IF [B] > [A]	[E] ADT AVAILABLE FOR TRANSFER OR (REDUCTION OF ADT AVAILABLE)
River Park District	0				
Residential District	4,284				
Hotel District	10,701				
TOTAL ADT	**14,985**				

(1) Development Intensity is expressed in Average Daily Trips (ADT) based on total trip generation at project completion per Traffic Impact Analysis prepared by Linscott, Law & Greenspan, Engineers (May 2016).

Table 7-4 Residential District Density Transfer

RESIDENTIAL DISTRICT	[A] TARGET DUs	[B] DUs BUILT	[C] DU OVERAGE IF [B] > [A]	[D] UNUSED DUs IF [B] > [A]	[E] DUs AVAILABLE FOR TRANSFER OR (REDUCTION OF DUs AVAILABLE)
Lot 1	160				
Lot 2	275				
Lot 3	255				
Lot 4	150				
TOTAL DUs	**840**				

DU - Dwelling Unit

7.5.1 Residential Density Transfer Criteria

Residential density transfer between lots within the Residential District is allowed provided that all the following criteria are met.

- The minimum density of 25 dwelling units per gross acre of the total residential zone within the Master Plan area shall be met.
- The maximum density of 84 dwelling units per gross acre of the total residential zone within the Master Plan area shall not be exceeded.
- The maximum of 840 total dwelling units within the Residential District shall not be exceeded.
- The number of dwelling units proposed for each lot shall fall within the DU Range as indicated in *Table 7-2 Development Program Summary*.
- The Residential District lots may each be built out as more than one project. Projects not utilizing the entire parcel shall submit conceptual alternatives depicting how the balance of the parcel may be built-out consistent with the guidelines and requirements of the Master Plan and the City LDC.
- It can be demonstrated that the intent of the Master Plan vision, objectives and guidelines shall be achieved by the proposed project.
- It can be demonstrated that the proposed project shall be consistent with SDMC Chapter 15, Article 14 Mission Valley Planed District as modified by the approved Master PDP implementing this Master Plan.

7.5.2 Monitoring Residential Density Transfer

A density transfer chart is required to accurately reflect and record the subsequent transfer of dwelling units or gross floor area throughout the Master Plan Area as it is built to completion over time per SDMC §143.0480(a)(9).

As such, the master developer or its successor shall maintain, review and approve an updated copy of *Table 7-4 Residential District Density Transfer*.

7.5.3 Density Transfer Tracking Process

If an update to the Residential District Density Transfer Table is needed, the applicant shall complete the following steps.

- Enter the number of dwelling units proposed for each lot in column [B].
- Compare the number in column [B] with the number in column [A].
- If the number in column [B] is greater than the number in column [A], copy the number in column [B] to column [C]. This indicates an overage of the number of dwelling units proposed to be built versus the dwelling unit target for the lot(s) as detailed in the Master Plan.
- If the number in column [B] is less than the number in column [A], copy the number in column [B] to column [D]. This indicates that the number of dwelling units proposed to be built is below the dwelling unit target for the lot(s) listed in the Master Plan.
- Copy any number from column [C] to column [E]
- Copy any number from column [D] to column [E] as a negative number.
- Update the total DUs row for all columns.

A letter request must be submitted to and approved by the master developer or its successor for a development application to deposit or withdrawal dwelling units to/ from the tracking pool using the table. Each project applicant shall complete and update the table for master developer review before submittal to the City. Before issuing any building permit for lots within the Residential District, City staff shall review the proposed project and an updated copy of *Table 7-2 Development Program Summary* and *Table 7-4 Residential District Density Transfer* to ensure compliance.

Additionally, a “Notice of Density Transfer” shall be recorded against the development to ensure that, should the development proposal not be implemented, a potential

future buyer is aware that the number of dwelling units allowed for that particular development area has been adjusted.

These monitoring and tracking procedures will assist the master developer and the City in ensuring that the residential density is appropriately distributed in a balanced manner across the Residential District without exceeding the established 840 maximum number of dwelling units or falling too short of the established maximum and not achieving Master Plan TOD goals.

7.6 PHASING PLAN

The Master PDP facilitates the processing of a proposed development that incorporates conceptual development criteria for portions of the premises intended for future or phased development. The Town & Country Master Plan will be developed in two phases which will minimize the disruption of ongoing hotel operations. This will accommodate the careful demolition of multiple existing structures, debris removal and importation of fill, construction of site infrastructure and utilities, implementation of extensive site and river improvements, construction of new hotel facilities, and preparation and construction of the Residential District.

The conceptual development plan summarized in *Table 7-5 Phasing Plan* is conceptual and outlines the generally expected implementation sequence of development. The phasing plan reflects current plans for the hotel renovation and new facilities, the anticipated market for residential parcels, physical attributes of the site, existing utilities infrastructure, and assumptions regarding overall construction management considerations.

Implementation of the two phases may overlap with the subsequent phase beginning prior to completion of the initial phase. The plan anticipates adjustments to the phasing sequence given the large scale and complicated nature of the scope of work proposed by the Master Plan.

To ensure the public park is constructed commensurate with the development of residential units, an agreement with the City for the construction of the park shall be entered into prior to the approval of the first final map for the Town & Country Master Plan.

7.7 AFFORDABLE HOUSING

The Master Plan requirements for affordable housing as outlined in the City of San Diego Inclusionary Affordable Housing Ordinance (SDMC §142.1300) and the San Diego Housing Commission's Implementation and Monitoring Procedures shall be satisfied through payment of the in-lieu fee.

7.8 MAINTENANCE RESPONSIBILITIES

The Master Plan includes development of public right-of way along Fashion Valley Road and Hotel Circle North. The Master Plan also includes development of private common space, landscaped parkways, and areas subject to public access easements. The maintenance of these common areas shall be the responsibility of the City, the master developer, property owners, a Home Owners Association, Property Owners Association, or Maintenance Assessment District or other such mechanism is established for the Town & Country Master Plan Area.

The responsible parties and/or associations within the Master Plan Area are responsible for enforcing private property maintenance requirements, easements, and signage standards in their respective areas of purview pursuant to the standards identified in the Master Plan and any separately created covenants, conditions, and restrictions (CC&R) or reciprocal easement agreements (REA).

The public park will be entirely within a recreation easement that also functions as a public access easement in conformance with City Council Policy No. 600-33 Community Notification and Input for City-wide Development Projects. The master developer or its successor will retain ownership and maintenance responsibility for the public park including the bridge over the river per separate agreement with the City.

In addition, the master developer or its successor will retain maintenance responsibility for the landscape improvements on the 0.5-acre portion of the public park between the northern

Table 7-5 Phasing Plan

DU	ON-SITE CONSTRUCTION IMPROVEMENTS	ON-SITE & OFF-SITE INFRASTRUCTURE	DURATION
	Phase 1		
435 dwelling units	**River Park District** • Construction of public park • Construction of San Diego River Pathway • Habitat restoration and enhancement (including SDP requirements) **Hotel District** • Renovation of hotel buildings to remain • Demolition of hotel buildings to be removed • Construction of new hotel lobby, lobby restaurants, hotel parking structure, pool complex, and hotel site improvements **Residential District** • Site preparation: Residential Lot 1, Lot 2, Lot 3, and Lot 4 • Construction: Residential Lot 1 and Lot 2	• Construction of storm drainage and utility infrastructure related to Hotel District and Residential District • Construction of Private Drive A • Construction of Private Drive B • Construction of Private Drive C • Construction of Private Drive D • Construction of Private Drive E	• Demolition: 3 months • Renovation and construction: 24 months
	Phase 2		
405 dwelling units	**Residential District** • Construction: Residential Lot 3 and Lot 4	• Construction of fire access lane/ bikeway and pedestrain access way on east side of Residential District Lot 4 • Right-of-way improvements to Hotel Circle North • Right-of-way improvements to Camino De La Reina	• Construction: 24 months

Master Plan Area boundary and the southerly back of curb of Riverwalk Drive per separate agreement with the adjacent property owner and the City.

The master developer or its successor will retain ownership and maintenance responsibility for the restored and enhanced open space and habitat along the river pursuant to SDMC Article 3, Division 1 Environmentally Sensitive Lands Regulations.

For all public areas with enhanced improvements, the master developer shall enter into a bonded maintenance agreement ensuring maintenance of all landscaping and appurtenance within the right-of-way until such time a Home Owners Association, Property Owners Association or Maintenance Assessment District or other such mechanism is established for maintenance of all landscaping and appurtenances.

Private development within the Hotel District and on lots within the Residential District will include landscaping, private recreational amenities and enhanced open areas. The maintenance of these areas will be the responsibility of the hotel owner in the Hotel District and the individual property owners or a Property Owners Association(s) within the Residential District.

7.9 MASTER PLAN DEVIATIONS

The purpose of the Master PDP regulations is to allow flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project.

Specific deviations from the Master PDP regulations are incorporated into the Master Plan in order to provide flexibility in achieving a zone-equivalent project design. The deviations will be consistent with the intent of the base zone and the Master Plan objective of creating a pedestrian friendly transit-oriented development. The application of the SDMC to the Master Plan will include the deviations as detailed in *Table 7-6 Master Planned Development Permit Deviations.*

Each individual permit application shall comply with all other regulations not specifically identified as deviations in this Master Plan. In addition, all permit applications will comply with zoning requirements except where deviations are specifically requested.

7.10 MASTER PLAN DESIGN STANDARDS

This Master Plan establishes a vision and objectives to guide the design and implementation of the Master Plan Area. Also, this Master Plan outlines design and planning guidelines for the River Park District, Residential District and Hotel District.

Each development project or action within the Master Plan Area shall be in substantial conformance with the intent of the Master Plan vision, objectives and district guidelines as outlined in this document to the extent feasible. All subsequent design documents and development activities shall be consistent with the Master Plan.

Furthermore, the Master Plan establishes design standards for all Master Plan Districts.

7.10.1 River Park District Design Standards

All development projects, or actions within the River Park District shall comply with all applicable design standards in the San Diego Municipal Code and other applicable regulations.

7.10.2 Residential District and Hotel District Design Standards

All new buildings, development projects, or actions within the Residential District and Hotel District shall comply with the following design standards.

1. Cohesive open space, an improved pool amenity, new lobby, food and beverage, entry court, and parking structure.
2. New buildings shall represent a single architectural style that is consistently reinforced by all materials and details.

3. Outdoor courtyards at ground level or podium level shall be improved with landscaping, paved areas or decking, shade structures or shade trees, seating, and other amenities to create an enhanced and inviting amenity open space.
4. Infrastructure and building utility needs must be accommodated in the earliest phases of design. Misplaced or visually intrusive vents, downspouts, life-safety, utility boxes, utility meters, and other site and building infrastructure shall be avoided to the greatest extent feasible.
5. The maximum length of any blank wall on a new a new building shall not exceed 25 feet.
6. Building façades shall have a glazed opening at least every 25 feet.
7. Windows and doors shall be recessed at least 3 inches from the face of the finished exterior wall to achieve sufficient depth and shadow. Flush finish installations, especially with stucco, are not permitted.
8. New buildings shall provide façade variation through the use of balconies, fenestration, or sunshades to create a visually interesting pattern of projections and recesses, and light and shadow.
9. Metal security doors and exterior security grilles are not permitted on new buildings.
10. Materials and color shall be used to reinforce variations in building massing and form, and provide visual variation in the building facade.
11. Detailed façade elements shall be used to reinforce the overall design concept, to create texture, shade, shadow, and to relate the building to a human scale streetscape. Exaggeration of details or use of generic, applied details shall not be used as they tend to create a cartoon-like appearance that is not consistent with the quality design and character intended.
12. Only durable and high quality materials with a proven longevity in the San Diego region shall be used.
13. All major building systems and equipment shall be accommodated within the building or, if located on the roof, shall be enclosed in a screening structure with materials and visual appearance integrated with the design of the building.
14. Building roof forms shall represent the single architectural style of the building and be simple, uncomplicated, straightforward, and proportional to the building massing and details.
15. Roof parapets, if used, shall be continuous and extend to all visible building elevations.
16. Stucco is a permitted building façade material. A variety of textures can be achieved with a final coat of cementitious stucco, depending on the size of aggregates used, the method of application, and the final use of float or trowel. Acrylic stucco can achieve a more limited range of textures. Smooth, fine-textured finishes such as Santa Barbara, 20/30 Float are permitted. Rough, irregular or coarse-textured finishes such as heavy lace, machine dash, or light lace are prohibited.
17. Façade elements constructed of foam or foam molding are strongly discouraged. If used, they shall be in proportion to other building elements and constructed in a manner to avoid the appearance of being pasted onto the building.
18. Ground floor dwelling units on Lot 4 that directly face the river shall have entries (primary or secondary) facing the river.
19. High-quality windows shall be provided with details that provide for a shadow line and appearance of depth, either through use of inset windows with an integral frame, or windows inset into the exterior wall. Windows may be constructed of wood, wood with vinyl clad exterior, recycled-content aluminum vinyl clad, steel casement, or anodized aluminum.

20. Metal railings, entrance canopies, downspouts, scuppers, shutters, and garage openings shall be consistent with the design, style, and proportion of the overall building.
21. Transparency is encouraged in fenestration to the greatest extent possible. Highly reflective or very dark glass is not permitted.
22. Outdoor lighting shall be designed to reinforce building architecture or special plant material and create an inviting street and sidewalk environment at night.
23. A hierarchy of exterior building lighting types and fixtures shall be provided to reinforce architectural features and materials. Blanket wash floodlighting of entire buildings is not permitted.
24. Visible direct lamp glare from unshielded floodlit fixtures is prohibited.
25. Lighting design that allows intense light to be cast up into the night sky is prohibited.
26. The Hotel District shall include a minimum of 10,000 square feet of ground floor food and beverage and/or retail use.

Table 7-6 Master Planned Development Permit Deviations

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
OF-1-1 (Open Space-Floodplain) Zone		
SDMC §131.0231-Table 131-02C Lot Area	Minimum 10 acres	Deviation to allow minimum lot area as follows. • Lot 6 = 1.74 acres • Lot 7 = 7.78 acres • Lot 8 = 2.15 acres
SDMC §131.0231-Table 131-02C Lot Width	Minimum 500 feet	Deviation to allow minimum lot width as follows. • Lot 7 = 300.5 feet (north-south) • Lot 8 = 231.4 feet (north-south)
SDMC §131.0231-Table 131-02C Street Frontage	Minimum 500 feet	Deviation to allow minimum street frontage as follows. • **Lot 6** = No public street frontage (515.3 feet frontage on Private Drive E) • **Lot 7** = 123.0 feet frontage on Fashion Valley Road
SDMC §131.0231-Table 131-02C Lot Depth	Minimum 500 feet	Deviation to allow minimum lot depth as follows. • **Lot 6** = 284.1 feet from Private Drive E
Master Plan River Park District		
SDMC, Land Development Code, Biology Guidelines	A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b) (2) of the U.S. Army Corps of Engineers General Regulatory Policies (33CFR 320-330) list criteria for consideration when evaluating wetland functions and values.	Wetland buffers shall be less than the standard 100 feet in some locations due to constraints (i.e., existing development) adjacent to the existing wetlands and proposed wetland restoration areas). However, wetland buffer shall exceed the standard 100 feet in other locations. Development shall be provided as depicted in Figure 4.4-3 (Project Impacts—Vegetation Communities) of the EIR.

Table 7-6 Master Planned Development Permit Deviations (cont.)

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
SDMC §143.0510 Wetland Deviations Outside of the Coastal Zone	Impacts to wetland habitats require a deviation.	The project meets the requirements for a deviation under the City's Biology Guidelines (City of San Diego 2012) as the project provides the Biologically Superior Option and would result in the maximum amount of habitat restoration and enhancement of wetlands on-site and limit impacts to wetlands of low biological quality.
SDMC §143.0145(e)(2) Structures within Floodways	Permanent *structures* not permitted within *floodway*.	Deviation to allow *permanent structures* associated with improvements to existing loading dock, parking, Private Drive E and associated directional signage within *floodway*.
SDMC §143.0146(a)(4) Flowage Easement	Flowage easement to the City shall be granted for that portion of the property within a *floodway*.	Deviation to allow existing and substantially improved existing structures within the floodway, outside the flowage easement.
SDMC §1514.0302(c) River Corridor Area	• *Permitted Uses* and Development limited in *River Corridor Area* • Alignment of *River Pathway* within *Path Corridor*	Deviation to allow the following within the *River Corridor Area*: • *River Pathway* outside of the *Path Corridor* and within *floodway*. • Existing hotel buildings and loading dock with certain improvements including parking and Private Drive E. • Construction of new residential building and site improvements on Lot 4 within *Path Corridor*. • Shielded lighting along *River Pathway* within *floodway* directed away from river and MHPA areas.
SDMC §1514.0302(d)(1) River Influence Area Lot Coverage	Maximum 65 percent lot coverage for any development on a lot wholly or partially within 115 feet of *River Corridor Area*	Deviation to allow 85 percent lot coverage for development on Lot 4.

Table 7-6 Master Planned Development Permit Deviations (cont.)

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
SDMC §1514.0302(d)(2) River Influence Area Building Height	Per Table 1514-03C and Diagram 1514-03C, set backs are established from the edge of the *River Corridor Area*. Minimum distance the building is set back from the ***River Corridor Area*** and maximum building height allowed: • Buildings shall be set back a minimum of 10 feet from the *River Corridor Area*. • 10' setback/35' max height • 20' setback/45' max height • 30' setback/70' max height • 70' setback/max height equal to the number of feet the building is setback from *River Corridor Area* • 115' setback/max height per underlying zoning	Deviation to measure height setback from edge of ***floodway*** instead of edge of *River Corridor Area*. Minimum distance the building is set back from the ***floodway*** and maximum building height allowed: • Buildings shall be set back a minimum of 10 feet from the *floodway*. • 10' *floodway* setback/35' max height • 20' *floodway* setback/45' max height • 30' *floodway* setback/70' max height • 70' *floodway* setback/max height equal to the number of feet the building is setback from *floodway* • 115' *floodway* setback/max height per underlying zoning. Within Master Plan area MVPD-MV-M zone, max height allowed is 250' per SDMC 1514.0404(a).

Table 7-6 Master Planned Development Permit Deviations (cont.)

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
SDMC §1514.0302(d)(2) River Influence Area Massing	Per Table 1514-03C, setbacks are established from the edge of the *River Corridor Area*. • Maximum 50 percent of a building's wall may be located at the setback measured from the River Corridor Area. • At or above 70 feet in height above finished grade, a building's wall shall be at least 30 percent narrower than the width of the building wall on the ground floor within the *River Influence Area*.	Deviation to measure massing setback from edge of ***floodway*** instead of edge of *River Corridor Area*. • Maximum 50 percent of a building's wall may be located at the setback measured from the ***floodway***. • At or above 80 feet in height above finished grade, a building's wall shall be at least 30 percent narrower than the width of the building wall on the ground floor within the *River Influence Area*.
SDMC §1514.0302(d)(8)(A) Exterior Equipment Enclosures	Loading Areas located minimum 100 feet from *River Corridor Area*	Deviation to allow one loading area within 100 feet of the *River Corridor Area*.
SDMC §1514.0302(d)(13) Fences	Limitations on fences within 10 feet of outer limit of *River Corridor Area*	• Deviation to allow fences at residential Lot 4 for definition of building entrances and terraces within *River Corridor Area*. • Deviation to allow fence along Riverwalk Drive within *River Corridor Area*.

Table 7-6 Master Planned Development Permit Deviations (cont.)

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
SDMC §1514.0402(b)(1) Sidewalks/Parkways	Minimum Average Widths per table 1514-04A: Majors and Arterials • 10' clear corridor sidewalk • 8' landscaped parkway 2-lane collectors and streets of lesser width • 6' clear corridor sidewalk • 5' landscaped parkway	Deviation to allow the following minimum average widths: Deviation to allow the following: 1. 4-lane major (Fashion Valley Road-at new construction) • 8' clear corridor sidewalk56' landscaped parkway 2. 4-lane major (Camino de la Reina) Option A, Option B and Option C • 8' clear corridor sidewalk • 6' landscaped parkway 3. 2-lane collector (Riverwalk Drive- outside Master Plan area) • 10' Multi-modal River Pathway **outside of Right-of-Way** in lieu of pedestrian sidewalk on south side. Distance to curb may vary.
Master Plan Residential District		
SDMC §1514.0304(c) Density Regulations	No minimum density specified. Maximum 70 dwelling units per gross acre (calculated across entire residential zone)	Pursuant to SDMC §143.0410(a)(3)(D), the Community Plan Amendment will allow maximum 84 dwelling units per gross residential acreage of entire residential zone and minimum of 25 dwelling units per gross residential acreage of entire residential zone.
SDMC §1514.0304(d)(1) Street Frontage	Minimum 70 feet public street frontage	Deviation to allow minimum SF to be "15 foot street yard factor x length of street frontage for new construction."
SDMC §1514.0304(e)(1) Street Yard Area	Minimum street yard area of 25 feet multiplied by the street frontage length plus an incremental factor of 0.25 feet for each foot of building elevation over 24 feet.	Deviation to allow: • Lot 3: No public street frontage provided. (366.8 feet private drive frontage provided). • Lot 4: No public street frontage provided. (448.4 feet private drive frontage provided).

Table 7-6 Master Planned Development Permit Deviations (cont.)

DEVELOPMENT REGULATIONS	CURRENTLY ALLOWED	PROPOSED
SDMC §1514.0304(e)(2) and (3) Parking and Building Setbacks and Incremental Building Setback	**Per Table 1514-03H**: **Street yard setback**: 15 feet plus incremental setback of 0.25 feet for each foot of building elevation over 24 feet. **Side yard setback**: 10 feet plus incremental setback of 0.2 feet for each foot of building elevation over 24 feet. **Rear yard setback**: 15 feet plus incremental setback of 0.2 feet for each foot of building elevation over 24 feet.	Deviation to allow the following: **Side yard setback** • Lot 1: 10 foot setback with no additional incremental setback along eastern side yard. • Lot 2, Lot 3, and Lot 4: 10 foot setback but no additional incremental setback along eastern or western side yards. **Rear yard setback** • Lot 1, Lot 2, Lot 3, and Lot 4: 10 foot setback with no additional incremental setback along northern rear yard.
SDMC §1514.0304(f)(2) Exterior Usable Open Area	156 square feet minimum of usable open area per dwelling unit	Deviation to allow 100 square feet minimum of usable open area per dwelling unit.
SDMC §1514.0304(g) Structural Development Coverage	50 percent maximum structural development coverage	Deviation to allow 55 percent maximum structural development coverage (calculated over the gross acreage of the residential zone).
Master Plan Hotel District		
SDMC §1514.0305(d) Maximum Structural Coverage	50 percent maximum structural development coverage	Deviation to allow 60 percent maximum structural development coverage excluding any fence, wall, retaining wall, pier, post, sign, parking space, terrace, deck, paved area, spa, or swimming pool.
SDMC §1514.0305(e)(1) Minimum Street Yards	Minimum SF = 20 foot street yard factor x length of street frontage	Deviation to allow minimum SF to be "15 foot street yard factor x length of street frontage for new construction."

(1) Density and Structural Development Coverage calculated over the entire site of 39.72 acres
(2) Usable Open Space includes both exterior and interior usable common active or passive recreation space

LETTER A
ATTACHMENT 11

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DRAFT Findings for Site Development Permit Approval

(a) Findings for all Site Development Permits

The proposed development will not adversely affect the applicable land use plan.

The Town & Country Master Plan (Master Plan) is a detailed guide for the renovation and infill redevelopment of the 39.7-acre Town & Country Hotel and Convention Center site. The site offers a unique redevelopment opportunity to create a vibrant, transit-oriented development (TOD) that captures the benefits of a renovated hotel and convention facility and a compact multifamily residential neighborhood located a short walk to transit, shopping, and entertainment. Significant on-site recreational benefits will include a new public park, multi-use pathway connection within a regional open space corridor and the restored ecosystem of this section of the San Diego River. The Master Plan establishes specific land uses in three districts (River, Hotel, and Residential). These districts are designed to restore important natural site features, efficiently build upon existing infrastructure, and capitalize on the proximity to transit.

The Master Plan goals are in alignment with the overall goals of applicable land use plans including The City of Villages strategy as described in the City's General Plan Strategic Framework (City of San Diego, 2008), the objectives of the Mission Valley Community Plan (MVCP) (City of San Diego, 1985), and the intent of the principles of the San Diego River Park Master Plan (SDRPMP) (City of San Diego, 2013a), and the City Transit-Oriented Development Design Guidelines (City of San Diego, 1992).

The following describes in more detail the applicability of the relevant land use plans to the Master Plan Area (Plan Area).

CITY OF SAN DIEGO GENERAL PLAN

The City's General Plan is the foundation upon which all land use decisions in the City are based. It expresses community vision and values, and embodies public policy for the distribution of future land use, both public and private (City of San Diego, 2008). The General Plan Strategic Framework emphasizes the City of Villages strategy which focuses growth into dense mixed-use pedestrian-friendly districts that are linked to the regional transit system. It encourages the incremental redevelopment of aging buildings and sites. The reuse and redevelopment of the site as a TOD implements these aspects of the City of Villages strategy. The Master Plan embraces and incorporates the General Plan Guiding Principles (City of San Diego, 2008) and is consistent with the vision and goals of the General Plan elements as follows.

Land Use and Community Planning Element. This element provides policies to implement the City of Villages strategy within the context of the City's community planning program (City of San Diego, 2008). The Plan Area will retain its Multiple Use land use category and the Master Plan supports the City of Villages strategy by creating a vibrant TOD and preserving and enhancing the existing open space within the Plan Area.

Mobility Element. This element contains policies that promote a balanced, multi-modal transportation network. It addresses walking, bicycling, transit, street design, as well as regional collaboration and parking (City of San Diego, 2008). The Master Plan directly implements these policies by creating a

compact TOD with a well-designed network of multi-modal transportation links and improvements. The Plan Area internal and surrounding streets are designed based on the "complete streets" concept, which entails designing rights of way for vehicles, pedestrians, and bicyclists. Proximity to mass transit is a critical asset. In addition, other mobility options complement the pedestrian and bicycle networks.

The Master Plan also embraces other mobility options and transportation demand management (TDM) strategies to address potential traffic impacts. These techniques would aid in reducing vehicular tripsand thereby reduce associated air quality impacts and greenhouse gas emissions. The TDM program would be based on project features that support the Plan Area as a mixed-use TOD. The overarching intent of the TDM program is to reduce peak period vehicle tripsby providing incentives to encourage staggered travel patterns for this type of mixed use TOD development. The TDM program will encourage pedestrian and bicycle travel, use of transit, and establishment of carpools.

Urban Design Element. This element establishes principles to guide development to respect the natural setting, enhance the distinctiveness of our neighborhoods, strengthen circulation links, and create compact mixed-use walkable communities (City of San Diego, 2008). The Master Plan creates a unique compact pedestrian-friendly TOD with a convention hotel and multifamily residential with new and enhanced public park space and accessible restored open space along the San Diego River. The Master Plan establishes a unifying site and building architectural language and cohesive theme for all land uses fortified with architectural and site design guidelines and a corresponding implementation program to ensure cohesive urban design.

Economic Prosperity Element. This element links economic goals with land use policies and describes how redevelopment can be used to implement community goals. The City of Villages strategy encourages better links between jobs, housing and transportation to support the City's economic base including visitor industries (City of San Diego, 2008). The Master Plan provides a mix of land uses and employment opportunities that encourage live-work in support of the City of Villages strategy. Plan Area land uses will serve as an important revenue source for the City through sales taxes, TOT, property taxes, and project-related fees.

Public Facilities, Services and Safety Element. This element ensures the provision of adequate public facilities and services throughout the City. Its policies outline developer financing responsibilities, prioritization, and the provision of specific facilities and services that must accompany growth (City of San Diego, 2008). The Master Plan outlines the existing and proposed facilities that will adequately serve the Plan Area. The Master Plan satisfies the requirement for population-based park acreage on-site (rather than simply paying an in-lieu fee) which provides a major amenity for the project's residents and guests and also helps address the current park deficit in the Mission Valley community generally.

Recreation Element. This element ensures the preservation, protection, acquisition, development, operation, maintenance, and enhancement of public recreation opportunities and facilities throughout the City for all users. Its policies support the role parks play in the physical, mental, social and environmental health of the City and its residents. Other parks and open space benefits include support provided to the tourism industry, space for storm water percolation, and habitat for plants and animals (City of San Diego, 2008).

This element outlines the categorization of the City's Parks and Open Space System and provides policies to guide the vision and goals for facilities. In addition, this element calls for the preparation of a Parks Master Plan and a sustainable approach to the design, maintenance, and financing of parklands. The

Master Plan provides for an approximately 11-acre Park District and includes more than 7 acres of restored and enhanced riverine open space habitat. The open space features new connecting segments of the San Diego River Pathway along each riverbank with a bridge crossing point. In addition, over 4 acres of new public park will replace 271 existing surface parking spaces along the southern edge of the riverine open space. These improvements will be designed with safety and sustainable features such as water-wise plant materials and low maintenance design.

Conservation Element. This element encourages sustainable development and conservation of the natural resources which help define the City's identity (City of San Diego, 2008). The Master plan directly supports this element and provides compact growth in the vicinity of transit. The Master Plan provides for the restoration and/ or enhancement of more than 7 acres of riparian open space. The Plan Area multi-modal circulation network reduces dependence on vehicles, thus reducing emissions and green house gases. The infrastructure systems are designed to improve storm water quality. Construction will incorporate green building techniques where feasible. All of these Plan features support the policies of the Conservation Element.

Historic Preservation Element. This element provides policies to guide the preservation, protection, restoration, and rehabilitation of significant historical and cultural resources of the City (City of San Diego, 2008). APPLICANT TO SUMMARIZE FINDINGS OF CULTURAL RESOURCES UPON COMPLETION AND SUBMTITAL OF HISTORIC RESOURCES TECHNICAL REPORT AND EIR.

Noise Element. This element protects the people living and working in the City from excessive noise (City of San Diego, 2008). As detailed in the Noise Technical Report prepared for the project and outlined within the EIR, the Master Plan development will comply with applicable regulations and guidelines for construction and operation and no noise-related impacts to sensitive receptors or biological resources will occur.

Housing Element. This element addresses the City's critical housing needs. The Master Plan high density TOD provides multifamily housing in proximity to transit providing increased inventory of relatively economical housing in a high demand area. Affordable housing for the Plan Area will be provided in accordance with the City of San Diego Inclusionary Affordable Housing Ordinance (LDC Section 142.1300) and the San Diego Housing Commission's Implementation and Monitoring Procedures. This requirement will be satisfied by payment of the in-lieu fee.

MISSION VALLEY COMMUNITY PLAN

The General Plan relies upon community plans (legally recognized as a part of the Land Use and Community Planning Element) to provide community–specific policies and recommendations. The community planning program is the mechanism to designate land uses, assign densities, identify site-specific recommendations, and refine citywide policies as needed. While the community plan addresses specific community needs, its policies and recommendations must remain in harmony with other community plans, the overall General Plan, and citywide policies (City of San Diego, 2008).

Multiple Use Development Option Land Use

With the removal of the project site from the Atlas Specific Plan, the Master Plan is in compliance with the Multiple Use Development Option land use of the Mission Valley Community Plan (MVCP) (City of San Diego, 1985). This option is described by the MVCP as follows:

A "multi-use development" means a relatively large-scale real estate project characterized by the following, which are implemented as part of a comprehensive development plan. It is not the intent of this Community Plan that these elements occur at the parcel level.

- *Two or more significant revenue-producing uses (such as retail, office, residential (either as rentals or condominiums), hotel/motel, and/or recreation – which, in well-planned projects, are financially supportive of the other uses.*
- *Significant functional and physical integration of project components including uninterrupted pedestrian connections, if available, to adjacent developments.*
- *Development in conformance with a coherent plan (which frequently stipulates the type and scale of uses, permitted densities and related items), and*
- *Public transit opportunities and commitments.*

This definition clearly differentiates multi-use developments from other forms of land use and also identifies "common denominator" characteristics of multi-use projects with a minimum number of criteria.

Another defining characteristic of multi-use development is a significant physical and functional integration of project components. All project components should be interconnected by pedestrian ways, though (physically) this integration can take many forms:

- Vertical mixing of project components into a single structure, often occupying only one parcel.
- Careful positioning of key project components around centrally located focal points (e.g., a shopping gallery or hotel containing a large central court).
- Interconnection of project components through an elaborate pedestrian circulation network (e.g., subterranean concourses, walkways and plazas at grade and aerial bridges between buildings, or
- Extensive use of escalators, elevators, moving sidewalks, bridges and other mechanical or structural means of facilitating horizontal and vertical movement by pedestrians.
- Permanent pedestrian linkages to public transit systems.

The project is consistent with the multiple use land use designation including the specific characteristics noted in the MVCP as follows:

- The project contains three significant revenue producing land uses including hotel/convention center, retail (in the form of hotel focused food and beverage services) and rental apartments.
- The San Diego River Pathway provides an uninterrupted pedestrian connection east/west through the site. A separate pedestrian corridor provides a north/south route through the site connecting to the River Pathway and public park.
- The Town & Country Master Plan provides detail on the integration and scale of uses, permitted densities and design guidelines.
- The site plan includes pedestrian and bicycle connections to the Fashion Valley transit center and, to facilitate that connection, a new multi-use bridge over the San Diego River.

The project is functionally integrated and interconnected by pedestrian ways with the following key features:

- New hotel facilities designed to form the central "urban heart" of the project. These food and beverage services are a common meeting space for hotel visitors and residents. The pedestrian network provides many routes through the site and to this central space.
- The hotel central courtyard is also a key focal point. The courtyard is open to the public similar to the food and beverage services. The pool portion of the courtyard is for hotel guests and will have controlled access.
- The new multi-use bridge over the San Diego River provides a permanent pedestrian linkage to the Fashion Valley transit center.

Overall Objectives
The Master Plan is consistent with the following MVCP objectives:

Encourage high quality urban development in the Valley which will provide a healthy environment and offer occupational and residential opportunities for all citizens.
The project meets this objective by creating a high quality TOD that integrates an employment generating renovated hotel and convention facility with a compact 840-unit multifamily residential neighborhood within a short walk to nearby employment opportunities, transit, shopping, and entertainment. Further, the land uses are designed to be interconnected by trails and clearly distinguished corridors to enhance multi modal travel and physical activity by employees, visitors, and residents of the site.

The Master Plan provides important outdoor recreational opportunities in the form of an approximately 11-acre Park District that includes more than 7 acres of restored and enhanced riverine open space habitat. The open space features new connecting segments of the San Diego River Pathway along each riverbank with a bridge crossing point. In addition, over 4 acres of new public park eliminates 271 existing surface parking spaces along the southern edge of the riverine open space. The new public park exceeds the population based park area requirements and will be accessible to users from a variety of locations including the Fashion Valley transit station, San Diego River Park Pathway, Fashion Valley Road, and several pedestrian access ways within the Plan Area. Park design and uses will be defined and designed as part of the park development process identified in Council Policy 600-33, Community Notification and Input for City-wide Park Development Projects.

The project land uses, design features, and proximity to transit will result in no net vehicular trips added to the local circulation system. The Master Plan also considers other potential mobility options and transportation demand management (TDM) strategies to minimize vehicular traffic generation. The TDM program encourages pedestrian and bicycle travel, use of transit, and establishment of carpools. These techniques aid in reducing peak hour vehicular trips, associated air quality impacts, and greenhouse gas emissions.

Provide protection of life and property from flooding by the San Diego River.
The entire site is currently mapped within the Federal Emergency Management Agency (FEMA) floodplain, designated as Zone AE per Flood Insurance Rate Map (FIRM) Map Number 06073C1618G, revised May 16, 2012. The northern portion of the site, along the river corridor, is located within the regulatory 100-year floodway.

Floodway

Development within the floodway is restricted as its preservation as an open corridor is critical for continued passage of flood waters. There are several requirements and restrictions imposed on any proposed improvements within the floodway by the Code of Federal Regulations sections related to FEMA as well as the City of San Diego's Municipal Code. Per the San Diego Municipal Code, development in the FEMA floodway areas is prohibited "unless certification by a registered professional engineer is provided demonstrating that encroachments will not result in any increase in flood levels."

The existing site conditions include surface parking within the floodway. The Master Plan proposes to retain a portion of the surface parking and develop the remainder of this area with public recreation facilities including a new public park with trails and passive recreation areas. No habitable structures or any structures that would inhibit floodwater passage are proposed within this floodway corridor. Therefore, these parking and recreation uses are allowed within this special flood hazard zone.

Floodplain

The remaining portion of the Plan Area is currently within the 100-year floodplain Zone AE. There are several restrictions regarding floodplain development, including finished floor elevation requirements. The City of San Diego's Municipal Code requires the lowest floor of a habitable structure, including the basement level, to be 2 feet above the Base Flood Elevation (BFE) (water surface elevation for a 100-year flood event).

The Master Plan proposes to construct all new residential structures and new hotel buildings such that the lowest finished floor elevation of all new habitable structures is 2 feet or more above the BFE. The Master Plan proposes to construct all new residential parking structures attached to habitable structures such that the finished floor elevation of the lowest level of parking is at or above the BFE per FEMA requirements.

The Master Plan proposes to construct a new parking structure for hotel use that is not attached to any habitable structures. The finished floor elevation of the lowest level of parking of this structure is below the BFE but includes flood proofing measures and elevation of electrical equipment above BFE and is thus permitted per FEMA requirements.

To accommodate the construction of new structures within the floodplain, the project applicant will go through FEMA's Conditional Letter of Map Revision (CLOMR) and Letter of Map Removal (LOMR) process. The FEMA process is summarized as follows:

- Conduct hydraulic analysis of the existing conditions of the San Diego River regulatory floodway and flood plain with proposed improvements.
- Obtain approval of the analysis from the City of San Diego.
- Submit approved analysis to FEMA.
- Obtain a CLOMR from FEMA before commencement of site construction.
- Complete construction of the site.
- Conduct a final hydraulic analysis and prepare a hydrology report including a topography map illustrating the as-built contours and the new BFEs.
- Submit the report to FEMA.
- FEMA issues a LOMR.

Upon approval, the FIRM map will be updated and certain portions of the site that are now above the adjusted BFE will be mapped in Zone "X" and deemed to be no longer within the 100-year floodplain. The LOMR must be recorded prior to issuance of a site occupancy permit. The Master Plan and these regulations will provide protection of life and property from flooding by the San Diego River.

Provide a framework for the conservation of important wetland/riparian habitats balanced with expanded urban development.

Although a majority of the site is developed, wetland/riparian habitats are currently present within the property boundary. The project proposes to use a portion of the currently developed site for renovated and new hotel facilities and residential units. No new structures are proposed within the MHPA.

A driving component of the Master Plan is an approximately 11-acre Park District that includes more than 7 acres of restored and enhanced riverine open space habitat and an approximately 4 acre public park. The Master Plan will implement a range of specific actions within the Park District that provide a framework for the conservation of important wetland/riparian habitats in balance with the urban development. The project will provide the following park improvements or components:

- Approximately 7.46 acres of restoration and enhancement of the riverine open space habitat.
- Approximately 4.04 acres of existing disturbed areas within the MHPA and wetland buffers will be restored through the removal of invasive exotic species and the establishment of native habitats.
- Approximately 3.10 acres will be restored and enhanced per Mitigated Negative Declaration No. 118318 and Site Development Permit (SDP) No. 400602 approved by the Mission Valley Unified Planning Committee on April 2, 2008.
- Approximately 0.32 acres of existing native habitats will be enhanced through removal of exotic species and establishment of native species.
- All these areas will be cleaned of litter and solid waste on a regular basis under an ongoing maintenance and monitoring program.
- A two-rail peeled log fence will enclose the habitat area with access points for maintenance of habitat and existing river drainage structures.
- The width of native habitats at the most constricted section of the river will be increased from approximately 80 feet to up to 210 feet. Some of the existing paved surface parking areas and unpaved surface parking areas shall be converted into native habitats, wetland buffers, or public parklands.
- The Master Plan will establish a 30-foot wetland buffer and a variety of Low Impact Development (LID) strategies directly adjacent to the riparian corridor.
- The Master Plan will replace approximately 1.7 acres of existing surface parking area south of the river with native habitats and/or park lands designed to enhance the River experience and enjoyment.
- The restored and enhanced native riparian vegetation will provide an enlarged habitat area for wildlife. The park and adjacent areas will provide bioswales for filtration of urban storm water runoff.
- The Master Plan significantly improves the quality and function of the San Diego River by improving water quality and enhancing the habitat area and width.

The project will result in a net gain in functions and values of existing wetland/riparian habitats by establishing and implementing the above framework.

Facilitate transportation through and within the Valley while establishing and maintaining an adequate transportation network.
The Master Plan directly implements this objective by creating a compact TOD with a well-designed network of multi-modal transportation links and improvements in proximity to existing mass transit. The project land uses, design features, and proximity to transit will result in no net vehicular trips added to the local circulation system.

The Plan Area internal and surrounding circulation system improvements are designed based on the "complete streets" concept, which provide for improved pedestrian and bicycle access in the vicinity of the site. As part of the Master Plan complete streets system, traffic signals are proposed at major intersections on Hotel Circle North, Camino de la Reina, and Fashion Valley Road to handle vehicular demand and provide dedicated and controlled crossing points for pedestrians and bicyclists. Plan Area intersection traffic control will include stop signs to calm traffic and reduce vehicular speeds. Enhanced paving is proposed to identify crosswalks, promote safety and improve the pedestrian experience within the Plan Area.

The Master Plan bicycle circulation network dramatically improves access to and across the River as well as throughout the Plan Area connecting the Residential District, Hotel District, and Park District to the MTS Fashion Valley transit center and Fashion Valley Mall. The Master Plan encourages bicycle travel along the multi-use San Diego River Pathway, key external roadways, and designated internal private streets. The Plan Area meets this objective by providing improvements for a network of Class I, Class II, and Class III bikeways. (Chapter 1000 Bikeway Planning and Design, California Highway Design Manual, June 26, 2006).

The project's pedestrian circulation network consists of a neighborhood network of sidewalks, pedestrian corridors, trails, and the reconstructed multi-use bridge across the San Diego River. The Master Plan proposes the construction of the San Diego River Pathway on the north and south sides of the San Diego River connected by a bridge across the river. This pathway improvement will further the SDRPMP vision of completing the planned 17.5-mile multi-use San Diego River Pathway from the Pacific Ocean to the City of Santee. The Master Plan creates a well-integrated network of sidewalks along streets and within defined pedestrian corridors to create strong connections between the Residential District, Hotel District, and Park District. Further, the Master Plan proposes the enhancement of sidewalks adjacent to the Plan Area, where feasible, to provide a safe and pleasant pedestrian experience on Hotel Circle North, Camino de la Reina, and Fashion Valley Road.

The Master Plan also embraces other mobility options and TDM strategies to further minimize vehicular traffic generation. The TDM program encourages pedestrian and bicycle travel, use of transit, and establishment of carpools. These techniques aid in reducing peak hour vehicular trips, associated air quality impacts, and greenhouse gas emissions.

Provide public facilities and services that will attend to the needs of the community and the region.
The City of San Diego Public Utility Department provides water and sewer service and San Diego Gas & Electric provides gas and electricity service to the Mission Valley community planning area. The existing site includes an extensive network of both wet and dry private utilities. One of the key utility objectives of the Master Plan is to maintain existing utilities services for the hotel buildings that will remain while simultaneously constructing new utility infrastructure for the proposed residential parcels. The utility design shall maintain separate systems for the existing hotel while constructing a

new separate system for the proposed residential development. All dry utilities will be removed and new services provided in areas proposed for new development. Where required, the existing services will be rerouted through the new development footprint to provide continued service to the Town & Country Hotel. All facility designs will meet existing regulatory requirements to ensure adequate level of service.

The provisions necessary to provide adequate public services for the Plan Area include access to schools, libraries, fire and police protection, solid waste management, and public parks and recreational facilities. Public service needs are based on the projected Plan Area population. The population of the Plan Area is estimated to be approximately 1,562 permanent residents based on a maximum of 840 residential multi-family dwelling units or an average occupancy of 1.86 people per residence (SANDAG, 2013) once the Master Plan is fully implemented. APPLICANT TO ADD ADDITIONAL SERVICE ANALYSIS ONCE EIR IS PREPARED.

The project will pay all relevant fees, including Mission Valley Public Facilities Financing Development Impact Fees to assist in funding public services and facilities in Mission Valley. Developers of the residential projects within the Plan Area will be responsible for the payment of fees associated with SDUSD service based on size of residential units and number of dwelling units as established by SDUSD and in accordance with City development impact fees. Current City policy requires verification of payment of school fees be made prior to the issuance of building permits. Additionally, a portion of the property taxes generated by the project will be allocated to SDUSD.

Provide guidelines that will result in urban design which will be in keeping with the natural features of the land and establish community identity, coherence and a sense of place.
The Master Plan includes specific architectural and site design and landscape guidelines applicable to development within the Plan Area. The design and landscape concepts are based upon balancing the natural character of the San Diego River with the contrasting mid-century modern style of the Town & Country Hotel.

The overall site design theme is reinforced by the landscape, hardscape, natural vegetation and restored riverine open space. These interrelated landscapes weave together the mid-century heritage of the buildings with a mix of expansive and intimately scaled green areas that contribute to the Plan Area's sense of place. The plant material palettes transition across the Plan Area to specifically complement the character of each of the three districts. The Plan Area sense of place is established by the landscape and site features which complement the architectural themes of the buildings and is reinforced by the pedestrian and bicycle circulation networks.

The following summarizes key urban design and landscape guidelines that help establish community identity, coherence and a sense of place within the Master Plan Area. The concepts will be adapted for the specific character of the Park, Hotel and Residential Districts within the Plan Area.

Park District
The enhanced San Diego River is the central feature for this District. Key goals are to enhance the San Diego River experience, activate it with residential where feasible, upgrade access to and from the transit station, and provide pedestrian and bike access within and through the site. The guidelines in the San Diego River Park Master Plan for Architectural Zone 2 - Lower Valley will be utilized in the design of site furnishings, the bridge, public facilities, and amenities within the Master Plan Area.

Hotel District

The Hotel District will be enhanced with more open space, an improved pool amenity, new lobby, food and beverage, entry court, and parking structure. The western edge of the Hotel District will continue to be the main entry point and arrival area for Conference Center activities and larger hotel events.

The exterior courtyards within the Hotel District will be enhanced to allow the Conference Center to better engage with the new hotel food and beverage services, and outdoor break-out spaces. This effort will include a new pool amenity, indoor/outdoor spaces for living, meeting, and dining and superior amenities to hotel guests and residents. Pedestrian access will be improved across the central green and to hotel rooms, amenities, and to the Park and Residential Districts.

The southern edge of the Hotel District is the formal entry and new vehicular arrival for visitors to the hotel. It also marks an important interface with the new Residential District. The main portal and focal point will be the new hotel lobby, bar, café, and restaurant. Pedestrian access to these amenities and passage through the building to the central hotel amenities are seen as important links between the adjacent Residential District and Hotel District.

The eastern edge of the Hotel District is defined by a continuous north-south public access corridor envisioned as a tree-lined green space providing access all the way through the Plan Area to the Park District and San Diego River. The landscape plan proposes to transplant significant numbers of existing on-site trees to enhance the renovated hotel/convention center grounds. Native riparian species will be reintroduced along the river. New exotic species of flowering trees will be introduced in the residential and hotel areas to help define the public circulation corridors and highlight special site features.

Residential District

The Residential District is proposed to be a neighborhood with each of the residential parcels expressing their own character. The Residential District will have a unique identity but clearly related to the Hotel District in its style and aesthetic. The architecture style may be similar to the new additions to the hotel, but more residential and private in scale and focus. Building massing will focus on indoor-outdoor living spaces with access to light, air and views.

One of the major goals is to bring the river experience into the site. Parcel 4, a residential land use adjacent to the Park District on the north eastern corner of the site, shall have active ground level units that face the park and balconies overlooking the park and river. Residential development on all parcels will activate the edges shared with all districts by using front doors, balconies, and site features to blur the lines where the districts come together.

The public landscape of the Residential District consists of a framework of circulation corridors defined by landscaped setback areas, sidewalks, and parkway planting buffers along the streets. The area between the residential parcel boundary and the residential building façade varies in width to accommodate the required building setback and architectural articulation. This area will be planted and maintained in compliance with the proposed design guidelines. The ground plane and understory vegetation are proposed to provide an attractive landscape that is also used to support LID water quality areas to collect, cleanse and reuse the storm water runoff.

SAN DIEGO RIVER PARK MASTER PLAN (SDRPMP)

The San Diego River flows through the northern third of the Plan Area. As such it is within the San Diego River Subdistrict (River Subdistrict) and subject to the guidelines of the SDRPMP as outlined in

the City LDC (City of San Diego, 2015a). The San Diego River Park as described in the SDRPMP follows San Diego's tradition of unique regional resource-based public parks. The San Diego River Park is a public effort to complete the vision through requirements and incentives on the redevelopment of private property. The Master Plan meets the intent of the five principles that support the SDRPMP vision as summarized below:

1. Restore and Maintain a Healthy River System

SDRPMP Principle One targets the improvement of the extent, form, and quality of the river and its riparian habitats.

Proposed Plan Area Improvements

The Master Plan will implement a range of specific actions that meet the intent of the SDRPMP by restoring and maintaining a healthy river ecosystem. The project will provide improvements in several ways:

Improved Habitat Quality

The portions of the Plan Area within the boundaries of the MHPA and wetland buffers will be restored or enhanced.

- Approximately 7.46 acres of restoration and enhancement of the riverine open space habitat.
- Approximately 4.04 acres of existing disturbed areas within the MHPA and wetland buffers will be restored through the removal of invasive exotic species and the establishment of native habitats.
- Approximately 3.10 acres will be restored and enhanced per Mitigated Negative Declaration No. 118318 and Site Development Permit (SDP) No. 400602 approved by the Mission Valley Unified Planning Committee on April 2, 2008.
- Approximately 0.32 acres of existing native habitats will be enhanced through removal of exotic species and establishment of native species.
- All these areas will be cleaned of litter and solid waste on a regular basis under an ongoing maintenance and monitoring program.
- A two-rail peeled log fence will enclose the habitat area with access points for maintenance of habitat and existing river drainage structures.

The 10.94 acres Park District includes the SDP Mitigation areas, the additional Restoration and Enhancement areas, and the public park.

Enlarged Habitat Area

The width of native habitats at the most constricted section of the river will be increased from approximately 80 feet to up to 210 feet. Some of the existing paved surface parking areas and unpaved surface parking areas shall be converted into native habitats, wetland buffers, or public parklands. The new River Pathway will be constructed in these areas.

Improved Water Quality

The Master Plan will establish a 30-foot wetland buffer and a variety of Low Impact Development (LID) strategies directly adjacent to the riparian corridor.

Compatible Adjacent Land Use

The Master Plan will replace approximately 1.7 acres of existing surface parking area south of the river with native habitats and/or park lands designed to enhance the River experience and enjoyment.

The restored and enhanced native riparian vegetation will provide an enlarged habitat area for wildlife. The park and adjacent areas will provide bioswales for filtration of urban storm water runoff.

2. Unify Fragmented Lands and Habitats

SDRPMP Principle Two seeks to restore connections between currently fragmented natural habitats along the San Diego River and adjacent canyons in Mission Valley and adjacent communities.

Proposed Plan Area Improvements

The Master Plan significantly improves the quality and function of the San Diego River by improving water quality and enhancing the habitat area and width, as noted in Principle One.

3. Create a Connected Continuum

SDRPMP Principle Three seeks to "create a connected continuum, with a sequence of unique places and experiences." The goals are:

- Create an unbroken visitor experience along the full length of the river
- Punctuate that continuum with unique places and opportunities for special experiences.

Proposed Plan Area Improvements

The Master Plan accomplishes these goals in the following ways:

Connected Continuum

The Master Plan will implement the San Diego River Pathway on both sides of the river. It will include a rebuilt non-vehicular 10-foot wide multi-use bridge across the river, providing improved connectivity between the Fashion Valley Mall and transit center to the north, and the hotel and residential to the south.

The trail system shall also connect with the Union-Tribune property to the east. A north-south pedestrian and bicycle link will be provided along the eastern Plan Area boundary to complete the planned connection from Mission Hills along Bachman Place to the San Diego River.

Unique Places and Experiences

The Master Plan converts approximately 1.7 acres of existing surface parking areas or degraded areas south of the river into new trail corridors and park space. Importantly, the Master Plan will provide all of the required population-based park acreage on-site in a highly visible and accessible location immediately adjacent to the restored riverine open space.

The Plan Area on-site park and trail system will feature interpretive way stations that convey the history of the river, the valley, its inhabitants and their impact on the ecology and efforts to control the river over time.

The Master Plan provides amenities along the River Pathway such as benches, picnic areas, overlooks, interpretive signs, and gathering areas.

The restored riverine open space and park space integrates with the Plan Area development program, providing a venue for quiet individual contemplation and organized indoor/outdoor events.

4. Reveal the River Valley History

Principle Four aims to preserve and reveal the rich history of the San Diego River valley.

Proposed Plan Area Improvements
The Master Plan includes an interpretive program integrated with the proposed River Pathway and park as summarized under Principle Three. The Way Stations are planned as stopping points and learning opportunities that will educate, and increase understanding and appreciation of the river and its history. Each is designed with furnishings (seating, picnic tables, waste receptacles, lighting) and signage to express aspects of the interpretative program. Each Way Station provides a special experience and a broad spectrum of interpretive information.

5. Reorient Development toward the River
SDRPMP Principle Five seeks to "reorient development toward the river to create value and opportunities for people to embrace the river."

Proposed Plan Area Improvements
The River is being improved and expanded, to enhance the overall user experience. Riverine habitat, totaling 7.46 acres, will be restored and/or enhanced. The Park District is showcased in the Master Plan as a major hub of activity: A confluence of the river's ecology with trails and 4.37 acres of public park space.

The existing Royal Palms Tower and convention building adjacent to the River Park will remain. However, the existing parking structure will be demolished to make way for new residential on parcel 4. Parcel 4, a residential land use adjacent to the Park District on the north eastern corner of the site, shall have active ground level units that face the park and balconies overlooking the park and river.

New buildings in the adjacent Residential District are designed to face the river and create active spaces and entries opening onto the restored riverine open space and park. Residential windows, balconies, and common areas take advantage of river views and adjacencies. Park spaces provide direct recreation value and flex space that can accommodate indoor/outdoor hotel and convention events, weddings, and outdoor entertainment.

A new exterior pre-function space for the Golden Pacific Ballroom will face the restored riverine open space.

The Master Plan pedestrian and bicycle circulation network dramatically improves pedestrian access to and across the river as well as throughout the Plan Area connecting the Residential District, Hotel District, and Park District to the MTS Fashion Valley transit center and Fashion Valley Mall. The existing pedestrian bridge over the river will be rebuilt to strengthen the connection between the Fashion Valley transit center and the Plan Area to further encourage the use of transit. The east-west River Pathway will be constructed on both sides of the river, and new parkland and public amenities will be provided at points along the River Pathway.

TRANSIT-ORIENTED DEVELOPMENT DESIGN GUIDELINES
The Master Plan supports the guiding principles of the City Transit-Oriented Development Design Guidelines (City of San Diego, 1992) as follows:

- Provides infrastructure-sensitive infill redevelopment
- Increases the efficiency of existing land uses
- Establishes land uses that reinforce the viability of the transit system

- Creates a safe and convenient pedestrian and bicycle network
- Protects the natural environment and community character by restoring and enhancing the riverine ecosystem and constructing the San Diego River Pathway
- Employs sustainable building principles
- Creates a vital, interactive and secure neighborhood.

The proposed development will not adversely affect the applicable land use plans.

(b) The proposed development will not be detrimental to the public health, safety, and welfare.
The proposed Project has been designed to conform to the City of San Diego's codes, policies, and regulations whose primary focus is the protection of the public's health, safety and welfare. The Project is consistent with the City's environmental regulations, landscaping and brush management requirements, the Fire Department's fire protection policies, water and sewer study recommendations and the City's affordable housing policies and regulations.

Prior to construction, construction permit drawings will be reviewed to ensure conformance with all applicable construction codes and to assure that structural, mechanical, electrical, plumbing, and access components of the project are designed to protect the public's health, safety and welfare. The Project will not be detrimental to public health, safety and welfare in that the permit controlling the development and continued use of the project for this site contains specific conditions addressing the project compliance with the City's codes, policies, regulations and other regional, state, and federal regulations to prevent detrimental impacts to the health, safety and general welfare of persons residing and/or working in the area. Conditions of approval require compliance with several operational constraints and development controls, the review of all construction plans by professional staff to determine construction will comply with all regulations and the inspection of construction to assure construction permits are implemented in accordance with the approved plans and the final construction will comply with all regulations. These requirements will assure the continued health, safety and general welfare of persons residing or working in the area.

The Plan Area receives fire protection services from the existing facilities of the City of San Diego Fire-Rescue Department (SDF-RD). A temporary station (referred to as Fire Station 45) is located approximately 4.1 miles east of the Plan Area at Qualcomm Stadium and operates 24 hours a day from a portable building. This temporary station serves the project area and in 2014 the average response time was 8.23 minutes (Infantono, 2015). A permanent fire station (also referred to by SDF-RD as Fire Station 45) is currently under construction at 9366 Friars Road and will serve the Mission Valley community including the Plan Area. The new facility is located approximately 4 miles to the northeast and is projected to be completed in Fall 2015. The temporary facility will be replaced once the permanent facility is completed.

The Plan Area receives police protection services from existing facilities of the City of San Diego Police Department—Western Division. The Western Division Substation is located at 5215 Gaines Street approximately 2 miles to the west of the Plan Area in the Linda Vista community. This substation serves the Mission Valley community west of SR 163.

APPLICANT TO ADD SUMMARY OF RELEVANT EIR RELATED CONCLUSIONS WHEN EIR IS PREPARED. THESE WILL INCLUDE HAZARDS AND HAZARDOUS MATERIALS, FLOODING, AIR QUALITY/HEALTH RISK, ETC.

Therefore, the proposed development will not be detrimental to the public health, safety, and welfare.

(c) The proposed development will comply with the applicable regulations of the Land Development Code.

The Mission Valley Planned District Ordinance (MVPDO) and Proposed Master PDP
The regulations in the MVPDO (LDC Section 1514 Mission Valley Planned District) apply to the entire Mission Valley Community Planning Area, unless development occurs under an approved Specific Plan or Master Plan. A Master Plan has been prepared for the project in compliance with the primary and supplemental PDP regulations and incorporates the development criteria in compliance with the Master PDP Criteria (City of San Diego, 2015). The PDP regulations provide flexibility in the application of development regulations for projects where strict application of the base zone development regulations would restrict design options and result in a less desirable project (City of San Diego, 2015).

Once the Master Plan has been adopted the MVPDO will no longer apply to the Plan Area. (LDC Section 1514) The Master Plan, in concert with the City's LDC, will govern development of the Plan Area. The Master PDP will retain the zoning designation of Mission Valley Planned District Multiple Use Zone (MVPD-MV-M), but will have underlying commercial, residential and open space base zones. The Plan Area Base Zones are per City Municipal Code Chapter 13, Article 1 and the master planned district regulations as outlined in City Municipal Code Chapter 15, Article 2. The Plan Area base zones are:

- OF-1-1 Open Space - Floodplain Zone
- OP-2-1 Open Space – Park Zone
- CV-1-1 Commercial-Visitor Zone
- RM-4-11 Residential - Multiple Unit Zone

The Master Plan establishes the Park District, Hotel District, and Residential District to organize the land use types and intensities consistent with the base zones. The Master Plan also establishes a maximum number of dwelling units and related densities in the Residential District and a maximum amount of gross square footage in the Hotel District. These maximum intensities are based on the Master Plan vision, base zones, Plan Area traffic generation projections, existing infrastructure, proposed improvements, site constraints, environmental considerations, and the City LDC and other applicable regulations.

Park District
The approximately 11-acre Park District, located in the northern portion of the site, is the recreational focus of the Plan Area. It includes over 7 acres of restored riverine open space habitat, and over 4 acres of new public parkland.

Hotel District
The approximately 18-acre Hotel District is located in the central and northwestern portions of the Plan Area. The hotel capacity shall be reduced from 954 to 700 guest rooms and the conference facilities reduced from approximately 213,000 to 177,000 gross square feet.

The renovated facilities shall include new lobby, food and beverage, hotel parking structure, main pool area, water-wise landscaping, and other site amenities. The loading dock at the northern end of

the Convention Center will be replaced by an exterior function area for the Golden Pacific Ballroom. This elevated terrace will have views to the public park and restored riverine open space. Collectively, these existing and new buildings will create the edges surrounding a vibrant new central courtyard and pool amenity.

Residential District
The approximately 9.7-acre Residential District includes up to 840 multi-family dwelling units (see Table 2-3 Plan Area Residential Density). The Master Plan minimum and maximum densities and floor area ratio are in compliance with the base zone RM-4-11 per City Municipal Code Section 131.0431. The Master Plan permits the transfer of density between parcels, as long as the maximum allowable unit total of 840 units is not exceeded.

Deviations
Per City LDC Section 143.0410(a)(2), "deviations from the applicable base zone development regulations may be requested in order to provide flexibility in achieving a zone-equivalent project design that will be consistent with the intent of the base zone."

The deviations for the project are described below:

RM-4-11 Zone
The application of the Citywide RM-4-11 zone to the Residential District includes deviations from the base zone as follows:
(1) Yard and setback requirements apply only to the Fashion Valley Road and Hotel Circle North frontages and will not apply to the interior private road frontages.
(2) Maximum lot coverage calculations apply to the gross acreage of the Plan Area and not on a parcel-by-parcel basis.
(3) Private open space requirement of 50 square feet per unit abutting each unit, with a minimum dimension 4 feet will not apply to Residential Parcels 1 and 2.

CV-1-1 Zone
The application of the Citywide CV-1-1 zone to the Hotel District includes deviations from the base zone as follows:

Section 131.0531(b) Table 131-05D Development Regulations of CR, CO, CV, CP Zones
(1) Height limit of 60 feet will not apply. The height limit will be 110 feet.

OF-1-1 and OP-2-1 Zones
The application of the Citywide OF-1-1 and OP-2-1 zones to the Park District will include deviations from the base zone as follows:
Section 131.0222 Table 131-02B Use Regulations Table of Open Space Zones:
Permanent structures are permitted within a floodway. Development (as defined by the City Municipal code) is permitted within the floodway.
Section 143.0145(e) Development Regulations for Special Flood Hazard Areas:
Section 143.0146(7) Supplemental Regulations for Special Flood Hazard Areas:
Development and permanent structures are permitted within a floodway if certified by a registered professional engineer demonstrating that encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge except as allowed under Code of Federal Regulations Title 44, Chapter 1, Part 60.(3)(13).

Transit Area Overlay Zone
The Plan Area is within a Transit Area Overlay Zone per City Municipal Code 132.1002. Thus, the Plan Area is subject to supplemental parking regulations for areas receiving a high level of transit service. The intent of this overlay zone is to identify areas with reduced parking demand and to lower off-street parking requirements accordingly. The use and development regulations of the applicable base zone (including planned district base zones) apply in the overlay zones except as modified by the supplemental overlay zone regulations per City Municipal Code Section 132.0104.

San Diego River Subdistrict
A portion of the Plan Area is within the San Diego River Subdistrict (River Subdistrict), so it is subject to City Municipal Code Section 1514.0302. The purpose of the River Subdistrict regulations is to ensure that development along the San Diego River is implemented in accordance with the San Diego River Park Master Plan and the Mission Valley Community Plan. It is also the intent of the River Subdistrict regulations to preserve and enhance the character of the San Diego River valley, provide for sensitive rehabilitation and redevelopment, and create the River Pathway (City of San Diego, 2015). Conformance with all River Subdistrict dimensional regulations is not feasible due to considerable existing site constraints. However, the Master Plan does conform to the Five Principles of the San Diego River Park Master Plan as described in Finding (a) above.

Atlas Specific Plan
The Master Plan will replace the authority of the Town and Country portion of the Atlas Specific Plan (adopted by City Council on December 13, 1988 (City of San Diego, 1988). The Atlas Specific Plan will be concurrently amended to strike references to the Town & Country site. The Atlas Specific Plan will remain in effect for all other existing Atlas Specific Plan Areas.

Mission Valley Community Plan
The amendment of the Atlas Specific Plan is in effect a de facto MVCP Amendment because all Specific Plans are incorporated by reference.

Vesting Tentative Map
A Vesting Tentative Map will be processed concurrent with the Master Plan. The Vesting Tentative Map has been prepared in accordance with the guidelines and development intensities presented in this Master Plan, the State Subdivision Map Act, and City of San Diego requirements.

Implementation
Specific conditions of approval require the continued compliance with all relevant regulations of the City of San Diego effective for this site and have been written as such into Site Development Permit No. _____. Development of the property shall meet all requirements of the regulations and development criteria of the OF-1-1 zone and the MVPD-MV-M zone except where site constraints or unique design considerations necessitate a deviation from the specific standards.

The proposed development complies with the applicable regulations of the Land Development Code through this described discretionary approval process.

Supplemental Findings – Environmentally Sensitive Lands

1. **The site is physically suitable for the design and siting of the proposed development and the development will result in minimum disturbance of environmentally sensitive lands.**
Although a majority of the site is developed, environmentally sensitive lands are currently present within the property boundary. The project proposes to use a portion of the currently developed site for renovated and new hotel facilities and residential units. With two exceptions, these areas are not within the floodway of the San Diego River. The exceptions are two existing structures which shall remain (the Royal Palm Towers and Golden Pacific Ballroom). Additionally, the project will not encroach into the MHPA.

Limited direct impacts to environmentally sensitive lands may result during project construction with improvements to the existing pedestrian bridge, grading to create a new drainage channel between an outfall located outside of environmentally sensitive lands and the San Diego River channel, and general habitat restoration and enhancement efforts that will include invasive species removal using mechanical and chemical methods. The project will result in a net gain in functions and values of existing environmentally sensitive lands as further described in Finding 3 below. Therefore, the project has been sited and designed to result in minimum disturbance to environmentally sensitive lands.

2. **The proposed development will minimize the alteration of natural landforms and will not result in undue risk of geologic and erosional forces, flood hazards, or fire hazards.**
The existing hotel and convention center development is on a site with little topographic relief. The nearly flat site slopes slightly from south to north toward the San Diego River. The proposed project does not change that landform with grading mostly limited to fill to make the finished floor of new development 2 feet above BFE in conformance with City and FEMA standards.

The development footprint has been located to minimize erosion, flood, and fire hazards. The development complies with the Region-wide erosion control plan. The plan exceeds the otherwise City-wide applicable requirements related to storm water runoff and best management practices as related to storm water runoff. As such the proposed development will minimize the alteration of natural landforms and will not result in undue risk from geologic and erosional forces, flood hazards, or fire hazards.

3. **The proposed development will be sited and designed to prevent adverse impacts on any adjacent environmentally sensitive lands.**
Environmentally sensitive lands are currently present within the property boundary. These consist of sensitive vegetation communities (open water; coastal and valley freshwater marsh; emergent wetland; southern cottonwood-willow riparian forest; and nonnative grassland) located within and immediately adjacent to the MHPA, which bisects the northern portion of the property boundary. With incorporation of a wetland buffer and establishment of a conservation easement on the MHPA segment within the property, the project is designed to avoid impacts to environmentally sensitive lands to the maximum extent possible. The project will not encroach into the MHPA.

Limited direct impacts to environmentally sensitive lands may result during project construction with improvements to the existing pedestrian bridge, grading to create a new drainage channel between an outfall located outside of environmentally sensitive lands and the San Diego River channel, and general habitat restoration and enhancement efforts that will include invasive species removal using mechanical and chemical methods. The existing pedestrian bridge requires replacement to function as a portion of the San Diego River Pathway. The new bridge is designed to utilize existing footings/abutments;

therefore, bridge improvements will not result in permanent impacts. The new drainage will be vegetated with native wetland/riparian species and is required to site a proposed outfall outside of environmentally sensitive lands and MHPA. Impacts associated with habitat restoration and enhancements are not considered adverse because these efforts will benefit existing habitat. Indirect impacts associated with the projects are generally not expected to exceed background levels and would be minimized with conformance to Land Use Adjacency Guidelines of the City's MSCP Subarea Plan.

The project will restore native habitat in all areas impacted during improvements to the existing pedestrian bridge and grading for the new drainage channel. Areas impacted currently support low quality riparian and disturbed habitat; restoration of impacted areas will benefit overall habitat quality along this portion of the San Diego River. In addition, the project will restore and enhance additional habitat beyond mitigation requirements and result in a net gain in functions and values of existing environmentally sensitive lands. Therefore, the project has been sited and designed to prevent adverse impacts on environmentally sensitive lands.

4. **The proposed development will be consistent with the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan.**

The project is located within the City's MSCP Subarea Plan and a portion of the MHPA bisects the northern portion of the property boundary. The project is designed to avoid impacts to the MHPA to the maximum extent possible and new structures are not proposed within the MHPA. A conservation easement on the MHPA segment within the property will be established.

The project is designed and will be implemented in a manner that is consistent with MHPA Land Use Adjacency Guidelines, Specific Guidelines, General Planning Policies and Design Guidelines, General Management Directives, and Conditions of Coverage of the City's MSCP as detailed in the Biological Technical Report (AECOM 2015). The Mitigation, Monitoring, and Reporting Program (MMRP) lists specific conditions to address MHPA Land Use Adjacency Guidelines, including drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development. These measures will minimize or eliminate indirect impacts the MHPA and would ensure the project's consistency with the City's MSCP Subarea Plan.

The project will allow limited passive recreation within the MHPA. Specifically, an existing picnic area and the existing trail crossing the San Diego River will be maintained by the project. Both the existing picnic area and trail segment will be located in the same area where they exist currently. The existing picnic area is located on the northern edge of the MHPA (adjacent to Riverwalk Drive) and will be reduced in size compared to the existing conditions. The disturbance area associated with the existing trail segment within the MHPA will also be reduced compared to existing conditions. The trail and picnic area are considered compatible uses within the MHPA.

5. **The proposed project will not contribute to the erosion of public beaches or adversely impact local shoreline sand supply.**

The proposed development is located adjacent to the San Diego River 5 miles east of the Pacific Ocean's beaches and local shoreline. The on-site development will not contribute to erosion of public beaches or adversely impact shoreline sand supply in that all current water quality and erosion control measures will be required for the project during construction and post-construction. All drainage will be directed to the San Diego River through a private storm drain system and to the extent possible will substantially decrease the potential for downstream siltation of the San Diego River. The proposed development will not contribute to the erosion of public beaches or adversely impact local shoreline sand supply.

6. **The nature and extent of mitigation required as a condition of the permit is reasonably related to, and calculated to alleviate negative impacts created by the proposed project.**
The Environmental Impact Report (EIR) prepared during the California Environmental Quality Act (CEQA) review process included a site specific impact analysis for this development project. An initial study has been conducted for the proposed development on this site and concluded that an EIR should include requirements to mitigate for potential impacts to (to be completed) and, in fact, the development will mitigate for these impacts with implementation of the project. All mitigation is related to and calculated to alleviate impacts created by the proposed development and has been or will be incorporated into conditions of the development permit.
APPLICANT TO ADD SUMMARY OF EIR RELATED ISSUES AND MORE DETAILED MITIGATION WHEN EIR PREPARED.

Supplemental Findings – Environmentally Sensitive Lands Deviations

1. **There are no feasible measures that can further minimize the potential adverse effects on environmentally sensitive lands.**
The project has incorporated design and construction avoidance and minimization measures to the maximum extent practicable. The MMRP lists specific conditions to address impacts to environmentally sensitive lands. Impacts to environmentally sensitive lands associated with improvements to the existing pedestrian bridge are limited to a temporary construction work area. The improved pedestrian bridge will be constructed on existing footings and abutments and the work area will be restored to higher quality habitat following construction. The minimal grading that is required to create a new drainage channel is necessary to construct a newly proposed outfall outside of environmentally sensitive lands. The new drainage channel will be vegetated with native wetland/riparian species and will function as habitat for plant and wildlife species. Overall, the project will result in a net gain in functions and values of existing environmentally sensitive lands.

2. **The proposed deviation is the minimum necessary to afford relief from special circumstances or conditions of land, not of the applicants' making.**
The request for a deviation to temporarily disturb environmentally sensitive lands is the minimum necessary to improve the existing pedestrian bridge and create the new drainage channel. The need for a replacement pedestrian bridge is an existing condition resulting from the River Park Pathway plan. Areas that will be impacted currently support low quality riparian and disturbed habitat; restoration of impacted areas will benefit overall habitat quality along this portion of the San Diego River. In addition, the project will restore and enhance additional habitat beyond mitigation requirements. The project will fully mitigate impacts in accordance with the City's Biology Guidelines, and will provide habitat restoration and enhancement beyond mitigation requirements. Overall, the project will result in a net gain in functions and values of existing environmentally sensitive lands.

Package Copy

Draft Findings
Version 2
(Project Manager)

3541112

Project

424475

Town & Country

PM: Peterson, Jeff 446-5237

Review Cycle

Cycle 16
Submitted (Multi-Discipline)
Expedite

THE CITY OF SAN DIEGO
Development Services
1222 First Avenue, San Diego, CA 92101-4154

LETTER A
ATTACHMENT 12

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San Diego Unified
SCHOOL DISTRICT

Office of Special Projects
Instructional Facilities Planning Department
Sarah Hudson/Demographer
TEL.: (619) 725-7369
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September 2, 2015

Ms. Meghan Haggblade
AECOM
401 West A Street, Suite 1200
San Diego, CA 92101

Submitted via email to: meghan.haggblade@aecom.com

Subject: TOWN AND COUNTRY MASTER PLAN
39.7 acre site located at 500 Hotel Circle North, San Diego, CA 92108
840 multi-family residential units in four 3-5 story buildings

Dear Ms. Haggblade:

We are in receipt of your August 21, 2015 letter requesting school information for the above referenced redevelopment. In this letter we address your questions and provide requested information.

1. *The following schools currently serve the project site:*

School	Address	Estimated Capacity	2014-15 Enrollment	2015-16 Enrollment Projection
Carson Elementary	6905 Kramer St San Diego, CA 92111	608	476	441
Montgomery Middle	2470 Ulric St San Diego, CA 92111	639	476	479
Kearny High	7651 Wellington St San Diego, CA 92111	1,679	1,504	1,452

Capacities are approximate and are calculated using current class size ratios; if class sizes ratios change, additional or less capacity may be available. Attendance boundaries are reviewed annually and are subject to change.

2. *How many portables/relocatable classrooms are utilized at these schools? Are there any identified deficiencies in school services and facilities?*

Carson Elementary has 2 portable and 32 permanent classrooms. Montgomery Middle has zero portable and 43 permanent classrooms. Kearny High has 8 portable and 64 permanent classrooms. It is important to note that at any given time, a number of these classrooms may be utilized for administrative support purposes and therefore unavailable for instructional use. At this time there are no identified deficiencies at these schools.

3. *According to the district's generation rates, how many students would the project generate? What are the generation rates?*

Student generation rates vary based on the type of project, number of units, bedroom mix, neighborhood, and other factors. There are not district standard rates. The information available indicates this project will include 840 multi-family residential units.

In order to estimate the number of students generated by the TOWN AND COUNTRY MASTER PLAN project, we reference existing similar developments in the vicinity. Table 1 below lists nearby existing developments and the number of students generated by each. The Civita development is ongoing; many more units are expected to be built over the next several years, likely resulting in an ongoing increase in students attending district schools.

TABLE 1. Existing Similar Developments

Existing Development	Address	Number of Units	2014-15 students (K-5, 6-8, 9-12, and K-12 total)	Student Generation Rate
Presidio View apartments	1440 Hotel Circle North San Diego, CA 92108	350	K-5: 2 6-8: 1 9-12: 3 **K-12: 6**	K-5: 0.006 6-8: 0.003 9-12: 0.009 **K-12: 0.018**
River Scene condos	510-580 Camino de la Reina San Diego, CA 92108	108	K-5: 5 6-8: 1 9-12: 2 **K-12: 8**	K-5: 0.046 6-8: 0.009 9-12: 0.019 **K-12: 0.074**
Rio Del Oro condos	640-680 Camino de la Reina San Diego, CA 92108	103	K-5: 0 6-8: 0 9-12:1 **K-12: 1**	K-5: 0 6-8: 0 9-12: 0.010 **K-12: 0.010**
River Front apartments	710-790 Camino de la Reina San Diego, CA 92108	229	K-5: 12 6-8: 2 9-12: 5 **K-12: 19**	K-5: 0.052 6-8: 0.009 9-12: 0.022 **K-12: 0.083**
Mission Gate condos	910-978 Camino de la Reina San Diego, CA 92108	98	K-5: 3 6-8: 0 9-12: 0 **K-12: 3**	K-5: 0.031 6-8: 0 9-12: 0 **K-12: 0.031**
Civita apartments and single-family	North of Friars Road, west of 805 freeway, and east of Mission Center Road	Approximately 800; construction ongoing to 4,000+ units	K-5: 16 6-8: 0 9-12: 3 **K-12: 19**	K-5: 0.020 6-8: 0 9-12: 0.004 **K-12: 0.024**

This office also recently prepared student generation rate estimates for two nearby proposed projects:

- **Union Tribune Mixed Use project**, 200 multi-family units, located immediately east of Town and Country Master Plan project (October 2014 letter to BRG Consulting). Union Tribune project is served by the same schools: Carson, Montgomery, and Kearny.
- **Camino Del Rio Mixed Use project**, 291 residential units, located at 730 Camino Del Rio North, about 0.4 miles east of the Town and Country Master Plan project (November 2013 letter to KLR Planning). Camino Del Rio project is served by different elementary and middle schools, but the same high school (Kearny). The Camino Del Rio Mixed Use project is currently under construction (September 2015).

Estimated student generation rates for these two proposed projects are shown in Table 2.

TABLE 2. Nearby Proposed Developments – prior Student Generation Estimates				
Proposed Development	**Address**	**Number of Units**	**Student Generation Rate**	**Estimated number of students**
Union Tribune Mixed Use project	350 Camino de la Reina San Diego, CA 92108	200	K-5: 0.023-0.045 6-8: 0.004-0.007 9-12: 0.011-0.022 **K-12: 0.037-0.073**	K-5: 5-9 6-8: 1-2 9-12: 2-4 **K-12: 8-15**
Camino Del Rio Mixed Use project	730 Camino Del Rio North San Diego, CA 92108	291	K-5: 0.027-0.054 6-8: 0.007-0.014 9-12:0.008-0.016 **K-12: 0.042-0.084**	K-5: 8-16 6-8: 2-4 9-12: 3-5 **K-12: 13-25**

Proposed student generation rates for the project that is the subject of this letter, TOWN AND COUNTRY MASTER PLAN, are shown in Table 3. The student generation rates are the average from the existing developments noted in Table 1, with a low and high range.

TABLE 3. Estimated Generation Rates for TOWN AND COUNTRY MASTER PLAN				
Proposed Development	**Address**	**Number of Units**	**Student Generation Rate**	**Estimated number of students**
Town and Country Master Plan project	500 Hotel Circle North San Diego, CA 92108	840	K-5: 0.026-0.052 6-8: 0.004-0.008 9-12: 0.011-0.021 **K-12: 0.040-0.080**	K-5: 22-44 6-8: 3-6 9-12: 9-18 **K-12: 34-68**

4. *Based on the district's calculation of the project's student generation, would the project result in a need for additional school facilities?*

   Based on the information in Table 3, the estimated number of students generated by the TOWN AND COUNTRY MASTER PLAN proposed project (34 to 68 students across K-12) would not result in the need for additional school facilities. At the present time, the serving schools have sufficient capacity to house the expected number of generated students.

   However, in combination with ongoing development at Civita (4,000+ units), the forthcoming Camino Del Rio Mixed Use project (291 units), the possible Union Tribune Mixed Use project (200 units), and lastly the possible redevelopment of the Riverwalk Golf course (up to 4,000 units) which is immediately adjacent to this project, the cumulative potential increase in students could impact district schools to the point of reaching capacity. This scenario would require additional planning for sufficient facilities, as all but one of these projects are within the same school boundaries as TOWN AND COUNTRY MASTER PLAN project.

5. *Please describe any developer fee assessment program which has been implemented by the district. Who is responsible, how is the amount determined, and what is the payment method?*

   For information on developer fees please contact Frank Webb at (619) 725-7529 or developer-fees@sandi.net.

6. *Please describe any agreements the district has with the city regarding use of school fields and game courts by the public.*

   For information on Joint Use please contact Debbie Beaver at (619) 725-7281 or dbeaver@sandi.net.

7. *Does the district anticipate or expect any long term (10 year, 20 year, 30 year or longer)impacts associated with school services due to anticipated development within Mission Valley? If so, please describe the nature of these impacts and how this project may contribute to those impacts. If an impact would occur, what suggestions do you have to minimize their effects?*

   As noted in the response to question 4, the TOWN AND COUNTRY MASTER PLAN project itself is not expected to generate enough students to exceed the capacity of the serving schools. However, in combination with the other noted projects, the cumulative potential increase in students could impact district schools to the point of reaching or exceeding their current capacity. This scenario would require additional planning for sufficient facilities. Possible solutions include reducing the number of non-boundary resident students attending the affected schools, evaluating attendance boundaries, and lastly the consideration of adding portable classroom space.

   Please keep us apprised of revisions to the development plan as new information may result in changes to the information stated in this letter. Thank you.

Sincerely,

Sarah Hudson
Demographer

M:\IFPD - 5494A\Demographics\New Housing and Redev\Mission Valley\Town and Country Master Plan project.docx

LETTER A
ATTACHMENT 13

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ATLAS SPECIFIC PLAN

Prepared for:

ATLAS HOTELS, INC.
500 Hotel Circle North
P.O. Box 80098
San Diego, CA 92108

Prepared by:

P&D TECHNOLOGIES, INC.
401 West A Street, Suite 2500
San Diego, CA 92101

Approved by the

CITY OF SAN DIEGO CITY COUNCIL
Resolution Number R-272571
December 13, 1988

Amended by the

CITY OF SAN DIEGO CITY COUNCIL
Resolution Number _____
(DATE) _____

ATLAS SPECIFIC PLAN

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I. INTRODUCTION

A. BACKGROUND AND PURPOSE

1. Adoption and Amendment

When the Atlas Specific Plan was originally adopted in 1988, Atlas Hotels, Inc. owned seven sites within the Mission Valley area of the City of San Diego totaling approximately 86 acres. In 2016, the approximately 18.9-acre Mission Valley Inn site and the approximately 39.7-acre Town and Country site were removed from the Specific Plan by amendment. Consequently, this document no longer references the Mission Valley Inn or Town and Country sites. The amended Specific Plan area is 27.6 acres (approximately 32% of the initial Specific Plan area) consisting of the remaining five sites which are non-contiguous and located both north and south of Interstate 8 (I-8).

The initially adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study, hydraulic study, flood management policy, and environmental mitigation plan greatly shaped the proposed development plan, intensity, configuration, and implementation. As part of any future development proposal, technical reports including but not limited to traffic impact analysis, biological technical report, and hydrology and hydraulic analysis shall be prepared as required to ensure the proposed development is based on current data, planning guidance and environmental review requirements.

2. Purpose

The Specific Plan establishes land uses and intensities for the five sites and consolidates them into a single specific plan area with the intent of ensuring orderly and integrated development of all of the sites. The Evelyn Terrace site comprises 3.70 acres which are being reserved for future dedication for off-ramps associated with the proposed I-8/Via Las Cumbres interchange. No development currently is proposed for this site as a part of this Specific Plan.

The five sites which comprise the Atlas Specific Plan area are:

1.	Hanalei Tower	1.91 Acres
2.	Hanalei Hotel	15.77 Acres
3.	Mission Grove Office Park	2.51 Acres
4.	Kings Inn	3.67 Acres
5.	Evelyn Terrace	3.70 Acres

During the summer and fall of 1983, as part of their coordinated planning effort, Atlas Hotels, Inc. prepared a master plan for all of the applicable properties (including the two properties removed from the Specific Plan area by amendment in 2016) and submitted that plan to the City of San Diego Planning Department. On October 13, 1983, the City of San Diego Planning Commission authorized preparation of a specific plan and development agreement for the Atlas Hotels properties within Mission Valley.

This Specific Plan, along with the attendant development agreement, establishes the land use and intensity of development for each of the sites within the Specific Plan area and is intended to serve as the property owner's and the City's framework for preparation and analysis of future applications covering actual development of the property. In addition, this Specific Plan evaluates the consistency of the proposed development with the applicable community plan – the Mission Valley Community Plan.

A companion document to this Specific Plan is its accompanying environmental impact report, and EIR Supplement (EQD Nos. 84-0129 and 88-0142). The EIR and EIR supplement evaluate environmental issues related to development of the sites and development intensities. The EIR is based on the originally adopted Specific Plan area of seven sites including the Mission Valley Inn and Town and Country sites which were each later removed from the Specific Plan by amendment in 2016.

B. LOCATION

The Atlas Specific Plan area is located in the Mission Valley area of the City of San Diego. Two of the five sites within the specific plan area are located north of I-8 adjacent to the San Diego River. The remaining three sites are located south of I-8 adjacent to the hillsides which form the southern boundary of Mission Valley. All of the sites are located entirely within the Mission Valley Community Plan Area. The location of all of the sites is illustrated in Figures 1, 2 and 3. Figures 1 and 2 are a regional map and a vicinity map of the specific plan area. Figure 3 illustrates the location of each of the specific plan sites.

C. SETTING

The specific plan area is located between SR-163 and I-5 in the Hotel Circle area of Mission Valley. Atlas Hotels, Inc. is a major landowner in this portion of Mission Valley and currently operates the Hanalei Hotel, and the Kings Inn. These sites are proposed for refurbishment or expansion in conjunction with specific plan implementation. Mission Grove Office Park, containing 59,158 square feet of leasable office space, was recently completed on another of the specific plan area sites and no expansion is proposed for this site. The remaining two sites with the specific plan area are currently vacant. These are the Hanalei Tower and Evelyn Terrace sites.

Development in areas north and south of I-8 present different opportunities and constraints which must be addressed in specific plan design. North of I-8, the proximity of the Hanalei Hotel and Hanalei Tower sites to the San Diego River offers the opportunity for river orientation and enhancement of the aesthetic appeal of each individual site. Care must be taken, however, to ensure that impacts to sensitive wetland habitats are mitigated. Flood control measures must also be incorporated into these individual project designs to ensure public health and safety while at the same time exhibiting sensitivity to the wetland habitat. South of I-8, the proximity of the sites to sensitive hillside areas requires careful attention to grading design, erosion control, and revegetation efforts. The hillside location also offers opportunities for view enhancement and distinctive architectural design.

Other significant land uses in the vicinity of the Atlas Specific Plan area include a variety of hotel and commercial-recreation oriented uses, the Stardust Country Club and the River Valley Golf Course, Fashion Valley Shopping Center and the specific plan area for the First San Diego River Improvement Project (FSDRIP). Development types proposed in conjunction with FSDRIP include a mixture of residential, office and commercial uses. A specific plan has also been approved for the Stardust Country Club (Levi-Cushman) property by Chevron Land Development. Planned uses in this specific plan area include a mixture of residential, hotel and office uses. These and other recent developments in the area have increased the importance of Mission Valley as one of the major urban nodes in the City of San Diego.

Excellent regional access is provided by five freeways in the project vicinity: Interstate 8, which provides direct access to Hotel Circle and the Specific Plan sites; Interstate 5 and State Route 163, immediately west and east of Hotel Circle, respectively; and Interstate 805 and 15, located east of Hotel Circle in Mission Valley. Freeway improvements for I-8 and SR-163 are major features of the urban setting of the Atlas Specific Plan.

Figure 1 Regional Map

Figure 2 Vicinity Map (amended)

Figure 3 Site Locations (amended)

II. DEVELOPMENT ISSUES

Several key development issues are relevant to the design of the Atlas Specific Plan and a brief overview of these issues is provided in this section. Each of these issues is discussed in greater detail in the appropriate elements of this specific plan.

A. ENVIRONMENTAL ISSUES

A wide range of environmental issues are associated with development of a project such as the Atlas Specific Plan including flood control, wetland habitat preservation, hillside preservation, air quality, energy conservation, seismic safety, urban design, and visual quality. The Atlas Specific Plan responds to these environmental issues in a variety of ways and environmental concerns are addressed in detail in the EIR and EIR Supplement (EQD Nos. 84-0129 and 88-0142) which accompany this specific plan. The EIR and EIR Supplement identify both direct and cumulative environmental impacts associated with implementation of the Atlas Specific Plan.

The specific plan includes detailed urban design and river improvement elements which provide for both flood protection and replacement of wetland habitats (if required by future development proposals for the Specific Plan area. The urban design element also contains specific guidelines regarding hillside development and includes a conceptual streetscape plan for the Hotel Circle area to ensure compatibility and consistency of landscaping and urban design. Transportation control measures are incorporated into the specific plan to encourage adherence to regional air quality standards.

Wetland habitat in the Hotel Circle area of Mission Valley is not as extensive as in other portions of the valley due to past disturbance associated with construction of the Fashion Valley shopping area and hotels, restaurants, and other commercial facilities. A revegetation plan has been prepared for the specific plan area and is incorporated into the river improvement element of this specific plan. An updated biological technical study with revegetation plan based on current data shall be prepared as part of any future development proposal within the Specific Plan area (as needed). Atlas Hotels, Inc. is committed to implementing a revegetation plan which is acceptable to both the City of San Diego's and the U.S. Army Corps of Engineers' applicable guidelines.

Flood control has been a major problem in Mission Valley for many years and is of particular concern in the Hotel Circle area where, in some locations, development has occurred extremely close to the existing pilot channel on both the north and south sides of the floodway of the San Diego River. SR-Adjacent to the Hanalei tower and Hanalei Hotel sites, flood control is less of a concern due to the presence of undeveloped golf course property north of these sites. In order to address the issue of flood control for the Hanalei Hotel and Hanalei Tower sites, detailed, computerized hydrology studies were conducted by Boyle Engineering, Inc. The flood control measures which have been incorporated into the design of these sites reflect the conclusions and recommendations of the Boyle Engineering studies. Updated hydrology studies based on current data shall be prepared as part of any future development within the Specific Plan area (as needed). These flood control measures are discussed in detail in the river improvement element of this specific plan. In general, the flood control improvements proposed by the Atlas Specific Plan

SR-may not be proposed at the Hanalei Hotel or Hanalei Tower sites, since all proposed construction will be outside the 49,000 cfs floodway.

An important element of the flood control studies for the Atlas Specific Plan has been coordination of flood control plans for the Atlas properties with adjacent property owners, most notably with flood control plans for the Levi-Cushman specific plan area. Representatives of Atlas Hotels, Inc. and its consultant, Boyle Engineering have met several times with the applicant for the Levi-Cushman Specific Plan and with that applicant's engineer, Rick Engineering, to ensure that such coordination takes place. The primary goal of these meetings has been to ensure that no flood control measures proposed by the Atlas Specific Plan would preclude flood control proposals for the Levi-Cushman properties. Representatives of Atlas Hotels, Inc. have also kept in close contact with representatives of the Fashion Valley Shopping Center and the Copley property. These coordination efforts are discussed in greater detail in the river improvement element of this specific plan. Renewed coordination would be required as part of any future proposed development within the Specific Plan area.

Since Mission Valley is bordered on the north and south by scenic hillside areas, preservation of views of and from these hillside areas is an important component of the Mission Valley Community Plan. I-The Mission Grove Office Park site is partially within the City's Hillside Review Overlay Zone. No hillside development is proposed on this site.

B. PUBLIC FACILITIES ISSUES

An important public facility concern relevant to development within the specific plan area and in all of Mission Valley is traffic circulation. Many of the assumptions underlying the Mission Valley Community Plan involve the ultimate configuration of the circulation system for Mission Valley and the capacity of that circulation system. Development of a balanced circulation system that provides ample opportunities for alternative modes of transportation, including light rail transit, bus, bicycle and pedestrian movement, is a primary goal of the community plan. In order to evaluate the contribution of the specific plan toward the achievement of that goal, a computerized travel forecast for the specific plan area was conducted by Linscott, Law and Greenspan, Inc. in support of the Atlas Specific Plan initially adopted in 1988. The data derived from that forecast resulted in a variety of transportation system recommendations and a circulation system improvement phasing plan which are discussed both in the transportation element of this specific plan and in the EIR which accompanies this document. An updated traffic impact analysis based on current data shall be prepared as part of any future development proposal within the Specific Plan area (as needed).

Other public facilities such as water and sewer service, and gas and electric utilities are also addressed in this specific plan. Existing utilities and services do not represent significant constraints to development of the specific plan area.

C. DESIGN ISSUES

A wide variety of design issues have affected preparation of the Specific Plan area properties as discussed in detail in the urban design element. The most significant of these are the constraints

posed by existing development, the existing urban character and quality of the Hotel Circle area, and the need to preserve and enhance views of and from the specific plan area. As shown on the opportunities and constraints analysis (Figure 4), existing development within the Hotel Circle area consists primarily of tourist-related commercial uses, the Fashion Valley shopping center, and some office uses. The existing Stardust Country Club and River Valley golf course represent major undeveloped properties in the Hotel Circle area. A specific plan has been approved for the Stardust (Levi-Cushman) property.

With the exception of the Fashion Valley shopping center, most of these existing uses have been developed in a piecemeal manner with little attention given to consistency of design or an overall architectural or landscape theme. In response to this design challenge, the urban design element of this specific plan includes a conceptual streetscape plan for the Hotel Circle area. The streetscape improvements proposed for the Atlas Specific Plan area sites will be an integral component of the land development process, building permit process or street improvement projects which are triggered by traffic volumes resulting from the phasing of individual development projects proposed by the Atlas and Levi/Cushman Specific Plans. Requiring streetscape improvements concurrently with street improvements or widenings and not solely in conjunction with new developments on individual project sites will allow the upgrading of streetscape areas adjacent to the Mission Grove Office Park where no new development is proposed or the King's Inn where only minor site improvements are proposed. The conceptual plan takes into account the constraints posed by existing development but strives to develop a unifying design theme.

As shown on the visual analysis map (Figure 5), views of the Hotel Circle area are available from both the hillsides north of Friars Road and south of Hotel Circle South. The design of the individual sites within the specific plan area will therefore be an important factor in preserving and enhancing those views. Enhancement of views of the river corridor, implementation of aesthetically-pleasing landscape techniques, and orientation of proposed high-rise structures to avoid view blockage are significant features of the specific plan design.

Figure 4 Opportunities and Constraints

Figure 5 Visual Analysis

III. LAND USE ELEMENT

A. OBJECTIVES

The primary land use objective of the Atlas Specific Plan is to establish uses and intensities for Atlas Hotels' properties in Mission Valley. In preparing the development program for its Mission Valley properties, Atlas Hotels considered a variety of factors including the marketability and compatibility of the proposed uses and achievement of the goal of enhancing Hotel Circle as a vital and dynamic urban node offering recreation opportunities for tourists and business opportunities for local resident.

The Specific Plan development program is intended to be balanced over the subject sites. The proposed office uses at the Hanalei Tower site will encourage hotel use. All of the sites will be integrated by an intra-valley shuttle, funded and operated by Specific Plan area property owners, which will transport hotel guests, office employees and members of the general public between the Specific Plan area offices, hotels, and the San Diego Lindbergh Field. Shuttle stops are proposed for each of the Atlas sites and may include stops outside the Specific Plan area. The proposed plans for the shuttle are discussed in greater detail in the Transportation Element (Section VI).

B. DEVELOPMENT PROGRAM

As shown in Table 1, the development program for the Atlas Specific Plan area consists of a combination of existing and proposed uses. Of the five sites within the specific plan area, three are currently developed (Hanalei Hotel, Mission Grove Office Park, and Kings Inn) and two are vacant (Hanalei Tower, and Evelyn Terrace). Only minor changes are proposed for two of the currently developed sites (Mission Grove Office Park, Kings Inn). The Hanalei Hotel will be expanded by 202 rooms. Office development is proposed on one of the two currently vacant sites, the Hanalei Tower site. The 3.70 acre Evelyn Terrace site, is being reserved for irrevocable dedication for the right-of-way for the future proposed I-8/Via Las Cumbres interchange. No development is currently proposed for this 3.70 acre site. The development proposals for each of the sites are discussed in greater detail later in this section and in the Urban Design Element of this specific plan.

In preparing the development program for the specific plan area, Atlas Hotels, Inc. evaluated a variety of uses for one of the two vacant sites – Hanalei Tower. For the Hanalei Tower site, the desirability of developing either office or hotel uses was investigated. Potential hotel use on

Table 1
Atlas Specific Plan
Development Program

Site	Net Acres*	Use	Existing	Additional Proposed (1)	Total
1. Hanalei Tower	1.91	Office	---	157,500 S.F.	157,500 S.F.
2. Hanalei Hotel	13.39*	Hotel Banquet Facilities	448 rooms 30,000 S.F.	202 rooms 34,000 S.F.	650 rooms 64,000 S.F.
3. Mission Grove Office Park	2.51	Office	59,158 S.F.	---	59,158 S.F.
4. Kings Inn	3.67	Hotel	140 rooms	---	140 rooms
6. Evelyn Terrace	3.70	Reserved for Interchange (2)		---	---
Total Office =			59,158 S.F.	157,500 S.F.	**216,658 S.F.**
Total Special Hotel Facilities =			117,500 S.F.	34,000 S.F.	**151,500 S.F.**
Total Hotel Rooms =			588 rooms	202 rooms	**790 rooms**

* Excluding floodway acreage. The proposed floodway acreage is as follows: Hanalei Hotel = 2.38 acres.

Note 1. These numbers represent the maximum development scenario and are subject to change at the time of detailed site designs.

Note 2. The 3.70 acre Evelyn Terrace site is being reserved for future dedication for off-ramps associated with the future I-8/Via Las Cumbres interchange. No development is currently proposed for this site.

Note 3. In 2016, the approximately 18.9-acre Mission Valley Inn site and the approximately 39.7-acre Town and Country site were removed from the Specific Plan by amendment. Consequently, this document no longer references the Mission Valley Inn or Town and Country sites although both sites were included in the original technical studies conducted circa 1988.

this site was evaluated in the context of the overall Specific plan Area. The overall development program calls for 202 additional rooms on the Hanalei Hotel site. With the proposed additions at the Hanalei Hotel site, a total of 790 hotel rooms will be provided within the Atlas Specific Plan area. At the time the Atlas Specific Plan was originally approved in 1988, Atlas Hotels' vacancy rates and anticipated growth in the Mission Valley area, informed Atlas Hotels, Inc. projection that 790 is the maximum number of hotel rooms which could be developed, marketed, and efficiently operated on the Specific Plan area properties. It is anticipated that the proposed office uses at the Hanalei Tower site will complement and support existing commercial recreation and retail development in the Hotel Circle area.

One issue of concern regarding the proposed development program involves the intensity of development associated with implementation of the Atlas Specific Plan. In order to evaluate the development intensity of the Atlas Specific Plan in the context of the Mission Valley Community Plan, Tables 2 and 3 have been prepared. All traffic information referenced in this document was current when the Atlas Specific Plan was originally approved in 1988. An updated traffic impact analysis based on current data shall be prepared as part of any future development proposal within the Specific Plan area (as needed). This will likely change the data presented in Tables 2 and 3.

The primary basis for analyzing development intensity according to the Mission Valley Community Plan is traffic, specifically trip generation. The Community Plan divides the community plan area into 13 development intensity districts (DID's) labeled A-M and assigns allowable trip generation rates (in terms of trips/acre) to each DID. As shown on Table 2, the Atlas Specific Plan area is located within DID's B and D. Table 2 provides a comparison of the trips allocated to the specific plan area utilizing the DID methodology outlined under the community plan and those anticipated to be generated by the proposed development program utilizing standard, maximum City traffic generation rates. It should be noted that Table 2 assumes no reduction in trip generation based on multiple use, vacancy rates or transit use. It also assumes no "credits" or development intensity bonuses given for multiple use or other factors. Such reduction factors and development intensity bonuses are permitted according to the Mission Valley Community Plan. Their applicability to the Atlas Specific Plan is discussed in the Transportation Element (Section VI) of this specific plan.

Table 3 provides a comparison of the Atlas Specific Plan to the Mission Valley Community Plan based on an equivalent dwelling unit (EDU) analysis. The factors utilized to determine existing Atlas Specific Plan and Community Plan EDU's are based upon the EDU factors presented in the Mission Valley Community Plan. As shown on Table 3, little or no growth would be permitted at three of the specific plan sites according requirements outlined in the Community Plan. These are the Hanalei Hotel site, the Mission Grove Office Park site, and the Kings Inn site. No growth is proposed at the Mission Grove Office Park or Kings Inn sites by the Atlas Specific Plan. The Specific Plan proposes to add 202

Table 2
Atlas Specific Plan versus Mission Valley Community Plan (MVCP)
Trip Generation Comparison[5]

Site	Acreage	Atlas Specific Plan Trip Generation [2]	MVCP Development Intensity District [1]	MVCP Daily Trips Permitted Per Acre [1]	Anticipated MVCP Trips (Based on DID's)
Hanalei Tower	1.91	2,520	B	263	502
Hanalei Hotel	15.77	5,200	B	263	4,148
Evelyn Terrace	3.70	0	D	380	1,406
Mission Grove Office Park	2.51	1,180	D	380	954
Kings Inn	3.67	1,120	D	380	1,395
Subtotal:	**27.56**	**10,020**			**8,405**

Note:
[1] Mission Valley Community Plan
[2] 1986, Travel Forecast by Linscott, Law and Greenspan Engineers
[3] Net, assumes reduction for HR property
[4] The acreage noted is reserved for the I-8/Via Las Cumbres interchange. No development is currently proposed.
[5] In 2016, the approximately 18.9-acre Mission Valley Inn site and the approximately 39.7-acre Town and Country site were removed from the Specific Plan by amendment. Consequently, this document no longer references the Mission Valley Inn or Town and Country sites although both sites were included in the original technical studies conducted circa 1988.

Table 3
Atlas Specific Plan versus Mission Valley Community Plan
Equivalent Dwelling Unit (EDU) Comparison[2]

Site	Existing EDUs	Proposed EDUs Atlas Specific Plan	Proposed EDUs Mission Valley Community Plan
Hanalei Tower	0	252	385
Hanalei Hotel	358	520	358
Evelyn Terrace[1]	0	0	141
Mission Grove Office Park	118	118	118
Kings Inn	112	112	112
Total	**588**	**1,002**	**1,114**

Note:
[1] The EDUs noted are the result of acreage reserved for the I-8/Via Las Cumbres interchange. No development is currently proposed
[2] In 2016, the approximately 18.9-acre Mission Valley Inn site and the approximately 39.7-acre Town and Country site were removed from the Specific Plan by amendment. Consequently, this document no longer references the Mission Valley Inn or Town and Country sites although both sites were included in the original technical studies conducted circa 1988.

rooms to the Hanalei Hotel site.

C. SITE-SPECIFIC LAND USE PROPOSALS

This section describes the uses proposed for each of the sites within the Atlas Specific Plan area. Individual land use schematics, specific site plans and the special design features of each of the sites are described in greater detail in the urban design element.

Table 4 (Deleted by amendment)

1. Hanalei Tower

The 1.91-acre Hanalei Tower site will be developed with 157,500 square feet of commercial office space in conjunction with specific plan implementation. The site area has been redefined from the existing site boundary, based on the proposed Via Las Cumbres interchange.

The office uses will be constructed in one nine-story tower. Access to the site will be provided from the Via Las Cumbres interchange and by the reconfigured Hotel Circle North Road. The street will cul-de-sac at the southeast corner of the site.

2. Hanalei Hotel

The 15.77-acre Hanalei hotel site is currently developed with 448 hotel rooms and approximately 30,000 square feet of restaurant and banquet facilities. An additional 202 rooms and 34,000 square feet of banquet facilities will be constructed in conjunction with this specific plan implementation. The main entry to the hotel will be relocated east along the proposed Levi-Cushman Road to align with a new entry lobby for the expanded facility. A new mid-rise hotel tower and lobby arcade with mixed dining and retail functions is proposed at the new hotel entry. A shared pedestrian/bicycle pathway located along the river has been incorporated into the project design. Wetlands mitigation will be provided as required.

3. Mission Grove Office Park

The 2.51-acre Mission Grove Office Park site is currently developed with 59,158 square feet office space in two structures. No new development is proposed as part of specific plan implementation. Existing development on the Mission Grove site consists of two wood-shingled buildings stepping up the hillside and separated by parking facilities. The frontage of the site along Hotel Circle South will be extensively landscaped in conjunction with the specific plan implementation.

4. Kings Inn

The 3.67-acre Kings Inn site is currently developed with 140 hotel rooms. No new structural development will occur in conjunction with the specific plan implementation, but the site will be refurbished and re-landscaped.

5. Evelyn Terrace

The 3.70 acre Evelyn Terrace site is being reserved for irrevocable dedication to the City, at no cost to the City, for the right-of-way for the proposed future interchange at Interstate 8 prior to the issuance of building permits for the Hanalei Tower site. No development is proposed for this vacant site.

IV. RIVER IMPROVEMENT ELEMENT

A. OBJECTIVES

Two sites within the specific plan area (the Hanalei Tower site and the Hanalei Hotel site) are located adjacent to the San Diego River. An updated hydrology and hydraulic analysis based on current data shall be prepared as part of any future development proposal within the Specific Plan area (as needed). The primary objective of the river improvement element of this specific plan is to develop coordinated flood control and wetlands management programs for these two sites which may provide both flood protection and wetlands mitigation and which adhere to the guidelines and criteria established by the City's Floodplain Section and the San Diego River Wetlands Management Plan. Flood protection within the specific plan area will be provided against the future 100-year flood identified as 49,000 cubic feet per second (cfs) by the City of San Diego and the U.S. Army Corps of Engineers.

B. RIVER CORRIDOR DESIGN CONCEPT

The overall river corridor design concept envisioned by the Mission Valley Community Plan and the San Diego River Wetlands Management Plan is that of a natural-appearing, enhanced river channel providing a natural and useable open space corridor within the valley. Both the community plan and the wetlands management plan recognize the urbanized nature of Mission Valley and the degree to which existing development has occurred near the river corridor. The need for a comprehensive flood protection program for existing and future development within the valley is also recognized as is the need for preservation and enhancement of existing wetland habitats and compensation for habitat lost as a result of development.

The river corridor design concept for the Atlas Specific Plan consists of two major components – a flood management program and a revegetation program. Each of these components has been specifically tailored to the individual characteristics of the river-oriented sites within the specific plan area. The revegetation plan is an integral part of the river corridor design. Its chief purpose is to mitigate for losses of wetland habitat resulting from floodway and development improvements.

At the Hanalei Tower and Hanalei Hotel sites, little or no development has occurred adjacent to the pilot channel. The Hanalei Tower site is currently vacant, and the Hanalei Hotel property consists of a 448-room hotel and banquet facilities oriented more toward Hotel Circle than toward the river. The north side of the pilot channel is occupied by the River Valley golf course. Since little existing development is located adjacent to the pilot channel, good opportunities exist for provision of a wider open space corridor as envisioned in the Mission Valley Community Plan. The design concept in this area focuses on providing river orientation for existing and proposed developments, and providing an open space corridor along the river. Flood protection is not as great a concern in this area since a larger area is available to carry floodwaters and phasing of

construction at the site is being coordinated with the channel improvements proposed by Levi/Cushman and Warner Ranch.

C. FLOOD MANAGEMENT PROGRAM

In order to develop a comprehensive flood management program for the Atlas Specific Plan, a computerized hydraulic study was conducted by Boyle Engineering Inc. (Boyle) prior to the original adoption of the Specific Plan in 1988. Information from the Boyle study is presented for informational purposes only since the study is considerably out-of-date. The Boyle Engineering study focused primarily on the area between SR-163 and Fashion Valley Road (essentially the Town and Country site which was later removed by amendment from the Specific Plan area), but also established the limits of the 49,000 cubic feet per second (cfs) floodway (existing conditions) for the Hanalei Tower and Hanalei Hotel sites.

An updated hydrology and hydraulic analysis based on current data shall be prepared as part of any future development proposal within the Specific Plan area (as needed). Furthermore, any future development proposal shall comply with applicable federal, state and city requirements and planning guidance (including but not limited to San Diego Municipal Code Section 1514.0302 San Diego River Subdistrict) as current at time of proposal submission unless specifically noted as a deviation in this Atlas Specific Plan Document.

Key terms in understanding the management of a flood-prone area are the floodplain, the floodway, and the floodplain fringe. These terms are defined as follows:

> floodplain – refers to the land surface which is inundated by the 100-year flood (49,000 cfs).
>
> floodway – refers to the channel of a river and the adjacent land areas that must be reserved in order to convey the 100-year flood without increasing the water surface elevation by more than one foot.
>
> floodplain fringe – refers to the area within the floodplain, but outside the floodway, which may be developed by raising the ground level at least two feet above the water surface elevation of the design flood, in this case the 100-year flood (49,000 cfs).

The HEC-2 computer program developed by the Army Corps of Engineers was used to calculate water surface profiles, and floodway and floodplain limits for the Boyle study area. Cross-sectional data was based upon City of San Diego data for existing conditions west of SR-163 and upon data provided by Dr. Howard H. Chang of San Diego State University for sections east of SR-163. The circa 1988 hydraulic study for the area east of SR-163 assumed implementation of flood control improvements upstream from SR-163, as outlined in the specific plan for the First San Diego River Improvement Project (FSDRIP).

As part of the Boyle flood management program study assumptions, the 49,000 cfs floodplain and a new 49,000 cfs floodway were defined for the study area between the Morena Boulevard bridge and SR-163. The 49,000 cfs floodway was developed by constricting the existing floodplain equal

amounts on each side of the river until a maximum 1 foot rise in the water surface elevation was obtained in accordance with federal criteria.

Per the Boyle study, critical to the computation of water surface elevations are the selection of appropriate friction factors or “n-values” for the computer model. The n-values selected are based on the characteristics of the area studied, and include the type and extent of vegetation as defined in the revegetation plan; material of the flow area (earth, pavement, riprap, etc.); the surface irregularity of the channel sides and bottom; and possible obstructions. After careful consideration and comparison with n-values used in FSDRIP, the Levi-Cushman, and Warner Ranch improvement plans, the roughness coefficients were assigned as follows:

Main Channel	n = (average) 0.060
Vegetated Buffer Areas	n = 0.05
Parking Lots	n = 0.02 to 0.035

Figure 6 Deleted by amendment

The first step for the Boyle evaluation of proposed improvements for the study areas was to establish a "benchmark" for comparison. While the current floodplain and floodway were based on a 100-year discharge of 36,000 cfs, it was estimated by the Corps of Engineers that increased runoff from future development in the San Diego River watershed will eventually yield a 100-year peak discharge of 49,000 cfs. The City required all new developments to be based on a 100-year peak discharge of 49,000 cfs.

Table 5 (Deleted by amendment)

Table 6 (Deleted by amendment)

Hanalei Tower and Hanalei Hotel Sites – Flood Management Program

As part of the Hanalei flood management program, a new 49,000 cfs floodplain and a new 49,000 cfs floodway for existing conditions were defined for the Boyle study area between the Morena Boulevard Bridge and Fashion Valley Road. The 49,000 cfs floodway was developed by reducing the existing floodplain's conveyance by equal amounts on each side of the river until a maximum 1 foot rise in the water surface elevation was obtained in accordance with federal criteria. Figure 14 shows the new 49,000 cfs floodplain and floodway limits relative to the existing 36,000 cfs floodway. The 49,000 cfs floodway limits are also shown on Figure 14 both with completion of the proposed improvements by Levi-Cushman and Warner Ranch and without those improvements.

Figure 7 Deleted by amendment

Figure 8 Deleted by amendment

Figure 9 Deleted by amendment

Figure 10 Deleted by amendment

Figure 11 Deleted by amendment

Figure 12 Deleted by amendment

Figure 13 Deleted by amendment

Per the Boyle study, the boundary of the existing conditions 49,000 cfs floodway at the Hanalei Tower and Hanalei Hotel sites is similar to that for the 36,000 cfs floodway as illustrated in Figure 14. All construction at the Hanalei Hotel site and Hanalei tower will be located outside this 49,000 cfs floodway. It is anticipated that construction at these sites will follow the channelization improvements proposed for Levi-Cushman and Warner Ranch. These improvements will widen the existing pilot channel to contain the 100-year flood and relocate the floodway line further to the north.

No features of the Atlas Plan will preclude developing a new configuration of the floodway proposed by the Levi-Cushman and Warner Ranch Specific Plans. Atlas is working closely with the applicant for the Levi-Cushman and Warner Ranch Specific Plan to develop mutually agreeable flood control solutions.

Additional flood protection will be provided at both the Hanalei Hotel and Hanalei Tower sites by elevating all new construction 2 feet above the level of the 49,000 cfs flood (100-year flood). Since no improvements are proposed by the Atlas Specific Plan in the vicinity of the Hanalei sites which would alter the configuration of the existing floodway, Atlas Hotels, Inc. will not be responsible for any flood control improvements in this area. As in the past, Atlas Hotels, Inc. is willing to work closely with Levi-Cushman to develop mutually agreeable flood control solutions. The need for, and configuration of any flood control improvements (including but not limited to those stated above) shall be based on an updated hydrology and hydraulic study based on current data as part of any future development proposal.

D. REVEGETATION PLAN AND MANAGEMENT PROGRAM

The initially adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study, hydraulic study, flood management policy, and environmental mitigation plan greatly shaped the proposed development plan, intensity, configuration, and implementation. As part of any future development proposal, technical reports including but not limited to traffic impact analysis,

Figure 14 Hanalei Hotel/Hanalei Tower - Floodway

biological technical report, and hydrology and hydraulic analysis shall be prepared as required to ensure the proposed development is based on current data, planning guidance and environmental review requirements.

Introduction

Recognizing the importance of the adjacent wetlands to the Atlas project, the following revegetation plan has been prepared. This section describes the revegetation plans for the Hanalei Tower and Hanalei Hotel sites. The circa 1988 revegetation plan complies with the guidelines and criteria outlined in the San Diego River Wetlands Management Plan. Complete listings of plants and animals observed on the property at the time of the circa 1988 study are included in the appendix to the 1988 EIR which accompanies this Specific Plan.

The purpose of the Revegetation Plan is to outline an effective means of compensating for loss of biologically valuable wetland habitats of the San Diego River associated with development of the Atlas Specific Plan area. This Revegetation Plan is guided in its preparation by the San Diego River Wetlands Management Plan, prepared by the City of San Diego Environmental Quality Division. The Wetlands Management Plan is an element of the Mission Valley Community Plan, and its purpose is to allow for continued development of the Mission Valley area, while at the same time permitting no net loss of wetland habitat within the floodway zone. The Wetlands Management Plan is comprehensive in that if its requirements are met, requirements of state and federal agencies responsible for wetlands preservation and enhancement should also be met.

At the time of the original adoption of the Specific Plan, revegetation of wetland habitats within San Diego County was a relatively new phenomenon, and no "proven" methods had been established; however, considerable research and in-the-field work had been done elsewhere in southern California. This work, by Dr. Bertin W. Anderson and John Disano of the Colorado River Laboratory, was of much help in outlining specifics such as planting depths, spacing, irrigation, etc. Much of the logic for wetlands habitat revegetation was a result of observing man-made and natural disturbances within floodplains, and the effects these phenomena have on the vegetation. A revegetation effort was under way in 1988 east of the Atlas Specific Plan area and was beginning to yield some useful information at that time.

Purpose

Specifically, the purpose of the revegetation plan is to present in detail specifications for establishment and maintenance of biologically viable riparian woodland, freshwater marsh, and open water habitats. Wetland habitats will be created from uplands, and degraded wetlands will be replaced with newly created wetland habitats. The newly-created wetlands must be of high use to native wildlife species; wildlife preservation is one of the chief reasons why wetlands are being preserved along the San Diego River. In order to achieve high wildlife usage of the wetlands, the revegetation effort must be properly planned, executed, maintained and monitored.

Status of Existing Habitats

This Revegetation Plan addresses the biological resources of two Atlas Hotel sites in Mission Valley, San Diego, California. Riparian resources of the San Diego River will be altered in each case. This revegetation plan focuses on the following areas: existing conditions, expected project impacts on riparian resources, and revegetation guidelines to mitigate impacts.

The area surveyed for this revegetation plan includes the riparian habitats of the San Diego River which front the Hanalei Hotel and Hanalei Tower sites, and similar habitats in the vicinity of the Town and Country Hotel site (from Fashion Valley Road east to SR-163). The Town and Country site was removed from the Atlas Specific Plan area by amendment in 2016; consequently, the survey data in this section is not an accurate depiction of current conditions and is included in this document for information purposes only. The sites were surveyed in 1988 by Eric N. Wier and Harold A. Wier, biologists.

Three native plant communities occur over the sites: riparian woodland, freshwater marsh and open water. An additional native category, floodplain, was mapped. Several non-native or disturbed areas are present, such as lawn, eucalyptus grove, pavement, exotic landscaping and bare soil.

Riparian Woodland is characterized by an overstory of riparian trees such as Fremont cottonwood (Populus fremontii), arroyo willow (Salix lasiolepis) and black willow (Salix gooddingii). Understory plants are absent in many places, but where present include natives such as green sedge (Cyperus eragrostis), sandbar willow (Salix hindsiana) and mule fat (Baccharis glutinosa), and woods such as giant reed (Arundo donax) and castor bean (Ricinus commus). The height of trees ranges from about 2.5 meters to over 12 meters. Riparian woodland covers approximately 1.6 acres at Hanalei Hotel and Hanalei Tower sites.

The existing riparian corridor is very restricted, and pressure from human usage and general disturbance is very high. The proximity of major highways and roads, and busy commercial areas currently have a significant adverse effect on habitat quality. However, wildlife usage remains moderately high. One contributing factor to the relatively high usage is the greenbelt surrounding the river along most of its length from Morena Boulevard east to Fashion Valley Road. The golf courses comprise most of this greenbelt, together with weedy areas and scattered native and exotic trees. Whether natural or not, the greenbelt provides forage, cover and nesting opportunities for many species. Many animals utilize both the greenbelt buffers and the riparian habitats. If the golf courses and other open space areas were eliminated, use of the riparian habitats would probably decrease. Certain species would suffer more than others, such as ash-throated flycatcher and blue grosbeak.

Freshwater marsh is characterized on-site by dense stands of California bulrush (Scirpus californicus) and Cattail (Typha spp.). This plant community occurs within the river, or on its banks, and in most cases, the plants have their “feet in water.” These plants range in height from about 1.5 to 3 meters. Freshwater marsh occurs only at the Town and Country site (removed from the Specific Plan area by amendment in 2016), and covers 1.1 acres.

A fourth wetland category was mapped, and is termed “floodplain.” This is a somewhat transitionary type as a result of disturbance from natural causes such as flooding. On-site it is

characterized by an absence of a significant amount of vegetation, and the presence of gravel or sand bars. This habitat type covers about 0.6 acre east of the Town and Country site (removed from the Specific Plan area by amendment in 2016) and west of SR-163.

Other non-native cover types occur in the project area, including eucalyptus groves dominated by blue gum (Eucalyptus globulus), disturbed areas, and areas landscaped with lawn and trees. In total, these non-native types cover about 7 acres in the 1988 project area.

Flora

The 1988 study recorded flora for the sites (including two sites no longer part of the Specific Plan area) and tabulated a total of 72 species, 21 of which are native (29%), 51 of which are non-native (71%). The native flora is typical of lowland riparian habitats in coastal southern California. The San Diego River habitats in this area are highly disturbed and impinged-upon by human uses on all sides. This partially accounts for the high number of non-native species recorded. Also, floodplains tend to support many exotic species due to the frequent natural disturbance as a result of flooding.

No plant species considered rare, endangered or threatened by federal or state agencies was detected or is expected on the sites. The lower San Diego River floodplain is not known for its sensitive plant habitat; a few species could reasonably be expected, including Palmer's ericameria (Ericameria palmeri), San Diego sagewort (Artemisia palmeri), and San Diego ambrosia (ambrosia pumila). These species were looked for and not found in the surveyed area.

Zoology

(Amphibians and reptiles). One amphibian, bullfrog (Rana catesbieana), and one reptile, great basin fence lizard (Sceloporus occidentalis longipes), were observed. Several other species are expected, including garden slender salamander (Batrechoseps major), pacific treefrog (Hyla regilla), San Diego alligator lizard (Gerrhonotus multicarinatus webbi), and gopher snake (Pituophis melanoleucus). A more intensive survey for this group of animals could reveal a great variety of species.

Birds

Fifty-four species and about 375 individuals were detected on the sites (including two sites no longer part of the Specific Plan area). Most of these species were associated with riparian habitats, and breeding behavior was noted in many. A higher species total is expected for this stretch of the San Diego River, with the addition of many winter and summer visitors and transients. Over 100 species have recently been recorded for the freshwater portion of the San Diego River in Mission Valley (Nasland Engineering, 1981-1983).

Mammals

A total of 4 species was detected by means of direct observation and indirect evidence: brush rabbit (Sylvilagus bachmani) was common in the non-riparian areas; Botta's pocket gopher (Thomomys

bottae) was in evidence in some areas; California ground squirrel (Spermophilus beecheyi) was uncommon; coyote (Canis latrans) scat was found in one location; and black rat (Rattus-rattus) was observed along the river bank. Numerous other mammals are expected, including several species of bats and mice, opossum, striped skunk, long-tailed weasel and grey fox.

No animals currently considered rare, threatened or endangered by federal or state authorities were detected or are expected on the sites surveyed (including two sites no longer part of the Specific Plan area).

Analysis of Significance

The most significant biological resources associated with the sites (including two sites no longer part of the Specific Plan area) are, of course, the San Diego River riparian habitats. It can be effectively argued that these habitats are of lower quality than on much of the rest of the river. This fact does not diminish the importance of the river and the semi-developed land around it as existing, functional habitat and as potentially high-quality habitat. The San Diego River riparian corridor must be considered as an entire system, not as sections of significant and insignificant habitat which could be alternately developed and preserved.

Expected Biological Impacts

Development of the sites is expected to have direct and indirect biological impacts. Some wetland vegetation would probably be temporarily destroyed as a result of any river course alteration. Approximately 1.6 acres of riparian woodland and 1.2 acres of open water habitat would be impacted adjacent to the Hanalei sites. Approximately 0.45 acres of riparian woodland habitat would not be disturbed at the Hanalei Hotel site; however, the elimination of related habitat due to site development may not ensure the viability of the undisturbed riparian woodland habitat. For this reason, this undisturbed riparian woodland habitat has not been credited to the impacted habitat at the Hanalei sites. In addition, the proposed Via las Cumbres (at Hanalei) bridge will have a "shading effect" on the vegetation below. Habitat value will be reduced to an unknown degree, but to be conservative, 100% reduction in quality has been assumed for purposes of determining the mitigation requirements in the revegetation plan. The actual amount of disturbance will depend on factors such as the height of the bridge above the river and the type and extent of abutments and supports used in the bridge design. A high bridge with a small amount of disruption within the river channel will probably have a minimal long-term impact on biological resources.

Any increase in lighting associated with walkways, bicycle paths, and visual landscaping effects will likely have a detrimental impact on wildlife usage of the river corridor. The degree to which lighting impacts wildlife activity depends on its brightness, angle, duration, and frequency per unit of distance. Lighting proposed adjacent to the river corridor will be reviewed by EQD.

Direct impacts during construction will severely disrupt wildlife activities along the river. The greatest disturbance would result from removal of vegetation and any channelization of the river. Secondary impacts will result from noise, dust and soil compaction.

Mitigation Measures

Several measures can be taken to mitigate the effects of the proposed development. The most basic and effective of these is compensation for lost acreage through habitat restoration. This type of mitigation is required as a result of the San Diego River Wetlands Management Plan in the form of a comprehensive revegetation plan. Such a revegetation plan has been prepared for the Specific Plan area and is described below.

Construction impacts are not easily mitigated, but certain general guidelines can be followed to minimize the effects of potentially harmful activities:

1. Remove vegetation during the late summer, when birds have completed nesting, and before migrant populations arrive in the area.

2. Preserve as much existing native riparian vegetation as possible, especially large willows and cottonwoods.

3. Keep to a minimum the time between vegetation removal and wetland habitat replanting.

4. Plant vegetation for restoration as soon as possible after finish grading is complete.

5. Provide certain areas for dense plant vegetation to hinder public access or disturbance to wildlife habitats.

Compensation Concept

The primary objective of the Atlas Specific Plan Revegetation Plan proposed in 1988 was to compensate for all on-site and off-site impacts to wetland resources on an acre-for-acre basis. Compensation and mitigation related to any future proposed development shall be based on an updated biological technical study based on current data, jurisdictional requirements and guidance. Off-site impacts associated with development of the Hanalei sites include disturbance associated with development of Via Las Cumbres.

Existing habitats at the time of the survey at the Hanalei sites are illustrated in Figure 19. Table 7 summarizes the acreages of existing habitats on the sites. Table 7 also summarizes the acreages of wetlands expected to be disturbed and created in conjunction with implementation of the Atlas Specific Plan. As shown on Table 7, compensation for wetlands disturbance would be provided based on current criteria as determined at time of submittal of any development proposal. Compensation for habitats disturbed at the Hanalei sites may be provided at off-site revegetation areas. Revegetation to be provided at Specific Plan area sites or any off-site revegetation areas will mitigate all impacts to open water, riparian woodland, and freshwater marsh habitats within the Atlas Specific Plan area. It should be noted that the impact on habitats result from Via Las Cumbres has been eliminated from the calculations in Table 7 due to the circa 1988 realignment of the proposed road to the east of the Hanalei sites.

- Buffer Planting

The San Diego River Wetlands Management Plan (SDRWMP) calls for the location of buffers an average of 20 feet wide outside of the floodway on both sides of the river. Per the SDRWMP, landscaped areas within the floodway cannot be termed buffers and have thus been termed landscaped setback area in this specific plan. Any future development proposals within the Specific Plan area shall be based on current federal, state, and city jurisdictional regulations and guidance.

The landscape plantings in the buffer areas and the landscape setback area will screen the wildlife habitat areas in the wetlands from the adjacent human activities associated with the planned development. The plantings will also provide valuable habitat edge and additional opportunities for non-wetland wildlife, thereby increasing the overall species diversity within the affected area. A 10-foot wide pedestrian/bicycle path will occur along the south side of the river channel and may be located within the buffer. The buffer areas and landscape setback areas will provide a visual transition between the manicured and ordered plant groupings associated with a maintained landscape and less orderly planting of other naturalistic wetland habitat.

Figure 15 Deleted by amendment

Figure 16 Deleted by amendment

Figure 17 Deleted by amendment

Figure 18 Deleted by amendment

Figure 19 Hanalei Hotel/Hanalei Tower Existing Habitats

Table 7
Atlas Revegetation Plan
Acreage Summary

EXISTING CONDITIONS[1]			IMPACT		MITIGATION				
Atlas Specific Plan			Atlas Specific Plan		Acres Required for Mitigation			Atlas Specific Plan	Required per SDRWMP[4]
Habitat type	Hanalei Sites[2]	Total	Hanalei Sites	Total	Hanalei Sites[3]	Off-site[3]	Total	% of Habitat Type[3]	% of Habitat Type
Open Water	1.2	1.2	1.2	1.2	TBD	TBD	TBD	TBD	20 - 40
Freshwater Marsh	---	---	---	---	TBD	TBD	TBD	TBD	25 -35
Riparian Woodland	1.6	1.6	1.6	1.6	TBD	TBD	TBD	TBD	35 - 45
Floodplain	---	---	---	---	TBD	TBD	TBD	TBD	---
Total Wetland	2.8	2.8	2.8	2.8	TBD	TBD	TBD	100	

Notes:

[1] All acreage is approximate and based on the biological survey conducted in 1988. Prior to development of any site, a new biological survey shall be conducted to determine the current acreage for each habitat type.

[2] Includes 0.45 acres of existing riparian woodland habitat which would not be disturbed by the proposed development but whose long-term, viability is questionable, given anticipated relocating of the floodway boundary at the Hanalei sites.

[3] Mitigation for all habitat acreage to be disturbed at the Hanalei Sites To Be Determined (TBD) at time of development based on new biological survey and current mitigation ratio requirements.

[4] San Diego River Wetlands Management Plan.

Figure 20 Deleted by amendment

Figure 21 Deleted by amendment

Finally, visual access to the wetland areas will be maintained from the buffer areas although physical access will be prohibited. The urban design section of this specific plan contains specific criteria for the development of the river corridor.

All plant material used in the buffer areas and landscape setback areas will be native. Suggested trees and shrubs include white alder, western sycamore, Fremont cottonwood, and coast live oak. The trees should be spaced to allow for an open canopy at final maturity. The shrub understory should be densely planted in order to provide a high degree of cover for wildlife, denser screening from adjacent human activities, and an effective barrier to human access to habitat areas.

- Riparian Woodlands

Riparian woodlands, if any, will be a tree-dominated plant association between the buffer plantings and any freshwater marsh areas. There will be two basic types of riparian woodland; the cottonwood association or a drier habitat located away from the water's edge from the top of the riverbank to the middle of the riverbank, and the willow association or a wetter habitat located from the middle of the riverbank to the lower edge of the riverbank. Trees of varying stature will be planted. Of the planted, 1-gallon tree stock, 40 percent will be black willow and 35 percent shall be a combination of at least two of the following: arroyo willow, red willow or polished willow. The remaining 25 percent of the trees will be white alder and Fremont cottonwood. The willows should be planted 10 feet apart, the alder and cottonwoods 15 feet apart. Shrubs should be planted 3 feet apart and extend only 5 feet into the tree plantings.

- Freshwater Marsh

This plant association, if any, will begin at the water’s edge if it occurs. Basically freshwater marsh could occur along continuous, gently sloped banks on both the north and south sides of the river channel and would average 15 feet in width on both sides. The plant material may be collected locally, using whole plants and rhizomes of cattail, bulrush, and others. One stem will be planted approximately every 5 feet, but not in an exactly linear arrangement. Dense planting is not necessary as this plant community will invade on its own.

- Open Water

Open water areas will not be planted.

Distribution of Habitat Types

The SDRWMP identifies the following criteria for distribution of habitat types within the wetlands corridor:

Open Water	20-40%
Freshwater Marsh	25-35%
Riparian Woodland	35-45%

As shown in Table 7, the goal for the distribution of habitat types within the Atlas Specific Plan Revegetation Plan would meet the SDRWMP criteria or subsequent superseding requirements to be determined at time of submission of any future development proposal.

Selection of Plant Material

The plants recommended for use in the revegetation plan are listed in Table 9. Some of the plant species suggested for use in revegetation are not readily available at nurseries. It is suggested that several sources be considered when arranging for plant stock. Most preferable are local sources such as Mission Valley. Many species, such as arroyo willow, become established readily from suitable cuttings. Rooted cuttings should be healthy, pest-free, and properly fertilized. Of high importance is the purity of the plant material collected in the local area. Great care must be taken not to introduce invasive weeds such as giant reed (Arundo donax), castor bean (Ricinus communis), pampas grass (Cortaderia spp.) and tamarisk (Tamarix spp.), with containerized stock. These plants deteriorate the quality of riparian habitats and spread rapidly once introduced by seed or stolons. Use of 1-gallon stock is highly encouraged, as larger individuals have a lower survival rate, slower growth, and a lower chance of developing an adequate (deep) root system.

Table 8 (Deleted by amendment)

Site Preparation

Site preparation is necessary prior to revegetation of wetland plant communities. Included in these site preparations will be state-of-the-art techniques such as:

1. Regrading of upland areas such that the finish grade is near the average water table level. This will allow for the conversion of upland plant communities to wetland plant communities.

2. Removal of weed species through both mechanical means, such as hoeing or discing, and the application of approved herbicides compatible with the wetland plant and animal communities.

3. When planting trees and shrubs from containers in compacted soils or soils less permeable than sand, holes must be augered to permanently moist soil.

4. Conduct soils analysis for soil layering, soil density, and salinity. The consulting biologist shall review soil conditions prior to grading to ensure that optimal soils are present in revegetation areas.

5. Backfill holes with loose soil material amended with appropriate nutrients, as determined by soil analysis.

6. Mass deep tillage of the soil may be an alternative to augering of individual plant holes. The consulting biologist shall determine the appropriate technique for various areas. The

time between soil preparation and planting must be minimized to prevent drying and hardening of the prepared soil.

Maintenance

- Irrigation

A temporary irrigation system will be necessary to establish plant material in the riparian woodland and buffer areas. Depending upon the time of year, any freshwater marshes may also require some supplemental watering. A drip irrigation system approved by the consulting biologist should be used in the riparian woodland and buffer areas so that deep penetration of the root system is encouraged and permanent (non-irrigated) establishment is more likely. Plants should be tested for establishment after an appropriate period of months by withholding water to a test block in each habitat. If wilting or other drought-related stress occurs, irrigation must be resumed until such time as all the plant stock is self-sufficient. The time it takes for various plant species to become established will vary.

Table 9
Selected Plants for Use in Revegetation

A. Trees for Riparian Woodland		**Planting Method**
Platanus racemosa	Western Sycamore	2, 3
Populus fremontii	Freemont Cottonwood	1, 2, 3
Quercus agrifolia	Coast Live Oak	2
Salix gooddingli	Black Willow	1, 2, 3
Salix hindsiana	Sandbar Willow	1, 2, 3
Salix laevagata	Polished Willow	1, 2, 3
Salix lasiandra	Red Willow	1, 2, 3
Salix lasiolepsis	Arroyo Willow	1, 2, 3
B. Shrubs for Riparian Woodland		**Planting Method**
Amorpha fruticosa	False Indigo Bush	2
Artemesia douglasiana	Western Mugwort	2, 4
Artemesia palmeri	Palmer Sagebrush	2, 4
Baccharis glutinosa	Mule Fat	3, 4
Clematis lasiantha (vine)	Pipestern Clematis	2
Hymenoclea monogyra	Cheesebush	4
Iva hayesiana	San Diego Poverty Weed	2
Rosa californica	California Rose	2,3
Rubus ursinus	California Blackberry	2,3
Salix hindsiana	Sandbar Willow	1,2,3
Solanum douglasii	White Nighshade	2
Vitis girdiana (Vine)	Desert Grape	2
C. Perennials for Freshwater Marsh		**Planting Method**
Alisma trivale	Common Water Plantain	

Anemopsis californica	Yerba Monsa	3
Carex spissa	San Diego Sedge	3
Juncus acutus	Spiny Rush	3
Mimulus cardinalis	Scarlet Monkey flower	3
Phragmites communis	Common Reed	
Psoralea macrostachya	Leather Root	3
Scirpus acutus	Hard-stem Bulrush	3
Scirpus americanus	Three-Square	3
Scirpus californicus	California Bulrush	3
Scirpus olneyi	Olney's Bulrush	3
Scirpus robustus	Pacific Coast Bulrush	2,3
Sparganium eurycarpum	Broad-fruited Bur-reed	4
Typha ssp Cattail		3
D. Annuals and Herbaceous Perennials for Riparian Woodland, Buffer and Landscape Setback Planting		
Camissonia cheiranthifolia ssp. suffruiticosa*	Primrose	
Eremocarpus setigerus	Doveweed	
Eriogonum parvifolium (s)	Buckwheat	
Eschscholzia californica (s)	California poppy	
Helianthus annuus (s)	Sunflower	
Lotus scoparius (s)	Deerweed	
Lupinus bicolor (s)	Lupine	
Nemophila menziesii (s)	Baby blue-eyes	
Oenothera hookeri (s)	Evening primrose	
Phacelia tanacetifolia (s)	Phacelia	
Plantago insularis (s)	Plantain	
Sisyrinchium bellum (s)	Blue-eyed grass	
E. Shrubs for Buffer and Landscape Setback Plantings		**Planting Method**
Atriplex lentiformis	Quail Brush	2,4
Baccharis pilularis var. consanguinea	Coyote Bush	2,3,4
Ceanothus spp.	Ceanothus	2
Cercocarpus minutiflorus	Smooth Mountain-Mahogany	2
Clematis pauciflora (vine)	Virgin's Bower	2
Comarostaphylis diversifolia	Summer Holly	2
Elymus condensatus	Giant Wild Rye	3,5
Fremontodendron mexicanum		2
Haplopappus squarrosus	Sawtooth Goldenbush	4
Haplopappus venetus	Isocoma	
Heteromeles arbutifolia	Toyon	2,3,4
Keckiella cordifolia	Heartleaf Bush Penstemon	2
Lonicera subspicata	Southern Honeysuckle	2,3
Malacothamnus fasciculatus	Globemallow	3
Mimulus puniceus	Red-Bush Monkey-Flower	2

Penstemon spectabilis	Showy Penstemon	4
Prunus ilicifolia	Hollyleaf Cherry	2
Prunus Iyoni	Catalina Cherry	2
Quercus dumosa	Scrub Oak	2
Phamnus crocea	Redberry	2
Rhus integrifolia	Lemonade Berry	2
Rhus ovata	Sugarbush	2
Rhus trilobata	Basketvine	2
Sambucus mexicana	Mexican elderberry	2,3,4
Yucca schidigera	Mojave Yucca	2
Other non-weedy native or exotic species consistent with a naturalistic landscape.		
F. Trees for Buffer and landscape Setback Plantings		
Alnus rhombifolia	White Alder	
Quercus agrifolia	Coast Live Oak	
Platanus racemosa	Western Sycamore	
Populus fremontii	Fremond Cottonwood	
Planting Method Legend 1 = Planted as slips 2 = Planted as container stock 3 = Planted as rooted cuttings or plugs 4 = Planted as seed		

- Weed Control

Noxious and invasive weeds such as giant reed and castor bean must not be allowed to invade the revegetation site, as their presence will adversely affect habitat quality and aesthetic appearance. These weeds should be treated with an environmentally safe herbicide suitable for use in wetland habitats. The biological consultant should be consulted in this matter.

- Replacement

During the first five years, all trees and shrubs lost to vandalism, disease, under-watering, flooding, etc., shall be replaced in-kind or with a suitable replacement (with approval of the biological consultant). Replacement applies only to newly created or enhanced wetlands, not to existing habitat, unless revegetation elsewhere has affected existing habitat.

- Routine Maintenance

Routine maintenance will be conducted at the project site. It will consist of three elements: 1) Bio/landscaping; 2) Hydraulic efficiency; and 3) Aesthetic.

The Bio/landscaping aspect will relate directly to the monitoring and management of the riverine vegetation. Specifically, routine irrigation, replacement of any dead plants (unless the biologist indicates otherwise), vegetation removal to establish intended patchiness, soil preparation, control

of pest species, weed removal, or measures taken to correct human intrusion problems, such as new fencing, signing or buffer plantings. Irrigation will be maintained at a level specified by a certified landscape architect or the biological consultant to ensure success of the revegetation effort. This may require a system of valves of differential emitters.

The hydraulic efficiency of the river channel must be maintained to ensure the 100-year flood flow of 49,000 cfs, per the Boyle study. If maintenance dredging is necessary, it should be confined to the open water areas of the channel and initiated by the decision of the City's Engineering and Development Department and the Army Corps of Engineers. No dredging shall occur without prior approval of appropriate agencies.

Aesthetic maintenance will consist mostly of trash clean-up and repair of walkways and will be key to the Revegetation Plan with regard to attractive, practical vegetation. Dead plants will be removed (if indicated by the biologist) and new ones replanted.

The overall maintenance aspect of this plan can be carried out rather routinely each year as needed but should be managed carefully to avoid a manicured appearance of the habitat areas, but at the same time, meet the visual needs of the adjacent developments.

Implementation

Performance of the management plan will be secured by the applicant in a manner satisfactory to the reviewing agencies.

According to the San Diego River Wetlands Management Plan, mitigation of impacts to wetland resources should occur at the time those impacts take place. Impacts to wetland resources within the Atlas Specific Plan area along the San Diego River may take place at several different times. The property owner will bond for the revegetation plan, or provide other assurance of funding acceptable to the City, prior to the issuance of building permits for the development. The property owner may seek to establish one or more assessment districts for the purpose of financing the construction of the river improvements, including the revegetation plan and other public amenities adjacent to the river, and the City shall assist the property owner in establishing such assessment districts.

Monitoring of the Revegetation Program

The success of the revegetation plan will be monitored by a biological consultant. The establishment of mature vegetation and restoration of habitat value will require a number of years and the monitoring program is designed to assess the progress of the vegetation effort and enable any necessary modifications to be made in a timely manner. A generalized discussion of the basic components of the monitoring methodology is provided. The following factors will be evaluated:

- Foliage density and diversity
- Foliage patchiness
- Plant growth rate and mortality rate (species-specific)

- Water flow and surface elevation

- Habitat density and diversity

- The period of monitoring will be five growing seasons, beginning with the first spring after revegetation

- Documentation will consist of color aerial photography, habitat mapping, and vegetation sampling. Through the first 2 years after revegetation, field visits should be monthly and reports to EQD should be quarterly. In the 3rd, 4th, and 5th years, the visits should be bi-monthly (6 per year), and reports should be bi-annual (2 per year).

    1. Aerial photography at 1" = 200' scale, flown by a professional service, with a 9" x 9" format. One set of stereo pairs will be taken in the late spring or early summer of each year.

    2. Habitat mapping on 1" = 200' scale, from the aerial photographs and field visits. Prepare habitat maps monthly. Censusing will be done according to seasons on the basis of phenology and the timing of nesting and migration; censusing will take place on at least five different days distributed throughout each season of sampling.

    3. Vegetation sampling. The purpose will be to document growth and survival. Field measurements to assess the progress of the vegetation development will be made on a semi-annual basis in May or June and again in August or September until the vegetation has stabilized as determined by the biological consultant, at which time measurements may be reduced to annually.

        a. Measure growth of tree species – height, canopy diameters, and trunk diameter. Sample size should be sufficiently large to be statistically significant (eliminate large standard deviations).

        b. Survivorship of planted stock by direct count within permanent plots. Plot size will be representative and selected to yield a sufficiently large sample size. This may require counts of all planted specimens. Stratify according to habitat, soil differences, water level differences, and other if necessary.

        c. Document results with digital photographs (for the project file and quarterly reports).

    4. Landforms. Describe the stability or failure of original and constructed landforms, as well as soil limitations to plant growth.

    5. Irrigation system. Describe the functioning of this system.

    6. Weed control. Describe the growth of pest plants.

- Reporting will be done quarterly to EQD using a standard scientific format. Discuss revegetation progress, failures, and success of corrective actions that were recommended in earlier reports.

- Recommendations: In each quarterly report, identify specific corrective actions which should be undertaken. In the final report, identify specific correction actions which remain to be undertaken in order to complete successful revegetation. Reports will contain a sufficient amount of data to support conclusions and recommendations but will emphasize analysis and conclusions.

- Biological Consultant Selection: The consultant or consultant team will be selected by the property owner, but must be approved by the City's Environmental Quality Division. It is preferable for the same consultant to be retained for the duration of the monitoring period.

Assurance of Mitigation, Maintenance, and Monitoring

In order for the revegetation effort to be effective, the City of San Diego, the property owner, landscape architect, a landscape contractor and a biological consultant must be involved with each other for a period of five years. The property owner will be responsible for implementing the revegetation plan and maintaining and monitoring the revegetation plan for a period of five years, with the City serving as a review agency. Regular and consistent monitoring of the revegetation areas, and semi-annual reports quantifying the relative success of the plantings and wildlife use will also be required. This work will be conducted by a qualified biologist. The biological consultant will also approve the type and quality of plant stock prior to planting. It is very important that the biological consultant and the landscape contractor be genuinely committed to seeing the revegetation work through to its successful completion. The completion of this program will be in accordance with the requirements of the Wetlands Management Plan. After the five year period, the property owner will participate in a maintenance district to be formed to provide future maintenance of the channel and wetland habitats in perpetuity.

E. RIVER ORIENTATION AND PROPOSED OPEN SPACE USES

Several features have been incorporated into the design of the Hanalei Hotel sites to encourage river orientation and definition of the river corridor as natural and useable open space.

A pedestrian plaza has been incorporated into the design of the Hanalei Hotel site to provide river orientation. A meandering pedestrian/bicycle pathway will be developed adjacent to the river and may be located within the 30-foot to 50-foot buffer area. The pedestrian/bicycle pathway will provide a link to the adjacent Hanalei Tower site.

Open space uses of the river corridor will consist primarily of opportunities for walking and riding bicycles along the river. The pedestrian plazas will offer opportunities for sitting and enjoying views of the river.

Specific criteria for the devlopment of the river corridor are contained in the Urban Design element of this specific plan.

V. URBAN DESIGN ELEMENT

A. OBJECTIVES

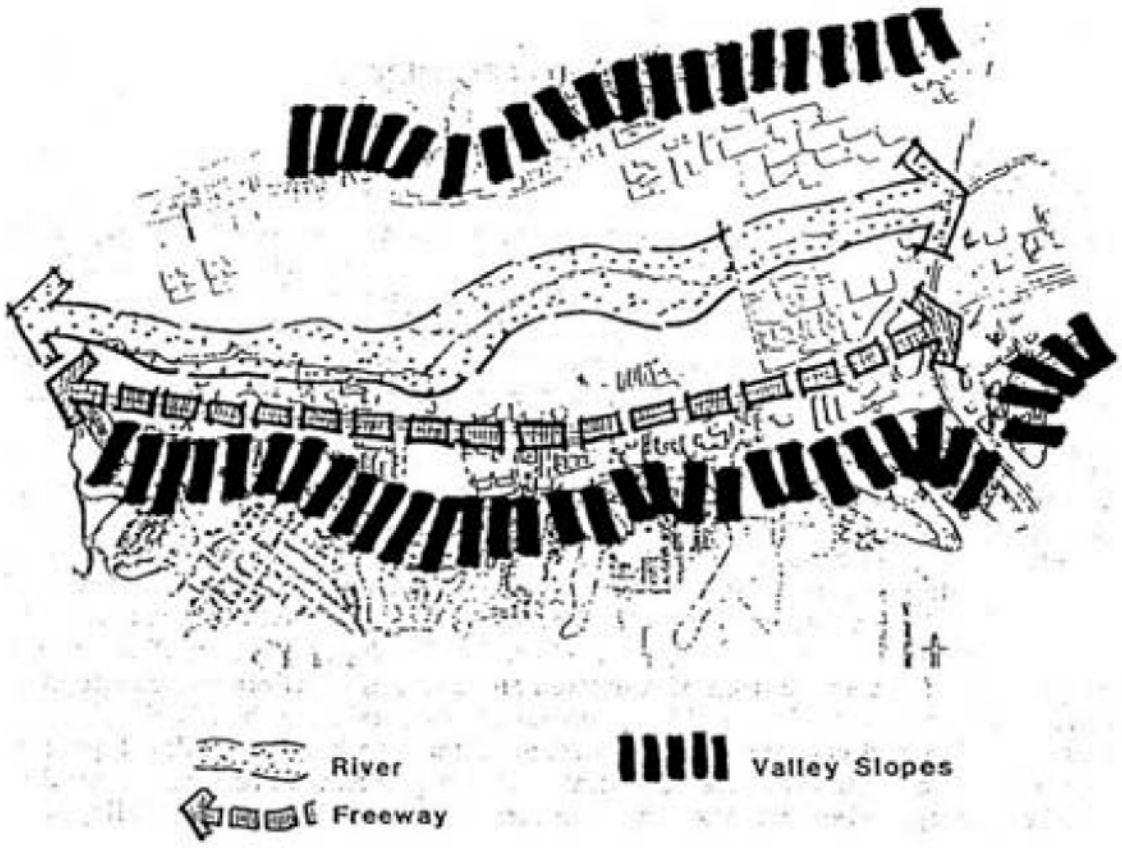
The purpose of this urban design element is to encourage and ensure, to the extent possible, the creation of a quality urban landscape. The various elements of the urban landscape include not only the planted landscape, but structures, roads, buildings, the land itself and perhaps most importantly, the people. A city is interaction; creating this interaction, as well as providing for other human needs such as aesthetics, privacy and quiet, is a primary purpose of this urban design element.

The river, the distant mountains, the freeway, the Presidio, the hotels, the crowds of busy people, the valley slopes; these are the obvious perceptions and elements one feels within and around the Atlas Specific Plan area. Once a rich agricultural valley, Mission Valley has now become one of the urban centers of San Diego. The Atlas Specific Plan area includes portions of the area between Taylor Street and State Route 163, known as "Hotel Circle." The Atlas Specific Plan area has great potential to contribute to the creation of a larger unified and exciting multiple use development. The elements needed to fulfill this potential already exist. What is required is a logical, creative and organized set of design criteria to help guide development in the planning area to its ultimate potential. Design guidelines are incorporated into this urban design element that will ensure the creation of a quality urban landscape.

There are three major factors which affect the spatial character of the Atlas Specific Plan area. These three factors are the principal reasons the "space" is perceived as it is. The design of the Atlas Specific Plan area emphasizes the relationships to and between these elements. The three major factors are:

- The River: The central focus of the Atlas Specific Plan area is its relationship with the river. A symbolic statement indicating the union between a very natural element, the river, and a highly urbanized and built environment would be ideal for those sites adjacent to the river. The river, by specific design treatment, will provide a transition between man and "nature," and provide a very necessary unifying element for the project. The river, along with the freeway, becomes the thread, so to speak, that holds the Atlas Specific Plan area fabric together.

- The Valley Slopes: The integrity of the natural Mission Valley topography will not be affected by the Atlas Specific Plan proposed design. On those projects which are adjacent to natural hillside areas along the southerly slopes of Mission Valley, careful and sensitive architectural design will maintain the integrity of the valley walls by respecting the topography and integrating the forms of buildings into the hillside. Site design, architectural design and site grading on the Specific Plan area sites will be consistent with the requirements of the Mission Valley Community Plan to ensure sensitive site design and the retention of significant views of the Mission Valley hillside.



As shown on Figure 22, Hillsides, none of the Atlas sites except the Mission Grove Office Park are affected by slopes steeper than 25%. The Mission Grove Office Park contains relatively little steep land and no additional development is proposed. The Mission Grove Office Park is subject to hillside review (HR) as per the requirements of City Ordinance 16523.

- The Freeway: Most people visually perceive the Atlas Specific Plan area while on the Interstate 8 freeway. It is one of the most travelled sections of freeway in San Diego. The freeway, however, need not be considered a constraint. In fact, as previously mentioned, along with the river, the freeway acts as one of the unifying elements, a "thread" that holds the urban design fabric of the area together. A key to the successful design of the Atlas Specific Plan area is recognizing the importance and design possibilities the freeway possesses. The specific plan responds to the design opportunities offered by the freeway corridor by suggesting a skyline theme planting of palm trees (Washingtonia robusta). These palm tree plantings would visually accentuate the freeway corridor and emphasize its importance in uniting the spatial relationships of Mission Valley. A more detailed discussion of the freeway's planting treatment can be found in the Streetspace guidelines.

Figure 22 Hillsides (amended)

The river, the valley slopes, and the freeway: these are the predominant environmental factors whose relationships affect the Atlas Specific Plan area. In addition to these, the "urban character" created within each individual site will emphasize and reinforce several key design elements.

- Views: The planning area presents two principal "positive" view types; background views and middle-ground views. The background views occur in an east-west direction toward the distant hills and mountains (i.e., Cowles Mountain) and present a pleasant visual backdrop. The valley walls, in particular the north facing slopes on the south side of the valley, provide middle-ground views and a much needed "green belt" that softens the intensity of the existing urban landscape. The main objectives of the streetscape and urban design guidelines are to preserve and reinforce the positive background and middle-ground views while mitigating and enhancing foreground views.

- Grading: When grading is required, several smaller pads rather than a few large pads will be created. This will maximize view opportunities from within the sites and minimize large slopes, thus enhancing the views from outside the planning area.

- Open Space: The creation of quality open space is of prime importance. These exists in the plan three basic types of open space. The first type is "natural open space" which consists of the river corridor and the undisturbed hillsides south of Hotel Circle. The second type is "useable open space." This includes the river buffer and any designated park-like or plaza areas adjacent to the river. The third type is "project open space." This includes areas such as setbacks, project entries and internal project plazas, walks, etc.

- Building Form and Mass: To provide quality open space, the buildings which delineate open space areas should have an orientation, form, massing, and exterior finish which enhance the visual, aesthetic and psychological character of the open space areas. Projects which are adjacent to the river corridor should locate their tallest buildings, or buildings with the largest mass, away from the river corridor. Where buildings front on the river corridor they should be terraced back on each successive building story to provide a transition toward river corridor open space. A consistent design theme for building design, landscaping and signage should be developed for the entire specific plan area giving it a unique and easily recognizable identity. Although specific architectural themes will vary at each site, the general design criteria outlined in the Mission Valley Community Plan will be utilized. Reference is made to the design principles for hillside areas and to criteria identified for development in river areas as included in the Mission Valley Community Plan. Signage criteria is identified in the signage and street graphics sections of this specific plan.

  Analysis of the specific plan area based on the environmental factors and key design elements previously mentioned resulted in the establishment of several major development goals. In summary, they are:

  - Maintain the visibility of the hotels, restaurants and offices along the freeway corridor from the freeway corridor.

- Establish a pedestrian linkage network between the proposed LRT stations and the proposed Atlas Specific Plan area developments by providing pedestrian sidewalks and/or bicycle paths or lanes along project vehicular corridors and on both sides of the river. Since the specific plan area has some unique site design constraints, pedestrian sidewalks, bikeways, buffer areas and landscaping are graphically documented with each specific site recommendation. Where exceptions from established design standards are proposed, alternate design criteria is specified.

- Develop a major gateway at the western end of Hotel Circle. Gateways can be formed by natural geologic features, building massing and placement, and/or distinctive landscape development. Refer to the specific site development criteria for the Hanalei Hotel and Hanalei Tower sites.

- Maintain the integrity of the hillsides through natural contour grading and revegetation of larger manufactured slopes with native compatible plant material.

- Provide a relationship to the river by orienting development and pedestrian activity areas to the river.

- Maintain and enhance the river corridor as an open space corridor.

- Provide theme entries to the individual project sites.

- Maximize distant views.

- Create a visually continuous streetscape along Hotel Circle North and South within and immediately adjacent to the Specific Plan area which upgrades and enhances foreground views through street improvements which improve pedestrian access and landscaping.

These major goals are graphically summarized on Figure 23.

Design Concepts and Criteria

The following design concepts, design criteria and development standards will regulate and guide future development. The basic objective will be to create a visually and functionally integrated urban environment fulfilling the major development goals previously discussed. The guidelines presented herein are not intended to be inflexible. Each individual site within the Atlas Specific Plan area will be developed during different time periods. Economics, technology, and markets are constantly changing. A design element should provide room for alternatives in order to properly address changing economic and social conditions. These criteria will provide a basic framework for directing the creation of the ultimate plan.

The Atlas Specific Plan area contains a combination of properties. The General Design Concepts and Criteria in Section V.B below address the issues of overall continuity and quality of urban design solutions. The general criteria address the design performance levels expected for the entire specific plan area. The general criteria will provide for

Figure 23 Area Synthesis (amended)

an overall urban design framework within which individual sites may be developed. The implementation of the concepts and criteria contained in the eleven categories covered in the General Design Criteria will provide a common urban design fabric which will unify and link individual development sites. The General Design Criteria include:

1. Land Use Criteria
2. Circulation System Criteria
3. Streetscape Criteria
4. Site Planning Criteria
5. River Corridor Criteria
6. Landform Alteration Criteria
7. Open Space and Recreation Criteria
8. Planting Criteria
9. Architectural Criteria
10. Visual Criteria
11. Energy and Conservation Criteria

Design criteria for each site are contained in Section V.C. Site Specific Design Criteria below These criteria provide detailed design performance for each of the proposed development sites and existing developed sites controlled by property owners within the Specific Plan area. The site specific criteria respond to the unique physical features on each of the Specific Plan area sites. The site specific criteria, while responding to the physical features of the Specific Plan area sites, also provide for their integration with a linkage to the overall site development categories in Section V.B General Design Concepts and Criteria. Site specific design criteria have been prepared for the following sites:

1. Hanalei Tower
2. Hanalei Hotel
3. Mission Grove Office Park
4. King’s Inn

The remaining site, the 3.70 acre Evelyn Terrace site, is being reserved for irrevocable dedication to the City, at no cost to the City, for the right-of-way for the proposed future interchange at Interstate 8 prior to the issuance of building permits for the Hanalei Tower site. No site specific design criteria have been prepared for the Evelyn Terrace site. If the interchange has not been constructed within 10 years after adoption of the Atlas Specific Plan, the City shall allow property owners to proceed with the redevelopment of Specific Plan area sites as provided in this Specific Plan as if the interchange was in place.

B. GENERAL DESIGN CONCEPTS AND CRITERIA

1. Land Use

The basic themes for the land uses within the Atlas Specific Plan area have been established as predominantly tourist-related commercial recreation with some office uses as shown in Figure 24. The Atlas Specific Plan land uses would remain within this basic established framework and would be consistent with the existing land use pattern which is "multiple use" oriented. Hotels, office buildings, residential condominiums, and golf courses presently occur adjacent to each other, providing a sense of excitement to the area as well as helping to mitigate traffic congestion during peak hours. Proper land use planning and urban design applied conscientiously and effectively can result in a proposed project area design that unifies, is aesthetically pleasing, mitigates environmental and planning concerns, and retains a multiple use concept which provides exciting spaces for human enjoyment.

Concepts and Criteria

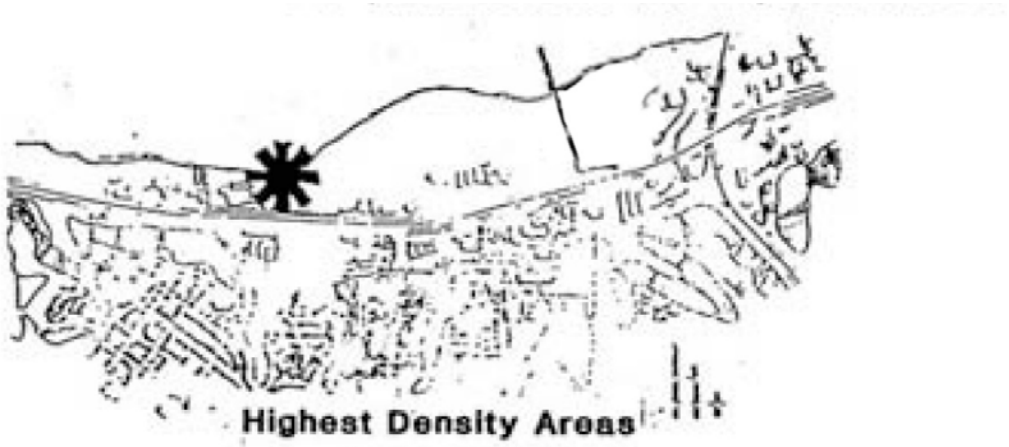
- Integrated multiple-use development shall be encouraged on those sites where it is possible from an economic point of view.

- Developments along the river corridor have at least two orientations; one to the river, and the other to the freeway and hotel circle. Improvements within those parcels shall be site-planned to respect both these important orientations. Service access and utility areas are not appropriate uses for either frontage.

- A sense of community shall be maintained within the entire area. Adjacent compatible developments should not separate themselves from each other, but rather an attempt should be made to integrate, to the best extent possible, these adjacent uses. Integration of adjacent compatible developments can be partially achieved through the implementation of the pedestrian circulation and streetscape improvements contained in the general concepts and criteria.

- In general, the area should be considered an urban area and not a suburban area. This creates, however, some difficulty in integrating a highly urban situation with a highly natural one, the river. Improvements within those parcels adjacent to the river shall, at least symbolically, reflect as much of the river environment as possible within the interior of the site. In this way, a sensitive and subtle transition will occur between river, structure, and the freeway corridor. For example, utilizing riparian trees and water elements around a central courtyard or plaza could be one way to reflect a site's proximity to the river.

Figure 24 Proposed Land Uses (amended)



(Illustration Amended)

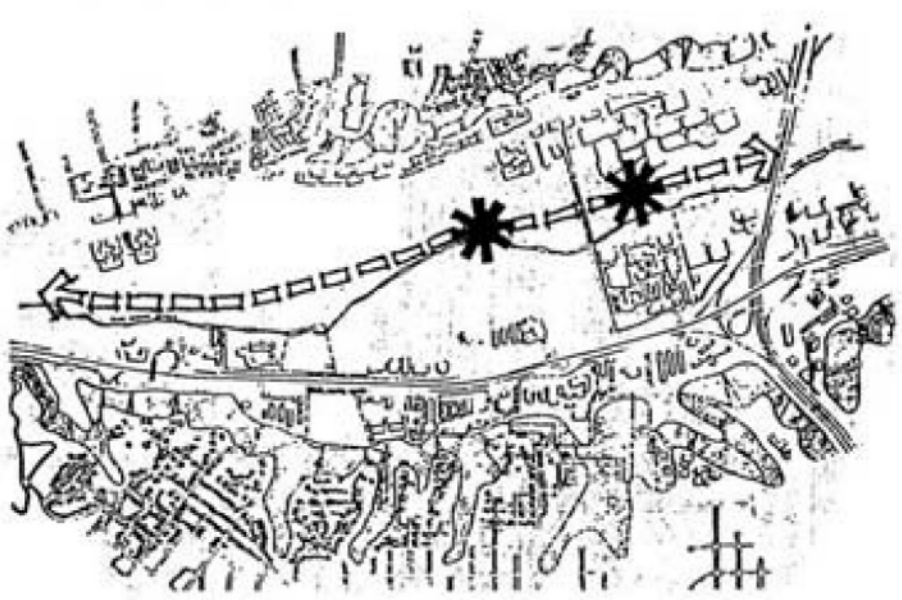
- City-wide regulations, CalTrans Design Criteria, and the Mission Valley Community Plan Design Criteria for landscaping, pedestrian walks, bikeways, signage and planned development regulations shall be the minimum standard unless modified by this specific plan.

2. Circulation System Concepts and Criteria

Mobility within the planning area will occur in a variety of ways; either by light rail public transit, by bus, by automobile, by intra-valley shuttle, by bicycle or by foot. Frequently these various transportation methods are conceived separately, with little thought given to their interrelationships. Because of the highly urbanized nature and character of the Atlas Specific Plan area, the individual transportation systems must carefully interrelate. Concepts and criteria for the light rail, bus, automobile (including service, emergency, and parking), bicycle and pedestrian systems are included in this section. A more detailed discussion is included in Section VI, Transportation Element.

(a) Light Rail Public Transit

A preferred LRT alignment for the Mission Valley area, including station locations, has been adopted by the Metropolitan Transit Development Board (MTDB). Two transit stations are shown in the adopted alignment in the vicinity of the Atlas Specific Plan area – one north of the river adjacent to the Fashion Valley Shopping Center north of the river and another north of the river within the Levi-Cushman Specific Plan area. The anticipated alignment for the LRT in the Mission Valley area is located on property not owned by property owners within the Specific Plan area.



LRT Station Locations

The light rail transit (LRT) system will most likely be incorporated along an east-west alignment along the northern boundary of the river. The precise alignment will be determined by the Metropolitan Transit Development Board and has yet to be finalized. However, in order to provide for the LRT line, the following shall be considered:

- An LRT station should be located between the Fashion Valley Shopping Center and the river. In this way, the station would better serve the high density Town and Country site (not a part of the Specific Plan area) as well as the busy Fashion Valley Shopping Center as conceptually illustrated in Figure 25.

Figure 25 Mission Valley LRT Conceptual Station Design (for reference only)

- Another LRT station should be located north of the river along Via Las Cumbres within the Levi-Cushman Specific Plan area. This location would allow for easy access and a central location for the users in the western end of the valley.

- The LRT line shall be located above the 100-year flood level. This will require that the LRT line be constructed on an elevated bridge type structure.

- Vehicular and pedestrian at-grade crossings with the LRT line shall be prohibited except at signalized intersections.

(b) Bus and Intra-Valley Shuttle

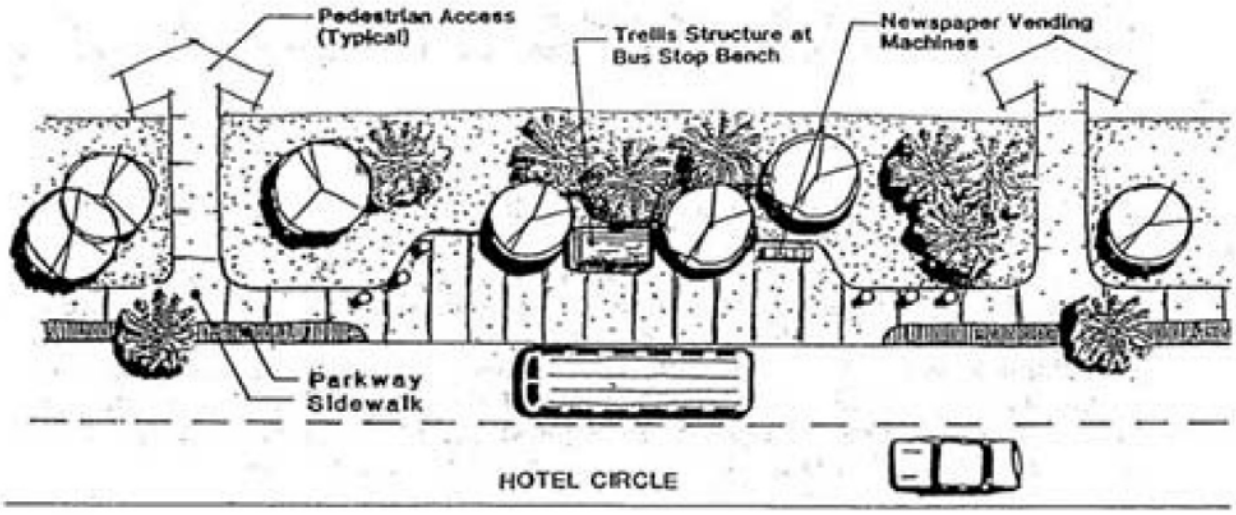
Bus and Shuttle Route Considerations: Hotel Circle and Fashion Valley Road are identified as major bus or shuttle transportation routes serving the Atlas Specific Plan area. Bus stop areas shall be located at points which give the greatest walk-in access possibilities and interface with the LRT stations.

- Bus stops shall be designed to be integrated into building or pedestrian areas, streetscapes and urban plazas in order to provide easy pedestrian access from bus stop to destination. These facilities shall be designed to maximize security features and shall be located in proximity to both traffic signals and pedestrian crosswalks, in order to provide for ease of ingress for buses and ease of access for pedestrians.

- If not integrated into a building, bus stops shall incorporate a shelter into their design. Bus stops shall be colorful, properly signed, and readily identifiable to both pedestrian and rider.

- Provide bus drop-offs at bus and shuttle stops.

- Intra-valley shuttle stops shall be provided for each of the Atlas Hotel sites already developed or proposed for development within the Specific Plan area. The shuttle stops will be provided adjacent to building lobbies or within expanded sidewalk paving areas in the Hotel Circle North and South Streetscapes as shown in the conceptual sketch below. Specific Plan area property owners will fund and operate an intra-valley shuttle to transport hotel guests, office employees and the general public between the Atlas Specific Plan sites, possibly other hotels and San Diego Lindbergh Field.



(c) Automobile Considerations

There are three distinctive types of automobile circulation systems; public systems, service systems, and emergency/police systems. The routes traveled by these are not necessarily the same. Most of the concepts specified herein integrate and consider the need for this distinction. The following concepts and criteria also include parking areas.

- Emergency (police, fire, and ambulance) services shall have complete access to structures as required by San Diego safety codes. Superblock areas, plazas and mall areas shall allow for emergency access. Consideration shall therefore be given to limiting the use of steps, steep ramps, and walls within these predominately pedestrian areas. Removable bollards, requiring minimum paving widths of 12 feet and minimum turning radii shall be considered in the final design of these areas.

- Driveway entrances into parking areas shall be minimized in order to avoid breaking the pedestrian continuity of the sidewalk areas, especially along Hotel Circle. If possible, these access points could be minimized by providing shared driveways at property lines. Care should be taken, however, that other urban design features, such as linear plazas and visual corridors are not compromised by these driveways. Also, too few driveways can cause congestion if a blockage occurs.

- Automobile driveways shall be carefully designed with the pedestrian crossing in mind. The driveway width shall be minimized and a patterned surface should be included to visually accent the pedestrian right-of-way.

- At sites where additional development is proposed, and at sites which may be proposed to be redeveloped in the future, a minimum of 75% of all required parking shall be provided

in architecturally integrated structures. The remaining 25 percent may be in surface parking areas. These surface parking areas shall have a minimum of 10 percent of the interior area (excluding the landscape setback buffer adjacent to major streets) landscaped, and should be designed to screen parked vehicles from view of the adjacent street.

- Parking on roofs of structures shall be restricted. For each site, 30% of the parking structure roofs shall be reserved for recreational facilities or screened from view by the use of trellis or other screening structures. In all cases, a minimum of 10% of each parking structure roof shall be reserved for recreational facilities or screened from view by the use of trellis or other screening structures or landscaping.

- Large parking areas shall feed off of an internal project street rather than a public arterial street area. In that manner, ingress and egress is simplified and the project provides drive up and drop off access as well as parking.

- Multiple-use areas within the same parcel of land may be considered for lower parking ratios than single use parcels. In order to obtain the lower overall parking ratios, an evaluation of peak use has to be made, as well as a specific review of the parking areas, their access and design in relation to buildings during each specific project permit process. Any requests for shared parking shall be based on Urban Land Institute (ULI) guidelines and approved by the Engineering and Development Department and Planning Department of the City.

- Surface parking areas shall, wherever possible, be screened from view of the public right-of-way by walls, berms or combination. Surface parking areas shall meet City-wide parking and landscaping regulations and shall be landscaped with broad canopy, long lived, evergreen trees.

- Large surface parking areas shall be constructed slightly below the grade of adjacent streets whenever feasible, particularly when visibility of the structures beyond is desired and berms are not appropriate.

- Parking facilities shall be designed to ensure proper access and shall generally be specified for use by residents, employees, customers, visitors, goods deliveries and/or the handicapped.

- Parking facilities shall be designed to be adequate for both initial development and future expansion of land uses in terms of size and intensity. For example, initial parking facilities could be surface lots capable of eventually accommodating parking structures. Surface lots could also reserve land for future development.

- Parking along major public streets shall be prohibited.

- The use of public rights-of-way for the loading and unloading of goods by providing adequate delivery areas shall be prohibited.

- Off-street loading and unloading bays shall be provided for new commercial developments.

(d) Bicycle Considerations

Bicycle paths provide an energy efficient alternative to the automobile and help to link commercial, residential, office, hotel, and open space uses.

- A combined pedestrian/bikeway shall be included along the south side of the river.
- Bikeway design standards shall reflect those presently adopted by the City, CalTrans, and the Mission Valley Community Plan.
- The minimum paved width for a shared pedestrian/bicycle path shall be 10 feet.
- A minimum 2-foot horizontal clearance to obstructions shall be provided adjacent to the pavement.
- The vertical clearance to obstructions across the clear width of the path shall be a minimum of 8 feet.
- Drainage inlet grates, manhole covers, etc. on bikeways shall be designed and installed in a manner that provides an adequate surface for bicyclists.
- Uniform signs, markings, and traffic control devices are mandatory and shall conform to the requirements of State law.
- All bicycle pathways shall have adequate lighting and signing to provide for the safety of the users.
- Office and hotel projects shall provide secure bike racks, bicycle parking facilities and other facilities to encourage bicycle use. Such facilities should be provided in accordance with City of San Diego regulations or guidelines pertaining to bicycle parking and related facilities.
- Hotels shall be encouraged to provide bicycle rental facilities within their respective complexes.

(e) Pedestrian Considerations

The San Diego River environment provides an excellent opportunity for utilizing an extensive local and regional system of trails and walkways. As the area grows, the dependence on the automobile could be minimized by encouraging pedestrian circulation. The following concepts and criteria shall be followed as closely as possible to ensure a successful pedestrian circulation system.

- Major linkages and plazas shall reflect the urban character of the sites while providing a transition with the riparian elements of the nearby river.

- Pedestrian sidewalk and parkway criteria, except where noted in this specific plan, shall conform to the Implementation Guidelines of the Mission Valley Community Plan which establishes sidewalk and parkway widths based on the adjacent street classifications as follows:

  - Major streets or arterials: 10-foot clear corridor sidewalk, 8-foot parkway
  - 3-4 lane collector streets: 8-foot clear corridor sidewalk, 6-foot parkway
  - 2 lane collector streets: 6-foot clear corridor sidewalk, 5-foot parkway

  Sidewalks should have adjacent pedestrian amenities such as benches and mini-plazas. Parkways shall incorporate a consistent street tree concept within their design to provide an inviting and "walkable" space. Project interior walkway widths of 10 feet to 20 feet and urban plazas should be considered within the interior of high intensity projects.

- Where insufficient rights-of-way or physical constraints (i.e., severe grade changes or physical conditions such as existing buildings) preclude the installation of the prescribed sidewalk and parkway widths, alternative streetscape sections may be considered. Alternative streetscape sections and exceptions to the community-wide criteria shall be subject to the approval of the City Planning Director.

- Pedestrian access shall be provided along the entire length of the river corridor at the Hanalei Hotel site. Refer to the river corridor section of the Urban Design Element and elsewhere in this specific plan.

- Separate internal pedestrian circulation and automobile circulation shall be provided throughout the specific plan sites wherever possible.

- Projects that front on the public street shall provide identifiable pedestrian access from the street into the project, even in areas where parking lots are located between the street and the buildings. Pedestrian access shall be provided through parking lots so as to minimize conflicts between automobiles and pedestrians.

- Urban plazas and other project open areas shall have direct pedestrian links to either the river corridor or to Hotel Circle pedestrian systems. Where these pedestrian links must cross parking areas, they shall be constructed of a paving material consistent with the pedestrian links or urban plazas and which provide a contrast to parking area paving.

- On-grade street crossings shall be permitted only in conjunction with major signalized street intersections. Pedestrian crossings shall be identified through special paving design. Special paving shall occur only at signalized intersections and at pedestrian crossings of local streets as determined by the City Engineer.

- All pedestrian pathways shall have adequate lighting and signing to provide for the safety of the users.

- Individual site development shall provide linkages between internal project circulation systems and the overall streetscape sidewalk system.

- Safe and convenient pedestrian movement shall be provided both within and to and from parking areas.

- Direct pedestrian links from transit stops (bus or LRT) shall be provided to high activity areas. These pedestrian links shall also relate to the river corridor.

3. Streetscape Criteria

The concepts and criteria in this section will be of a more general nature since most of the elements comprising the streetscape are covered throughout other sections of this urban design element. However, certain characteristics of the streetscape are particularly important.

Streetscape Philosophy

The streetscape is much more than the sum of the buildings, plantings, paving, and street furniture that give the street its appearance. The true streetscape incorporates emotional and cultural factors as well as physical factors. All of these factors contribute to perhaps the most important characteristic, function.

The streetscape must also include people as an element. Human figures as well as the vehicles they operate, act as kinetic design elements. Frequently, they alone can create the diversity and variety necessary to energize a space.

A streetscape can be perceived at three levels:

Level 1. From the street as a pedestrian.
Level 2. From the street as a passenger in a vehicle.
Level 3. From the surrounding or adjacent structures or buildings.

Each level utilizes different criteria for design and quite often all three must be taken into consideration, especially in a highly urbanized area. Level three perceptions and criteria, those derived from the buildings themselves, are usually quite compatible with the pedestrian experience and the automobile experience. Levels one and two, however, frequently compete with each other. Because of the location, scale, perception, and speed differences, the same streetscape scene utilized for a 40 mile per hour parkway, for example, cannot be repeated and expected to also function as a pedestrian experience. Visual perception is only one area where the automobile and pedestrian often do not mix.

Streetscape Design Factors

Numerous design techniques and considerations shall be considered when preparing the final detailed streetscape design for the Atlas Specific Plan area. These include:

- Available right-of-way
- Element of surprise
- Communication
- Noise
- Interest versus clutter
- Lighting
- Spontaneity
- Geometrics
- Height
- Scale
- Natural light
- Grade changes
- Public versus private space
- Second-level access
- Signage (public and private)
- Physical site constraints
- Micro-climate
- Landmarks
- Energy conservation
- Indoor/outdoor relationships
- Soft versus hard landscape
- Plant material
- Pedestrian/vehicular separation
- Music
- Food
- Art

The utilization of the various design techniques, coupled with fulfilling the needs of the community, will result in a streetscape scene that is appropriate, functional and aesthetically pleasing.

Streetscape Design Elements

The elements of the streetscape can be divided into 6 basic categories. These are:

(1) Street Furniture: Those elements used to comfort, service and direct.

- Fire hydrants
- Phone kiosks and booths
- Bicycle racks
- Newspaper racks
- Mail boxes
- Planters
- Tables
- Trash receptacles
- Bollards
- Seats/benches
- Railings, balustrades
- Tree guards
- Drinking fountains

(2) Spatial, Visual and Coverage Elements: The major elements utilized to create outdoor spaces.

- Vegetation
  - Trees
  - Shrubs
- Visual/Functional Components
  - Screens
  - Framing

- Vines
- Groundcovers

- Overhead Structures
  - Canopies
  - Trellises
  - Shelters

- Topography
  - Walls
  - Berms
  - Ramps
  - Steps
  - Terraces
  - Terminus points
  - Focal points
  - Facades
  - Utility wires, antennas, etc.
  - Signage

(3) Surfaces: Deals with paving and other surfaces used in streetscape design.

- Paving (Used as focus, accent, interlace, edges)
  - Shape
  - Texture
  - Color
  - Size
  - Expansion joints
  - Quantity and location
- Tree grates
- Utility covers

(4) Control Elements:

- Light standards
- Stop lights
- Parking signs
- Traffic bollards
- Other traffic related graphics

(5) Street Graphics:

- Directional signs (public and private)
- Billboards
- Storefront signs
- Art
- Sculpture
- Characteristics include
  - Legibility
  - Reading rate

- Location/surroundings
- Letter style/background
- Color
- Lighting
- Sight lines
- Correct copy
- Integrated signage
- Flexibility/changeability
- Letter
- Heights
- Square footage
- Symbols
- Confusion on traffic standards

(6) Architectural Elements:

- Space articulation
- Forms and shapes
- Windows
- Views
- Energy considerations
- Adjacent styles
- Transitions in forms and scale
- Indoor/outdoor relationships
- Visual connections

Concepts and Criteria

The streetscape design for the Atlas Specific Plan area shall consider the following concepts and criteria. The concepts presented in this section are general in nature with more specific criteria presented following, in the "Hotel Circle Streetscape" section or in other individual sections, such as landscape concepts and architectural considerations.

Environmental Goals and Objectives:

- Mitigate climate extremes (seasonal and localized microclimate).

- Improve the quality of the environment by utilizing visual, audio, air and water features.

- Minimize adverse wind tunnel effects. Wind studies should be undertaken on significant projects proposing several high rise buildings located near each other.

Aesthetic/Sensory Quality Goals and Objectives:

- Recognize and enhance major views.

- Relate the scale and character of the street to adjacent uses.

- Provide focal points.

- Promote and encourage artistic expression.

- Street graphics within the project shall be of consistent type and style. A comprehensive sign plan shall be prepared for all Atlas Specific Plan sites and approved by the City prior to any planned development permits being issued.

- Public signing for the open areas, river corridor, traffic management and parking access shall be graphically coordinated. Sign sizes shall be subdued relative to the other design elements of the project.

- Street signing within the project area shall be coordinated in the graphic design of the signs themselves and in their location. Sign locations shall be prominent in order to establish a clear directional identification.

- Private development signing shall be coordinated for directional signing, identifying entrances, etc.

- Building identification signs shall emphasize the use of logo designs and shall be integrated on the building exterior.

- Other signs identifying building activities and tenants shall be designed to fit the structure and design of the building.

- Establish a uniquely urban and Southern California quality to the Atlas Specific Plan environment while maintaining the "flavor" that is Mission Valley.

    - Utilize plant material that is appreciated visually, environmentally and emotionally.

    - Architectural materials and forms shall be compatible with those in the area as well as being appropriate for the region.

- Create an indoor/outdoor linkage and relationship between major project interior plazas and the streetscape.

<u>Functional Goals and Objectives</u>

- Provide for lighting that respects the functions and hierarchies of various street and activity centers.

- Provide barrier-free design amenities for the disabled.

- Arrange centers or groupings of activities to facilitate access, minimize conflicts.

- Minimize conflicts between circulation systems (pedestrian, automobiles, transit and service) by proper integration between transportation and circulation systems.

- Provide transportation nodes conveniently located so as to efficiently move people, goods, and vehicles throughout the area.

- Provide a pedestrian network that includes spatial and design qualities that allows the pedestrian to feet that the space was created for him, not as an afterthought.

Social Goals and Objectives

- Provide an attractive and secure environment for private investment.

- Provide for social interaction (group and individual).

- Improve communications and reduce visual clutter by proper utilization of street graphics.

- Provide for activities that will bring life into the Mission Valley streetscapes where feasible; for example, food vendors, sidewalk cafes, and street entertainment.

Hotel Circle Streetscape

The existing streetscape, particularly Hotel Circle, is a haphazard collection of random elements which results in an incongruous street scene that adds to the visual confusion of the area. The following section focuses on the Hotel Circle streetscape. Property owners will not improve the entire Hotel Circle, but only those areas immediately adjacent to Plan area properties.

Several major problems have been identified with the existing Hotel Circle street scene. Although the following identified problems have a negative impact on the Hotel Circle streetscape, the solutions will take some time to evolve. It is not proposed that the problems be immediately corrected. Rather, a long term improvement program should be established. The major problems are:

- Certain physical site constraints such as topography or the location of existing improvements such as buildings, walls, utilities, or driveways, make expansion or improvement of streetscape areas to the optimum standards established by the Mission Valley Community Plan difficult if not impossible.

- Discontinuous pedestrian sidewalks occur typically throughout the area.

- There is an emphasis on vehicular circulation.

- There is a de-emphasis on pedestrian circulation.

- Overhead utility lines are visually objectionable.

- Too much variety in plant material with no consistent frame.

- Utility structures such as electrical transformers and telephone equipment create visual clutter within the perceived streetscape.

- The freeway side of the Hotel Circle right-of-way is relatively barren.

- There is informational overload due to the number and design of the street graphics.

- The cumulative effect of street lights, parking lot lights, commercial signs, flag poles, traffic signs, utility poles, and single palm trees, creates a busy and cluttered urban forest of "poles."

Conversely, some positive aspects of the existing streetscape have been identified. They are:

- Light standards have good visual quality, detail, and are generally regularly spaced. The night scene, therefore, appears more cohesive.

- The planting within the freeway right-of-way is well planned and maintained.

- The proximity and views of the southern valley slopes help soften the harshness of the existing streetscape.

Design Criteria for the Hotel Circle Streetscape

In addition to the general streetscape criteria previously mentioned, the following specific streetscape criteria shall be followed for Hotel Circle.

Theme

Due to the proposed cul-de-sacs on Hotel Circle North it will no longer be a continuous thoroughfare. For this reason a major emphasis should be placed upon introducing a main, skyline palm theme planting in the unpaved right-of-way areas on the north and south sides of Interstate 8. This proposed theme planting for I-8 would be implemented by appropriate agencies, not Specific Plan area property owners. The proposed palm tree planting would emphasize the importance of Interstate 8 as a main element in the urban design fabric of Mission Valley. It would also give the highway visual prominence and a "tropical feel" which would enhance the experience of visitors to the Mission Valley area. The palm tree planting would retain a high visibility factor for destination-oriented hotels and businesses along the I-8 corridor due to their skyline quality and compact foliage. To retain this high visibility along Hotel Circle, the streetscapes for Hotel Circle North and South shall be planted with small to medium sized broad headed evergreen trees. This will allow people in vehicles on the highway to see hotels and business along and beyond Hotel Circle North and South without streetscape plantings obscuring their view. The lower scale of the Hotel Circle streetscape plantings would also place further emphasis and importance on the palm tree plantings along Interstate 8. The graphics on the following pages illustrate both the proposed design suggestions for the I-8 right-of-way and other non-Atlas Specific Plan improvements, and design concepts and criteria for the Hotel Circle streetscape improvements by Specific Plan area property owners. Figure 26 presents the proposed Hotel Circle concept

streetscape design recommendations. The following criteria shall be adhered to at all Atlas Specific Plan sites:

General Criteria

- Provide planting between the freeway fence and the Hotel Circle curb nearest the freeway immediately opposite the Atlas Specific Plan sites. Where planting areas occur, skyline palm tree plantings should be provided to emphasize the highway corridor's function as a major design element and to provide a tropical theme for Mission Valley.

- Provide a continuous paved 8' wide pedestrian sidewalk with a 6' wide landscaped parkway between the sidewalk and the street incorporating small to medium height, broad-headed, evergreen street trees at each of the Atlas Specific Plan sites along the outer perimeter of Hotel Circle; that is, the north side on Hotel Circle North and the south side on Hotel Circle South, except where otherwise noted within this specific plan.

- Where site constraints due to topography or existing improvements such as buildings, walls, utilities, or driveways preclude installation of the 8' wide sidewalk with 6' wide landscaped parkway, alternative streetscape designs may be allowed. Refer to the site specific design criteria section of the Urban Design Element for locations of alternative streetscape design. Minor exceptions to the streetscape and alternative streetscape design criteria shall be approved by the City Planning Director.

- The installation of Hotel Circle streetscape improvements shall be provided in conjunction with street widenings or improvements triggered by traffic thresholds which are described in the traffic analysis of this specific plan.

- Accent colors shall be used to prevent monotony. Color can originate from plant material, building material, street graphic materials, or landscape materials.

- Theme entries shall be incorporated at the major access points to each site. Theme entries shall consist of decorative landscape paving, special signage and special entry monument or destination-oriented signage and special plant material treatment. This treatment results in being able to identify major entries quickly and safely as well as providing a pleasing aesthetic scene.

- Utilize decorative textured paving at pedestrian crosswalks.

- When trees occur in paved areas, removable tree grates shall be used.

Signage and Street Graphics

The present visual quality of the Hotel Circle streetscape and the adjacent Interstate 8 transportation corridor is significantly affected by a variety of existing informational signage and graphics. In general, the visual results produced by the variety of signs existing

in the specific plan area are somewhat chaotic. In an effort to reduce the negative visual impacts created by a perceived lack of coordination of signage types or a limitation on their number, this specific plan proposes the basis for a comprehensive signage and graphics program for the Hotel Circle streetscape. This program shall be developed and submitted to the City for approval in conjunction with the first Planned Commercial Development submittal for the Atlas Specific Plan sites.

The Mission Valley Community Plan is relatively flexible in its discussion of street graphics and signage. Rather than providing specific guidelines or concepts it suggests the development of a special signage district for Mission Valley and the incorporation of comprehensive signage programs within specific plans.

The most important issue these signage criteria will address is the performance standards for ground mounted, free-standing, freeway-oriented signage. Division 11, Citywide Sign Regulation, of the Municipal Code limits freeway-oriented signage heights to 50’ with a maximum sign face area of 300 square feet.

Figure 26 Hotel Circle Streetscape Plan (amended)

Atlas Hotels recognizes that the visual continuity of freeway-oriented signage, as well as other signage, is important to the success of the urban design and streetscape design for the Atlas Specific Plan areas and Mission Valley. Specific Plan area property owners will comply with the regulations in Division 11, the criteria in this section. The timing and phasing of freeway-oriented signs will be identified in the comprehensive sign program to be prepared by each property owner.

The signage criteria for the Atlas Specific Plan area will consider a variety of basic signage types which would accommodate the basic signage and graphic needs of individual development sites and the area wide needs of the entire Specific Plan area. The sign types discussed will include:

- Freeway-oriented signage
- Building wall signage
- Individual project entry signage
- Secondary signage (vehicular safety and directional signage, etc.)
- Building directory signage
- Temporary signage

Sign type will be discussed in terms of general concepts and criteria which would address the performance standards for all sign types and specific concepts and criteria which would address detailed performance standards for each individual sign type.

<u>General Signage Concepts and Guidelines</u>

- Commercial signage shall limit the amount of informational bits occurring on any one sign.

- Major freeway-oriented identification signs should have simple forms and shapes to minimize visual clutter.

- Each individual site shall establish a signage vocabulary that will create a distinctive yet consistent sign program. The design vocabulary should address lettering style, size, form, color, and materials.

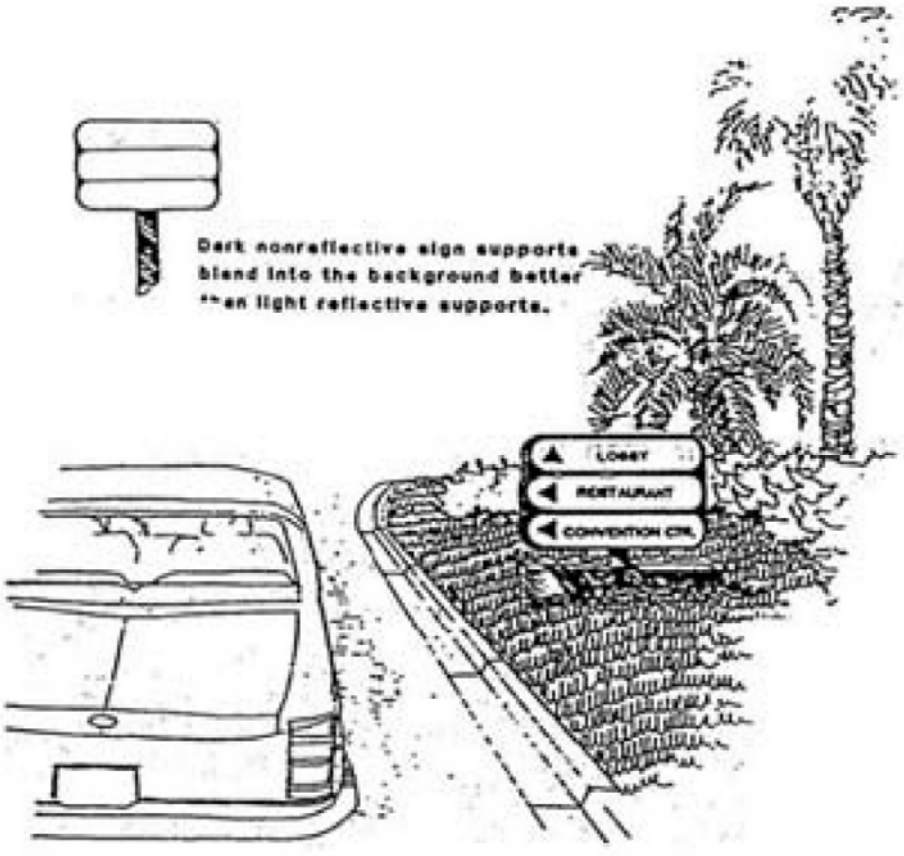
- Individual rather than multiple sign supports should be utilized; especially for major freeway-oriented identification signs. Where multiple sign supports are employed they will be limited to two support poles. These poles should be designed to appear as a visually continuous design element such as an arch or a “u”-shaped structural element. Combinations of individual unattached or discontinuous support poles should be avoided.

- Signs shall not contain any moving parts.

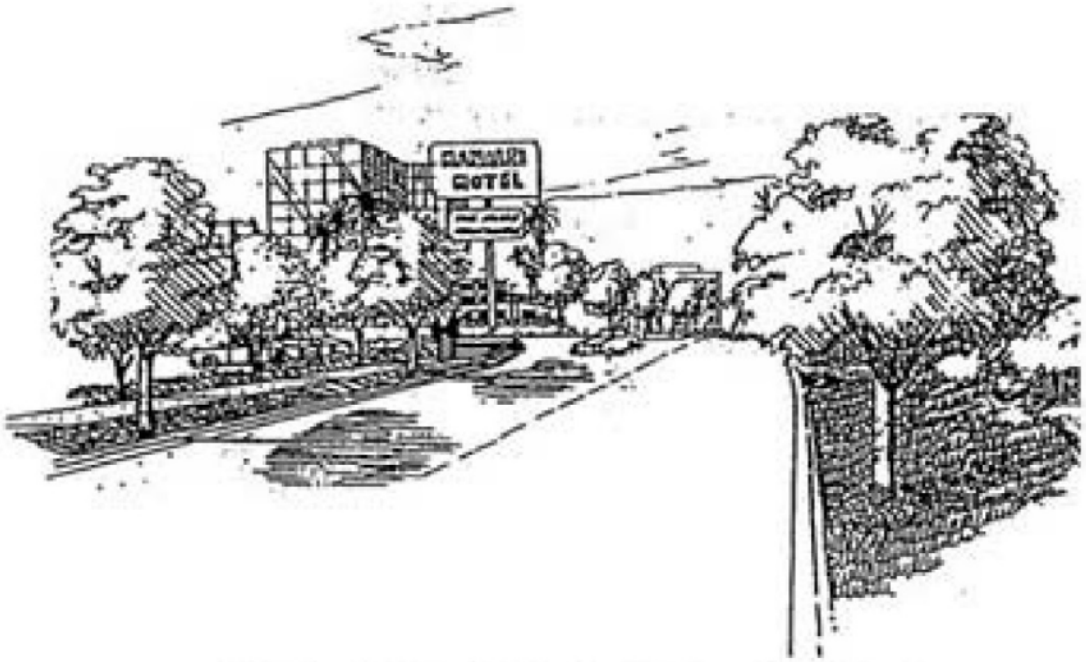
- Sign supports, materials and colors shall be compatible with the architecture on the project they occupy.

- Lighting for signs should be as minimal as possible and still provide readability. Glare and ambient light should not affect adjacent properties. Flashing lights shall be prohibited. Where lighted, computerized, digital read-out signage is allowed and employed, it shall be a steady, constant read-out type, and not of intermittent or flashing operation.

- The number of colors utilized in any one sign shall be minimized. Use light or dark letters on a solid contrasting background.

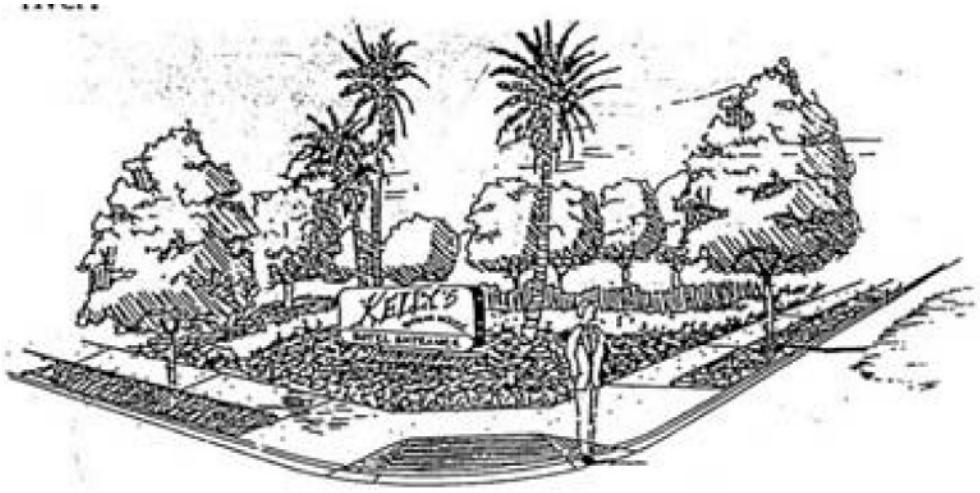


Typical Directional Sign



Typical Hotel Circle Street Graphics

- Information should be located on a single sign rather than utilizing multiple signs.
- Freestanding signs, other than freeway-oriented signs, shall have a maximum height of 30 feet, a maximum size of 200 square feet, and shall be located at least 10 feet from the public right-of-way.
- No signs shall be located immediately on the "roof" (on top) of any structures.
- Wall signs shall be allowed when applied directly to the building face only if they are integrated into the architectural design of the buildings and meet criteria established by Division 11, Citywide Sign Regulations, of the Municipal Code.
- Signage, other than secondary signage, shall be discouraged along the river.



Typical Monument Corner Sign

Specific Signage Criteria

The following criteria provide specific performance standards for each of the individual signage types anticipated for the Atlas Specific Plan area. These criteria provide the basis for future development of a comprehensive signage program for the Atlas Specific Plan sites. These guidelines do not, however, relinquish the requirement to prepare signage design written and graphic information concurrently with individual planned development permits for site development. These criteria and the future comprehensive signage program will be used as a reference for determining the performance and adequacy of signage proposals contained in planned development permit submittals. All signs described below will conform to the Mission Valley Community Plan, the Citywide Sign Regulations contained in Division 11 of the Municipal Code and with the following criteria whichever is more stringent.

1. Freeway-oriented signage: These signs are generally classified as major, pole support or ground-mounted signs which are readily visible from the freeway. Freeway-oriented signage will conform to the following criteria:

    - The maximum height of freeway-oriented signs is 50’ north of I-8 and 40’ south of I-8.

    - The maximum sign face area for freeway-oriented signs is 300 square feet. Freeway-oriented signs may be double sided. Where double sided signs are used, the total area of both sign faces shall not exceed 600 square feet.

    - Freeway-oriented signage shall be in accordance with Division 11 setback requirements from a property line or public street right-of-way.

- Freeway-oriented signs will only be allowed on properties which front on a public right-of-way which is designated as a major street or prime arterial in the General Plan or which is wider than 60'.

- Each project site which qualifies for a freeway-oriented sign, based on road designation or width, will only be allowed one such sign per project site.

- Sign type face and logos shall not exceed 75% of the sign face. Where double face signs are used, both sides shall conform to the 75% maximum. Signage type face size and logos shall comply with Division 11 requirements.

- The number of poles used to support freeway-oriented signs shall be limited to a maximum of two.

- Where computerized digital read-out display is allowed and incorporated into a sign, it should not occupy more than 50% of the sign area.

- The computerized read-out characters will not be allowed to change color, intensity or to flash intermittently.

- The height of logos or letters displayed on a computerized read-out shall comply with Division 11 requirements.

- Letters and logos on freeway-oriented signage may be internally illuminated or externally illuminated. Internal illumination might be more appropriate for signs constructed with matte finish plastic panels. External illumination may be more appropriate for sign faces with applied metal or plastic letters.

- Where external illumination sources are employed they should be provided with appropriate shielding to eliminate glare to adjoining properties or sensitive land uses such as the river.

- Because of their relatively large size, freeway-oriented signs should be placed with themed landscape planting elements. Combining freeway-oriented signage with landscaping will help to create a transition between sign supports and the ground and allow signs to appear more in concert with the pedestrian scale when viewed from the streetscape.

2. Building Wall Signage – Signs and logos which are attached to a building wall or an extension of a building wall such as an arcade or a porte-cochere. Building signage will conform to the following criteria:

   - The total area devoted to wall signage and logos on a building will comply with Division 11 requirements. Only one wall-mounted sign will be allowed on any building elevation.

   - All building wall signage shall employ a low, horizontally-oriented layout.

- Metal or matte finish plastic letters and logos which are individually attached to a building wall surface or letters and logos which are directly cast and recessed into a wall surface are preferred. However, some building architectural styles may lend themselves to individual wood letters and logos or wood panels with carved or recessed letters and logos.

- Where a fabricated metal, wood, or plastic panel type sign is used for building signage it shall comply with Division 11 requirements. Letters and logos on panel type signs shall not exceed 75% of the total area of the panel.

- Letters and logos shall not be directly painted onto building wall surfaces or extension of building wall surfaces.

- All figures, logos or lettering for building wall signs should exhibit a finished typeset quality. Approximations of typestyles will not be permitted.

- Wall-mounted signage shall not extend beyond the sides or tops of building walls, building extensions (porte-cocheres, etc.) or fascia and shall be placed a minimum of two feet away from the corner or top of a building wall or fascia.

3. Individual Project Entry Signage – Signage or logos which are placed on ground-mounted, free-standing walls or retaining walls at major project entry driveways. Individual project entry signs should conform to the following criteria:

- Project entry sign walls may be placed on each side of a major project entry drive. Major project entry drives are those driveways which provide access to a project from Hotel Circle North or South, or other major roadways.

- Project entry sign walls shall have a maximum height of 5’ measured from finish grade and a maximum wall face area of 80 square feet.

- Project entry sign walls should retain a horizontally-oriented or rectangular shape to remain consistent with building wall signage.

- No more than 60% of the total face area of a project entry sign wall shall be occupied by logos and typeface.

- Project entry wall sign material shall be consistent with the architectural theme of the building on a site.

- Individually attached metal or matte finish plastic letters and logos or letters, and logos which are recessed into wall surfaces are preferred. However, wood letters and logos or wood sign panels with recessed or carved letters may be appropriate with certain styles of architecture.

- Decorative fountains or water features or design elements such as flags or banners may be used in conjunction with project entry wall signage.

- Project entry wall signage shall be in accordance with Division 11 setback requirements from a property line or public street right-of-way.

- The placement of project entry walls should not conflict with any requirements by the City of San Diego Traffic Engineering Department for vehicular line-of-sight distance.

4. Secondary Signage – These signs would generally be ground-mounted signs which are located within or near vehicular roadways, accessways, driveways, or project entries. These signs would serve to provide information for motorists, pedestrians or bicyclists. Secondary signs shall conform to the following criteria:

   - Secondary signs shall be appropriately sized to be easily read without becoming over dominant when perceived at the pedestrian scale.

   - Secondary signs shall have a maximum 6' height including sign face when measured from finish grade. However, where certain vehicular, pedestrian or bicycle safety signs (stop signs, etc.) require maximum heights or sign face areas which differ from the foregoing, they shall comply with those standards which are required by the governing agencies (i.e., City of San Diego, CalTrans, etc.). Such standards shall take precedence over the maximum 6' height criteria.

   - Secondary signs may be single or double faced. The area of a sign face shall not exceed 12 square feet.

   - In general, simple sign face treatments are preferred. The internationally accepted symbols or graphics for certain activities or services (i.e.., bicycle path, food or lodging, etc.) should be used whenever possible in lieu of type face descriptions.

   - Whenever possible, secondary information signs should be stacked within an appropriate sign frame or on an individual pole.

   - In general, metal signs with dark matte finish backgrounds and light colored or white symbols and letters are preferred. However, wood signs may be appropriate for secondary signage when placed in proximity to certain architectural styles within a project site.

   - Secondary signs shall not be located in a public street right-of-way.

5. Directory Signage – These signs would usually be located within landscaped areas adjacent to building entries or vehicular drop-off points but would generally not be visible from the public street. They would serve to provide directions to visitors of buildings such as hotels which have a variety of functional areas within one structure:

   Directory signs shall conform to the following criteria:

- Directory signs shall employ simple sign faces. The exterior framework of the directly sign shall be consistent with the materials used in the building which it serves.

- Building directory signs shall have a maximum sign face area of 10 square feet and may be double sided.

- Individual letters or logos placed in directory signs shall have a maximum height of 8 inches.

- Letters and logos may be individually attached or may be applied by using adhesive backed or painted stencil letters on an individual panel.

6. Temporary Signage – These signs will include temporary signs used for the sale, lease, or rental of a building space and temporary signs which announce the construction and development of a project site. Temporary signs shall conform to the following criteria:

   - One freestanding temporary construction sign will be allowed for each project or site.

   - Temporary construction signs may not be installed closer than 5' from a property line or right-of-way along a public street.

   - Temporary construction signs shall employ a square or rectangular format and should have a maximum total sign face area of 100 square feet.

   - Temporary construction signs shall be single-sided and no more than 75% of the total sign face area shall be occupied by typeface and logos.

   - Temporary construction signs shall be removed immediately following completion of construction.

   - One temporary sign may be permitted for each building or portion of a building which announces the sale, lease or rental of that building or portion of a building.

   - Temporary signs used to advertise sale, rental or release shall comply with Division 11 requirements.

Street Furniture

Street furniture shall conform to the following criteria:

- Street furniture shall not intrude into the required width of pedestrian sidewalks.

- Public telephones, if installed, shall not be considered as "afterthoughts," they should be integrated into the street scene. If possible, they should be located on or adjacent to a structure; either a bus shelter, or building facade or transit stop.

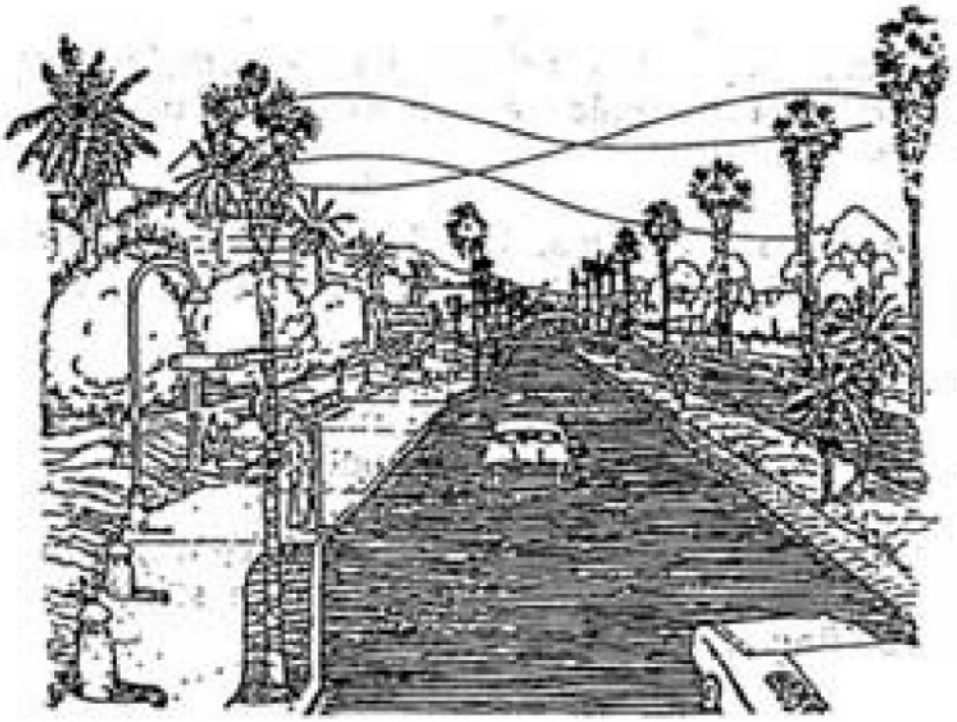
- Trash receptacles shall be installed periodically, especially at waiting areas like bus shelters or transit stops. They shall be constructed of a material compatible with the existing light standards.

- Benches shall be contoured for human comfort and constructed of a warm, inviting, and vandal resistant material (i.e., hardwood). Benches should be provided at bus/shuttle stop locations in expanded sidewalk paving sections within streetscapes. No advertising shall be allowed on any benches.

- Bollards can be utilized as a safety separation between vehicles and pedestrians. Their materials shall match or be compatible with the street light standards and trash enclosure container materials which are installed within streetscape areas.

- Newspaper vending machines shall be allowed only in groups of uniformly designed units in logical areas (i.e., bus stops, shuttle stops and near hotel lobbies).

- Miscellaneous items such as mailboxes, fire call boxes, traffic speed and directional signs, traffic signal boxes, and electrical transformers will require careful location studies along with color and material coordination.



Lighting

Since the entire Hotel Circle street scene is very well lit at night, only minimal pedestrian scale lighting should be required. This lighting should be located at theme entries, uplighting accent trees, and at bus and shuttle stops. Streetscape lighting shall conform to the following criteria:

- Low pressure sodium lights shall be used as the predominant roadway lighting and parking area lighting. High pressure sodium or mercury vapor shall be used for such uses as plaza and mall lighting, building accent lighting, pedestrian lighting, and special landscape lighting.

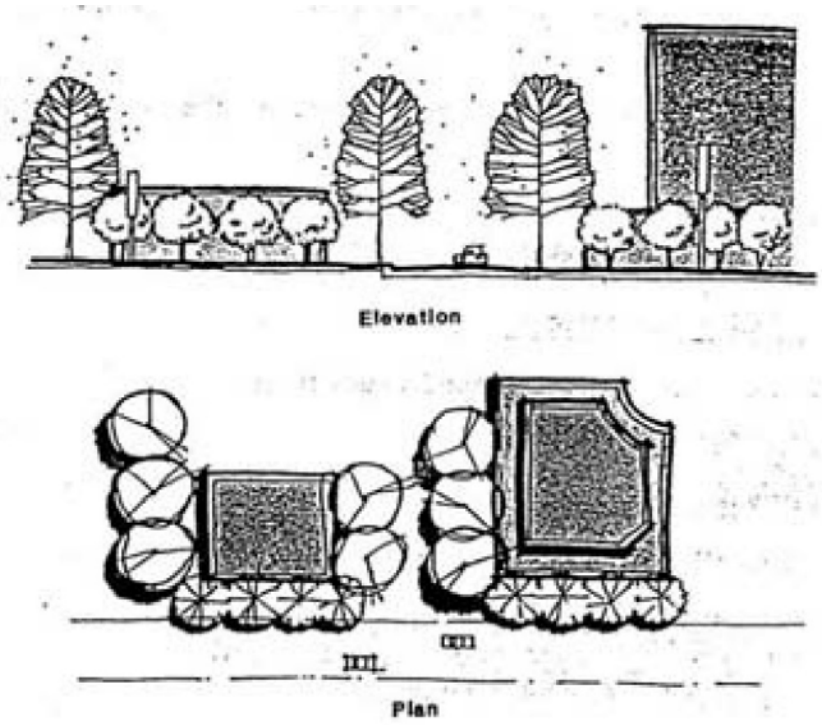
- Accent lighting, where used, shall originate from concealed or inconspicuous source locations.

- Flashing lights on signs shall not be allowed.

Plant Materials

Since most of the architecture for the area has been established (built) and uniformity does not exist, it is not practical to modify the architectural facades of the existing structures. Therefore, the streetscape, and in particular, the proper use of plant materials is critical as the element that will unify the area.

Palms, predominately Washingtonia robusta, dominate most of the sites throughout the Hotel Circle area. Philosophically and economically, the use of palms should be encouraged in a San Diego tourist area. Most tourists, whether correct or not, expect to see palm trees in San Diego, especially in the "resort" area of Mission Valley. In fact, palm trees, if used correctly, are drought tolerant, low maintenance, solve many problems, and can provide a pleasing skyline. There are skyline palm trees that traditionally have been planted as single trees in a row that should be viewed from a distance as well as smaller scale cluster palms that can be effectively used at the pedestrian scale. Tall, single trunk palm trees should not be used as a pedestrian scale tree, but rather when viewed from a distance. The palm tree, therefore, will be the theme tree for the Atlas Specific Plan area.



The Use of Open Trees, Palms and Small Broad-Headed Trees in Front of Buildings Will Provide Visual Continuity Without Blocking Views of Signs or Building Facades

However, since the palms are generally (in the case of Mission Valley) tall skyline trees, smaller broad headed evergreen trees are needed in the area of Hotel Circle itself and would be planted within the parkways which separate the pedestrian sidewalks from the street. These trees will provide shade and visual relief resulting in a pleasing effect. Since much of the architecture along Hotel Circle is varied with no continuity, another effect of significant masses of these trees will be to unify the street scene. This is a critical aspect of the proposed Hotel Circle streetscape. Care must be taken not to screen the entire hotel frontage from the freeway. Therefore, these trees should not be dense but open and should not form a wall along the freeway. Rather, they should be grouped together strategically providing necessary views of the adjacent commercial/hotel areas. The theme entry accent trees should be of similar scale but can vary in color or texture. Care shall be taken to provide adequate vehicular sight lines at driveways and project entries. The use of a smaller scale evergreen tree will symbolically provide a transition from the tall upright trees (eucalyptus) presently used within the freeway right-of-way. The freeway requires a taller open tree like the existing eucalyptus (cladocalyx and maculata) due to the high speeds and visibility while Hotel Circle should utilize the palm tree and smaller trees. Figures 27 and 28 illustrate this concept. The following illustrations depict the concepts and criteria for planting along Hotel Circle. The concepts and criteria presented in “Plant Material Criteria” later in the Urban Design Element will also apply to Hotel Circle.

The following suggested lists of plant materials has been prepared for inclusion into the Hotel Circle streetscape.

Suggested plants for the I-8 Corridor (not a part of the Atlas Specific Plan improvements)

Theme Tree (Palms)

- Washingtonia robusta (skyline)

Plants for the Hotel Circle Streetscape

Small-medium evergreen broad-headed street trees

- Ceratonia siliqua (male)
- Rhus lancea
- Pyrus kawakami

Mid-height to small clumping accent trees

- Phoenix reclinata (clumping mid-height)
- Arecastrum romanzoffianum (single mid-height)
- Chamaerops humilis (small clumping)

The above list of evergreen, broad-headed street trees is purposefully kept short to avoid too much variety. A single species shall be chosen for all sites along Hotel Circle North. The same or an alternate single species shall be chosen for all sites along Hotel Circle South. The mid-height and small clumping accent palm trees should be limited to individual project entries or entry plazas. Other trees for the Hotel Circle streetscape may be selected subject to the approval of the City Planning Department.

Figure 27 Proposed Hotel Circle Streetscape Plan, North and South Typical

Figure 28 Proposed Hotel Circle Streetscape Section North and South - Typical

Accent trees (theme entries, bus stops, etc.)

- Jacaranda acutifolia
- Koelreuteria bipinnata
- Liquidambar styraciflua
- Platanus racemosa
- Populus fremontii

Low Shrubs (in median and adjacent to street)

- Moraea bicolor
- Agapanthus africanus
- Hemerocallis aurantiaca
- Lantana montevidensis
- Lantana camara
- Raphiolepis indica (small varieties)
- Rosmarinus officinales
- Pittospurum tobira "wheeler's dwarf"
- Ceanothus griseus horizontalis
- Acacia ongerup
- Carissa grandiflora (low varieties)

Shrubs

- Abelia grandiflora
- Elaeagnus pungens
- Photinia fraseri
- Nandina domestica
- Pittosporum tobira "variegata"
- Raphiolepis indica
- Plumbago capensis
- Rhus integrifolia
- Rhus ovata
- Heteromeles arbutifolia

Groundcovers

- Gazania species
- Hedera helix
- Delosperma alba
- Potentilla verna
- Vinca major/minor

Vines (along freeway fence)

- Bougainvillea species
- Doxanthus unguis-cati
- Solanum jasminoides
- Tecomaria capensis
- Cissus antarctica

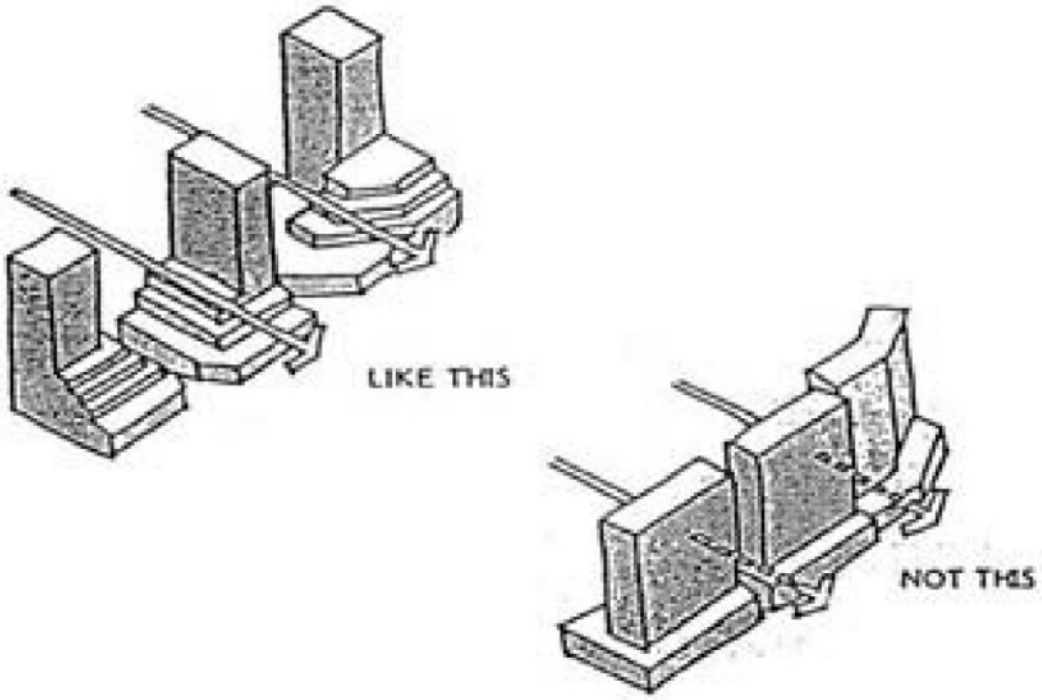
4. Site Planning Criteria

The location and "footprint" of a structure on each individual parcel is as important as the "design" (aesthetically speaking) of the building itself. Because of the variety of lot sizes and uses, special attention must be given to the location of each structure.

Concepts and Criteria

- In general, plazas and courtyards shall be oriented to the sun whenever possible with the buildings clustered to make the most efficient use of the site. Large landscaped open areas for human use and the development of vistas to the river and other open areas shall be created.

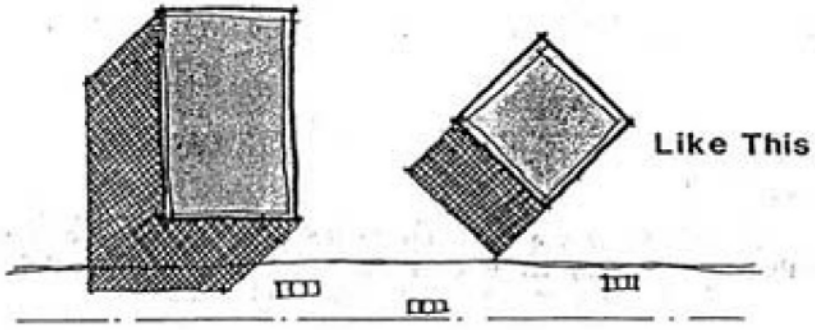
- In general, 30' of landscaped buffer area except for driveways and/or drives should be provided adjacent to major streets. Parking lots or structures should not be permitted in these landscaped buffer areas except for specific conditions described and illustrated in this Specific Plan. Refer to the Site Specific Design Criteria, Section V.C., for exceptions. For existing developed sites where no additional development is proposed, the restriping of parking lots, use of compact stalls, use of parallel parking and other appropriate design techniques shall be studied to achieve the maximum landscape buffer possible where this 30' criteria is infeasible.



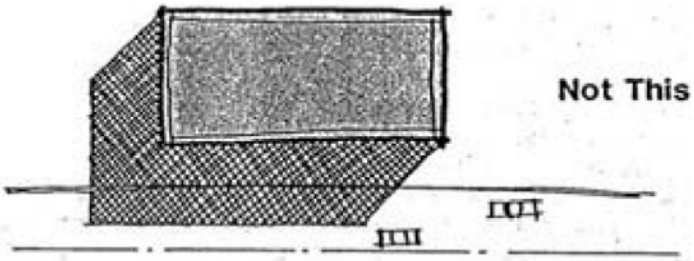
Orient Buildings to Create View Corridors

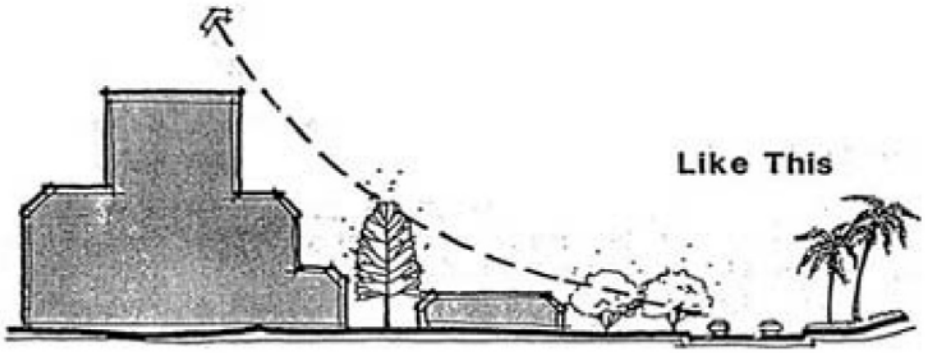
- High rise buildings should be located north and east of outdoor plaza areas. This eliminates plaza areas that receive little sun.

- Outdoor plazas in individual projects shall be linked to pedestrian walkways within streetscape areas and to the river corridor.

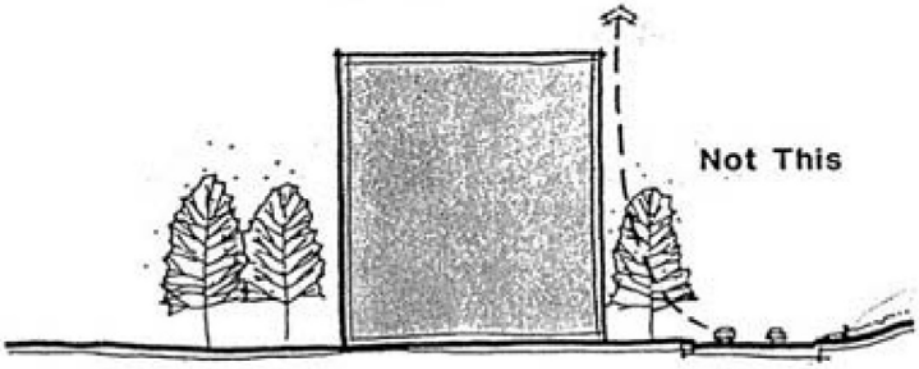


Orient Buildings so that a Corner or Narrow Side Faces the Road and River





Graduated Setback to Height Ratios Provide for Open Streetscape Scenes and Eliminates Walled Feeling Along the Road



Tall Structures Next to Road Create a Walled Effect for Both Pedestrian & Highway Users

- The orientation of buildings, especially those in clusters, shall be carefully designed to consider and/or create view corridors.

Additional specific site planning criteria for each of the Atlas Specific Plan sites are contained in the site specific design recommendations section of the Urban Design Element of this Specific Plan.

5. The River Corridor

The San Diego River should play a vital role in the urban design process for the Atlas Specific Plan area. In addition to physically crossing the Hanalei Hotel, and Hanalei Tower sites, the river symbolically connects all the sites in the valley. The San Diego River is, perhaps, the single most important resource or amenity on the site. In urban Mission Valley, the river has the potential to provide natural and useable open space, recreational opportunities and aesthetic enhancement. In addition to the human benefits the river can provide, the river area on and adjacent to the Atlas Specific Plan area sites is part of a major freshwater wetland system complete with a variety of established riparian habitats.

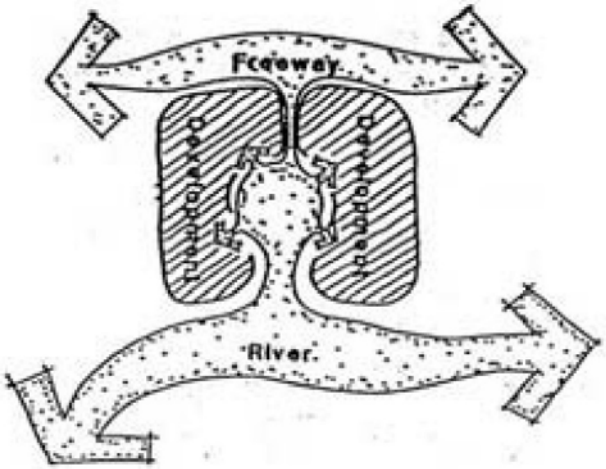
The San Diego River through Mission Valley is a significant aesthetic and economic asset of the community. It provides visual and physical relief from the intensifying urbanization in the Valley. As a linear green space, the river corridor unifies the community accentuating the natural setting of the Valley. As the Valley continues to develop as a major urban center, the need for accessible useable open space will increase. The river corridor has the potential to become a regional attraction, drawing residents and visitors to the area. This will, in turn, draw spending money into the area and provide greater demand for visitor-oriented services. The unique setting of the river and wetland habitats also adds to the value of property in the area. The addition of a flood control facility may make more land available for development. Existing development, however, has essentially ignored the river, choosing instead to orient away from it. The Atlas projects will, as previously mentioned, utilize the river as the symbolic spine of the project where applicable. Realizing the importance of the river and its associated vegetation and wildlife, the river must maintain its “natural” integrity.

In order to create and maintain a viable wildlife corridor within the floodway proper, it is necessary to protect the native habitat areas from excessive human disturbance. A degradation of both the native habitats and their use by wildlife can occur through either noise, visual or direct physical disturbance. These same forms of disturbance can also degrade the aesthetic value of the river corridor for human use. For these reasons, buffers shall be provided and activities shall be restricted along and within the floodway. Buffers planted with native species of coastal sage scrub and native trees are needed to protect the river’s habitat and to create greater edge and diversity. Within these buffers there will be, however, opportunities for pedestrian and bicycle circulation systems. These circulation systems will allow people to experience the river without actually entering sensitive vegetation or wildlife habitat areas.

Concepts and Criteria

- The treatment of the river corridor shall comply with the San Diego River Wetland Management Plan Design Criteria, except as modified by this Specific Plan.

- Viewsheds into and across the river shall be maintained or enhanced by proper site planning and building design.



Symbolically Integrate the River into Adjacent Development

- A buffer area from 30 feet to 50 feet wide shall be provided along the south side of the river at the Hanalei Hotel site between wetland habitat area and adjacent development.

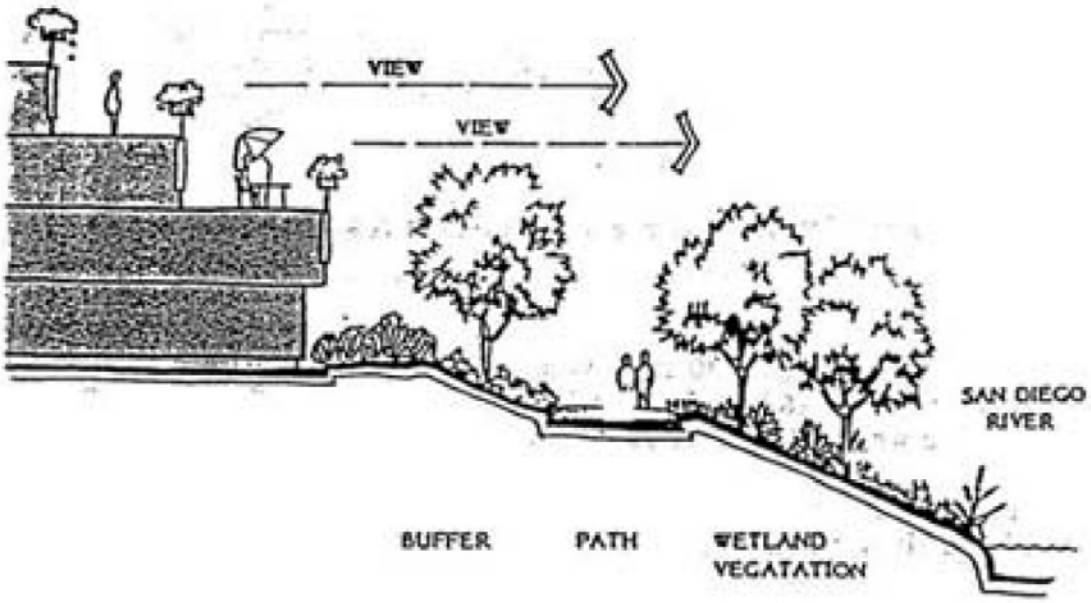
- The regional east-west pedestrian/bicycle system within the river corridor shall be constructed along the south side of the river at the Hanalei Hotel site. The pedestrian/bicycle system shall be provided within a shared, paved path a minimum of 10 feet wide located adjacent to the river and which may be located within the river buffers. SR-At the Hanalei Hotel site, the pedestrian/bicycle path shall extend along the length of the Hanalei Hotel site and shall connect with the pedestrian/bicycle path associated with the approved Levi-Cushman Specific Plan. The internal and streetscape pedestrian systems shall be connected to the regional system.

- The LRT should be located above the 100-year flood and, if feasible, should relate to adjacent structures rather than the river.

- Passive recreation facilities shall be located along the outer edges of the buffer area to the floodway. These include picnic areas, benches, viewing areas and pathways.

- The buffer areas shall be planted, where necessary, with a combination of native trees, particularly riparian woodland species, and native shrubs of the coastal sage scrub community.

- Surface parking areas located near the river corridor shall be either depressed to allow for viewing or screened with berms or landscaping. This will help to maintain the visual integrity from within the river corridor.



Viewsheds Across the River Should be Maintained or Enhanced

- In order to provide visual openness the 150-foot "Design Sensitive Zone" criteria for development adjacent to the river corridor as identified in the San Diego River Wetlands Management Plan shall be adhered to except as otherwise defined in this specific plan. In addition to other criteria, the "Design Sensitive Zone" criteria establishes a maximum building height of 42 feet within this 150 foot area. Buildings should step back from the river corridor. Public, recreational and pedestrian-oriented uses are encouraged.

- To allow see-through at pedestrian levels along the ped/bike path within the river corridor buffer, landscaping materials in the river corridor areas shall include tall canopy trees, rather than short bushy trees. Visual access to the river shall be provided along at least 20% of the length of the corridor improvements. No visual break shall be greater than 50 linear feet.

- Generally, ground level view corridors to the river corridor shall be provided from public areas. This will require space between buildings and special development of landscaped areas in the view corridor.

- The use of appropriate materials shall be encouraged for building facades adjacent to the river. Reflective "mirror" glass shall not be used on building facades which face the river.

6. Landform Considerations

Although all of the Atlas sites have been severely altered and disturbed by previous grading operations, the final landform configurations on each site are important. Grading is often overlooked as a way to achieve an integrated community design. The purpose of this section is to provide criteria

for landscape grading within the Atlas Specific Plan area. These criteria are intended to create a pleasant aesthetic environment by working together with landscape planting, circulation, and land use as well as other elements of this specific plan. The concept drawings in this section are intended to show general conditions and are not keyed to specific locations. They are intended to serve as criteria that can be used in evaluating proposed final grading plans.

Concepts and Criteria (For final grading procedures)

- Buildings and parking areas shall be adapted to the terrain. This could include terracing of buildings either up or down a slope. In addition to providing views and terraced outdoor "deck" areas, the visual impact of slopes if minimized.

- Variable slope gradients shall be encouraged. However, it may be desirable to create an "architectonic" effect with a slope. That is, the slope may become an extension of the structure, where a "natural" effect may not always be desired and therefore a more rigid, geometric form may result. Large slopes adjacent to native areas and those on the southern portions at the base of the valley slopes shall retain a "natural" appearance.

- In general, sharp, angular slopes forms shall be rounded and smoothed to blend with the natural terrain. All graded slopes shall be revegetated. Where appropriate, buildings should be sited to conceal graded slopes.

- All cut slopes over 10 feet in vertical height will be serrated to provide a more suitable surface for revegetation.

- Site development adjacent to the southerly slopes of Mission Valley shall prohibit grading within the established Hillside Review Overlay Zone. Minor exceptions to the foregoing may be acceptable subject to the approval of the City Planning Director.

- To retain the integrity of the intended grading configurations, the following criteria shall be applied:

    - During construction, measures shall be taken to control runoff from construction sites. Filter fabric, fences, heavy plastic earth covers, gravel berms or lines of straw bales are a few of the techniques which should be considered.

    - Grading shall be phased so that prompt revegetation or construction can control erosion. Where possible, only those areas which will later be resurfaced, landscaped or built on shall be disturbed. Resurfacing of parking lots and roadways shall take place as soon as practicable and not at the completion of construction.

    - The maximum slope ratio allowed shall be 2½:1, a recommended by the Mission Valley Community Plan.

- Long, continuous "engineered" slopes that have hard edges and no transition areas at the top or toe of the slope shall be avoided. "Natural" landform contour grading shall be used when possible, to create a more natural appearing slope.

- Transition spaces shall be used between adjacent land uses to take up grade.

- Berms shall be large enough to actually have a strong visual impact.

- Landscape grading shall use imaginative design, accenting or deemphasizing the change in grade as necessary to achieve the desired design goals. Circulation elements such as trails and paths can effectively respond to grade conditions by meandering in long graceful curves. In contrast, walks that switch direction too often in response to poorly conceived landscaped berms, or walks that go up and down over small berms have an unnatural appearance and should be avoided.

7. Open Space and Recreation

The preservation of natural open space and the provision of open areas in the Atlas Specific Plan area is a significant component of the urban design concept. Regardless of the aesthetics of structures, humans require a certain amount of quality open space within their home and work environments to maintain an optimum level of physical as well as mental health. Within these open spaces, provisions for recreational opportunities shall be considered. These include both active and passive recreation areas.

Open space can be defined as the total area of land and/or water within the boundaries of the project which is generally free from development or developed with low intensity uses that respect natural environmental characteristics. Useable open space generally includes areas such as the river buffer and any designated park-like or plaza areas adjacent to the river. Projected open space includes areas such as setbacks, project entries and internal project plazas, walks, etc. Natural open space encompasses the natural hillside areas of the south side of Mission Valley and the river corridor. The following summarizes the open space by categories for the Specific Plan sites:

Site	Open Space			
	Natural (Sq. Ft.)	Useable (Sq. Ft.)	Project (Sq. Ft.)	Total (Sq. Ft.)
Hanalei Tower	--	--	52,000	52,000
Hanalei Hotel	116,900	94,300	100,700	311,900
Mission Grove Office Park	--	--	40,560	40,560
Kings Inn	--	--	53,200	53,200
TOTALS	**116,900**	**94,300**	**246,460**	**457,660**

Open space is perceived as one of the tools for protecting San Diego's quality of life. It supports the conservation and enhancement of San Diego's existing communities and aids in the creation of new communities which strive to retain and enhance natural amenities.

As a major floodplain, Mission Valley is an important element of the city-wide open space system. Additionally, open space in the Valley serves a dual function of recreation and flood control. Given the topography in Mission Valley, open space, and in particular the river, will affect all aspects of future development in the community including land use, transportation (configuration of surface streets), and urban design.

In Mission Valley, open space includes those areas which form a greenbelt around and through the community. The San Diego River is the most prominent natural open space element. The hillsides which form the north and south boundaries of the community area also a significant natural open space feature.

Concepts and Criteria

- Office buildings shall be designed using terraces, roofscapes, and balconies with heavy plantings to create outside open areas. Building roofscapes should be used to serve both active and passive community needs, including areas for social functions and for the enjoyment of urban and river views.

- Uses along the river will include landscaped areas, walks, gardens and bike paths to complement the proposed vegetation along the river. Hotel facilities such as the guest rooms and lobby areas will be located off the gardens and landscaped areas oriented to the river. Active recreation facilities are proposed within the hotel complex areas; they include swimming pools, tennis courts, exercise rooms, pro shops and snack bar.

8. Planting Considerations

The individuality as well as the cohesion between the various land uses in the Atlas Specific Plan area should be strengthened by the planting plan. Overall project identify is greatly enhanced by the continuity of plant materials along publicly visible areas. Conversely, individual parcel identity can be established through variations in planting at major entry points, along smaller streets within the project, and within individual areas.

There are three distinctive "entry" situations within the Atlas Specific Plan area: (1) major community entries – these are the predominant entries one encounters upon entering the specific plan area (i.e., at Taylor Street and the SR-163 interchange); (2) secondary entries – these are entries not as obvious as the community entries, but quite significant; and (3) special entries – these are the individual project entries one encounters when traveling along Hotel Circle. A distinctive hierarchy in the design of these entries must be achieved. This can be accomplished through sensitive treatment of the landscape.

Plant material is but one of the elements of the landscape. As described in the streetscape section, there are many components that comprise the "urban landscape." Although the term "landscape" has many connotations, the emphasis in this design element will be on planting design.

Uses of plants can be categorized into four basic categories:

Architectural Uses – These include space articulation, screening and privacy control.

Engineering Uses – These include erosion control, acoustical control, atmospheric purification, traffic control, and glare or reflection control.

Climatological Uses – These include solar radiation control, wind control, precipitation and temperature control.

Aesthetic Uses – Plants can be used to create certain emotional responses for beauty, for pleasantness, for view enhancement and focal points.

These planting concepts and criteria contain criteria for the planted areas of the Atlas Specific Plan area. These planted areas have a significant role in the image that is created of a community. The planting criteria are designed to create a beautiful community while addressing basic planning goals and concepts, as well as community-wide issues of conservation and urban design.

Concepts and Criteria

- Drought-tolerant plant materials with an emphasis on native plants shall be used extensively throughout the Atlas Specific Plan area. Their use will accomplish several important community planning goals: first, they will enrich the existing landscape character, which is dominated by drought resistant plants; second, their use will conserve water and energy; third, they are economical to maintain, and fourth, in the proper place, they can serve the image-forming needs of the community as well as plants that require more water.

  Drought-tolerant plants will need some irrigation, especially in the first few growing seasons. Once the plants are established, irrigation will be required about once a month during the dry months. This irrigation practice will promote deep root growth and a better tolerance for the hot, dry summer months. Irrigation methods will vary depending on the particular situation and the specific plants chosen. In some places, bubbler heads will provide the once-a-month deep watering. Other situations may be better adapted to some form of drip irrigation. Still others may require truck watering for the first few years, and no additional irrigation after that. Specific conditions will require specific solutions that can be implemented as the choice of plant material and specific planting location is known.

  The use of drought-tolerant plant material also makes the use of ornamental native plants possible. Many natives are sensitive to overwatering and could not be used unless watering is restricted during the dry months. Plants such as Toyon (*Heteromeles arbutifolia*), hollyleaf cherry (*Prunus ilicifolia*) or sugarbush (*Rhus ovata*) will thrive in dry conditions. These and

other native trees and shrubs will be used in a natural way to create a pleasant naturalized landscape.

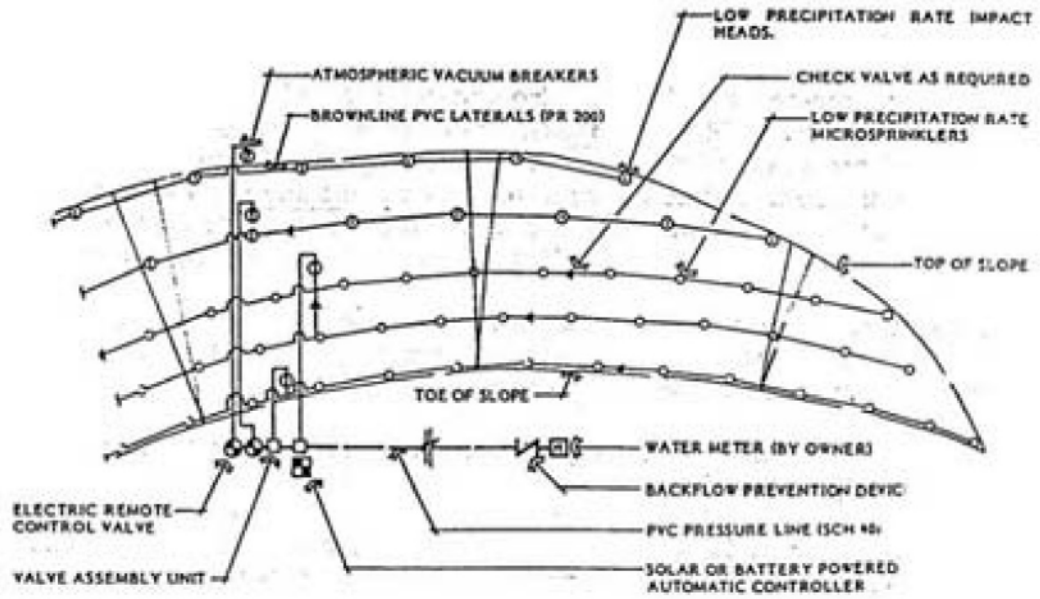
Non-native ornamentals that are drought-tolerant will also be used. Acacia (*Acacia* spp.), olive (*Olea europea*), eucalyptus (*Eucalyptus* spp.) and pines (*Pinus* spp.) are some of the plants that are suggested for use within the Atlas Specific Plan area. Palms (*Washingtonia* spp., *Phoenix* spp.) also are drought resistant, and are suggested for use along the I-8 corridor as a major theme planting and intermittently along Hotel Circle as entry accent planting.

The conversion to drought-tolerant plant material will take time since a considerable amount of plant material presently exists that is not drought tolerant within most of the Atlas sites.

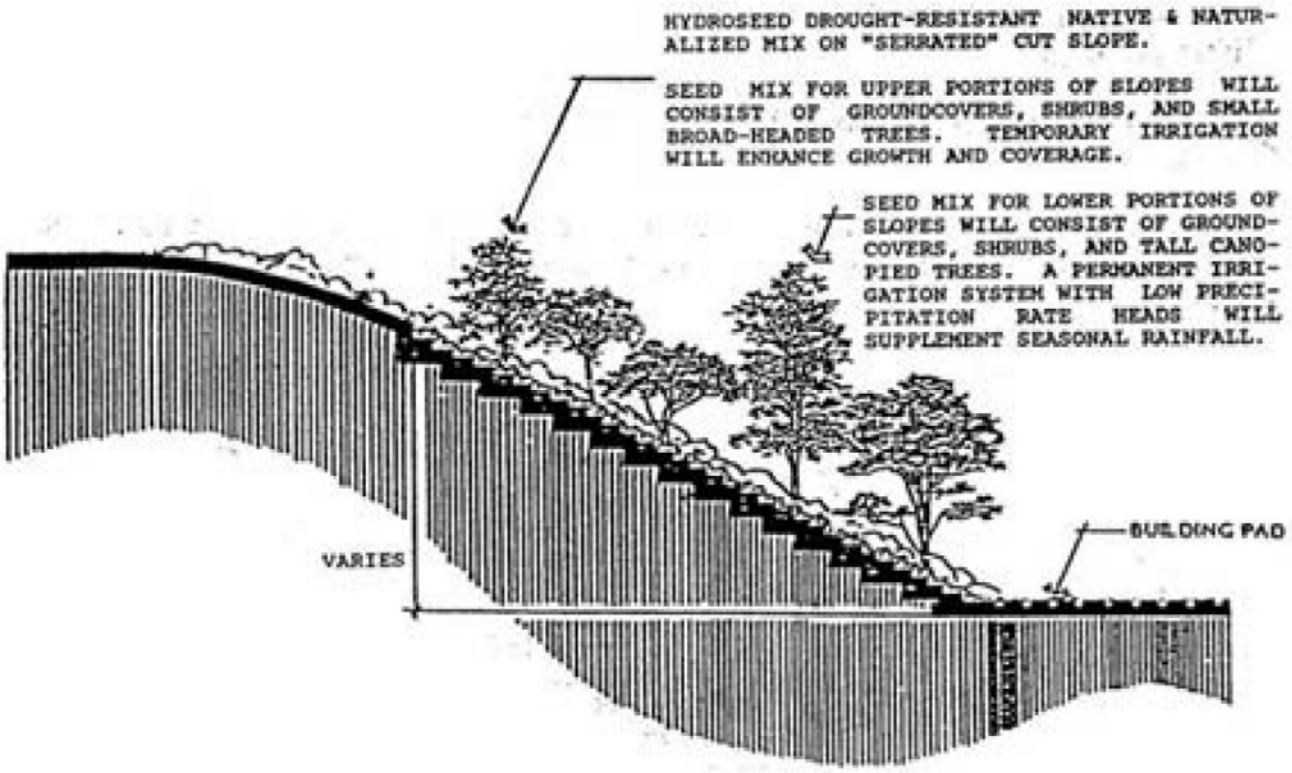
- An irrigation system shall be required for any planted area to insure plantings are adequately watered.

- Native plant materials shall be used on existing natural slopes, in designated hillside review areas, and in the river channel and buffer.

- Graded slopes shall be promptly revegetated with groundcover, shrubs and trees. Hydroseed may be used for groundcover and may include shrubs and trees. Groundcovers shall possess moderate or high erosion control qualities. Further, appropriate fertilization and plant materials shall be verified by soil sampling and analysis by a soils laboratory to be indicated on the landscaping plans for the project. The graphics below and on the following page illustrate typical slope planting and irrigation techniques.



Typical Slope Irrigation – Plan



Typical Cut Slope Planting

- All slopes over 5 feet in vertical height shall receive at least a one (1) gallon plant for every 100 square feet of slope area prior to building occupancy on the respective lot.

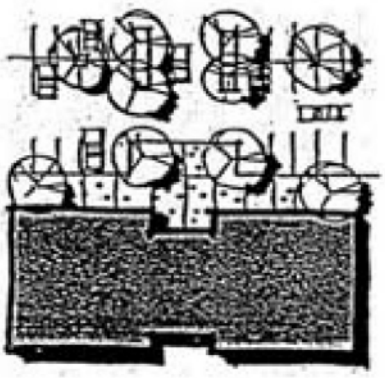
- All slopes over 5 feet high shall receive erosion attenuation treatment such as punched-in straw, tacked-on straw, or jute mesh.

- Street trees shall be long-lived (60 years), deep rooted, and require little maintenance (structurally strong, insect and disease resistant, and require little pruning).

- Trees and other plants shall be the dominant elements of the major entry statements.

- Deciduous trees shall be used in south facing outdoor areas around buildings to provide solar access during winter months, while providing shade in hot summer months.

- Deciduous trees shall be used where winter sun is to be available to outdoor areas.



Incorporate Deciduous Trees into Planting Plans Near Buildings

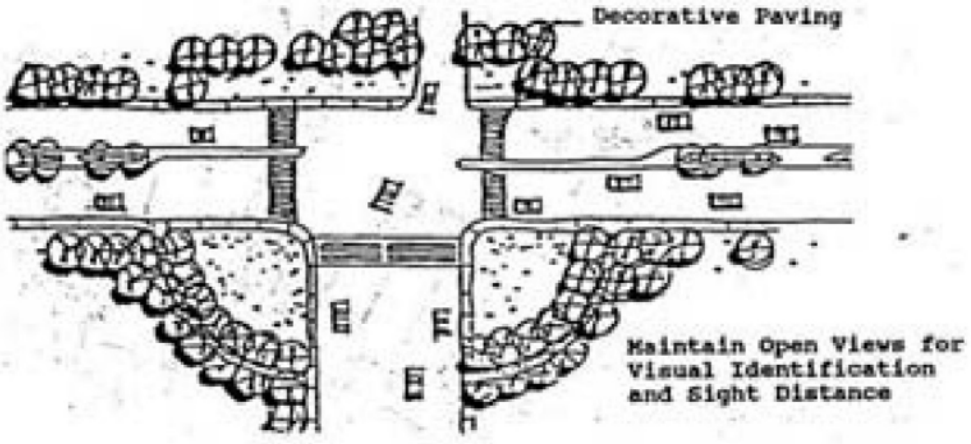
- Trees and shrubs on west sides of buildings shall be concentrated to reduce heat buildup during hot afternoon hours.

- Round-headed canopied rather than upright trees shall be utilized in parking areas.

- Parking lot trees shall be evergreen with a mature height and spread of at least 30 feet. They shall also be long-lived (60 years), clean, and require little maintenance (structurally strong, insect and disease resistant, and require little pruning).

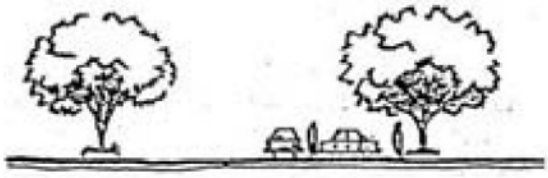
- Where project development areas occur adjacent to the river corridor, those areas shall utilize landscape materials which are compatible with the native vegetation along the river corridor. Where high intensity hotel and office uses are clustered adjacent to the river, river vegetation species should be introduced within usable open space areas such as public plazas created by the building clusters.

- To allow visibility at pedestrian levels, landscaping materials in the ground level view corridor areas shall include tall trees with canopy areas, rather than short bushy trees.



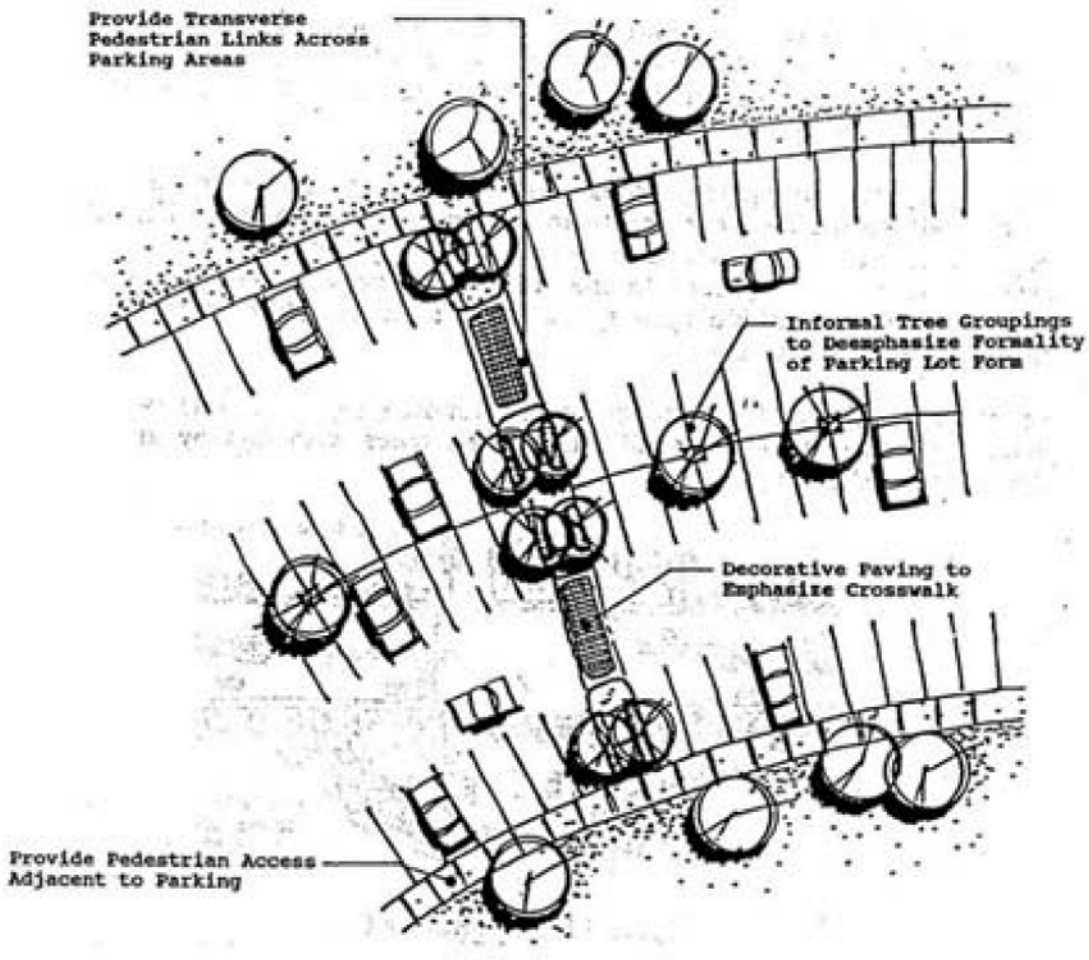
Typical Major Intersection

- In the interest of maintaining sight distances and public safety, trees shall be planted not less than 25 feet from beginning of curb returns at intersections, 10 feet from street lights, 10 feet from fire hydrants, and 10 feet from driveways.



Broad-Headed Trees Should be Utilized in Parking Areas

- On- and off-site views (since they are not panoramic) shall be enhanced through the creation of view frames. These can be horizontal or vertical in nature.



Typical Parking Lot Treatment

- To screen unsightly or undesirable views near a slope area, large dense shrubs shall be massed near the top of the slope, not the toe.

- Trees and shrubs can be combined with earth berms to screen adjacent views.

- Plantings designed for major entries shall relate directly to adjacent plantings as well as provide the necessary focal element. If an entry monument or sign is utilized, evergreen shrubs and vines shall be used to provide a visual backdrop and soften its edges. Low plantings of ground cover, turf, or annual color will be used in the foreground.

- Turf areas shall be minimized except where recreation areas are required. Turf for strictly visual reasons (except at major entries) shall be minimized because of relatively high water use and maintenance costs.

- Surface parking areas shall be screened from adjacent development.

- Large walls or fences, such as around tennis courts, shall be softened with large shrubs or small trees.

- Tree plantings at major intersections shall reflect an "openness" for visual identification, maintaining sight distances, and maintaining open views.

- The following plant lists indicate acceptable species for use within the Atlas sites. Supplement this list with the list depicted in the streetscape section.

  <u>Slope Trees</u>
  - o * *Acacia cyclops*
  - o * *Callistemon citrinus*
  - o * *Ceratonia silique*
  - o * *Eucalyptus* species
  - o + *Heteromeles arbutifolia*
  - o *Melaleuca styphelloides*
  - o * *Pinus eldarica*
  - o * + *Prunus caroliniana*
  - o * + *Prunus lyonii*
  - o * *Schinus terebinthifolius*

  <u>Large Evergreen Round Headed Trees</u>
  - o *Cinnamomum camphora*
  - o *Ficus retusa*
  - o * *Quercus ilex*
  - o *Ulmus parviflora*

Small Evergreen Broad Headed Trees

- o * *Callistemon citrinus*
- o * *Ceratonia silique*
- o * *Eucalyptus ficifolia*
- o *Geijera parviflora*
- o * *Leptosperum laevigatum*
- o * *Olea europaea*
- o * + *Rhus lancea*
- o * *Schinus terebinthifolius*

Evergreen Upright Trees

- o *Brachychiton populneum*
- o *Magnolia grandiflora*
- o *Tristania conferta*

Large Scale Canopy Trees

- o * *Eucalyptus* (selected species)
- o + *Fraxinus velutina*
- o * + *Platanus racemosa*

Deciduous Round Headed Accent Trees

- o *Albizia julibrissin*
- o *Bauhinia variegates*
- o *Jacaranda acutifolia*
- o *Koelreuteria paniculata*
- o *Lagerstroemia indica*
- o * *Pistacia chinensis*
- o *Pyrus kawakamii* (Evergreen Pear)

Riparian Deciduous Trees

- o * + *Platanus racemosa*
- o * + *Populus fremontii*
- o * + *Alnus Rhombifolia*

Shrubs

- o *Abella grandiflora*
- o *Agapanthus africanus*
- o * + *Agave americana*
- o * + *Artemesia californica*
- o * + *Artriplex semibaccata*
- o *Carissa grandiflora*
- o * + *Cassia* spp.
- o * + *Ceanothus* (all species)
- o * *Dodonaea viscosa*
- o * *Echium fastuosum*
- o * *Elaegagnus pungens*

- o * *Feijoa sellowiana*
- o * + *Fremontodendron* “California Glory”
- o *Hakea sauveolens*
- o *Hebe* spp.
- o * + *Heteromeles arbutifolia*
- o *Lantana* species
- o * *Leptospermum laevigatum*
- o *Ligustrum* spp. (shrub varieties)
- o * *Mahonia aquifollum*
- o *Melaeuca* species (shrub varieties)
- o * *Nandina domestica*
- o * *Nerium oleander*
- o * *Myrsine africana*
- o *Photinia fraseri*
- o *Pittosporum tobira*
- o *Pittosporum phillyraeoides*
- o *Pittosporum crassifollum*
- o * *Plumbago capensis*
- o * + *Prunus lyoni*
- o *Pyracantha* species
- o *Raphiolepsis indica*
- o * + *Rhus ovata*
- o * + *Ribes speciosum*
- o * *Rosmarinus officinalis*
- o * + *Senecio cineraria*
- o * *Teucrium fruticana*
- o *Iburnum tinus*
- o *Viburnum japonica*
- o *Xylosma congestum*
- o * *Yucca glauca*

Vines

- o *Bougainvillea* species
- o *Cissus antarctica*
- o *Clematis armandii*
- o *Clytostoma callistegioides*
- o *Doxantha unguis-cati*
- o *Ficus pumila*
- o *Parthenacissus tricuspidata*
- o *Solanum jasminoides*
- o * *Tecomaria capensis*
- o *Wisteria* species

Groundcovers

- o * *Achillea tomentosa*
- o *Arctotheca calendula*

- o * + *Atriplex semibaccata*
- o * + *Baccharis pilularis* (dwarf varieties)
- o * *Drosanthemum* species
- o * *Fragaria chiloensis*
- o *Gazania uniflora*
- o *Hedera helix*
- o *Hypericum calycinum*
- o * + *Lampranthus* species
- o *Lippia canescens*
- o * *Malephora crocea*
- o *Myoporum parvifollium*
- o *Pelargonium peltatum*
- o *Potentilla verna*
- o * *Rosmarinum officinalis* var. *prostratus*
- o * *Sedum confusum*
- o *Verbena peruviana*
- o *Vinca major*
- o *Vinca minor*

* Indicates drought tolerant plant material.
+ Indicates native plant material.

9. Architectural Considerations

This section contains design concepts and criteria related to architectural form, massing, aesthetics and materials. To give the developer enough flexibility, the criteria are conceptual in nature and allow a variety of options. These criteria, though conceptual, should be followed as closely as possible to insure that the intended urban design quality is implemented.

Concepts and Criteria

- A mixture of high-rise, mid-rise and low-rise structures is proposed within the Atlas Specific Plan area. Tall buildings should be designed in the form of slim towers. Consideration shall be given to the selection of materials that offset and enhance the dramatic landscape and topographic features in the valley and the inland mountains.

- Mid-rise hotel buildings should make extensive use of balconies, decks, and roof terraces. Building materials shall be homogeneous and shall provide either a contrast or a blending with the open space and landscaped areas.

- Low-rise buildings shall pay special attention to roof area treatment, the location and screening of roof-mounted equipment and roof materials. Pitched roofs or other special roof forms may be preferred in some cases to flat roofs. Flat roof areas shall be considered for human use as terraces, or surfaced with materials of earth tone colors of darker hues.

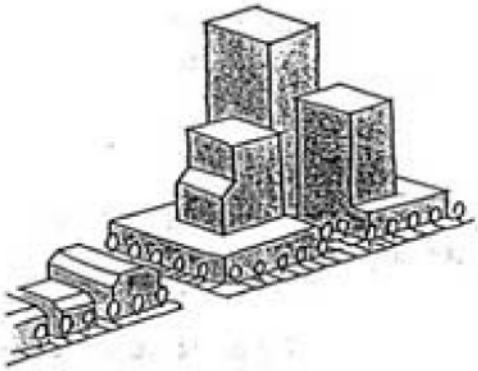
- In general, mechanical equipment should not be roof-mounted. Where necessary to be roof-mounted, equipment shall be enclosed or screened from view.

- Low-rise buildings shall be designed with homogeneous materials that complement landscaping materials. Special care shall be given to building detailing, particularly at building entrances.

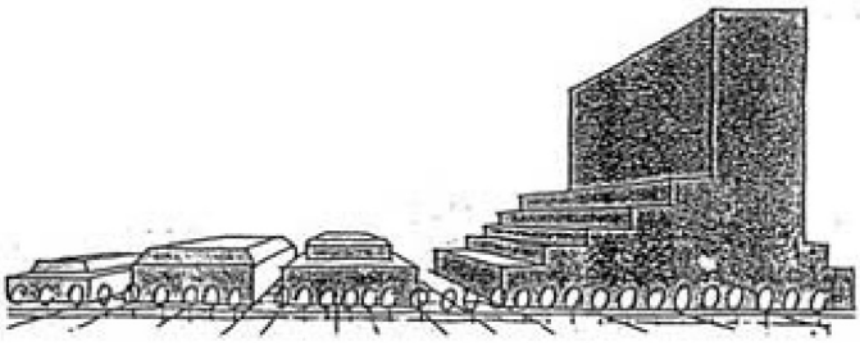
- Structures shall be designed to create transitions in form and scale between large buildings and adjacent smaller buildings.

- Building Height Limit Zones shall be as follows:

Zone	Maximum Permitted Height
South of I-8	40 feet with exceptions to 65 feet
North of I-8	250 feet
Within the 150-foot wide Design Sensitive Zone at the river corridor	42 feet



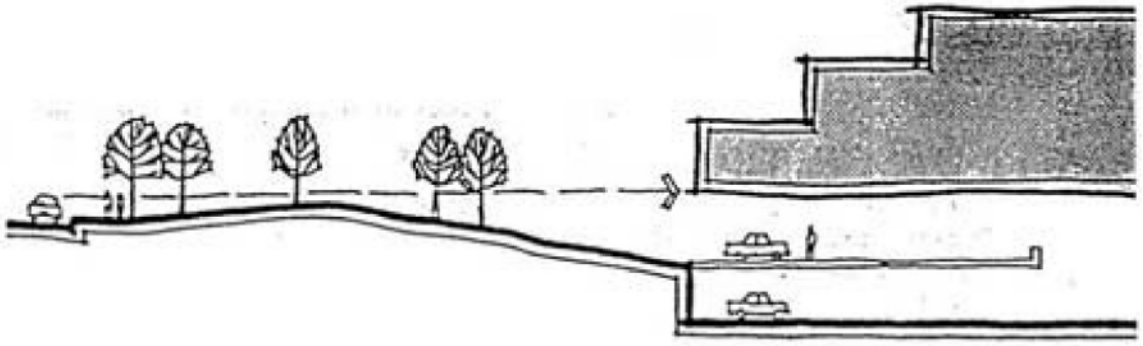
Design Structures to Create Transitions in Form and Scale Between Large Buildings and Adjacent Smaller Buildings



- Building development at the base of slopes shall utilize building materials and colors which are comprised of earth tones, particularly darker hues.

- Parking garages shall be provided as an integral part of new development utilizing ground level spaces for retail or other similar activity, where possible.

- Parking structures shall be screened from street views where possible. Plant material could also be used to create interest.

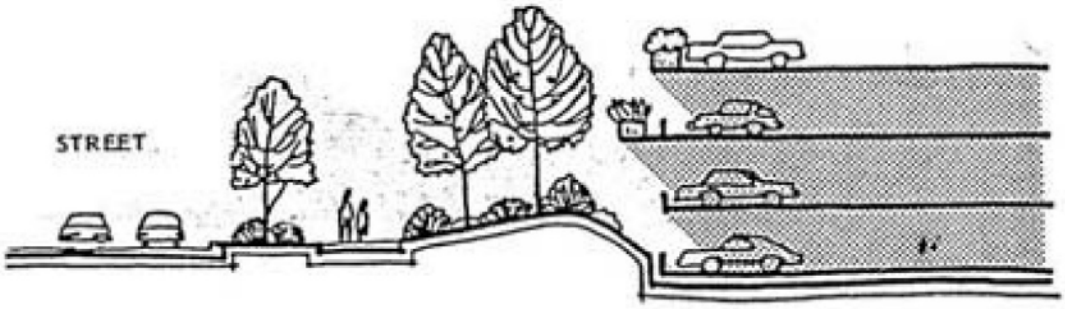


Parking Areas Should be Placed Below grade or "Tucked Under" Buildings. This Maximizes Site Efficiency and Places Parking Areas Out of View.

- Parking areas placed below grade, "tucked under" buildings, or in inconspicuous above grade parking structures shall be encouraged. This maximizes site efficiency and places parking areas out of view.

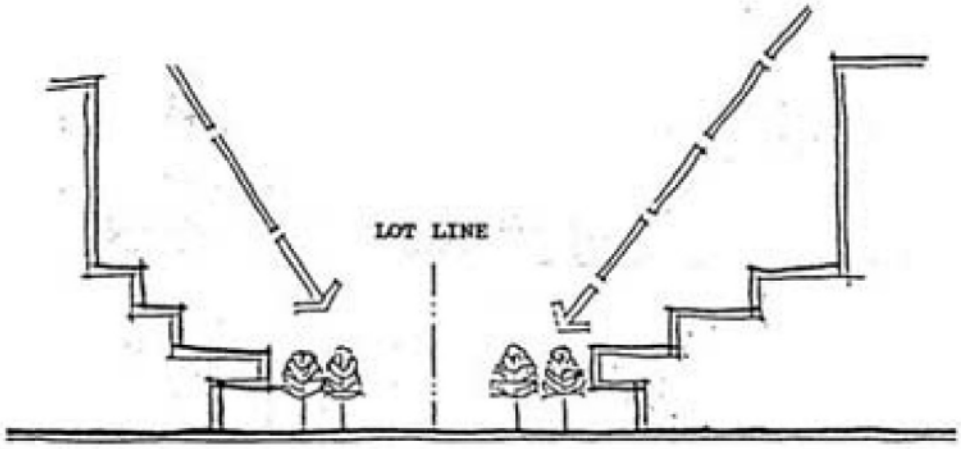
- Buildings shall terrace up from adjacent streets. Rather than create "hallway" effects, structures shall "open up" at the upper levels eliminating "dark" streets.

- Building forms shall be designed to create visual interest. Changes in form by varying levels and planes can create a visually satisfying structure.



Parking Structures Should be Screened from Street Views Where Possible. Plant Material Could Also be Used to Create Interest.

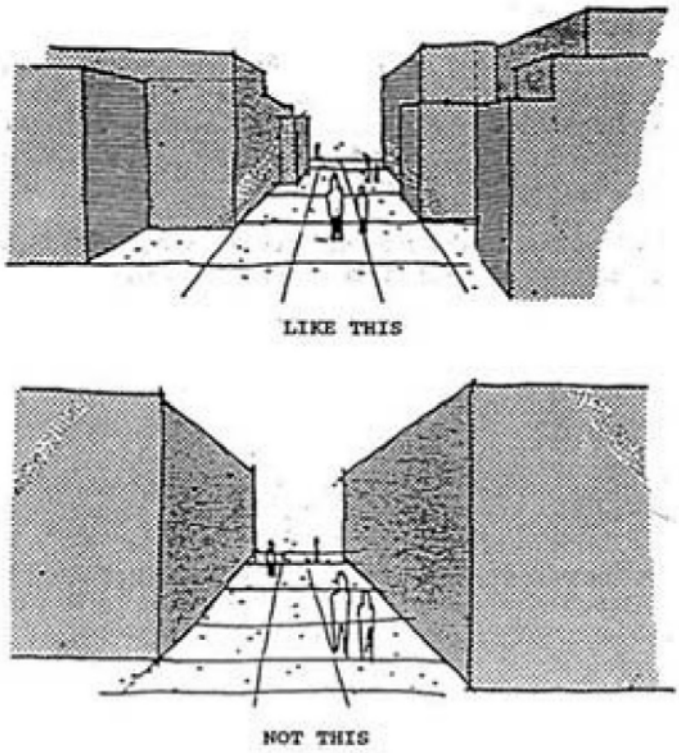
- Buildings shall complement surrounding topography. For example, buildings adjacent to steep slopes should reflect the slope by gradual "step-up" design towards the slopes.



Where High Rise Buildings are Adjacent, Terracing Should be Utilized to Prevent Dark Unpleasant Spaces.

- Tunnel-like effects between buildings should be avoided.

- Building forms should terrace down to riverfront areas.

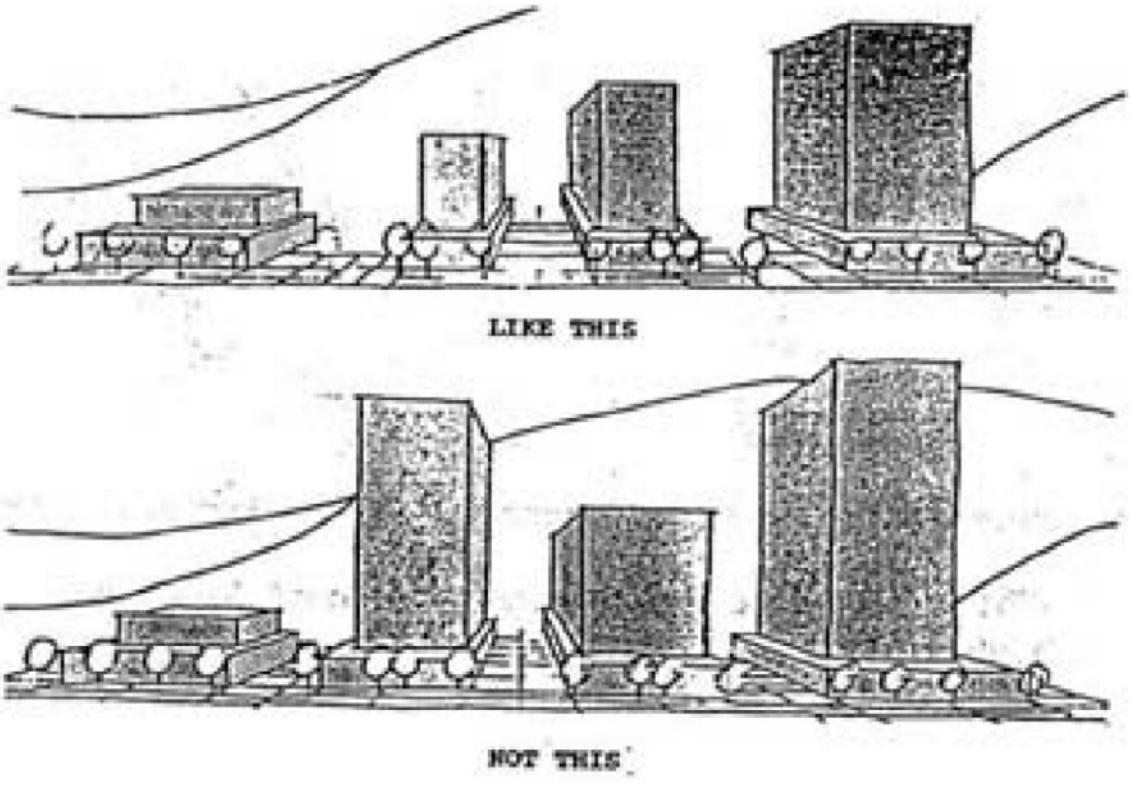


Avoid Tunnel-Like Effects Between Buildings

- Where high rise buildings are adjacent, terracing should be utilized to prevent dark unpleasant spaces.

- Buildings adjacent to the southerly slopes of Mission Valley shall incorporate the architectural guidelines of the Mission Valley Community Plan Implementation Program.

- Building clusters shall relate to surrounding topography and create appropriate height transitions. Background topography shall be considered an asset. Rather than "fight" the existing forms of the valley, building clusters shall logically transition in height and form from one structure to the next considering the surrounding topography.



Building Clusters Should Relate to Surrounding Topography and Create Appropriate Height Transitions

- Tall buildings that face pedestrian streets and spaces shall incorporate design features that increase visual interest at street level.

- Buildings shall be designed to create comfortable scale relationships with adjacent open areas.

10. Visual Considerations

To maintain the special visual character of the Atlas Specific Plan area the following visual concepts and criteria shall be followed as closely as possible. The basic concept is that of utilizing view corridors throughout the project. Visual terminuses such as plazas, fountains, special buildings, or sculpture shall occur at key points within these corridors to act as focal points. In addition, the orientation of the buildings shall reflect the visual corridor objectives.

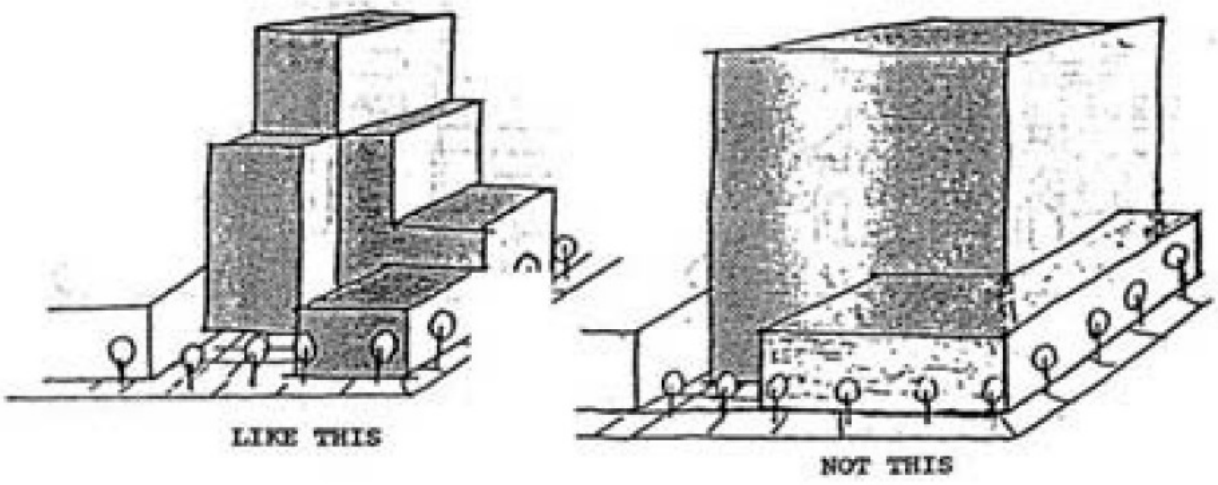
Concepts and Criteria

Developments shall provide landmarks and focal points for visual orientation, through visual vertical elements or other special forms. These architectural forms are particularly applicable to the urban plaza area adjacent to the river.

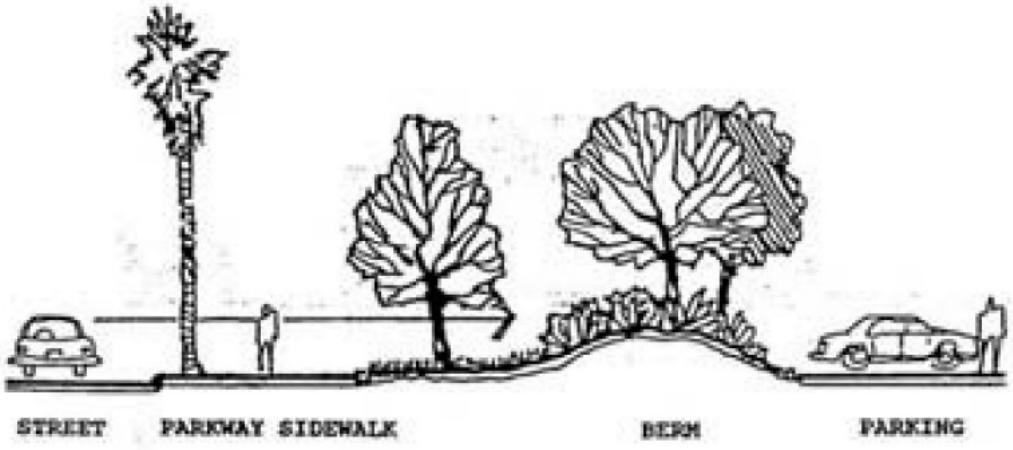
- Individual parcels shall be site planned to consider internal views (for example, in recreation areas) as well as views looking outward.

- Because of the view impacts of large low-rise buildings as seen from above, mechanical equipment should not, in general, be roof-mounted. Where necessary for equipment to be roof-mounted, roof areas shall be carefully designed to enclose or screen mechanical equipment. Roof-mounted equipment should be incorporated into the architectural design of buildings or should be logically grouped or clustered in a manner which allows them to be effectively screened with free-standing or parapet walls. Projects shall also consider the development of roof forms and the use of roof materials that will have positive visual impacts b providing color and pattern. Ideally, strong consideration shall be given to the use of roofs for recreation, as terraces and landscaped park-like areas, in conjunction with project recreational activities or commercial activities such as restaurants.

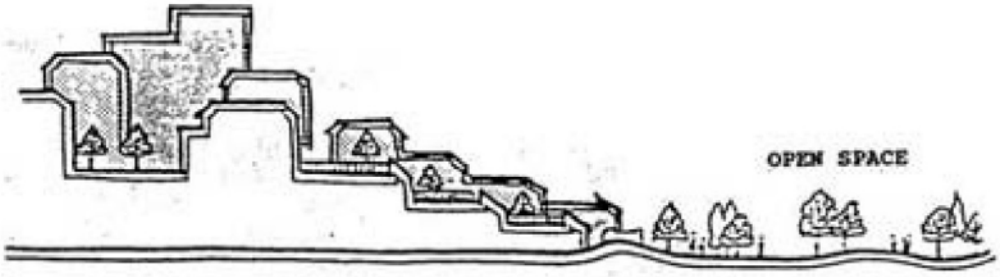
- View corridors from I-8 to the river and from I-8 to the hillsides shall be provided for the Hanalei Hotel site. Refer to the site specific criteria section of the Urban Design Element of this specific plan.



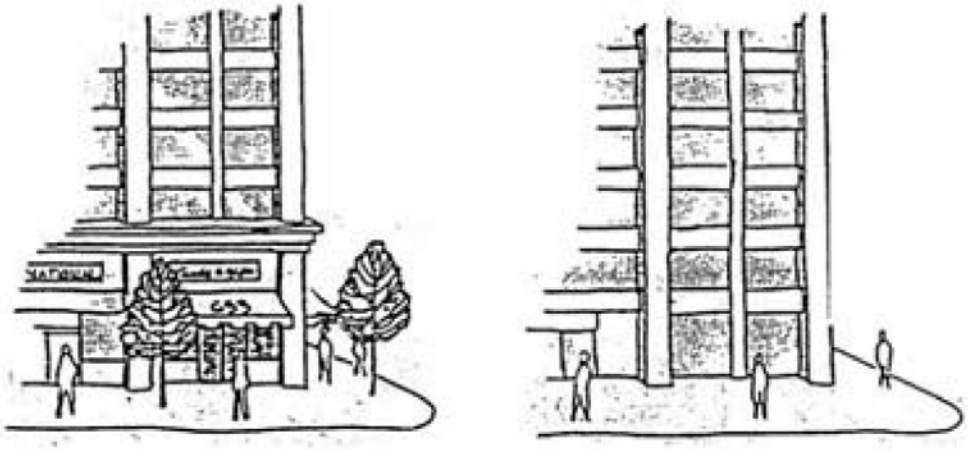
Building Forms Should be Designed to Create Visual Interest



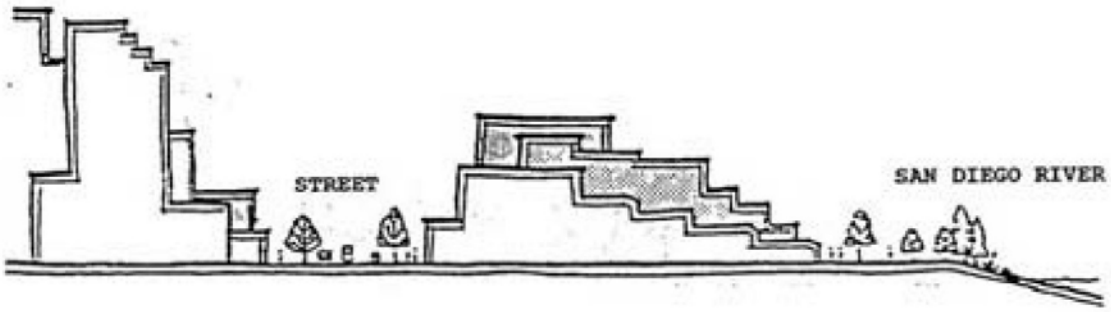
Parking Areas Adjacent to Streets Should be Screened



Buildings Should be Designed to Create Comfortable Scale Relationships with Adjacent Open Space Areas



Tall Buildings that Face Pedestrian Streets and Spaces Should Incorporate Design Features that Increase Visual Interest at Street Level



Building Forms Should Terrace Down to Riverfront Areas

11. Energy and Conservation Considerations

The need for property energy planning has become readily apparent in recent years. Shortages of traditional energy sources coupled with spiraling prices make it important that steps be taken to control and conserve the amount of energy expended on a local and national level. Within this context, the following criteria for the Atlas Specific Plan area have been prepared. Significant energy savings will be realized as these guidelines are integrated into the planning and design of each site. Specific energy-saving techniques listed in this section are intended to serve as design criteria to be used by architects, site planners, landscape architects and engineers. Atlas Hotels has been extremely successful in exceeding energy conservation goals through well-organized and implemented energy conservation techniques.

All new or improved buildings within the Atlas Specific Plan areas must comply with the minimum state energy conservation standards, presently embodied in Title 24 of the California Administrative Code. As a goal for the Atlas Specific Plan area, all major buildings should exceed Title 24 standards. Typically, state energy standards concentrate on structural factors such as insulation, glazing, etc. This section outlines a conservation program which complements Title 24, by concentration on other avenues of energy conservation not ordinarily addressed by the state requirement. The emphasis is on instituting a number of financially-feasible conservation techniques, such as appropriate landscaping, daylighting, water management etc., rather than attempting the implementation of specialized, high-technology devices such as solar or wind-powered mechanisms. It is believed this strategy offers an equally satisfying end product, while, at the same time, representing significantly more favorable life cycle costs.

One conservation technique which will be incorporated into the design of the Atlas Specific Plan area is the concept of multiple use development. In essence, this concept combines various land uses within the project. This results in fewer vehicular trips than would a comparably-sized traditional development simply because some residents have the opportunity to work, shop and recreate within the confines of the Valley rather than commuting. Other benefits accruing from a project of this scale include connections with major public transit networks including the LRT and bus lines in the Mission Valley area.

Site planning to take advantage of passive solar energy will be encouraged. The kinds of plant material and their location, widow exposure, roof overhang, and building alignment should be manipulated to maximize the “free” energy the sun provides daily. In those places where “active” solar collectors can be used, and also “passive” solar considerations can be utilized, access to the sun’s radiation should be preserved and maintained.

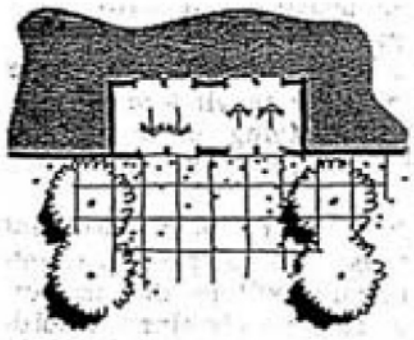
Concepts and Criteria

- Nearly 50 percent of a commercial building’s energy is used for lighting purposes. Approximately 33 percent of total building energy is consumed by environmental comfort systems. Daylighting shall be used as a conservation technique on low rise buildings where possible. This can be done by utilizing skylights, atriums, and courtyards to maximize available window space. It provides desirable results and an attractive economic return on investment.

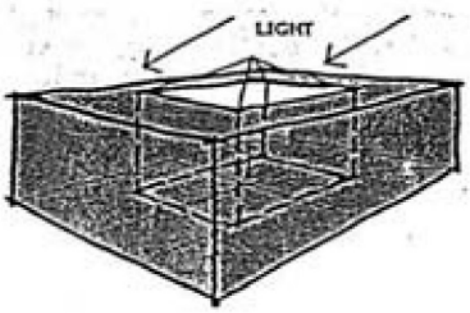
- Appropriate glazing techniques shall be utilized to permit interior light penetration up to twenty (20) feet within buildings. For interior areas greater than twenty (20) feet from window areas, skylights, light wells, interior courts or similar architectural features shall be considered.

- In conjunction with daylighting technology, low wattage light fixtures, dimmer switches, zoned lighting banks and time controlled lighting controls for public areas shall be utilized.

- Energy efficient appliances shall be used in all buildings.



Consider Utilizing Vestibules at Entryways to Reduce Heat or Cold Infiltration



Buildings Should be Designed to Maximize Natural Lighting

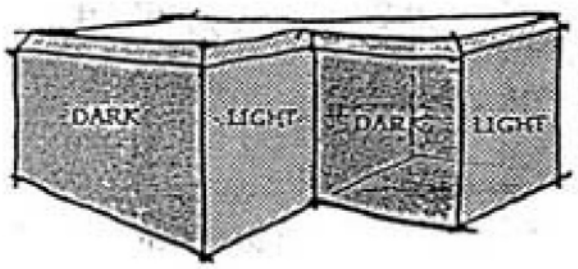
- Utilization of vestibules at entryways shall be considered to reduce heat and cold infiltration into buildings.

- Buildings shall be properly insulated. Insulation blankets should be utilized to isolate the building mass from the exterior building skin.

- Appropriate building colors shall be used to minimize heat gain into building structures.

- Roof surfaces shall be constructed of materials to minimize solar roof loads, unless a passive heat system is employed.

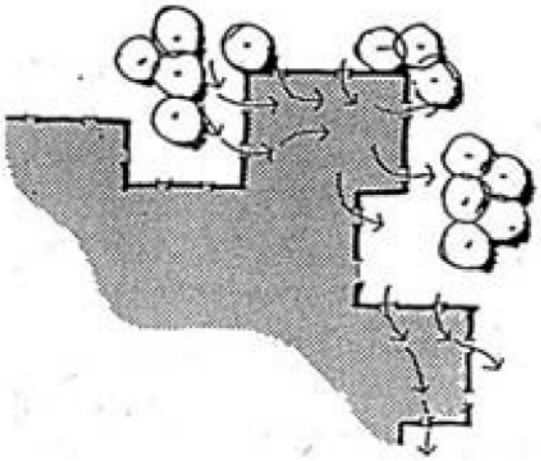
- Building facades shall incorporate overhangs, canopies or other methods to reduce heat gain.



Appropriate Building Colors Should be Used to Minimize Heat Gain

- The use of cogeneration or district heating and cooling facilities shall be considered.

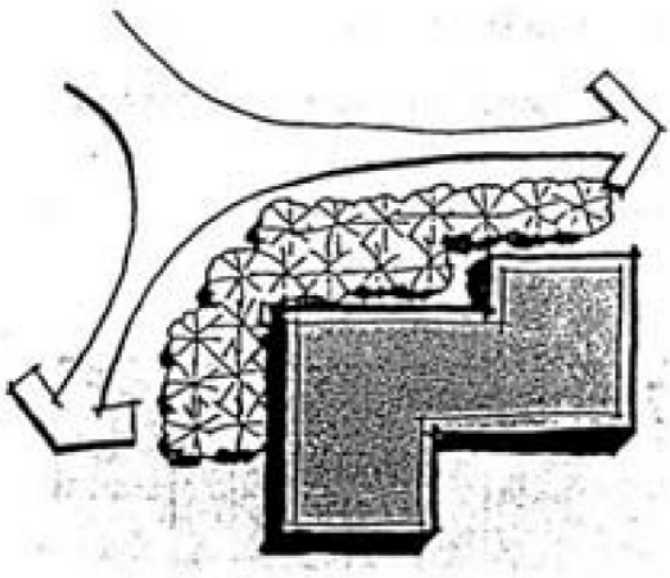
- Buildings shall not be solely dependent on mechanical systems for ventilation. Buildings should be designed to encourage natural ventilation.



Buildings Should be Designed to Encourage Natural Ventilation

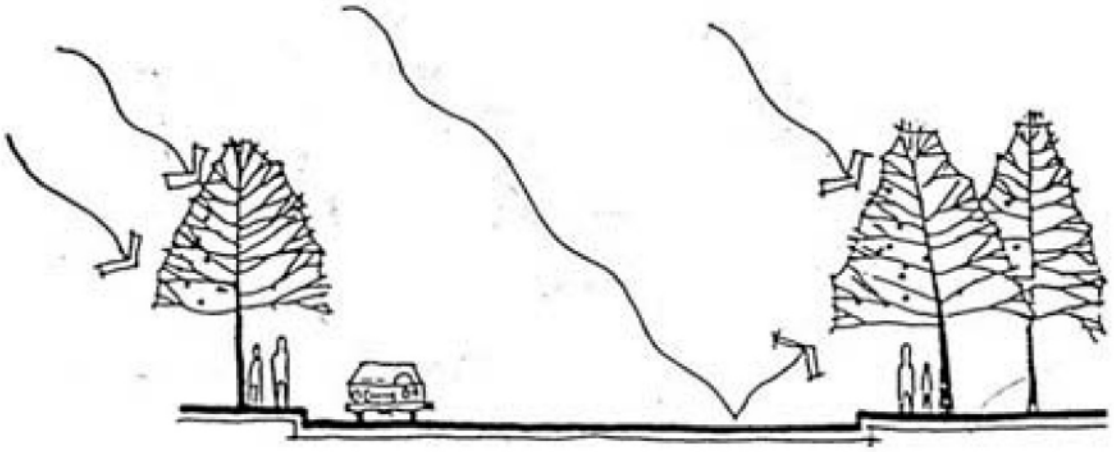
- When designing exterior plazas and courtyards, buildings shall be of appropriate height and clustered to provide wind and sun protection.

- Evergreen trees shall be placed on the north, northeast and northwest sides of buildings to provide protection from cold north winds.



Evergreen Trees Should be Placed on the North Side of Buildings to Shield North Winds

- The installation of "active" solar hot water and space heating systems shall be considered for buildings within the project; and, if installed rooftop solar energy collectors shall be designed as an integral part of the building form. The slopes necessary for the energy collector are important and possible determinants of architectural shapes. If rooftop solar energy collectors are brought into a building complex subsequent to construction, an appropriate add-on design that integrates the collectors to the building form shall be required.



Water Conservation

- Direct water conservation by the users can be achieved through the installation of pressure and flow reducing mechanisms within the water distribution system itself. The following are water saving devices which have been deemed most appropriate and feasible for installation to meet the water savings goal.
    - Low-flow shower head and faucets.
    - Low-flow toilets.
    - Cycle adjustment dishwashers.
    - Pressure regulators to limit household pressure to a maximum of 60 psi.
    - Hot water pipe insulation or instantaneous water heaters.
    - Automatic sprinkler systems for irrigation with timers with low precipitation rates and water sensors.
    - Standard water meters and house connections pipe sizes (no oversizing).

- Water shall be conserved wherever possible by using low maintenance drought tolerant plant material.

- Drip irrigation systems shall be encouraged, especially for tree plantings.

- Encourage the use of reclaimed water.

C. SITE SPECIFIC DESIGN CRITERIA

Conceptual Site Plans

Because each individual Atlas site is unique in character, access, topography, land use and overall visual and functional context, the following site specific urban design criteria have been prepared. The previous general design criteria shall still be utilized as they pertain to each site.

Conceptual site plans have been prepared to better illustrate the urban design concepts presented in this urban design element and are reproduced as part of the discussion for each of the sites. Figure 29 delineates existing and proposed development within the Atlas Specific Plan area. The building foot-prints shown on these plans to not indicate the final building form. Similarly, the pedestrian and open space systems indicate design concepts which will be delineated and further refined during the final design process. However, based on the criteria prepared, the conceptual site plans serve a very useful purpose in illustrating what the project could look like. To ensure that the basic urban design concepts depicted in the site plans are adhered to, the following concepts and criteria have been prepared.

Figure 29 Existing and Proposed Development (amended)

Figure 30 Deleted by amendment

Figure 31 Deleted by amendment

Figure 32 Deleted by amendment

Figure 33 Deleted by amendment

Figure 34 Deleted by amendment

Figure 35 Deleted by amendment

Figure 36 Deleted by amendment

Figure 37 Deleted by amendment

Figure 38 Deleted by amendment

Figure 39 Deleted by amendment

1. Hanalei Tower

The 17.80-acre site encompassing the existing Hanalei Hotel and future Hanalei Tower site is bounded by the San Diego River and Hotel Circle North. The site will be significantly modified by the proposed Via Las Cumbres interchange at I-8, resulting in a 1.91-acre site for the proposed Hanalei Tower development. The development of 157,500 square feet of office space in a single eight-story structure is proposed for this site. Structured parking for 485 cars is included beneath the building, with minimal convenience parking provided at the proposed pedestrian plaza area to the south of the structure. Figure 40 illustrates a schematic site plan for the Hanalei Tower site. Figure 41 illustrates the conceptual open space and view corridor criteria. Figure 42 illustrates the circulation and streetscape concepts and criteria. Figure 43 presents a cross section through the site. Figure 44 summarizes certain development criteria.

Access to the proposed development is provided from the reconfigured Hotel Circle North cul-de-sac, and from the proposed Levi-Cushman road. Pedestrian access is provided to the Hanalei Hotel site via an at-grade crossing at the Via Las Cumbres/Levi-Cushman Road intersection. The following design criteria shall be applied to the Hanalei Tower site.

Figure 40 Hanalei Tower Schematic Site Plan

Figure 41 Hanalei Tower Conceptual Open Space Site Plan

Figure 42 Hanalei Tower Circulation and Streetscape Site Plan

Figure 43 Hanalei Tower North/South Site Section

Figure 44 Hanalei Tower Development Criteria Summary

- A minimum of 75% of all required parking shall be provided in architecturally integrated structures. The remaining 25% may be in surface parking areas. These surface parking areas shall have a minimum of 10% of the interior area (excluding the landscape buffer adjacent to Hotel Circle North) landscaped, and shall be designed to screen parked vehicles from view from Hotel Circle North.

- Parking on roads of structures shall be restricted.

- An 8-foot wide sidewalk separated from the public street by a 6-foot wide landscaped parkway shall be installed along Hotel Circle North (proposed Levi-Cushman Road).

- A shuttle bus stop shall be located adjacent to the office tower lobby or within an expanded sidewalk paving area within the Hotel Circle North streetscape (proposed Levi-Cushman Road).

- Architectural materials shall complement existing structures in the vicinity.

- The office structures shall be sited to maximize views to the river and up and down the valley.

- The architectural form and mass of the structure shall be developed to act in concert with the architectural form and mass of structures on the Hanalei Hotel site to form an implied "gateway" along the proposed Levi-Cushman Road.

- A 30-foot wide landscaped buffer area except for driveways and/or drives shall be provided adjacent to the Interstate 8 off-ramp and adjacent to Hotel Circle North (proposed Levi-Cushman Road). Parking lots or structures shall not be permitted in these landscaped buffer areas except as described and illustrated in this Specific Plan.

2. Hanalei Hotel

Approximately one-half of the existing Hanalei Hotel site is currently developed with 448 hotel rooms and approximately 30,000 square feet of restaurant and banquet facilities. With the proposed placement of the I-8/Via Las Cumbres Interchange and the linkage to Levi-Cushman Road, the net acreage assigned for development at the Hanalei Hotel site is 13.39 acres.

The specific plan proposed expansion of the hotel functions with development of 202 additional guest rooms, approximately 34,000 square feet of additional banquet space, and a new "theme" entry and lobby area with access to Hotel Circle North and a new main entry located along the proposed Levi-Cushman Road. A new mid-rise hotel tower and lobby with mixed dining and retail functions is proposed at the new hotel entry.

Access to the site will be restricted to three locations, two serving the hotel functions and one serving the expanded banquet and convention facility. The main entry to the Hanalei Hotel has been relocated east along the proposed Levi-Cushman Road to align with a new entry lobby for the expanded facility. A separate entry for banquet and convention patrons is near the western border of the site.

The existing banquet facility will be expanded to the north with new meeting facilities. The orientation of these spaces is to the river corridor which incorporates a shared 10-foot wide pedestrian/bicycle path and river-related amenities adjacent to the river which may be located within a 30- to 50-foot buffer. Low-rise portions of the new meeting facilities are partially located in the 150-foot design sensitive zone adjacent to the river, with pedestrian linkages to the river walk. Additional landscape setback area extends along the river, providing a landscaped link with the hotel-tower plaza located one-story above covered parking.

The new mid-rise hotel tower and lobby arcade with mixed dining and retail functions proposed at the new hotel entry would link directly with this pedestrian plaza. Pedestrian connections from the plaza to the riverwalk and design sensitive zone are provided from this plaza. Project open space at the expanded hotel facility is integrated with the courtyards and pools of the existing hotel complex, providing a continuous loop of pedestrian circulation and activity throughout the hotel site.

Structured parking is provided below the new mid-rise hotel complex and in separate structures adjacent to this complex and adjacent to the banquet and meeting facilities to the west. Access to the parking is apportioned in several locations to serve the various components of this project. 1,120 total parking spaces are provided at the Hanalei Hotel site, with over 75% of the total provided in structured facilities.

Figure 45 illustrates a schematic site plan for the Hanalei Hotel site. Figures 46 illustrates the conceptual open space and view corridor criteria. Figure 47 illustrates the circulation and streetscape concepts and criteria. Figures 48 presents a cross-section through the site. Figure 49 summarizes certain development criteria.

The following design criteria shall be applied to the Hanalei Hotel site:

- In order to provide visual openness, the 150-foot “Design Sensitive Zone” criteria for development adjacent to the river corridor as identified in the San Diego River Wetlands Management Plan shall be adhered to except as otherwise defined in this Specific Plan. In addition to other criteria, the “Design Sensitive Zone” criteria establishes a maximum building height of 42 feet within this 150-foot area. Buildings should step back from the river corridor. Public, recreational and pedestrian-oriented uses are encouraged.

Figure 45 Hanalei Hotel Schematic Site Plan

Figure 46 Hanalei Hotel Conceptual Open Space Site Plan

Figure 47 Hanalei Hotel Circulation and Streetscape Site Plan

Figure 48 Hanalei Hotel North/South Site Section

Figure 49 Hanalei Hotel Development Criteria Summary

- Vehicular use adjacent to the river corridor within the 150-foot "Design Sensitive Zone" shall be limited to the required fire access, service carts, and the two service locations as described and illustrated in this Specific Plan. These service locations include: an access road from the westerly end of Hotel Circle North to service docks located on the north side of the proposed meeting center; and, an access road from the easterly end of Hotel Circle North to service facilities on the northeast end of the proposed new hotel tower complex. Limited vehicular use of the service/fire lane between the two service areas shall be controlled by the use of removable bollards or other means approved by the City Fire Marshall.

- A minimum of 75% of all required parking shall be provided in architecturally integrated structures. The remaining 25% may be in surface parking areas. These surface parking areas shall have a minimum of 10% of the interior area (excluding the landscape buffer adjacent to Hotel Circle North) landscaped, and shall be designed to screen parked vehicles from view from Hotel Circle North.

- Parking on roofs of structures shall be restricted. For the site, a minimum of 30% of the parking structure roofs shall be reserved for recreational facilities or screened from view by the use of trellis or other screening structures. A minimum of 10% of each parking structure roof shall be reserved for recreational facilities or screened from view by the use of trellis or other screening structures or landscaping.

- A 30-foot wide landscaped buffer area except for driveways and/or drives shall be provided adjacent to Hotel Circle North. Parking lots or structures shall not be permitted in this landscaped buffer area.

- An 8-foot wide sidewalk separated from the public street by a 6-foot wide landscaped parkway shall be provided along Hotel Circle North.

- A 30- to 50-foot buffer shall be provided between the wetland and adjacent development. A paved, 10-foot wide shared pedestrian/bicycle pathway shall be provided adjacent to the river and may be within the buffer area.

- An intra-valley shuttle stop shall be located adjacent to the hotel lobby and banquet facility, or within an expanded sidewalk paving section within the Hotel Circle North streetscape.

- The pedestrian walkway along the river shall continue to the east to Via Las Cumbres to connect with the proposed walkways within the Levi-Cushman Specific Plan Area.

- Architectural materials shall complement existing structures in the vicinity.

- The plant material utilized on the site, especially in areas adjacent to the river corridor, shall be riparian in nature to better introduce the river element into the project.

- A theme entry shall be located near or at the main hotel lobby.

- The architectural form and mass of the easterly parking structure shall be developed to act in concert with the architectural form and mass of the Hanalei Tower structure to form an implied "gateway" along the proposed Levi-Cushman Road.

- Development shall not extend into the area currently designated within the 100-year floodway until upstream improvements are constructed or are under construction, or until a new pilot channel is constructed or is under construction.

3. Mission Grove Office Park

Since this site has been recently built out to accommodate office use, there are relatively few proposed improvements for this site. The landscaping is quite pleasant aesthetically and the site will require only minor internal pedestrian circulation improvements. Existing exterior materials emphasize wood shingles and wood trims. Figure 50 illustrates the proposed site improvements for the Mission Grove Office Park site. Figure 51 illustrates the open space and view corridor criteria. Figure 52 illustrates the circulation concept and criteria. Figure 53 presents a cross-section through the site. Figure 54 summarizes certain development criteria.

The following design criteria shall be applied to the Mission Grove Office Park site:

Criteria

- A minimum of 75% of all required parking shall be provide in architecturally integrated structures. The remaining 25% may be in surface parking areas. These surface parking areas shall have a minimum of 10% of the interior area (excluding the landscape buffer adjacent to Hotel Circle North) landscaped, and shall be designed to screen parked vehicles from view from Hotel Circle North.

- Parking on roofs of structures shall be restricted. A minimum of 30% of the parking structure roof shall be reserved for additional recreational facilities or screened from view by the use of trellis or other screening structures.

- A sidewalk and parkway shall be installed along Hotel Circle South. Physical constraints on the site, such as the existing grades and the proximity of existing stairs, signage and walks to the public street, will not permit the construction of the standard sidewalk and parkway for the Mission Grove site. Therefore, a 5-foot wide sidewalk separated from the public street by a 4-foot wide landscaped parkway shall be provided to preclude the need to remove, demolish or relocate existing site improvements. A 30-inch high stone veneered

- wall will be constructed along the interior edge of the sidewalk to accommodate existing grades.

- A new 6-foot wide sidewalk shall be installed along the driveway to the rear of the site linking the rear building to the area-wide Hotel Circle pedestrian system.

Figure 50 Mission Grove Office Park Schematic Site Plan

Figure 51 Mission Grove Office Park Conceptual Open Space Site Plan

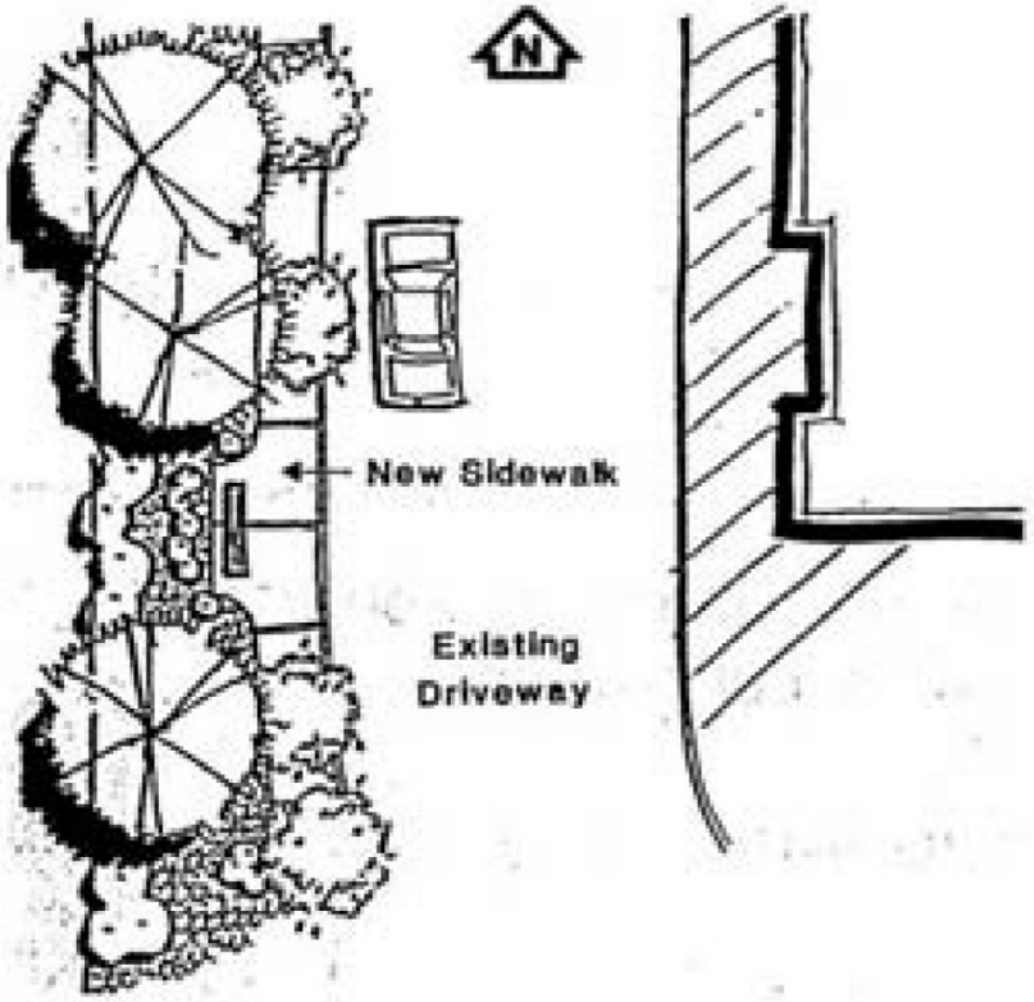
Figure 52 Mission Grove Office Park Circulation and Streetscape Site Plan

Figure 53 Mission Grove North/South Site Section

Figure 54 Mission Grove Office Park Development Criteria Summary

- An intra-valley shuttle stop shall be located on-site or within an expanded sidewalk paving section within the Hotel Circle South streetscape.

- A 26-foot wide landscaped buffer area except for driveways and/or drives shall be provided adjacent to Hotel Circle South. Parking lots or structures shall not be permitted in this landscaped buffer area, except for existing structures.



Add Sidewalk at Edge of Driveway

4. King's Inn

The site is presently entirely hotel and related uses. The Atlas Specific Plan proposes no new structures or uses, only site improvements and landscaping. The only improvements made will be for the purpose of better integrating the site to the proposed streetscape improvements of Hotel Circle South and the other Atlas Specific Plan area properties. Figure 55 illustrates the proposed site

improvements for the King's Inn site. Figure 56 illustrates the open space criteria. Figure 57 illustrates the circulation concept and criteria. Figure 58 presents a cross-section through the site. Figure 59 summarizes certain development criteria. The following design criteria shall be applied to the King's Inn site:

Criteria

- An 8-foot wide sidewalk shall be installed along Hotel Circle South. The sidewalk shall be separated from the public street by a 6-foot wide landscaped parkway which will be planted with the appropriate street trees.

- A pedestrian link or connection shall be made between the lobby of the hotel and the sidewalk within the Hotel Circle South streetscape. Where this pedestrian linkage must cross a parking area it shall be constructed of a paving material which is consistent with the pedestrian sidewalks or hotel entry paving to provide a definite contrast to the parking area paving.

- The parking area shall be screened from Hotel Circle South by utilizing berms and plant material. However, care shall be taken to not screen the hotel from vehicular view.

- A theme entry shall be provided near the main lobby entrance. The theme entry shall consist of enhanced paving at the entry drive and theme plantings.

- Plant material, especially trees, shall be added to the existing parking areas. This includes tree wells located between adjacent parking stalls (see conceptual plan). Surface parking areas shall have a minimum of 10% of the interior area (excluding the landscape buffer adjacent to Hotel Circle South) landscaped, and shall be designed to screen parked vehicles from view from Hotel Circle South.

- New plant material shall be added to the slope at the rear of the site.

- Generally, new plant material should be added to the entire site to better integrate with the streetscape theme and comply with the previous planting guidelines.

- An intra-valley shuttle stop shall be located near the theme entry at the lobby or within an expanded sidewalk paving section within the Hotel Circle South streetscape.

- A 30-foot wide landscaped buffer area except for driveways and/or drives shall be provided adjacent to Hotel Circle South. Parking lots or structures shall not be permitted in this landscaped buffer area, except as described and illustrated in this Specific Plan.

Figure 55 Kings Inn Schematic Site Plan

Figure 56 Kings Inn Conceptual Open Space Site Plan

Figure 57 Kings Inn Circulation and Streetscape Site Plan

Figure 58 Kings Inn North/South Site Section

Figure 59 Kings Inn Development Criteria Summary

Figure 60 Deleted by amendment

Figure 61 Deleted by amendment

Figure 62 Deleted by amendment

Figure 63 Deleted by amendment

Figure 64 Deleted by amendment

VI. TRANSPORTATION ELEMENT

NOTE: The originally adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study greatly shaped the proposed development plan, intensity, configuration, off-site transportation improvements, and implementation phasing. The circa 1988 traffic study conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment. Thus, the traffic study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only. An updated traffic impact analysis and other relevant studies based on current data, requirements and guidance shall be prepared as required in conjunction with any future development proposal within the Specific Plan area.

A. OBJECTIVES

(See note at beginning of this section [VI. Transportation Element]).
The purpose of this transportation element is to outline the circulation requirements of the specific plan. The traffic study for the Atlas Specific Plan was prepared by Linscott, Law & Greenspan, consulting engineers. The study evaluated the Mission Valley circulation system with respect to specific plan implementation and community development. This element describes the existing circulation system, the proposed circulation system and its relationship to the Mission Valley Community Plan, and the improvements necessary to implement the proposed circulation system. Alternative available modes of transportation and the integration of these modes with the specific plan are also addressed.

The traffic study conducted by Linscott, Law and Greenspan was based on a computerized travel forecast conducted by the City of San Diego. The assumptions utilized in the travel forecast were approved by the City's Transportation and Traffic Engineering Division prior to conduct of the study and the actual computer programming was done by the City. The traffic study was structured in such a way as to make it possible to evaluate the traffic/circulation effects of development of the specific plan area under a cumulative development scenario which assumed buildout of the Mission Valley area in accordance with the community plan plus implementation of the Levi-Cushman and Atlas Specific Plans.

B. EXISTING CONDITIONS

(See note at beginning of this section [VI. Transportation Element]).

Located in Mission Valley in the central San Diego metropolitan area, the Atlas Specific Plan area lies within the heart of the San Diego regional transportation network. The area is served by a comprehensive network of regional and local highways and streets, planned public transit, and bicycle and pedestrian systems. The existing street system is illustrated in Figure 65.

For the purposes of the traffic study conducted, it was assumed that the Atlas Specific Plan is bordered by the future extension of Camino de la Reina to the north, State Route 163 to the east, and Colusa/Taylor Street to the west. Regional access to this portion of Mission Valley is provided via the Mission Valley (Interstate 8) and Cabrillo (State Route 163) Freeways. Indirect regional freeway access is provided via three major travel corridors; San Diego (Interstate 5), Jacob-Dekema (Interstate 805) and Escondido (Interstate 15) Freeways. Arterial streets and other surface streets servicing the study area include Hotel Circle North and South, Friars Road, Fashion Valley Road and Camino de la Reina.

Freeway System

I-8 is the major east-west facility connecting downtown San Diego with the residential areas to the east. This freeway carries downtown commuter traffic during the peak hours, and regional traffic with origins and/or destinations in Mission Valley. Traffic volumes remain relatively heavy throughout the day, particularly during commuter peak hours. Figure 66 summarizes existing freeway volumes in the vicinity of the specific plan areas. Freeway volume information was obtained from CalTrans by Linscott, Law and Greenspan.

The basic freeway access system to I-8 within the study area, consists of the Hotel Circle North and Hotel Circle South frontage roads on either side of the freeway with two, low capacity, button-hook type ramps providing east and westbound access to the mainline freeway. These button-hook ramps are located in the vicinity of the Mission Valley Inn (later removed from the Specific Plan area by amendment, but included in the traffic study conducted) and the existing Stardust Hotel and are too short to allow adequate stacking room during peak traffic periods. The eastbound I-8 button-hook ramp near the Mission Valley Inn immediately turns into the connector ramps for eastbound I-8 to northbound and southbound SR-163. Thus, traffic on this button-hook ramp during the heavy eastbound PM peak hour is forced into heavy traffic. This heavy traffic and lack of weaving room make the merge onto the freeway very difficult from the button-hook ramps.

In the immediate vicinity of the Presidio overcrossing, I-8 interchanges with Hotel Circle North, South and Taylor Street presently existing. The Hotel Circle ramps are very congested due to the existing high volumes and lack of stacking room created by the button-hook type design.

Caltrans is currently preparing a Project Report on the feasibility of increased freeway access/egress along I-8 between SR-163 and I-5. This feasibility study will address the present weaving problem on I-8 at the eastbound Taylor Street off-ramp, the possible modifications to existing ramps for increased carrying capacity and the potential for new freeway interchanges.

Figure 65 Existing Vehicular Circulation (amended)

Figure 66 Atlas Hotels Existing (1985) Freeway Volumes (amended)

Street System

Hotel Circle North and South form a loop frontage road system parallel to I-8 which provides access to the freeway system and to all adjacent businesses. The typical cross-section for Hotel Circle North consists of three lanes, one in each direction, with, in most cases, a two-way or exclusive left-turn lane. Parking is generally allowed on the developed side of the street throughout the segment. According to the community plan, such on-street parking will no longer be permitted as the community plan area is built out. The typical street cross-section for Hotel Circle South consists of two lanes with parking along the south sides of the street.

Figure 67 summarizes the street traffic volumes in the vicinity of the specific plan area. Street volume information shown on Figure 67 represents data obtained from the City of San Diego and data gathered by Linscott, Law and Greenspan during actual counts in 1986. Based on existing traffic volumes, the majority of the streets in the study area are presently carrying volumes in excess of their respective maximum desirable Average Daily Traffic (ADT).

Friars Road is a major 4-lane facility which generally lies parallel to I-8. Friars Road has few intersections and limited driveway access, and traffic flow is smooth most of the time. In that respect, Friars Road could carry a portion of the east-west commuter traffic when I-8 congestion occurs. Parking is allowed along the north side of Friars Road in the vicinity of the specific plan area.

Fashion Valley Road links Hotel Circle North with Friars Road. This four-lane collector road forms the western boundary of the Fashion Valley Shopping Center and the Town and Country Hotel (later removed from the Specific Plan area by amendment, but included in the traffic study conducted). Traffic signals controls are located at both intersections with Hotel Circle North and Friars Road. Parking is prohibited throughout the length of the segment.

Camino de la Reina provides a link between the Mission Valley and Fashion Valley Shopping Centers under SR-163. East of SR-163 Camino de la Reina functions as a frontage road to westbound I-8. West of SR-163, Camino de la Reina presently provides a connection to the Hotel Circle street system. Generally, a three-lane street section prevails throughout its length.

As discussed in the land use element of this specific plan, several of the sites within the specific plan area are currently developed (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted). Existing development on these properties generates an estimated 18,120 daily trips with 1,320 trips occurring during the AM peak-hour and 1,810 trips during the PM peak-hour.

Intersection Peak-Hours Service Levels

Existing AM and PM peak-hour intersection conditions were evaluated at 11 key intersections. They are as follows:

- Hotel Circle North at
    - Presidio/Taylor Street/Westbound I-8 ramps

Figure 67 Atlas Hotels Existing (1985) Street Volumes (amended)

  - Westbound I-8 ramp
  - Fashion Valley Road
  - Camino de la Reina

- Hotel Circle South at
  - Bachman Canyon Road
  - Eastbound I-8 ramps
  - Presidio Overcrossing
  - Taylor Street, I-8 ramps

- Camino de la Reina at Avenida del Rio

- Friars Road at
  - Fashion Valley Road
  - Ulric Street/southbound SR-163 ramps

The traffic count information used in this analysis was collected by Linscott, Law & Greenspan, Inc. during February 1986. During the AM peak-hour all of the intersections operate at Level of Service (LOS) B or better. LOS D is the lowest acceptable service level for urban intersections. During the PM peak-hour, one intersection operates at an unacceptable level or LOS E. The location is Hotel Circle North/Camino de la Reina/Hotel Circle South.

Future Planned Improvements

(See note at beginning of this section [VI. Transportation Element]).

Recognizing that many major streets in Mission Valley are not built to major street standards and now experience congestion (especially during peak hours), the Mission Valley Community Plan has designated certain improvements to accommodate existing and future traffic. Hotel Circle North is designated to be widened to a four-lane collector street, narrowing to three lanes near Via Las Cumbres, and is proposed to cul-de-sac just east of Via Las Cumbres. Hotel Circle South and the undercrossing to Hotel Circle North are designated to be improved to four-lane collectors between Camino de la Reina and the eastbound I-8 ramps. Between Camino de la Reina and Colusa Street, Hotel Circle South is designated to be three lanes, and widened to four lanes at intersections.

According to the community plan, Friars Road, in the vicinity of the specific plan area, is planned to be striped as a six-lane major street. Fashion Valley Road, which links Hotel Circle North with Friars Road, will have an additional two-way left-turn lane and will widen to a four-lane major street. Camino de la Reina will ultimately be constructed as a four-lane major street and will be realigned parallel to Friars Road, between Hotel Circle North and Via Las Cumbres. According to the Mission Valley Community Plan, Via Las Cumbres will be a four-lane major street between Friars Road and Hotel Circle North.

The Linscott, Law and Greenspan study also evaluated the effectiveness of various regional improvements. These include construction of a new interchange with I-8 at Via Las Cumbres. The

results of this analysis are summarized later in this section under the proposed circulation system discussion.

A major development project located within the area of influence of the Atlas Specific Plan is the Chevron Land-Levi/Cushman project consisting of mixed use residential/commercial land uses. The approved development is expected to generate traffic volumes consistent with the Mission Valley Community Plan. Based on this information, the travel forecasts for Mission Valley depicting the community plan traffic volumes also reflect the Levi-Cushman proposal. Circulation networks analyzed in the traffic study assume ultimate development of the circulation network as shown in the Mission Valley Community Plan which has been approved by the San Diego City Council. Other potential development projects located within the area of influence of the Atlas Specific Plan include the Linda Vista Plan Amendment and the Warner Ranch project. The traffic study did not include the Linda Vista Plan Amendment as it was not a known project at the time the Atlas travel forecasts were prepared. The potential impacts of this project to the Atlas Specific Plan would not be expected to substantially alter the travel forecasts since the travel forecasts are rounded per City guidelines. Similarly, the potential impacts of the Warner Ranch Project would not be expected to substantially alter the travel forecasts due to the rounding of the forecasts.

C. RELATIONSHIP TO MISSION VALLEY COMMUNITY PLAN

(See note at beginning of this section [VI. Transportation Element]).

The purpose of this portion of the Transportation Element is to briefly compare traffic generated by the Atlas Specific Plan with that anticipated for the specific plan area by the Mission Valley Community Plan.

The Linscott, Law and Greenspan traffic study evaluated the effects of development within the specific plan area on 26 roadway segments under the cumulative development scenario which assumed buildout of the Mission Valley area in accordance with the community plan plus the Levi-Cushman and Atlas Specific Plans. The future traffic volume forecasts and the volume to capacity ratios identified in Tables 10 and 11 and shown in Figure 68 include the previously proposed 450,000 s.f. of large office on the Evelyn Terrace site, 200 more hotel rooms and 10,000 s.f. of office at the Town and Country site (later removed from the Specific Plan area by amendment, but included in the traffic study conducted), 50 more hotel rooms at the Hanalei Hotel site, 150 more hotel rooms at the Mission Valley Inn site (later removed from the Specific Plan area by amendment, but included in the traffic study conducted), and 94,200 s.f. of office and 5 residential units at the Atlas Hill site. The impacts identified in the analysis are therefore overstated as there are 12,920 additional trips per day added to the street system analysis than currently proposed in the Atlas Specific Plan.

Table 10
Future Traffic Volume Projection Comparison,
Atlas Specific Plan, Mission Valley, San Diego
(See note at beginning of this section [VI. Transportation Element]).

Location	Roadway Classification	Maximum ADT (1000's)	A* Volume (1000's)	V/C Ratio	B* Volume (1000's)	V/C Ratio
Friars Road:						
W/O Colusa Street	4-lane major	25	22	0.88	18	0.72
E/O Colusa Street	6-lane major	40	28	0.70	28	0.70
E/O Via Las Cumbres	6-lane major	40	35	0.88	22	0.55
E/O Fashion Valley Rd.	6-lane major	40	35	0.88	45	1.13
W/O State Hwy 163	6-lane primary	50	60	1.20	65	1.30
Camino De La Reina:						
W/O Colusa Street	4-lane major	25	14	0.56	12	0.48
E/O Colusa Street	4-lane major	25	25	1.00	20	0.80
E/O Via Las Cumbres	4-lane major	25	25	1.00	22	0.88
E/O Fashion Valley Rd.	4-lane major	25	25	1.00	20	0.80
Hotel Circle North:						
E/O Colusa Street	4-lane collector	10	12	1.20	8	0.80
W/O Via Las Cumbres	4-lane collector	10	12	1.20	14	1.40
E/O Via Las Cumbres	3-lane collector	10	8	0.80	5	0.50
W/O Fashion Valley Rd.	4-lane collector	10	16	1.60	5	0.50
E/O Fashion Valley Rd.	4-lane collector	10	12	1.20	12	1.20
S/O Camino de la Reina	4-lane major	25	18	0.72	18	0.72
Hotel Circle South:						
W/O Taylor Street	3-lane collector	10	10	1.00	8	0.80
W/O Presidio O/C	4-lane collector	10	16	1.60	7	0.70
E/O Colusa Street	4-lane collector	10	10	1.00	5	0.50
W/O Via Las Cumbres	3-lane collector	10	12	1.20	16	1.60
W/O Mission Valley Inn	4-lane collector	10	18	1.80	12	1.20
S/O Hotel Circle North	4-lane collector	10	20	2.00	20	2.00
Colusa Street:						
S/O Friars Road	4-lane collector	10	12	1.20	10	1.00
Via Las Cumbres:						
N/O Camino de la Reina	4-lane major	25	14	0.56	12	0.48
S/O Camino de la Reina	4-lane major	25	24	0.96	28	1.12
Fashion Valley Road:						
N/O Camino de la Reina	4-lane major	25	18	0.72	20	0.80
S/O Camino de la Reina	4-lane major	25	18	0.72	28	1.12
State Highway 163:						
N/O Friars Road			180		160	
S/O Friars Road			180		180	
S/O Interstate 8			180		180	
Interstate 8:						
W/O Colusa Street			160		180	
W/O Via Las Cumbres			160		180	

Location	Roadway Classification	Maximum ADT (1000's)	A* Volume (1000's)	V/C Ratio	B* Volume (1000's)	V/C Ratio
E/O Via Las Cumbres			160		180	
E/O Fashion Valley Rd.			160		200	
E/O State Hwy 163			180		220	

Note:
A* Community Plan Volumes (1984 Travel Forecast), and buildout of Levi-Cushman.
B* Community Plan plus Atlas Volumes (1986 Travel Forecast). Includes existing community plan volumes plus build-out of Atlas and Levi-Cushman specific Plans; also includes certain additional road network changes proposed by Levi-Cushman Specific Plan including improvements to Fashion Valley road interchange. Since this information was compiled, the Atlas traffic volumes have been reduced to bring the Atlas Specific Plan into conformity with the Mission Valley Community Plan.

Table 11
Future Daily Traffic Volume Projections Comparison with Improvements, Atlas Specific Plan, Mission Valley, San Diego
(See Note at beginning of this section [VI. Transportation Element]).

Location	Roadway Classification	Maximum ADT (1000's)	A* Volume (1000's)	V/C Ratio	B* Volume (1000's)	V/C Ratio
Friars Road:						
W/O Colusa Street	4-lane major	25	22	0.88	18	0.72
E/O Colusa Street	6-lane major	40	28	0.70	28	0.70
E/O Via Las Cumbras	6-lane major	40	35	0.88	22	0.35
E/O Fashion Valley Road	6-lane major	40	35	.088	45	1.13
W/O State Highway 163	6-lane primary	50	60	1.20	65	1.30
Camino de la Reina:						
W/O Colusa Street	4-lane major	25	14	0.36	12	0.48
E/O Colusa Street	4-lane major	25	25	1.00	20	0.80
E/O Via Las Cumbras	4-lane major	25	25	1.00	22	0.88
E/O Fashion Valley Road	4-lane major	25	25	1.00	20	0.80
Hotel Circle North:						
E/O Colusa Street	4-lane collector	10	12	1.20	8	0.80
W/O Via Las Cumbras	4-lane collector	10	12	1.20	14	1.40
E/O Via Las Cumbras	4-lane collector	10	8	0.80	5	0.50
W/O Fashion Valley Road	4-lane major (med)	10	16	1.60	5	0.50
E/O Fashion Valley Road	4-lane collector	10	12	1.20	12	1.20
S/O Camino de la Reina	4-lane major	25	18	0.72	18	0.72
Hotel Circle South:						
W/O Taylor Street	3-lane collector	10	10	1.00	10	1.00
W/O Presidio O/C	4-lane collector	10	16	1.60	7	0.70
E/O Colusa Street	4-lane collector	10	10	1.00	5	0.30
W/O Via Las Cumbras	3-lane collector	10	12	0.60	16	1.60
W/O Mission Valley Inn	4-lane collector	10	18	1.80	12	1.20
S/O Hotel Circle North	4-lane collector	10	20	1.00	20	1.00
Colusa Street:						
S/O Friars Road	4-lane collector	10	12	1.20	10	1.00

Location	Roadway Classification	Maximum ADT (1000's)	A* Volume (1000's)	V/C Ratio	B* Volume (1000's)	V/C Ratio
Via Las Cumbres:						
N/O Camino de la Reina	4-lane major	25	14	0.56	12	0.48
S/O Camino de la Reina	4-lane major	25	24	0.96	28	1.12
Fashion Valley Road:						
N/O Camino de la Reina	4-lane major	25	18	0.72	20	0.80
S/O Camino de la Reina	4-lane major	25	18	0.72	28	1.12
State Highway 163:						
N/O Friars Road			180		160	
S/O Friars Road			180		180	
S/O Interstate 8			180		180	
Interstate 8:						
W/O Colusa Street			160		180	
W/O Via Las Cumbras			160		180	
E/O Via Las Cumbras			160		180	
E/O Fashion Valley Road			160		200	
E/O State Highway 163			200		220	

Note:

A* Includes existing Community Plan volumes and Levi-Cushman buildout. Improvements include Community Plan road network, Community Plan buildout and three additional improvements.

a. Construct Hotel Circle North to a modified 4-lane major street section between Fashion Valley Road and the existing westbound I-8 ramps.
b. Construct Hotel Circle South to a modified 4-lane major street section west of Presidio overcrossing.
c. Widen Colusa Street south of Friars Road to 4-lane major collector standards.

B* Includes existing Community Plan volumes and Levi-Cushman buildout, and Atlas proposed buildout. Since this information was compiled, the Atlas traffic volumes have been reduced to bring the Atlas Specific Plan into conformity with the Mission Valley Community Plan. Improvements include Community Plan road network, Community Plan buildout, and the following Atlas Specific Plan proposals:

a. Construct Hotel Circle North to a modified 4-lane major street section between Fashion Valley Road and the existing westbound I-8 ramps.
b. Construct Hotel Circle South to a modified 4-lane major street section west of Presidio overcrossing.
c. Specific Street improvements associated with the Community Plan identified in Table 13 (numbers 4, 5, 8A, 8B, 9, 10A, 10B, 11, 13, 14). Also, the appropriate street improvements identified in Table 14, which were based on cumulative development and interim street capacity.
d. Incorporate the potential need for localized intersection improvements into the site planning process.

The results of the roadway segment analysis are summarized in Table 10. The volume to capacity (V/C) ratios shown in Table 10 are based on a level of service (LOS) C for the roadways analyzed. A V/C ratio of 1.00 would therefore mean that the particular roadway is operating at capacity at LOS C. A V/C ratio of greater than 1.00 indicates that the roadway segment is operating at less than LOS C. As a practical matter, the City has also considered LOS D, one service level lower, to be acceptable for roadways or frontage roads adjacent to freeways. The average daily traffic (ADT) for LOS D is approximately thirty percent greater than that at LOS C (1.30). As shown in Table 10, under the Mission Valley Community Plan scenario six roadway segments would have V/C ratios which exceed the maximum ADT for LOS C or LOS D for roadways adjacent to freeways. These segments are:

Figure 68 Atlas Hotels Traffic Volume Forecast (amended)

- Friars Road west of SR-163
- Hotel Circle North west of Fashion Valley Road
- Hotel Circle South west of the Presidio overcrossing
- Hotel Circle South west of the Mission Valley Inn
- Hotel Circle South south of Hotel Circle North
- Colusa Street south of Friars Road

The section of Table 10 which shows future traffic volumes based on Mission Valley Community Plan plus Atlas volumes (at 32% over that allowed by the Mission Valley Community Plan) indicates that four additional roadway segments would have V/C ratios which exceed the maximum ADT. These segments are:

- Friars Road east of Fashion Valley Road
- Friars Road west of SR-163
- Hotel Circle South west of Via Las Cumbres
- Hotel Circle North west of Via Las Cumbres

Since this information was compiled, the Atlas traffic volumes have been reduced to bring the Atlas Specific Plan into conformity with the Mission Valley Community Plan (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted).

Figure 68 illustrates rounded horizon year traffic volumes based on the Mission Valley Community Plan plus Atlas Specific Plan volumes prior to reductions in the Atlas traffic volumes to bring the Atlas Specific Plan into conformity with the Mission Valley Community Plan.

Traffic Generation

Another issue of concern regarding the relationship of the Atlas Specific Plan to the Mission Valley Community Plan involves the number of trips expected to be generated by development within the specific plan area (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted). As discussed in the Land Use Element and shown in Table 2, the Atlas Specific Plan would generate approximately 30,870 daily trips utilizing the City standard trip generation rates. Utilizing the development intensity district (DID) methodology outlined in the Mission Valley Community Plan, approximately 29,965 trips would be allocated to the specific plan area. The Atlas Specific Plan therefore differs from the Mission Valley Community Plan in terms of trip generation. The increase in daily trips is 3% percent greater than that anticipated under the Mission Valley Community Plan. However, based on a 2% adjustment in trip generation for the LRT facilities and a 1% adjustment in trip generation for the intra-valley shuttle, the Atlas Specific Plan traffic generation is approximately the same as that anticipated in the Mission Valley Community Plan. The 2% ADT adjustment for the LRT will only be applied after construction of the LRT facilities begins into Mission Valley, as allowed in previously approved projects.

A variety of use factors may also combine to reduce traffic generation within the study area. For the Atlas Specific Plan, these factors include use of the proposed Mission Valley LRT and an intra-

valley shuttle system serving the Atlas Specific Plan sites. MTDB is currently in the process of deciding on a preferred alignment for the LRT in the Mission Valley area. As discussed in the transportation element, two LRT stations are proposed in the vicinity of the specific plan area, one within the Levi-Cushman Specific Plan area and another adjacent to the Town and Country site (later removed from the Specific Plan area by amendment, but included in the traffic study conducted).

Atlas Hotels, Inc. currently offers a variety of shuttle services to its hotel guests. Atlas Hotels currently contracts with a private airport shuttle service to provide airport transportation for hotel guests. That existing service transports from 2,000-6,000 passengers monthly from the Town and Country, Hanalei Hotel, Mission Valley Inn, and Kings Inn sites to and from the airport (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted). In addition to the Atlas service, three other firms also offer jitney service from Mission Valley to the airport. Atlas Hotels, Inc. also contracts with several private tourist consultant firms (Cal Leisure Consultants, Enjoy Cal Enterprises) to provide transportation to local tourist attractions (such as Sea World, San Diego Zoo, etc.) for hotel guests. Ridership for this transit service fluctuates seasonally.

Specific Plan area property owners will fund and operate an intra-valley shuttle to transport hotel guests, office employees and members of the general public between the Atlas Specific Plan sites, and the San Diego Lindbergh Field on a frequent schedule basis.

D. PROPOSED CIRCULATION SYSTEM

(See note at beginning of this section [VI. Transportation Element]).

The specific plan proposes a balanced transportation network accommodating automobile, mass transit, bicycle and pedestrian circulation systems. With improvements delineated under the cumulative development scenario included in the specific plan, levels of service as anticipated in the community plan will be maintained on roadways in the vicinity of the specific plan area. Figure 69 illustrates the recommended street system for the Hotel Circle area based upon buildout of the area under the Mission Valley Community Plan, plus the Atlas Specific Plan (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted).

This system incorporates the recommended roadway reclassifications and provides an increase in the freeway access/egress over existing conditions. Some of these projects will be funded by development impact fees (DIF). Others will be the responsibility of subdividers or developers. Phasing plan conditions or thresholds may require Atlas to advance costs of construction for projects or portions of projects which are not the responsibility of Atlas. If so, Atlas may request the formation of one or more City Council authorized reimbursement districts for purposes of recovering its off-site costs . In general, the recommended circulation system consists of the following items (the Mission Valley Inn site and the Town and Country site were later removed from the Specific Plan area by amendment, but were included in the traffic study conducted):

Figure 69 Recommended Circulation System (amended)

- Construct Hotel Circle North to a modified 4-lane major street section between Fashion Valley Road and the existing westbound I-8 ramps.

Table 12
Transportation Improvements Associated with Development of Western Mission Valley Per the Mission Valley Community Plan, Mission Valley, San Diego
(See Note at beginning of this section [VI. Transportation Element]).

Group [1]	Sector [1]	Project [1]	Improvement
A	-	4	Restripe Hotel Circle South, to provide three travel lanes. Prohibit parking from eastbound ramps at Mission Valley Inn to Camino de la Reina. Install Class II bike lanes.
A	-	5	Provide increased intersection capacity and signalization at both the eastbound and westbound Hotel Circle freeway ramps.
C	3	8A	Remove parking and restripe Hotel Circle South for three lanes between the I-8/Presidio overcrossing and the eastbound ramps at the Mission Valley Inn.
C	3	8B	Widen Hotel Circle South, between eastbound ramps at Mission Valley Inn and Camino de la Reina to four lanes. Install Class II bike lanes.
C	3	9	Widen Hotel Circle South, between the Presidio ramps and the I-8 Presidio overcrossing. Install Class II bike lanes.
D	4	10A	Widen Hotel Circle North to four lanes between I-8 ramps and Camino de la Reina
D	4	10B	Construct Camino de la Reina to four lanes between Fashion Valley Road and SR-163. Install Class II bike lanes.
D	4	11	Widen Camino de la Reina to four lanes between Hotel Circle North and Avenida del Rio. Install Class II bike lanes.
E	3	12	Construct Via Las Cumbras interchange with I-8.
F	3-4	13	Construct or widen Via Las Cumbras between Friars Road and Hotel Circle North. Install Class II bike lanes.
G	4	14	Install dual eastbound left-turn lanes on Friars Road to northbound SR-163. Widen north leg to accept the dual turns.
G	4	15	Construct Hazard Center Road between Fashion Valley and Mission Center Road. Install Class II bike lanes.
F	3-4	16	Construct new southbound SR-163 off ramp to Friars Road.
G	4	17	Modify westbound approach on Friars Road to provide three westbound lanes through intersection at SR-163 northbound ramps.
G	4	18	Reconstruct northbound SR-163 on ramps to Friars Road.

Note:
[1] Table A-2, Page A-4/5; Adopted Mission Valley Community Plan, June, 1985.

- Construct Hotel Circle South to a modified 4-lane major street section west of the Presidio overcrossing.

- Construct specific street improvements associated with the Mission Valley Community Plan as identified in Table 12 (project numbers 4, 5, 8A, 8B, 9, 10A, 10B, 11, 13, 14) (see note at beginning of this section).

- Construct street improvements identified in Table 13 which are based on the cumulative development scenario analyzed in the traffic study and interim street capacity.

- Participate in an active ridesharing program with respect to the office development component of the specific plan. Provide the continued operation of the hotel/airport and other intra-valley shuttle systems. Such programs would need to be implemented at the planned development permit stage.

- Incorporate the potential need for localized intersections into the site planning process. Required intersection improvements would be defined at the planned development permit stage.

With implementation of the roadway improvements recommended under the cumulative development scenario as summarized in Tables 12 and 13 and shown in Figure 69, fourteen street segments in the vicinity of the Atlas Properties would exhibit an improvement in level of service over that anticipated in the community plan and five street segments would maintain the same level of service as that anticipated in the community plan. Seven street segments would experience a decreased level of service from that anticipated in the community plan. These segments are:

- Friars Road east of Fashion Valley Road
- Friars Road west of SR-163
- Hotel Circle North west of Via Las Cumbres
- Hotel Circle South west of Via Las Cumbres
- Fashion Valley Road south of Camino de la Reina
- Fashion Valley Road south of Friars Road
- Via Las Cumbres south of Camino de la Reina

Since this information was compiled, the Atlas traffic volumes have been reduced to bring the Atlas Specific Plan into conformity with the Mission Valley Community Plan. As the actual development of the specific plan would result in 12,920 fewer ADT (29% less) than the amount of traffic analyzed in the traffic forecast, none of the previously identified segments would exceed the traffic volumes anticipated in the Mission Valley Community Plan.

Regional Improvements

(See note at beginning of this section [VI. Transportation Element]).

Several freeway access concepts have been developed jointly by Atlas Hotels, Inc., Chevron Land Development (the applicant for the Levi-Cushman Specific Plan), the City of San Diego and CalTrans. These improvements would need to be implemented when buildout of Mission Valley is completed and should be funded by State and local monies, in addition to an assessment district. Figure 70 illustrates the recommended freeway access improvements. In general, the following are the results of the CalTrans review of the Mission Valley Community Plan.

- Construct an interchange at Via Las Cumbres and I-8.

Figure 70 Atlas Hotels Freeway Access Improvements

- Realign Hotel Circle North at the I-8 westbound ramps and provide a direct connection to Fashion Valley Road.

Atlas Hotels, Inc. and other developers in the Mission Valley area have been working closely with CalTrans and the City of San Diego to develop preliminary plans for the new interchange at Via Las Cumbres and the redesign of the Fashion Valley ramps at Hotel Circle. CalTrans is presently preparing a project report for these modifications to the freeway access system. Atlas Hotels, Inc. has committed to work with CalTrans to implement these freeway ramp improvements, and has reserved the 3.70-acre Evelyn Terrace site for future dedication for off-ramps associated with the proposed I-8/Via Las Cumbres interchange.

Several freeway ramping configurations are being evaluated to determine what a Via Las Cumbres/I-8 interchange might look like. A conceptual plan depicting a new Via Las Cumbres interchange is shown in Figure 71.

The operation of the existing westbound I-8 freeway ramps to Hotel Circle North could be improved by relocating these ramps to the east and connecting them at the Fashion Valley Road/Hotel Circle North Intersection. Fashion Valley Road would be realigned to the west to connect to the ramps. A conceptual plan depicting a Hotel Circle North ramp modification is shown in Figure 72.

Intersection Improvements

(See note at beginning of this section [VI. Transportation Element]).

Future peak hour traffic volumes were not prepared for either the City's Mission Valley travel forecast or the Linscott, Law and Greenspan study. The primary reason City staff does not forecast peak hour traffic volumes is because driver behavior can change drastically as traffic volumes and congestion increase. The changes in behavior are not easily predicted due to the human factor involved. Generally, driver habits can be assumed to remain static for less than three years. Travel forecasts for volumes longer than three to five years in the future become meaningless, as modes of transportation utilized and driver behavior change. Peak hour intersection level of service analysis has more meaning on a specific site by site basis. At the planned development stage, specific intersection improvements will be evaluated as specific Atlas sites are proposed for development.

Special consideration to the following intersections should be given since these intersections may represent potential problem areas.

- Freeway ramps intersections with I-8 and SR-163 on Hotel; Circle and Friars Road, respectively
- Friars Road at Ulric Street
- Friars Road at Fashion Valley Road
- Friars Road at Via Las Cumbres
- Hotel Circle North at Hotel Circle South (near SR-163)

Figure 71 Intersection Improvements Via Las Cumbres/Hotel Circle/W.B. I-8 Ramps

Figure 72 Intersection Improvements Hotel Circle North/W.B. I-8 Ramps

In conjunction with the river improvements and the Mission Valley Community Plan circulation system, a conceptual geometric alignment for the intersection of Camino de la Reina and Hazard Center Drive at the Fashion Valley Shopping Center has been studied. The resulting conceptual alignment as shown in Figure 73 (see note at beginning of this section) has been reviewed and approved by the City Traffic Engineering and Civil Engineering Departments. All applicable City design standards have been incorporated into this conceptual alignment. All future alignment plans will be submitted to and approved by the City Traffic Engineering and Civil Engineering Departments.

Additional Improvements

(See note at beginning of this section [VI. Transportation Element]).

In addition to the circulation system improvements required in the Mission Valley Community Plan, the following additional improvements have been included in the Atlas Specific Plan:
I-

- Atlas Hotels, Inc. acknowledges that the City and/or MTDB may establish one or more assessment districts to finance the construction of the LRT system in Mission Valley. Atlas Hotels, Inc. will agree not to oppose the formation of such an assessment district provided that assessments for right-of-way acquisition and construction payable to Atlas Hotels, Inc. thereunder, when added to the sums already provided by Atlas Hotels, Inc. for the LRT system, do not exceed the cost of construction of an at-grade LRT station and at-grade facility the length of the Town and Country property (no longer a part of the Specific Plan area, but included in the circa 1988 traffic study conducted). The LRT, as designed by MTDB, will not be constructed on Atlas Hotels, Inc. property. Therefore, Atlas Hotels, Inc. will not be providing right-of-way for the LRT.

- 100% funding for the operation and maintenance of the intra-valley shuttle as described.

Figure 73 Atlas Hotels Intersection Geometrics

- Partial funding for the new I-8/Via Las Cumbres interchange. Funding sources for this project have not yet been determined by the City, but Atlas Hotels, Inc. has reserved approximately 3.7 acres of land, referred to herein as the Evelyn Terrace site, to be irrevocably dedicated to the City, at no cost to the City, for the right-of-way for the proposed future interchange at Interstate 8 prior to the issuance of building permits for the Hanalei Tower site. This land will be irrevocably dedicated to the City as the full fair share contribution of Atlas Hotels, Inc. to the right-of-way and construction of the I-8/Via Las Cumbres interchange. If the interchange has not been constructed within 10 years after adoption of the Atlas Specific Plan, the City shall allow Atlas to proceed with the redevelopment of the Mission Valley Inn site as provided in this Specific Plan as if the interchange was in place.

E. TRANSPORTATION IMPROVEMENT PHASING

(See note at beginning of this section [VI. Transportation Element]).

Atlas Hotels, Inc. worked closely with adjacent property owners, specifically Chevron Land Development/Levi-Cushman and River Valley (Warner Ranch), to develop an in-depth and coordinated improvement phasing plan to insure that acceptable Levels of Service will be maintained during the buildout of the ultimate street system. A generalized improvement phasing program has been developed based on Equivalent Dwelling Units (EDUs) similar to that in the community plan, for the additional street improvements recommended based on the circa 1988 traffic study.

According to each of the development phasing plans for Atlas, Levi-Cushman and River Valley, corresponding circulation improvements, based on EDUs, were calculated independently of each other. This analysis identified which specific circulation improvements were triggered by each development and what would be anticipated should no other development occur. The cumulative EDUs representing the buildout of these development projects were calculated and established the timing and scope of specific improvements needed to maintain reasonable traffic flow as defined in the community plan.

To verify that the EDU calculations in the community plan are adequate to maintain a reasonable Level of Service on the circulation system, traffic volumes associated with each phase of development were assigned to the street system assumed in each phase of the cumulative development scenario. Circulation system improvements were added to the base street system when acceptable Levels of Services are exceeded for the individual segment (the Mission Valley Inn site and the Town and Country site are no longer a part of the Specific Plan area but were included in the circa 1988 traffic study conducted). The circulation system phasing, based on interim street capacity, is shown in Table 13. Both Chevron Land Development and Atlas Hotels, Inc. have agreed to this phasing plan and Atlas Hotels, Inc. has committed to provide its fair share for funding of the identified improvements as discussed in Section X, Plan Implementation (the Mission Valley Inn site and the Town and Country site are no longer a part of the Specific Plan area but were included in the circa 1988 traffic study conducted).

F. PARKING

(See note at beginning of this section [VI. Transportation Element]).

Parking will be provided for all sites within the Specific Plan area in accordance with City requirements or a modified use requirement based on actual field studies conducted in conjunction with planned development permit applications.

G. ALTERNATIVE MODES OF TRANSPORTATION

(See note at beginning of this section [VI. Transportation Element]).

1. Public Transit

Mass transit systems will be provided within the specific plan area consistent with the recommendations included in the Mission Valley Community Plan. Figure 74 illustrates the proposed mass transit systems.

Bus Transit: Current transit services to Mission Valley is provided by San Diego Transit (SDT). Four urban routes and two metro routes serve the specific plan area. Only one route, Urban Route 6, provides a direct link to all Atlas Hotels, Inc. sites along Hotel Circle with 30 minute headways along this stretch. Metro route 80 generally travels along Friars Road with average headways of approximately 30 minutes. All of the Mission Valley transit routes converge at the Fashion Valley Transit Center. These urban routes and Metro Route 80 provide transit service to the rest of Mission Valley, downtown and Clairemont Mesa, while Metro Route 20 provides express service along SR-163.

Light Rail Transit: A preferred LRT alignment for the Mission Valley area, including station locations, has been adopted by the Metropolitan Transit Development Board (MTDB). Within the specific plan area, the alignment generally follows a parallel route along the northern boundary of the future extension of Camino de la Reina. The LRT is to be located above the 100-year flood elevation of the San Diego River and will cross SR-163 on an elevated structure. Two transit stations are proposed in the vicinity of the specific plan area, one adjacent to the Fashion Valley Shopping Center and the Town and Country site (not a part of the Specific Plan area) and another within the Levi-Cushman Specific Plan area, east of the Hanalei sites. The preferred LRT alignment will continue eastward to a terminus just east of I-15, with several stations along the way. Future extensions are under consideration eastward along the I-8 corridor to San Diego State University, along the north riverbank through Alvarado Canyon and north along I-5 from the Old Town line to the City of Del Mar.

Section X, Plan Implementation, identifies the applicant's commitment to funding of the LRT. It should be noted that the anticipated alignment for the LRT adjacent to the Town and Country site (not a part of the Specific Plan area) is located on property not owned by Atlas Hotels, Inc. Atlas Hotels, Inc. is not, therefore, in a position to provide right-of-way for the LRT.

Figure 74 Mass Transit System

Intra-Valley Shuttle: The Mission Valley Community Plan recommends development of an intra-valley shuttle system for the community plan area. As discussed previously in this section, Atlas Hotels, Inc. currently sponsors a shuttle system in the Mission Valley area and Specific Plan area property owners will fund and operate a shuttle system, available to members of the general public, serving the Specific Plan area sites, and the San Diego Lindbergh Field on a frequent schedule basis. The individual site development concepts and criteria for the Specific Plan area properties contain criteria for shuttle stops adjacent to hotel and building lobbies or within expanded sidewalk paving areas in the Hotel Circle North and South streetscapes.

2. Bicycle Circulation

(See note at beginning of this section [VI. Transportation Element]).

The Mission Valley Community Plan proposes a tri-level community wide bikeway system which would tie into the citywide bikeway system. The system includes bicycle paths (Class I), with separate right-of-ways for exclusive use of bicycles; bicycle lanes (Class II), with restricted right-of-way on the road surface; and bicycle routes (Class III), with shared right-of-way designated by signs and pavement markings only. The bikeway system would extend from Mission Bay to I-15. Other systems would connect Mission Valley with Hillcrest and Mission Hills.

The bicycle circulation system for the Atlas Specific Plan area is shown in Figure 75. (The Mission Valley Inn site and the Town and country site are no longer a part of the Specific Plan area but were includen in the 1988 bikeway system analysis). There are existing Class II bicycle lanes which are striped along both sides of Friars Road. The Class II bicycle lane on the southside of Friars Road would connect to Class II bicycle lanes proposed by the Atlas Specific Plan and the Levi-Cushman Specific Plan for both sides of Via Las Cumbres and Fashion Valley Road. The Class II bicycle lanes proposed for Via Las Cumbres and Fashion Valley Road will extend south from Friars Road to connect with Class II bicycle lanes proposed for both sides of Hotel Circle South. The Hotel Circle South Class II bicycle lanes will extend westerly from the I-8/Hotel Circle underpass to connect with existing Class II bicycle lanes which are currently striped on both sides of Taylor Street beginning at the Taylor Street/I-8 access ramps and continuing into the Old Town area. Class II bicycle lanes are also proposed within the improved Camino de la Reina/Hazard Center Drive Street section, which will connect with the Levi-Cushman Specific Plan proposed bicycle paths adjacent to the continuation of Camino de la Reina to the east. The bicycle circulation improvements proposed by the Atlas Specific Plan are designed to interface with bikeway improvements proposed by the Levi-Cushman Specific Plan.

In addition to the Class II bicycle lanes within roadways previously described, the Atlas Specific Plan will also provide Class I bicycle paths along the south side of the river corridor. This Class I bicycle path will be a minimum 10-foot wide shared pedestrian/bicycle path completely separated from vehicular roadways and located adjacent to this river and may be contained within the 30-foot wide (average) buffer along the south side of the river.

To further encourage bicycle use within the Atlas Specific Plan area, secure bicycle parking facilities will be incorporated within all of the Atlas Specific Plan sites in accordance with the City of San Diego Bicycle Parking Guidelines listed below:

Figure 75 Bikeway System

- Bicycle parking facilities should be identified by bicycle parking signs. Bicycle parking signs with directional arrows should be used to guide bicyclists to bicycle parking facilities when the facilities are not visible to arriving cyclists.

- SR-Bicycle parking facilities consist of bicycle racks and bicycle lockers. Bicycle racks should not require the use of chains or cables to secure them as chains and sables are easily cut by thieves using bolt cutters. It is recommended that bicyclists use "U"-shaped high-security locks (e.g., Kryptonite, Citadel, Gorilla brands) to lock bicycles. Bicycle lockers should be provided for employees arriving by bicycle at major activity centers. Bicycle racks should be provided for visitors to major activity centers arriving by bicycle. A combination of bike racks and lockers should be provided at transit centers.

- Bicycle parking facilities should be located closer to the entrance of the activity center than the nearest motor vehicle parking space. The placement of bicycle parking facilities should not block pedestrian traffic.

The bicycle circulation system proposed by the Atlas Specific Plan will be assured by the provision of sufficient right-of-way within Hotel Circle North and South, Camino de la Reina, Fashion Valley Road and Via Las Cumbres. A minimum 6-foot wide bicycle lane will be reserved on each side of these roadways at the time of their widening or improvement as required by phasing plans for the Atlas Specific Plan and the traffic thresholds created by the Atlas Specific Plan or the Atlas Specific Plan in conjunction with the Levi/Cushman Specific Plan. In conjunction with the construction of the pedestrian/bicycle path, access to the path will be assured by the dedication by Specific Plan area property owners of a public easement encompassing the path. The bicycle circulation improvements are consistent with the objectives and guidelines of the bikeways transportation element of the Mission Valley Community Plan and exceeds the number of alternative bikeway routes and class types listed in the Mission Valley Community Plan.

3. Pedestrian Circulation

(See note at beginning of this section [VI. Transportation Element]).

The Mission Valley Community Plan proposes a major pedestrian path system to connect residential and commercial land uses throughout the valley. The pedestrian circulation system should provide convenience, safety, comfort and aesthetic enjoyment. The system should connect smoothly with other transportation components and provide interest and activity areas.

The pedestrian circulation system for the Atlas Specific Plan area is shown in Figure 76. Pedestrian sidewalks separated from the public street by landscaped parkways are designated on all public streets.

The area-wide pedestrian sidewalk circulation system will be provided at each Atlas Specific Plan site within streetscape areas on the north side of Hotel Circle North, the south side of Hotel Circle South, both sides of the new Levi-Cushman Road (Hotel Circle North) between the Hanalei Hotel and Hanalei Tower sites and the west side of Via Las Cumbres at the Hanalei Tower site. Pedestrian

linkages from building and hotel lobbies or pedestrian plazas to the area-wide pedestrian sidewalk circulation system will be provided on all Atlas Specific Plan sites.

Pedestrian access along the river corridor will be provided by a minimum 10-foot wide shared pedestrian/bicycle path located adjacent to the river and which may be within the buffer area along the south side of the river corridor at the and Hanalei Hotel site. Specific design criteria for the pedestrian circulation system at each of the Atlas Specific Plan site is identified in the Urban Design Element of this specific plan.

The proposed Atlas Specific Plan pedestrian circulation system is consistent with the Mission Valley Community Plan's objectives. The pedestrian circulation system is also consistent with and provides logical connections to the proposed Levi-Cushman Specific Plan and FSDRIP pedestrian circulation systems.

Figure 76 Pedestrian Circulation System (amended)

Table 13
Circulation System Improvement Phasing Plan Based on Cumulative Development and Reasonable Interim Levels of Service
(See Note at beginning of this section [VI. Transportation Element]).

Development Threshold Section	Cumulative EDU Threshold	Project	Improvement [1]	Notes [2]	Associated Atlas Only Phase (EDU)	Financing Method[2]
1-4	0	D	New Fashion Valley Interchange	Assure funding for Project "D" to the satisfaction of the City engineer prior to approval of any final maps within these sectors.	Phase 1 (48)	S
1-4	0	4	Restripe Hotel Circle South to three lanes by prohibiting parking from eastbound Hotel Circle freeway ramps to Camino de la Reina.	This improvement would be assured[3] prior to approval of the first Final Map for developers within these sectors.	Phase 1 (48)	S
1-4	0	5	Increase capacity and Signalize the east and westbound Hotel Circle freeway ramps. (Note: Improvements 4 and 10A also increase the capacity of these freeway access ramps).	This improvement would be assured[3] prior to approval of the first Final Map for developers within these sectors.	Phase 1 (48)	S
1,3,4	0	8A	Restripe Hotel Circle South to three lanes by prohibiting parking from the I-8/Presidio overcrossing to the eastbound Hotel Circle ramps.	Cumulative development within these sectors would trigger tis improvement. The improvement would be asssured[3] prior to approval of the first Final map for any project that reaches the EDU threshold within these sectors.	Phase I (48)	S
1,3,4	0	8B	Widen Hotel circle South to four travel lanes with Class II bike lanes between eastbound Hotel Circle ramps and existing Camino de la Reina.	Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to approval of the first Final map for any project that reaches the EDU threshold within these sectors.	Phase 1 (48)	S
1-4	0	10A	Widen Hotel Circle North to 4 travel lanes between the westbound I-8 Hotel Circle ramps to existing Camino de la Reina. Provide left turn channelization between Camino de la Reina and Fashion Valley Road. Reconstruct Hotel Circle North/South/Existing Camino de la Reina	This improvement would be assured[3] prior to first Final Map for developers within these sectors. This project could be constructed in lieu of project "D" with respect to the section west of Fashion Valley Road	Phase 1 (48)	S

Development Threshold Section	Cumulative EDU Threshold	Project	Improvement [1]	Notes [2]	Associated Atlas Only Phase (EDU)	Financing Method[2]
			intersection to improve geometrics and provide a signalized access to the Town & country Hotel Development.			
1,3,4	0	"C"	Widen Fashion Valley road to 4 lane major classification with Class II bike lanes (78'/98'). Improve the river crossing to accommodate a 10 year design.	Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to approval of the first Final Map for any project that reaches the EDU threshold within these sectors.	Phase 1 (490)	S
3,4	0	RV1	Widen and signalize the "River Valley" project access at the Hotel Circle North/most westerly I-8 ramps to provide necessary through and turn lanes as required by the City Engineer.	These improvements are to be provided by "River Valley" or before approval of the first Final Map for projects meeting this threshold. Any development in Sector 3 or 4 to be conditioned with participation i this improvement.	Phase 1 (490)	S
1-4	500	14	Add dual left turns for eastbound Friars Road to northbound SR-163; widen north leg of intersection to accept the two eastbound left turning lanes.	NONE	Phase 1 (490)	S
1,3,4	1,800	"D"	Construct new Fashion Valley Road interchange by relocating the existing westbound I-8 Hotel Circle ramps, relocating Fashion Valley Road and Hotel Circle North.	Cumulative development within these sectors would trigger this improvement. The timing of this improvement may be accelerated depending on when the CalTrans schedule calls for its installation. Whenever CalTrans is ready to build this interchange, all parties contributing to its construction shall pay CalTrans the portion needed to complete the interchange.		S
1,3,4	1,800	"E"	Remove existing west-bound Hotel Circle ramps concurrent with "D".	This improvement would only be implemented when the Fashion Valley Interchange is operational.	-----	S
1,3,4	1,800	LC1	Construct new North/South street (4-lane collector) with class II bike lanes between Hotel Circle North and "B" Street.	This improvement is needed as the new Fashion Valley interchange disrupts the existing flow of traffic along Hotel Circle North.	-----	S

Development Threshold Section	Cumulative EDU Threshold	Project	Improvement [1]	Notes [2]	Associated Atlas Only Phase (EDU)	Financing Method[2]
1,3,4	1,800	LC1	Construct Street B as a 4-lane major with Class II bike lanes from Street C to Fashion Valley Road.	This improvement is needed as the new Fashion Valley interchange disrupts the existing flow of traffic along Hotel Circle North. This street is also entirely within the Levi-Cushman Specific Plan area.	-----	S
1,3,4	1,800	11	Widen existing Camino de la Reina to a 4-lane major classification with class II bike lanes between Hotel Circle North/South and Avenida del Rio	Cumulative development within these sectors would trigger this improvement. The improvement would be assured prior to approval of the first Final map for any project which reaches the EDU threshold.	-----	S
3,4 Or 1	2,900 400	6	Restripe Friars Road to a 6-lane primary arterial classification with appropriate widening as necessary to obtain this classification (102'/122'). Remove the asphalt berm and the two-way bike path along the south side of Friars Road and install Class II bike lanes.	Either threshold could trigger this improvement. Cumulative development within these sectors would-trigger this improvement. The improvement would be assured[3] prior to approval of the first Final map for any project which reaches the EDU threshold.	-----	S
1,3,4	2,900	10B	Construct Camino de la Reina to a 4-lane major classification with class II bike lanes between Fashion Valley Road and SR-163, including an intersection with Hazard Center Road.	Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to approval of the first Final Map for a project which reaches the EDU threshold.	-----	S
1,2,4-7	12,000	15	Improve Hazard Center Drive to a 4-lane collector street with class II bike lanes along the north side of the river between Camino de la Reina and Mission Center Road.	Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to approval of the first Final Map for any project which reaches the EDU threshold.	-----	S/DIF
1,2,4-7	2,900	19A	Widen existing Camino de la Reina to a 4-lane major classification with Class II bike lanes between SR-163 and Mission Center Road.	NONE	-----	S
1,2,4-7	4,700	17	Cut back median on SR-163 bridge to allow three westbound lanes on Friars Road through signal for northbound	NONE	_____	S

Development Threshold Section	Cumulative EDU Threshold	Project	Improvement [1]	Notes [2]	Associated Atlas Only Phase (EDU)	Financing Method[2]
			SR-163 on-ramps; approximately 85% of build-out in these sectors.			
1,3,4	5,100	7	Construct a new Camino de la Reina to a 4-lane major classification with Class II bike lanes between Napa Street and Fashion Valley Road.	Portions of this improvement may be constructed by Chevron/Levi-Cushman during development of their Project Phasing. Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to the approval of the first Final Map for a project which reaches the EDU threshold.	-----	S/DIF
1,3,4	5,100	13	Construct new Via Las Cumbres between Friars Road and Hotel Circle North to a 4-lane major classification with Class II bike lanes.	Portions of this improvement may be constructed by Chevron/Levi Cushman during development of their Project Phasing. Cumulative development within these sectors would trigger this improvement. The improvement would be assured[3] prior to approval of the first Final Map for a project which reaches the EDU threshold.	-----	S
1,3,4	5,100	9	Widen Hotel Circle south to a 4-lane collector classification with class II bike lanes between Eastbound I-8 ramps and Presidio overcrossing.	To be constructed concurrent with I-8/Via Las Cumbres interchange	-----	DIF
1,3,4	5,100	12	Construct new I-8/Via Las Cumbres interchange. Relocate Hotel Circle North. Construct 4-lane connection between Via Cumbres and Hotel Circle North.	The timing of this improvement may be accelerated depending on when the CalTrans schedule calls for its installation. Atlas is irrevocably dedicating the 3.70 acre Evelyn Terrace site as its full fair-shire contribution to this project.	-----	OTHER
1,3,4	5,100	“B”	Restripe Hotel Circle North between Presidio Overcrossing and new interchange at I-8/Via Las Cumbres.	To be constructed concurrent with I-8/Via Las Cumbres interchange	-----	S
1,3,4	5,100	“F”	Widen Hotel Circle North between Presidio Over crossing and new interchange to provide 4 travel lanes and Class II bike lanes as appropriate.	To be constructed concurrent with I-8/Via Las Cumbres interchange.	-----	S

Development Threshold Section	Cumulative EDU Threshold	Project	Improvement [1]	Notes [2]	Associated Atlas Only Phase (EDU)	Financing Method[2]
1,3,4	5,100	LC15	Construct new street between Fashion Valley Road and I-8/Via Las Cumbres as a 4-lane major street with class II bike lanes (Levi-Cushman S.P. Street "B").	To be constructed concurrent with I-8/Via Las Cumbres interchange.	-----	S
1-4	7,500	16	Construct new southbound SR-163 to west-bound Friars Road off-ramp.	NONE	-----	DIF
1,2,4-7	18,000	18	Move northbound SR-163 on-ramps at Friars Road eastward or replace with a loop or flyover; approximately 95% buildout in these sectors.	NONE	-----	S

Legend:
S = Subdivider
DIF = Development Impact Fee
Note:
Subdivision improvements are required by the City to be bonded for, or otherwise assured to the satisfaction of the City, prior to the recording of a final map.
[1] Circulation Implementation Phasing Sectors per the Mission Valley Community Plan.
[2] All projects/developments within the sectors identified would be conditioned to contribute their fair share of the triggered improvement at the time of approval or when the improvement is constructed. Specific Plan area property owners are not required, by themselves, to fund all of these improvements. Phasing plan conditions or thresholds may, however, require Specific Plan Area property owners to advance costs of construction for some of these projects. Specific Plan area property owners may request the formation of one or more City Council authorized reimbursement districts for purposes of recovering these costs.
[3] Construction of all improvements are to be assured to the satisfaction of City engineer when the EDU thresholds are met.

VII. PUBLIC FACILITIES ELEMENT

A. WATER FACILITIES

The City of San Diego provides water service to the Atlas Specific Plan area. Mission Valley is served by the Alvarado Filtration Plant.

Water transmission and distribution mains exist in the Specific Plan area (see Figure 77). The capacity of these facilities will require analysis during the tentative subdivision map process. Water distribution mains, including 8-inch and 16-inch lines, are available on Hotel Circle South, Hotel Circle North, and Fashion Valley Road. The precise requirements for the needed on-site and any off-site water facilities for the specific plan area will be set by the Water Utilities Department during the tentative subdivision map approval process. Any needed project-serving water facilities shall be financed by the Specific Plan area property owners, per Council Policy 400-7.

B. SEWER FACILITIES

The City of San Diego provides sewer collection and treatment services to the Mission Valley area. Two major trunklines in the Valley serve much of the San Diego metropolitan area.

West of SR-163, the 66-inch north Mission Valley trunkline extends through the south half of the Fashion Valley Shopping Center site, and continues westerly roughly parallel to Friars Road (see Figure 77). This portion of the trunkline is considered to be adequate up to year 2000. The 27-inch south trunkline, roughly paralleling I-8, is nearing capacity from Texas Street westward. However, a 21-inch diversion sewer across the San Diego River is expected to be constructed in 1988 which will allow greater capacity in the 27-inch trunkline. A 10-inch north-south main line is available in Fashion Valley Road.

The precise requirements for the on-site and any off-site sewer facilities for the Atlas Specific Plan area will be set by the Water Utilities Department during the tentative subdivision map approval process. Any needed project-serving sewer facilities shall be financed by Specific Plan area property owners per Council Policy 400-7. No specific plans for the use of reclaimed water have been incorporated into the Atlas Specific Plan. If, and when, a reliable supply of reclaimed water becomes available in the Mission Valley area, Specific Plan area property owners would consider using such water for irrigation purposes.

C. SOLID WASTE MANAGEMENT

The City of San Diego provides solid waste collection and disposal free of charge to residential property and to commercial property with a limit of six cans per establishment. Bin collection and disposal are available through a number of private collection companies. Atlas Hotels, Inc. also employs a private collection service to provide trash pick-up for their existing developed hotel facilities.

Figure 77 Existing Utilities

Solid waste material is disposed of at the City's Class II sanitary landfill at Miramar. The West Miramar landfill will handle the majority of San Diego's solid waste for the remainder of the century.

D. STORM DRAINAGE

A number of major storm drainage facilities are existing in the specific plan area (see Figure 77). The San Diego River is the dominant natural drainage feature in the valley. A 48-inch storm drain extends southerly across the Fashion Valley Shopping Center site to the river. An 18-inch drain serves the area west of the Mission Grove site and a 54-inch drain extends across I-8 west of the Mission Grove site. A 24-inch drain extends northerly across the west side of the Hanalei Hotel site to the river. In general, all of the sites within the specific plan area drain toward the San Diego River. Standard storm drain facilities will be provided in conformance with subdivision requirements during specific plan implementation.

E. POLICE PROTECTION

The City of San Diego provides police protection for the specific plan area from the substation at Friars Road and Napa Street at the western end of the valley.

Atlas Hotel's management retains an excellent private security team, familiar with the protection requirements of hotel/office facilities. The existing hotel and new hotel/office facilities will include skilled security teams to provide immediate on-site 24-hour service to hotel residents and reduce service loads for the San Diego Police Department. In addition, the opportunity is available in new construction and expansion of structures to incorporate state-of-the-art plant security systems into the new development such as providing centralized visual access to key points by security personnel, automatic lighting of parking garages for use by late-night office workers when leaving the office, and controlled access to parking areas and office areas through use of computerized security systems.

F. FIRE PROTECTION

The City of San Diego provides Fire Protection to Mission Valley from fire stations located in surrounding communities. Although no fire stations are currently located in the valley, two stations are proposed to be built in the future. Fire Station No. 2, which is proposed to be located in the vicinity of I-15 and Friars Road, is scheduled for land acquisition in FY 2004 design and construction in FY 2005. Fire Station No. 45, which is proposed to be located on City-owned property in the vicinity of Friars Road and Napa Street, is scheduled for design, apparatus acquisition, and construction in FY 1995. Specific Plan area property owners will participate in the provision of fire protection facilities through the payment of Development Impact Fees as required by the Interim Public Facilities Financing Plan for Mission Valley.

Both fire stations are planned to be 6,500 square feet and will have the capability of housing one triple combination pumper, one aerial ladder truck, and up to ten personnel.

The opportunity is available in the development of new office and hotel structures to incorporate state-of-the-art internal fire protection devices such as flame retardant construction materials, up-to-date sprinkler systems, and smoke detection devices. Such measures are intended to be incorporated

in the proposed developments, thereby supplementing the public fire protection services, and improving their fire insurance rating status.

G. GAS AND ELECTRIC FACILITIES

San Diego Gas and Electric Company maintains gas and electric distribution lines in the specific plan area with adequate capacity to serve all future needs. A 12-inch gas main is located in Hotel Circle North (see Figure 77). Underground electric distribution facilities are available in the main roadways. Minor extensions to these distribution facilities are available in the main roadways. Minor extensions to these distribution facilities will be required to serve the specific plan area. Gas and electric distribution lines necessary to serve the project will be installed underground. No gas or electric transmission lines or easements cross any of the specific plan sites that would act as a restraint to development.

H. TELEPHONE SERVICE

Telephone service will be supplied by Pacific Bell Telephone Company, which has numerous telephone lines available for service connections in the specific plan area. All telephone connections will be installed underground.

I. CABLE TELEVISION SERVICE

Southwestern Cox Cable TV Company has the cable television franchise for the area. Cable television service will be provided through underground facilities installed in common trenches adjacent to power and telephone lines. The cable television lines will connect to individual laterals and prewired buildings.

J. POPULATION BASED PARKS

There are no public parks currently located within the specific plan area; however, there are significant park and open space resources in the vicinity. Three regional parks are located nearby, including Presidio Park and Mission Bay Park at the western end of Mission Valley. Mission Trails Regional Park is located northeast of Mission Valley. In addition, the greenbelt formed by the San Diego River corridor will provide trails, landscaped areas, and other visual and physical relief from urban development.

The City of San Diego leases out land for two recreational facilities in Mission Valley. One is the Sefton Little League Field on Hotel Circle Place, just west of the Hanalei Hotel site, the other is an outdoor sports facility next to Jack Murphy Stadium, east of I-805. The latter facility is used exclusively by the San Diego Chargers football team during football season, but is made available to other sports organizations during the rest of the year. The Jack Murphy Stadium offers spectator sports, concerts and other activities.

The YMCA is a recreational facility at the west end of the valley, which offers indoor and outdoor activities.

The above facilities, coupled with the proposed enhancement of the San Diego River as an open space linkage, with adjacent pedestrian and bicycle paths, should satisfy future residents' needs for both active and passive recreational facilities. In addition, hotel guests will have access to the proposed swimming pools on the Hanalei Hotel site.

K. OFF-SITE IMPROVEMENTS

NOTE: The originally adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study greatly shaped the proposed development plan, intensity, configuration, off-site transportation improvements, and implementation phasing. The circa 1988 traffic study conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment. Thus, the traffic study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only. An updated traffic impact analysis and other relevant studies based on current data, requirements and guidance shall be prepared as required in conjunction with any future development proposal within the Specific Plan area.

Off-site improvements to be provided in conjunction with specific plan implementation involve primarily the improvements to the existing circulation system. The phasing of these improvements has been identified as part of the cumulative development scenario analyzed in the circa 1988 traffic study and is summarized in Table 13. Specific Plan area property owners shall contribute their fair-share to the construction of the improvements needed to mitigate the cumulative impacts identified, with such fair share to be determined in cooperation with the Transportation and Traffic Engineering Division of the City of San Diego. If development of Atlas Specific Plan sites proceeds, the street system triggered by that EDU level of development must be constructed prior to the completion of that phase of construction.

The construction of some of the transportation improvements described in Table 13 will provide a substantial benefit to owners of land adjoining the real property. As a result, a portion of the cost of such improvements and dedications may be allocated to adjoining and other benefitted landowners. It is anticipated that the City may establish one or more assessment districts, or other financing mechanism, for the purpose of financing construction of the improvements and to obtain contributions toward the dedication of rights-of-way. Specific Plan area property owners may also seek reimbursement agreements with the City and/or owners and developers of land benefitted by the public improvements and dedications. In the alternative, Specific Plan area property owners may receive a credit equal to the cost of improvements and value of dedications allocated to adjoining and other benefitted landowners to be applied by Specific Plan area property owners toward their obligations under an assessment district formed for the purpose of providing the described improvements. The City will cooperate and assist Specific Plan area property owners in establishing such assessment districts as needed to implement the improvements, and shall enforce any City-approved reimbursement agreements by requiring reimbursement to Specific Plan area property owners as a condition to the approval of subdivision improvements on the benefitted lands, other than the Specific Plan area property owner's property. Said enforcement will include payments by

other owners and/or developers to the City that will be passed through the City to Specific Plan area property owners.

Public improvements associated with anticipated development in the Mission Valley area are addressed in detail in the Mission Valley Interim Public Facilities Financing Plan prepared by the City of San Diego (the Mission Valley Inn site and the Town and Country site are no longer a part of the Specific Plan area, but were included in the Mission Valley Interim Public Facilities Financing Plan). As discussed in Section X Plan Implementation, below, Specific Plan area property owners will participate in the Mission Valley Financing Plan through the payment of Development Impact Fees.

L. FLOOD PROTECTION

Proposed flood protection programs for the Atlas Specific Plan are described in detail in the river improvement element of this specific plan.

VIII. CONSERVATION ELEMENT

A. OBJECTIVES

The purpose of this conservation element is to describe the ways in which environmental sensitivities have been incorporated into the specific plan design. The primary way in which this has been accomplished is through design criteria incorporated into the urban design elements, and flood protection and revegetation plans incorporated into the river improvement element.

B. ENERGY

Certain components of the Atlas Specific Plan encourage the conservation of energy. The specific plan emphasizes the use of mass transit with the incorporation of access to the LRT in the site plan for the Hanalei site. Implementation of the LRT system in Mission Valley will allow residents of other areas of the valley to travel to offices and recreation facilities in the specific plan area. As discussed in Section VI Transportation Element, above, Specific Plan area property owners will fund and operate an intra-valley shuttle system between the Atlas Specific Plan sites in the Hotel Circle area, and the San Diego Lindbergh Field on a frequent schedule basis.

Landform and architectural elements of the specific plan are also designed to conserve energy. Buildings have been sited on the Hanalei Towers site, to preserve solar access to the maximum extent possible, and to minimize shading of outdoor swimming pools, pedestrian plazas, and riverfront areas. In addition, the urban design element of this specific plan contains guidelines to encourage energy conservation. Among these is the stated goal that all major buildings should exceed Title 24 energy conservation standards.

C. WETLAND HABITAT

Existing wetland habitats within the specific plan area include open water, freshwater marsh, and riparian woodland. A revegetation plan has been incorporated into the design of the specific plan. The revegetation plan is described in detail in the river improvement element of this specific plan.

D. SEISMIC SAFETY

Based on a review of existing available geotechnical information in 1988, alluvial materials which may be subject to liquefaction in the event of a moderate earthquake appear to be present on the Hanalei Tower and Hanalei Hotel sites. Although no faults have been identified in the specific plan area, moderate magnitude earthquakes have occurred in recent history in the San Diego metropolitan area. The potential therefore exists for liquefaction within the specific plan area following development. The potential for liquefaction within the plan area is not, however, greater than that in other areas of Mission Valley, and would not be greater for new development than for existing development already within the specific plan area. Potential liquefaction hazards associated with development of the site can be reduced through implementation of normal grading and structural mitigation measures. Such grading and structural mitigation measures will be established prior to any grading activities within the specific plan area.

Future development of the specific plan area will occur through the City of San Diego's planned development permit process as discussed in the implementation element of this specific plan. That process requires conduct of a geologic reconnaissance by a qualified engineering geologist prior to recordation of a final map for major developments within the specific plan area. Such studies will be conducted prior to development and will include specific grading and structural mitigation measures to avoid potential geologic hazards.

E. HILLSIDES

Two sites within the specific plan area are located adjacent to the hillsides which form the southern border of the Mission Valley Community Plan area: Mission Grove Office Park and Kings Inn. No site would involve hillside development. The urban design element of this specific plan includes site-specific guidelines to endure sensitivity to the existing hillside in grading and site design, erosion control, slope maintenance, and revegetation.

F. OPEN SPACE

The primary open space feature of the specific plan is an open space corridor adjacent to the San Diego River. Enhancement of the river corridor and river-orientation of proposed developments are integral parts of the specific plan design. Both the river improvement and urban design elements of this specific plan contain detailed criteria for design, maintenance and use of the river corridor as an open space greenbelt.

IX. RELATIONSHIP TO RELEVANT PLANS

NOTE: The originally adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study greatly shaped the proposed development plan, intensity, configuration, off-site transportation improvements, and implementation phasing. The circa 1988 traffic study conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment. Thus, the traffic study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only. An updated traffic impact analysis and other relevant studies based on current data, requirements and guidance shall be prepared as required in conjunction with any future development proposal within the Specific Plan area.

A. OBJECTIVES

The Atlas Specific Plan was prepared in accordance with governing City plans and state law pertaining to specific plans. This section discusses the relationship of the specific plan to the City of San Diego Progress Guide and General Plan, and to the Mission Valley Community Plan.

B. PROGRESS GUIDE AND GENERAL PLAN

The Progress Guide and General Plan of the City of San Diego is the City's comprehensive plan which is intended to serve as an overall guide to future development. The General Plan includes statements of overall goals and objectives, as well as guidelines and standards. In addition to the general plan, each of the subareas of the City has specific community plans which are intended to serve as official guidelines for specific development proposals within an individual community. The General Plan states that it is intended to:

> indicate only those land uses of regional or City-wide significance and its locational designations should be regarded as advisory only. The fine detail so often seen on planning maps is included not on the General Plan, but on the many community plans which have been developed throughout the San Diego area. Reference must be made to these plans and the maps and descriptions contained within them in order to determine the land use designation of any particular property (p. 203).

This section of the specific plan describes the conformance of the plan with the various goals and objectives outlined in the Progress Guide and General Plan.

1. Transportation

In terms of the regional transportation systems, the General Plan seeks to:

> Provide a network of transportation systems that are integrated, complementary and compatible with other city-wide and regional goals. A network that takes into account the physical, social and economic conditions of the environment, both present and future (p. 59).

The plan seeks to foster mobility and accessibility for all areas of the region minimizing the negative effects of congestion, noise and landscape alteration.

As discussed in the transportation element, the specific plan proposes a balanced transportation network accommodating automobile, mass transit, bicycle and pedestrian circulation systems. Circulation system improvements proposed by the Atlas Specific Plan are discussed in detail in the transportation and implementations elements of this specific plan and in the EIR which accompanies this document. The traffic study undertaken in conjunction with specific plan preparation assumed full build-out of the study area. Trips generated by the Atlas Specific Plan are approximately the same as trip allocations for the Atlas sites assumed in the Mission Valley Community Plan. According to the engineering and development department, the recommended set of major road improvements (Table 13) is expected to mitigate the interim, as well as cumulative, traffic impacts associated with this project (memo from Allen Holden, Deputy Director, Transportation and Traffic Engineering Division, to Date Potter, Deputy Director, Environmental Quality Division, July 22, 1987). Additional improvements beyond those required by the Mission Valley Community Plan have also been incorporated into the Atlas Specific Plan and are identified in the Transportation and Plan Implementation Elements of this Specific Plan. In conjunction with the cumulative development scenario analyzed in the traffic study for the Atlas Specific Plan, a transportation phasing plan has been developed for the Atlas Specific Plan and is presented in Table 12 of this specific plan. In addition, Specific Plan area property owners will participate in the Mission Valley Interim Public Facilities Financing Plan prepared by the City of San Diego through the payment of Development Impact Fees.

2. Commercial

The primary objective of the General Plan for the commercial development of the City is to:

> develop an integrated system of commercial facilities that effectively meets the needs of San Diego residents and visitors as well as assuring that each new development does not impede the economic vitality of other existing commercial areas (p. 72).

To implement this goal, the General Plan lists five general guidelines for evaluating new commercial use proposals:

- Does the development fit into the environmental structure of the community.
- Parking, where and how is it located.
- The amount and quality of landscaping.

- Do the facilities proposed really serve the community.
- Does the development intrude upon the market area of other commercial activities.

The Atlas Specific Plan is designed to harmonize with the economic and land use climate existing in the project area. The Hotel Circle area is an established, successful hotel/convention center. San Diego's growing image as a resort center indicates that the city-wide demand for further tourist/convention oriented activities is increasing. The Hotel Circle area serves as a centrally-located hub for participation in the City's many attractions, including Mission Bay, Old Town and the Port. In addition to providing new hotel rooms, the specific plan will act as a catalyst for revitalizing the Hotel Circle area ensuring the long-term viability of existing businesses.

The specific plan also includes 216,658 total square feet of commercial office space. The incorporation of offices within the tourist/convention activities is designed to be mutually supportive. The availability of hotel/convention facilities within walking distance will be an attraction to corporate offices seeking relocation into modern facilities. The corporate activities will, in turn, create demand for convention services. Additionally, restaurants, theaters and shops as well as regional shopping centers located close by, will provide services for the future employees.

3. Public Facilities, Services and Safety

The primary goal of the Public Facilities, Services and Safety Element is to program public service allocation:

> at a time and level to complement accompanying development…it is enormously important that the quality and quantity of the services and facilities provided be geared to the nature and intensity of the development that is prevailing and/or protected. But most important, that facilities and services be timely developed so as not to impact the capacity and ability of the City to provide the service (p. 81).

Adequate facilities and capacities for sewage collection and water distribution are available in the specific plan area, as discussed in the public facilities element.

In the provision of water, the plan's objective is to ensure that water will be available to all areas through a regional water management program. The individual development should support this goal through water conservation. Criteria regarding water conservation have been incorporated into the urban design element of this specific plan and Atlas Hotels, Inc. has indicated a willingness to utilize reclaimed water for irrigation if and when an appropriate water source becomes available.

In fire and police services, the General Plan strives to provide the highest service level possible through optimally located stations. Decentralization of police administration through the establishment of new sub-stations is planned to provide better service throughout the City for the next 30 years. The Linda Vista station is one of these new substations. Implementation of the specific plan may require additional personnel and equipment for this station; however, the excellent internal security program of Atlas Hotels, Inc. will be expanded for its developing sites, thereby reducing the load on public protection facilities. Additionally, Specific Plan area property owners will participate

in the provision of fire protection facilities through the payment of Development Impact Fees as required by the Interim Public Facilities Financing Plan for Mission Valley.

In the protection of public safety in drainage and flood control, the plan's main objective is:

> to preserve as much as possible the natural attributes of both the floodplain and floodway without endangering loss of life and property (p. 92).

To implement this goal, the plan recommends specific measures for revegetation of disturbed habitats. SR-

4. Open Space and Recreation

The General Plan delineates a City-wide open space system based on the natural features of the San Diego coastal plain, emphasizing river valleys and adjoining steep hillsides. The primary objective of the Open Space and Recreation Element is to:

> Establish an open space system which provides for the preservation of natural resources, the managed production of resources, the provision of outdoor recreation, the protection of public health and safety, and the utilization of the varied terrain and natural drainage systems of the San Diego community to guide the form of urban development (p. 96).

The plan designated the San Diego River floodway on the north side of the specific plan area and the steep hillsides on the south side as open space. Plans for floodplain areas should emphasize preservation of natural resources and flood protection. Park and recreational uses should be developed wherever possible.

Hillside regulation is intended to provide for reasonable use of slopes greater than 25% gradient, as long as disturbance of natural terrain, soil erosion, siltation and flooding, slide damage and scarring is minimized, and environmental resources and views are protected. The retention of a "sense" of hillside topography is encouraged. Open space may be acquired through outright purchase, easement, dedication, and through provision of flood facilities.

The Atlas Specific Plan includes a comprehensive river improvement element which outlines plans for revegetation of wetland habitats disturbed as a result of construction of the SR-proposed development as well as riverfront bicycle and pedestrian paths. The Atlas Specific Plan also incorporates specific design criteria within the Urban Design Element for the Hanalei Hotel and Hanalei Tower sites, as well as the other sites within the Specific Plan area.

The hillside areas south of Hotel Circle South, which visually identify the boundaries of the valley and form a green backdrop for the urban uses, will be preserved on the Kings Inn and Mission Grove Office Park site through careful structure siting. The Atlas Specific Plan incorporates specific design criteria within the Urban Design Element for these sites.

5. Redevelopment

For the most part, the Redevelopment Element of the General Plan addresses the older identifiably deteriorated areas of the city, with the objective of restoring these areas to social, economic and physical vitality. Secondarily, the plan seeks to encourage the maintenance and conservation of sound existing development.

The specific plan will implement this goal through the modernization and redesign of existing developments, and through the addition of integrating landscape design. These efforts will ensure the long term integrity and overall appearance of the area.

6. Conservation

As discussed in the conservation element of this specific plan, measures have been incorporated into the specific plan to encourage energy conservation, replacement of wetland habitat, sensitivity to hillsides, and protection against geologic hazards.

7. Urban Design

The specific plan contains an extensive urban design element which presents detailed criteria with regard to streetscape plans, landform considerations, landscape considerations, architectural considerations, planting concepts, and site planning concepts. Specific design criteria are also provided for each of the sites within the specific plan area. Adherence to these criteria in conjunction with specific plan implementation will ensure fulfillment of the urban design goals set forth in the General Plan.

8. Growth Management

The Atlas Specific Plan will assist the City in the implementation of its adopted Growth Management policy, which is intended to encourage the intensification of development within the urbanized areas of the City. Mission Valley is centrally located in the City and will provide unique opportunities to foster the growth of a more compact city, and to help support the development and operation of additional mass transit facilities.

C. MISSION VALLEY COMMUNITY PLAN

NOTE: The initially adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study, hydraulic study, flood management policy, and environmental mitigation plan greatly shaped the proposed development plan, intensity, configuration, and implementation. As part of any future development proposal, technical reports including but not limited to traffic impact analysis, biological technical report, and hydrology and hydraulic analysis shall be prepared as required to ensure the proposed development is based on current data, planning guidance and environmental review requirements. The circa 1988 technical studies conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment.

Thus, the technical study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only.

The Mission Valley Community Plan was adopted by the San Diego City Council on June 25, 1985 and serves as a guide for future new development in the Mission Valley area. This area covers 1,982 acres and is bordered on the north by Friars Road, on the south by a 150-foot contour line to the south of I-8, on the east by the San Diego River east of I-15, and on the west by I-5. Development intensity guidelines and transportation systems development in the plan were based on land use assumptions provided by property owners. The main issues involved in development of the plan were form and intensity of development, flood protection and physical constraints, public facilities and services, and traffic circulation.

1. Land Use and Intensity

Land use proposals outlined in the Mission Valley Community Plan are based upon land use assumptions provided by property owners prior to conduct of the 1982 Mission Valley travel forecast. Intensity limits established by the Plan scenario are based upon the results of the Mission Valley travel forecast. The Community Plan establishes development intensity districts for various areas within the community plan area. The Plan also outlines several criteria for receiving a development intensity adjustment. These criteria are as follows:

a) The portion of the Valley's vehicle circulation system affected by the proposed development is capable of accommodating all of the traffic which would be generated;

b) The proposed land use will generate traffic at a lower rate than the land use originally assumed for the traffic forecast;

c) An approved LRT or other regional public transit system station is located on the affected property or will otherwise serve the proposed development (as determined by adopted MTDB alignment studies);

d) The unique nature of the proposed development justifies a lower traffic generation rate than that assigned by the original traffic forecast used as the basis for this Plan, as demonstrated by a professional transportation study, subject to the approval of the City Engineer;

e) The direct and cumulative traffic impacts associated with the proposed development of the site can be mitigated;

f) The financing and implementation of other transportation measures or systems, which can be shown to reduce traffic impacts on the street and freeway system, is not guaranteed by the applicant or property owners, either through provision of 100 percent of the costs involved or formulation of an assessment district.

The Community Plan states that any site or proposed development which meets one or more of these criteria may request higher intensity than called for in the plan.

The Atlas Specific Plan is consistent with the land use types established for the specific plan properties by the Mission Valley Community Plan. The intensity proposed by the specific plan is approximately the same as that anticipated for the specific plan area according to the Community Plan. Additionally, the specific plan meets several of the density adjustment criteria outlined in the Community Plan.

- The traffic study conducted for the Atlas Specific Plan concludes that, with implementation of recommended improvements, the circulation system could accommodate anticipated traffic levels, as stated in the July 22, 1987 letter from the City of San Diego Transportation and Traffic Engineering Division.

- Development within the specific plan will be located in proximity to two LRT stations and links to these stations have been incorporated into the specific plan design.

- The direct and cumulative impacts of the development can be mitigated to a level not exceeding impacts anticipated under the Community Plan.

- The traffic study for the Atlas Specific Plan has been coordinated closely with other proposed developments in the area (including the Levi-Cushman and River Valley Plans) and a comprehensive transportation phasing plan has been prepared and committed to by Specific Plan property owners which will ensure appropriate phased implementation of the recommended circulation improvements.

In these respects the Atlas Specific Plan is consistent with the land use and intensity guidelines outlined in the Mission Valley Community Plan.

2. Transportation

The Mission Valley Community Plan calls for redevelopment of a balanced circulation system in the community plan area including a well-developed road system, mass transit systems, and pedestrian and bicycle circulation systems. The community plan encourages the integration of alternative transportation modes into development designs.

The Atlas Specific Plan conforms with the guidelines included in the community plan transportation system in a variety of ways. A comprehensive transportation phasing plan has been prepared in conjunction with the Atlas, Levi-Cushman and FSDRIP Plans which will ensure coordinated implementation of a circulation network adequate to serve all of the proposed developments. Transportation improvement projects outlined in the Mission Valley Community Plan for the specific plan area will be constructed in conjunction with specific plan implementation. In addition, a number of alternative transportation system improvements have been incorporated into the specific plan design including links to the valley-wide LRT system, provision of an intra-valley shuttle for the Atlas properties, and numerous pedestrian and bicycle pathways. Funding commitments for these improvements are detailed in the Plan Implementation Element and elsewhere in this Specific Plan.

3. Flood Protection

The Mission Valley Community Plan describes the San Diego River as a "significant aesthetic and economic asset to the community (p. 112)." The river should serve as an attraction to visitor-oriented services through the orientation of land uses to the river and the protection and enhancement of the wetland habitat. At the same time, the adverse effects of periodic inundation of the floodplain should be reduced through application of appropriate hydraulic, environmental and design criteria. The San Diego River Wetlands Management Plan implements the goals of the draft community plan. The Wetlands Management Plan calls for a 10-year pilot channel and a flood facility to accommodate a 100-year storm.

The specific plan incorporates measures which would implement virtually all of the goals expressed above for the site adjacent to the San Diego River (Hanalei Hotel). The river channel would be improved to the standards stated above. The revegetation plan incorporates habitat replacement and buffer areas to protect the wetlands. A pedestrian/bicycle promenade and buffer areas will also be located adjacent to the river corridor at the Hanalei Hotel site. New structures on the Hanalei Hotel and Tower sites will be oriented to the river and passive recreational use encouraged through the development of pedestrian plazas and pedestrian/bicycle pathways. The river improvement and urban design elements of this specific plan describe these features in detail.

4. Hillsides

The Mission Valley Community Plan identifies the southern hillsides of Mission Valley as a distinctive and aesthetic feature of the valley's character. The plan's objective is to:

> Preserve as open space those hillsides characterized by steep slopes or geological instability in order to control urban form, insure public safety, provide aesthetic enjoyment, and protect biological resources (p. 120).

Two of the sites within the specific plan area are located adjacent to the southern hillsides of Mission Valley. No encroachment into the hillsides will be associated with development on any of these sites. Design criteria have been incorporated into the Atlas Specific Plan to ensure sensitivity to the natural hillsides as discussed in the urban design element of this specific plan.

5. Urban Design

The main objective of the urban design element of the Mission Valley Community Plan is to encourage design which will enhance the form and function of the community and integrate the various components. Two functional categories are identified for special consideration: design protection areas and transportation corridors.

Design protection areas include the San Diego River and the valley walls. Design adjacent to the river should be sensitive to the natural habitat. Structures should be oriented towards the river, and designed at appropriate scale or "stepped-down" towards the river for a gradual visual transition. Visual and physical access should be ensured through protection of views and provision of pedestrian paths, observation areas and rest areas within buffer areas. On the southern hillsides, natural slopes

should be utilized as a background and guide for urban form. Contouring, terracing and landscaping with natural vegetation should be utilized.

The Atlas Specific Plan area is somewhat unique from an urban design standpoint since several of the Atlas sites are already developed with existing uses which relate in a variety of ways to the urban design guidelines included in the Mission Valley Community Plan. In the case of the Hanalei Hotel site, the Atlas Specific Plan seeks to redevelop this existing developed site in a manner more consistent with the urban design goals of the community plan. The urban design element of this specific plan presents criteria for both riverfront and hillside development and includes specific design criteria for each of the sites within the specific plan area.

The second area of concern in the Mission Valley Community Plan is in the transportation corridors. The plan recommends buffering of freeways from local frontage roads with landscaping. Development along major roads should observe setbacks and also be buffered by landscaping. Local streets should provide safe pedestrian access and visual interest as well as retail development.

LRT stations should be located and designed to emphasize pedestrian access; minimize conflict with vehicles; provide shelter, information and visual interest; and harmonize with the river corridor criteria. Pedestrian paths and use areas should provide safe access to the major shopping centers; seating; landscaping; information, public art or vending activities; and observation areas for natural habitat.

The Atlas Specific Plan will achieve all of the transportation corridor objectives stated above. Specific designs are recommended which will provide pedestrian interest areas while meeting multiple objectives of river enhancement, flood protection, parking provision and visual quality. A conceptual streetscape plan for the Hotel Circle area has been incorporated into the specific plan which will provide visual integration of previously unrelated sites and improve the aesthetic environment of the freeway view corridor.

X. PLAN IMPLEMENTATION

NOTE: The originally adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. This information greatly shaped the proposed development plan, intensity, configuration, off-site transportation improvements, and implementation phasing. The circa 1988 technical studies conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment. Thus, the study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only. Updated technical studies based on current data, requirements and guidance shall be prepared as required in conjunction with any future development proposal within the Specific Plan area.

This implementation element describes the methodology to be utilized in future processing and review of development plans for the Atlas Specific Plan, outlines phasing strategies and improvements to be provided in conjunction with specific plan implementation, and discusses financing mechanisms for the proposed improvements.

A. PROCESSING AND REVIEW

The Atlas Specific Plan consists of five separate sites, three of which are currently developed: Hanalei Hotel, Mission Grove Office Park and Kings Inn. Little or no additional development is proposed on two of the currently developed sites: Kings Inn and Mission Grove Office Park. Future processing and review of proposed improvements at these two sites will involve obtaining the necessary land development permits for grading or building construction. City review of these permit applications will ensure consistency of the proposed improvements with the design criteria included in this specific plan. Plans for development on two sites within the specific plan area (Hanalei Hotel and Hanalei Tower) must be processed under the requirements and procedures of the Planned Commercial Development (PCD) permit process (Section 109.0910). It is understood that individual development projects for these sites will be permitted to develop as long as the individual development projects are consistent with the uses, intensities and guidelines established within this specific plan. In all cases, the decision to approve, conditionally approve, or disapprove the application for any PCD within the Atlas Specific Plan area shall be based on conformance of that application to this specific plan.

The 3.70-acre Evelyn Terrace site is being reserved for irrevocable dedication for off-ramps associated with the proposed I-8/Via Las Cumbres interchange. No development is proposed for this 3.70-acre site.

The City Planning Director may approve minor adjustments to the Atlas Specific Plan so long as those adjustments are in substantial conformance and meet the spirit and intent of the Atlas Specific Plan. Such adjustments will not require an amendment to the Atlas Specific Plan.

The City Planning Director may approve minor adjustments of up to a 5% increase in the development intensity of any site within the Atlas Specific Plan area provided that there is a concurrent reciprocal reduction of development intensity on another site within the Atlas Specific Plan area such that the net overall development allocation within the Atlas Specific Plan area is not changed. Specific Plan area property owners shall be responsible for demonstrating the development allocation balance pursuant to any requested development intensity adjustment in a form satisfactory to the City Planning Director. Such adjustments will not require an amendment to the Atlas Specific Plan. Regardless of any development intensity adjustment requested, the total traffic volume ADT level related to the Atlas Specific Plan shall remain unchanged by the adjustment.

If any ambiguity or discrepancy arises between the text and/or illustrations within this Specific Plan, the more restrictive shall apply unless otherwise approved by the City Planning Director. The Atlas Specific Plan contains specific standards and criteria for development of the sites within the specific plan area. As such, should any conflict arise between provisions of the Specific Plan and other applicable adopted City plans and/or ordinances, this Specific Plan shall prevail.

Zoning Regulations

Development projects within the Atlas Specific Plan area shall be implemented according to the FW, R-1-40, CO, and CR zoning regulations. Proposed zoning designations for the specific plan area are illustrated in Figure 78. The CO and CR zoning regulations are modified by the development criteria contained in the Urban Design Elements and the parking standards contained in the Transportation Element of this specific plan.

Subdivision Maps

The following sections of this Implementation Element identify the major improvements that will be required for future Planned Commercial Development permits and possible subdivision or parcel maps. Subdivision improvements are required by the City to be constructed, bonded for, or otherwise assured to the satisfaction of the City prior to the recording of a final map.

B. PHASING OF DEVELOPMENT

The phasing program for development of the Atlas Specific Plan is shown in Table 14. Identification of the public improvements which will be provided in conjunction with development of the sites within the specific plan area is provided in the following public facilities and improvements section of the Plan Implementation Element of this Specific Plan.

Figure 78 Existing Zoning (amended)

Flexibility must be allowed within any long range phasing plan. Market conditions change rapidly, and Atlas must be able to move in conformity to the demands of the market place. For this reason, the Atlas Specific Plan shall remain flexible. Atlas will be permitted to adjust the phasing schedule, or construction now anticipated in the various phases, as long as Atlas provides the contribution to the financing of public improvements required in conjunction with the portion of the project actually being constructed, with such contribution to be determined in cooperation with the Transportation and Traffic Engineering Division of the City of San Diego.

Table 14
Atlas Specific Plan, Proposed Phasing of Development
(See note at beginning of this section [X. Plan Implementation]).

Phase	Estimated Years to Construct [3,5]	Estimated Date of Completion [4]	Site	Development	
Phase 1 [1,2]	2		Hanalei Tower	157,500	SF Office
Phase 2 [2]	2		Hanalei Hotel	202	Net Additional Hotel Rooms

Note:
[1] No alteration to floodway, no revegetation required.
[2] Property owner may seek to establish one or more assessment districts for the purpose of financing the construction of river improvements, if needed, including the wetlands area and public amenities adjacent to the river, and City shall assist property owner in establishing such assessment districts.
[3] Estimated years to construct refers to construction time only and does not include design or permitting time. Refer to the phasing of development text of this specific plan for additional remarks.
[4] Estimated date refers to the estimated time of completion of construction. Refer to the phasing of development text of this specific plan for additional remarks.

C. PUBLIC FACILITIES AND IMPROVEMENTS

NOTE: The initially adopted Atlas Specific Plan was based on circa 1988 planning guidance, regulations, requirements, and technical studies. In particular, the traffic study, hydraulic study, flood management policy, and environmental mitigation plan greatly shaped the proposed development plan, intensity, configuration, and implementation. As part of any future development proposal, technical reports including but not limited to traffic impact analysis, biological technical report, and hydrology and hydraulic analysis shall be prepared as required to ensure the proposed development is based on current data, planning guidance and environmental review requirements. The circa 1988 technical studies conducted included the Town and Country site and the Mission Valley Inn site within the Specific Plan area; however, both sites were later removed from the Atlas Specific Plan by amendment. Thus, the technical study data, assumptions, forecasts and conclusions remaining in this amended Specific Plan document are fundamentally outdated, inaccurate and shall be considered for general informational purposes only.

The provision of transportation improvements associated with the Atlas Specific Plan is summarized in Tables 12 and 13, included in the transportation element of this specific plan. Tables 12 and 13 outline the transportation improvements necessary to serve the Mission Valley area under the cumulative development scenario outlined in the Atlas Specific Plan and includes the EDU threshold and Atlas development phase at which specific transportation improvements would be provided. Other public facilities and improvements to be provided in conjunction with the Atlas Specific Plan are summarized below.

	Description	Implementation
	Flood Control	
1.	Flood control improvements: if needed, as described in river improvement element	SR-Specific Plan area property owners may seek to establish one or more assessment districts for the purpose of financing the construction of the river improvements, including the wetlands areas and other public amenities adjacent to the river, and City shall assist the propery owners in establishing such assessment districts. The LRT, as designed by MTDB, will not be constructed on Atlas Hotels, Inc. property. Therefore, Atlas Hotels, Inc. will not be providing right-of-way for the LRT.
	Revegetation	
2.	Revegetation Plan	At time of implementation of flood control or development improvements.
	Public Transit	
3.	Deleted by amendment	
4.	Provide bus stops as required by San Diego Transit Corp.	With street improvements
	Bikeways	
5.	Provide bicycle network connecting to community plan bikeway system	With development of individual sites, in conjunction with individually approved street and river corridor improvements
	Public Facilities	
6.	Water	Project-serving facilities provided by developer per Council Policy 400-7
7.	Sewer	Project-serving facilities provided by developer per Council Policy 400-7
8.	Storm Drainage	With street improvements
9.	Gas and Electric	Provided by SDG&E
10.	Telephone Service	Provided by Pacific Telephone
11.	Cable Television Service	Provided by private cable TV service

	Description	Implementation
12.	Open space	
	• River Corridor	At time of implementation of flood control improvements, if needed
	• Open space linkage	Contained within and provided with development of individual sites, as improved
	Off-site Improvements	
13.	Fire Protection	Through payment of Development Impact Fees as required by the Interim Public Facilities Financing Plan for Mission Valley.
14.	Off-site transportation improvements	To be provided as summarized in Table 13 subject to updated traffic study based on current data.
15.	Intersection improvements, signing, signal modification	With development of individual sites as determined by City engineer. To be provided as summarized in Table 13 subject to updated traffic study based on current data.

D. FINANCING

Public Improvements, Facilities and Services

The Mission Valley Community Plan and the Atlas Specific Plan provide for subdivision improvements for the Atlas Specific Plan properties consisting of (1) construction and/or improvement of specified transportation and infrastructure projects, (2) construction of public facilities, (3) flood control improvements as needed, and (4) dedication of certain land necessary to implement the foregoing. Accordingly, Specific Plan area property owners shall locate on the real property, and construct thereon, the public improvements and facilities as designated herein, and shall dedicate a portion of the real property required to accommodate such improvements and facilities as specified in this specific plan. To the extent that improvements and facilities are to be located off-site of the Specific Plan area, Specific Plan Area property owners agrees to pay a fair and reasonable portion of the cost for such improvements and facilities, as set forth in this specific plan. Construction, dedication, and/or payment by property owners in lieu of such construction or dedication, shall constitute the full extent of property owners' obligation to construct, dedicate property and pay for subdivision improvements for the project, except for the development impact fees described hereafter. Such public improvements, facilities, and dedications include the following primary improvements.

1. River and Landscape Improvements: Atlas will construct the river improvements as needed for flood control and restoration at the Hanalei Hotel and Hanalei Tower sites. SR-The described improvements will be constructed at property owner's cost and expense. Property owner will bond for the improvements, or provide other assurance of funding

acceptable to the City, at the time the City issues building permits for the development. Property owner may seek to establish one or more assessment districts for the purpose of financing the construction of the river improvements, including the wetlands area and other public amenities adjacent to the river, and City shall assist property owner in establishing such assessment districts.

2. Maintenance of River and Landscape Improvements: The property owner will retain ownership of the river improvements described in paragraph 1 above, and be responsible for operation, maintenance, and repair of same for a period of five years following completion of such improvements. Thereafter, maintenance and repair of the facilities will be provided by a maintenance district or other similar mechanism in which property owner will participate in perpetuity.

3. Transportation Improvements: Table 15 (subject to updated traffic study based on current data) of this Specific Plan sets forth the transportation improvements in which Specific Plan area property owners. will participate, the degree of participation in each improvements, the method of that participation (directly or through Development Impact Fees) and the phase of the specific plan development during which each of the improvements will be implemented. This table includes both improvements required by the Mission Valley Community Plan, and additional improvements in which property owners will participate.

The construction of some of the transportation improvements described in Table 15 (subject to updated traffic study based on current data) will provide a substantial benefit to owners of land adjoining the real property. As a result, a portion of the cost of such improvements and dedications may be allocated to adjoining and other benefitted landowners. It is anticipated that the City may establish one or more assessment districts, or other financing mechanisms, for the purpose of financing construction of the improvements and to obtain contributions toward the dedication of rights-of-way. Specific Plan area property owners may also seek reimbursement agreements with the City and/or owners and developers of land benefitted by the public improvements to permit Atlas to recover an equitable portion of the cost of such improvements and dedications. In the alternative, property owners may receive a credit equal to the cost of improvements and value of dedications allocated to adjoining and other benefitted landowners to be applied by property owners toward their obligations under an assessment district formed for the purpose of providing the described improvements. The City will cooperate and assist property owners in establishing such assessment districts as needed to implement the improvements, and shall enforce any City-approved reimbursement agreements by requiring reimbursement to property owners as a condition to the approval of subdivision improvements on the benefitted lands, other than

Table 15
Preliminary Circulation System Improvement Cost Sharing,
Atlas Specific Plan, Mission Valley, San Diego
(See note at beginning of this section [X. Plan Implementation]).

DIF Project Number	Improvement[4]	Approximate Construction Cost	Land Cost (@ $25/sf)	Approximate Total Cost	Atlas Percentage	DIF Funding	Development Threshold Sector	Cumulative EOU Threshold	Concurrent [1] Atlas Phase
4	Restripe Hotel Circle South, from EB Hotel Circle ramps to Camino de la Reina	$8,000	$0	$8,000	0%		1-4	0	1
5	Increase capacity at I-8/Hotel Circle ramps (Interim)	$270,000	$250,00	$520,000	33%		1-4	0	1
6	Restripe Friars Road	$80,000	$0	$80,000	0%		1 or 3, 4	400 2,900	4+ 4+
7	Reconstruct Camino de la Reina from Napa to Fashion Valley *plus $5,400,000 DIF funds	$640,000	$12,500,000	$16,140,000*	22%	Partially DIF funded	1, 3, 4	5,100	4+
8A	Restripe Hotel Circle South, remove parking, from I-8/Presidio to EB Hotel Circle ramps	$15,000	$0	$15,000	40%		1, 3, 4	0	1
8B	Widen Hotel Circle South, to 4 lanes from Camino de la Reina to EB Hotel Circle ramps	$1,920,000	$680,000	$2,600,000	33%		1, 3, 4	0	1
9	Widen Hotel Circle South from EB Hotel Circle ramps to I-8/Presidio	$1,450,000	$150,000	$1,600,000		100% DIF funded	1, 3, 4	5,100	4+
10A	Widen Hotel Circle North between WB I-8 ramps and Camino de la Reina	$575,000	$35,000	$1,110,000	40%		1-4	0	1

DIF Project Number	Improvement[4]	Approximate Construction Cost	Land Cost (@ $25/sf)	Approximate Total Cost	Atlas Percentage	DIF Funding	Development Threshold Sector	Cumulative EOU Threshold	Concurrent [1] Atlas Phase
10B	Construct Camino de la Reina between SR-163 to Fashion Valley Road	$2,060,000	$7,750,000	$9,810,000	56%		1, 3, 4	2,900	4+
11	Widen existing Camino de la Reina from Avenida del Rio to Hotel Circle	$1,000,000	$1,000,000	$2,000,000	18%		1, 3, 4	1,800	4+
12	Construct Via Las Cumbres interchange *plus $3,000,000 from Caltrans	$10,000,000	$46,000,000	$6,000,000*	City to provide funding source [2]		1, 3, 4	5,100	4+
13	Construct Via Las Cumbres	$6,800,000	$4,750,000	$11,550,000	25%		1, 3, 4	5,100	4+
14	Add dual left turns for EB/WB SR-163/Friars Road	$124,000	$0	$324,000	25%		1-4	500	1
15	Improve Hazard Center Road to a 4-lane major from Fashion Valley Road to Mission Center Road *$3,600,000 from DIF funds	$2,560,000	$3,325,000	$5,885,000	5%	Partially DIF funded	1, 2, 4-7	12,000	4+
16	Construct SB off ramp to WB Friars Road at SR-163	$2,214,000	$750,000	$2,964,000		100% DIF funded	1-4	7,500	4+
17	Add third WB through-lane Friars Road at SR-163	$5,000	$0	$5,000	25%		1, 2, 4-7	4,700	4+
18	At SR-163 and Friars Road, move WB on ramps eastward, or replace with a loop or flyover.	$1,621,000	$0	$1,621,000	6%		1, 2, 4-7	2,900	4+
19A	Widen Camino de la Reina to 4-lane major from SR-163 to Mission Center Road	$800,000	$2,850,000	$3,650,000	5%		1, 2, 4-7	2,900	4+
Subtotal:		**$35,392,000**	**$80,540,000**	**$115,932,000**					

DIF Project Number	Improvement[4]	Approximate Construction Cost	Land Cost (@ $25/sf)	Approximate Total Cost	Atlas Percentage	DIF Funding	Development Threshold Sector	Cumulative EOU Threshold	Concurrent [1] Atlas Phase
Improvements implied by Community Plan									
A	Widen Presidio overcrossing to 4 lanes	$800,000	$0	$800,000	20%		1, 3, 4	6,500	
B	Restripe Hotel Circle North	$10,000	$0	$10,000	40%		1, 3, 4	5,100	4+
C	Widen Fashion Valley Road	$2,565,000	$3,600,000	$6,165,000	40%		1-4	0	1
D	Construct new Fashion Valley interchange	$2,600,000	$6,400,000	$9,000,000	25%		1-4	0	4+ [3]
E	Remove existing WB ramps to Hotel Circle	$130,000	$0	$130,000	25%		1-4	1,800	4+
F	Widen Hotel Circle North to 4 lanes between the Presidio overpass of I-8 and Via Las Cumbres	$75,000	$531,0000	$1,106,000	44%		1, 3, 4	5,100	4+
Subtotal:		**$6,680,000**	**$10,531,000**	**$17,211,000**					
LC1	Construct Street B as 4-lane major from Street C to Fashion Valley Road	$1,076,000	$4,500,000	$5,576,000	22%		1, 3, 4	1,800	4+
LC2	Construct Street C as 4-lane major from the river to Street B	$576,000	$3,000,000	$3,576,000	0%		4	1,700	4+
LC6	Provide minor intersection improvements at various locations as required by City Engineer	$500,000	$0	$500,000	33%		1	1,800	
LC8	Construct Street C as 4-lane road from Friars Road to the river	$3,494,000	$3,250,000	$6,744,000	0%		1	1,800	
LC9	Construct Street D as 4-lane major from Friars to Camino de la Reina	$405,000	$1,250,000	$1,655,000	0%		1	1,800	
LC12	Construct WB Friars to SB Morena/I-5 connection	$2,430,000	$1,250,000	$3,680,000	14%		1, 3, 4	6,200	

DIF Project Number	Improvement[4]	Approximate Construction Cost	Land Cost (@ $25/sf)	Approximate Total Cost	Atlas Percentage	DIF Funding	Development Threshold Sector	Cumulative EOU Threshold	Concurrent [1] Atlas Phase
LC15	Construct Street B as 4-lane major from Street C to Via Las Cumbras	$1,605,000	$6,875,000	$8,480,000	22%		3, 4	0	
RW1	Widen and signalize the "River Valley" project (access at Hotel Circle North to provide necessary through and turn lanes).	$250,000	$272,000	$22,000	0%		3, 4	0	1
Subtotal:		**$10,226,000**	**$20,197,000**	**$30,733,000**					
Grand Total:		**$52,408,000**	**$11,468,000**	**$163,876,000**					

Note:

[1] These cost estimates are very preliminary and will not be the actual construction cost at the time of implementation. These estimates should only be used as a guide for determining percentage of distribution cost.

[2] 4+ indicates that a project will be triggered only by cumulative development. Atlas will provide its share of funding upon this event which is not anticipated to occur until after Phase 4 of the Atlas development.

[3] The Traffic Impact Report for the Atlas Specific Plan shows that the traffic impacts of the first four phases of the Atlas Project can be mitigated without the interchange, unless Phase I of the adjacent Levi-Cushman (Chevron) project occurs concurrently with one of the early phases of the Atlas development. To insure that the Atlas Project will not hinder future construction of the interchange, Atlas Hotels will commit its fair share of the cost of the interchange at such time as Atlas begins construction of the first phase of the redevelopment of the Town and Country site, with such fair share to be determined in co-operation with the Transportation and Traffic Engineering Division of the City of San Diego. Atlas will also construct the necessary improvements to mitigate the interim impacts associated with the Atlas development to provide acceptable levels of service on all roadways adjacent to the Town and Country site during each phase of Atlas development of the site.

[4] All circulation system improvements are subject to updated traffic study at time of development based on current data.

the property owner's property. Said enforcement will include payments by other owners and/or developers to the City that will be passed through the City to property owner.

Atlas acknowledges that the City and/or Metropolitan Transit Development Board may establish one or more assessment districts to finance the construction of the LRT system in Mission Valley. Specific Plan area property owners will agree not to oppose the formation of such an assessment district provided that assessments for right-of-way acquisition and construction payable to property owners thereunder, when added to the sums already provided by property owners for the LRT system, do not exceed the cost of construction of an LRT station.

The LRT, as designed by MTDB, will not be constructed on Atlas property. Therefore, Atlas will not be providing right-of-way for the LRT.

4. Bicycle and Pedestrian Circulation: Specific Plan area property owners will fund construction of bicycle and pedestrian circulation facilities on the Specific Plan area sites and the shared pedestrian/bicycle path along the river corridor, as described in this specific plan. The improvements will be implemented in conjunction with the development of each of the properties included in the Atlas Specific Plan.

5. Streetscapes: Specific Plan area property owners will fund construction of streetscapes on each of the sites, as described in this specific plan. Implementation on each site will occur in conjunction with the development of the site, or at the time development levels trigger street improvements adjacent to the site.

6. Development Impact Fees: The Mission Valley Community Plan identified the public improvements and facilities to be implemented and financed by the Mission Valley Interim Public Facilities Financing Plan and Development Impact Fee (January, 1988), which included the related development impact fee schedule. The ultimate Mission Valley Financing Plan, in preparation by the City, will provide for construction of certain other regional transportation and infrastructure improvements. Such improvements and fees are intended to mitigate and accommodate development occurring throughout Mission Valley and thus will be proportionally allocated to owners of property subject to the community plan through means of a “Development Impact Fee Plan.”

At this time, the City has not adopted a complete Mission Valley Financing Plan, although the Mission Valley Interim Public Facilities Financing Plan and Development Impact Fee has been adopted. Atlas will pay its allocated share of the development impact fees in effect at the time of building permit issuance as required by the adopted interim plan. Further, attached hereto are a letter of agreement dated June 1, 1987, with regard to participation by Atlas Hotels, Inc. in the financing of traffic circulation improvements for Mission Valley, and a letter of March 10, 1987, by which Atlas makes a specific commitment for participation in the funding of the Fashion Valley Road interchange. These agreements are subject to concurrence with adjustments to forecasts and conclusions of an updated traffic study based on current data.

Specific Plan area property owners may, from time to time, elect to construct at thier own cost and expense one or more of the regional public improvements or other improvements subject to the development impact fees. If a property owner constructs one or more of said improvements, and/or dedicates land to the City for such public improvements, the property owner shall receive from the City, upon recordation of a notice of completion and acceptance, and upon approval by the City Council, a credit equal to the actual substantiated cost of construction of such public improvement and/or the fair market value of land dedicated by the property owner for said purpose. The property owner shall be entitled to apply such credit or credits toward its obligation to pay impact fees up to the full amount of the credit. The property owner shall retain the right to apply such credits to the development of one or more of the property owner's sites in order to fulfill, in whole or in part, the impact fee obligations with respect to such site.

LETTER A
ATTACHMENT 14

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TOWN & COUNTRY
MIR Review (Cycle 9)
Project No. 276334/SAP No. 24002577

INTRODUCTION
The Environmental Analysis Section (EAS) has reviewed the MIR project submittal for the above referenced project and is providing the following comments.

PROJECT SCOPE
MISSION VALLEY IO# 24005875 **SUSTAINABLE BUILDING EXPEDITE PROGRAM** (Process 5) LUA, PDP, SDP, VTM, and Easement Vacation(s) to create 9 parcels, demo commercial structures, reduce hotel rooms from 954 to 700, reduce conference area from 212,762 sq ft to 177,137 sq ft, & construct 840 dwelling units, 4.37 acres of park area on a 39.7-acre site at 500 Hotel Circle North in MVPD-MV-M/SP & OF-1-1 Zones of the MVPDO within Atlas Specific Plan and MVCP, and CD 7.
Applicant proposes to demolish existing structures and surface parking to redevelop the site with a medical center comprised of a eight-story, 720,000-square-foot, 450-bed acute care hospital; a four-story, 180,000-square-foot hospital support building housing ambulatory , clinical, and administrative functions; a 36,000-square-foot energy center; a six-story, 2,200-stall parking structure; and, associated site improvements (hardscape, driveway access, retaining walls, and landscaping). The XX-acre project site is located 5201 Ruffin Road …... *(LEGAL DESCRIPTION: XXXX).*

PREVIOUS ENVIRONMENTAL
A Mitigated Negative Declaration (No. 118318 / 2011041092) was prepared for the Town and Country Parking Lot in order to permit the prior unauthorized construction of a 112-space paved parking lot along with remediation and mitigation for the unauthorized placement of soil into sensitive biological resources during the unauthorized construction.

The violation occurred in September 2005 when dirt was removed from the project area (approximately 1.7-acres in size with 1.0-acre for the parking lot) and was stockpiled by the contractor adjacent to the bank of the San Diego River and to the east of the expansion area. Temporary impacts occurred as a result of the placement of fill along the river and in the open area behind the Union Tribune parking lot. Permanent impacts resulted from the construction of the parking lot expansion. Prior to the paved parking lot expansion, the area was effectively a dirt parking lot that was used to capture overflow parking and large vehicle parking from special events and conventions.

The history of the violation includes the issuance of a Notice of Violation (NOV), dated December 12, 2005, which was prepared by the Neighborhood Code Compliance Department and issued to the property owner; a Cleanup and Abatement Order (COA) issued by the Regional Water Quality Control Board (RWQCB) and an Enforcement Case opened by the U.S. Army Corps of Engineers (USACE).

A component of the project was to a restoration and mitigation plan that included wetland enhancement and creation (refer to the final MND). To date, the restoration and mitigation plan has not been implemented.

The project is required comply with the stipulated judgment dated March 22, 2007, that outlines the requirements.

LAND USE

The project site is in the Atlas Specific Plan and is identified as a 39.4-acre area with hotel, convention center/meeting space, and pre-function area uses. The project site is also within the Mission Valley Community Plan Area. On February 19, 2015, Planning Commission approved the initiation request to amend the Atlas Specific Plan and Mission Valley Community Plan (Planning Commission Report PC-15-012, Resolution No. PC-4658). EAS defers to Plan-Long Range Planning on community plan issues; refer to their comments for further direction. Additionally, EAS defers to Planning Review on Land Development Code (LDC) issues; refer to their comments for further direction.

Per the City's Significance Determination Thresholds an inconsistency with a plan is not in of itself a significant environmental impact; the inconsistency would have to result in a secondary physical impact. Please refer to Planning Review and Plan-Long Range for additional information and/or clarification. EAS will coordinate with staff to determine what, if any, impacts would result with implementation of the project.

Issues raised by Engineering Review have been resolved. The technical study prepared by (XXXX) has been reviewed and accepted. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

LAND USE (MSCP)

The project site located within and adjacent to the City of San Diego Multi-Habitat Planning Area (MHPA) of the Multiple Species Conservation Program (MSCP) Subarea Plan and would need to be evaluated for conformance with the final MSCP Plan (August 1998) and the City's MSCP Subarea Plan (March 1997). An evaluation of the should be conducted within a biological resources report that include conformance to the Land Use Adjacency Guidelines (Section 1.4.3) in terms of land use, drainage, toxic substances in runoff, lighting, noise, invasive plant species, and brush management requirements for the portions of the proposed development which lie adjacent to the MHPA. EAS staff will coordinate with MSCP staff to assess overall impacts in this area. In addition, should the applicant require a MHPA boundary line adjustment and/or correction, MSCP staff should be consulted to determine what steps and/or additional information may be needed. Please refer to additional comments provided by MSCP staff.

CIRCULATION/PARKING

Transportation is currently reviewing the traffic study prepared for the project (prepared by Linscott Law Greenspan Engineers, March 16, 2015); refer to their comments for further direction. please has determined that the project requires the preparation of a traffic study. Should revisions be required, please provide EAS with a revised version of the study. EAS will coordinate with Transportation to determine what, if any, impacts and/or mitigation would be required.

As the review progresses, please be aware that any revisions to the traffic study may require changes to other technical studies (i.e., air quality, GHG, noise) in order to incorporate revised information to ensure consistency. Furthermore, based on the analysis/conclusions, new studies and/or analysis may need to be requested based on locale of impact.

Transportation staff reviewed the traffic study prepared by Kimley-Horn and Associates, Inc. (dated June 28, 2010) and is requesting revisions. Based on the revisions and the conclusions, other technical studies may also need to either be revised and /or new studies requested (i.e. air quality, noise) based on locale of impact. Please provide EAS with a copy of the revised traffic study. EAS will coordinate to determine what, if any, impacts and/or mitigation would be required.

Please be aware that any revisions to the traffic study would require changes to other technical; studies (i.e., air quality, GHG, noise) to ensure consistency.

Transportation has reviewed and accepted the traffic study prepared XXXX dated XXXX. The study determined that there would be traffic impacts in the horizon year 2030 with and without the project. Therefore, appropriate mitigation measures and all pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

AIR QUALITY / ODOR

EAS has reviewed the air quality report prepared by AECOM (April 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study.

EAS has reviewed and accepted the air quality analysis prepared by XX (XX). The study determined that no impacts (construction or operational) would result; therefore, mitigation measures are not necessary. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

BIOLOGICAL RESOURCES

EAS has reviewed the biological technical report prepared by AECOM Technical Services (April 2015); staff is providing the following general comments:

1. There is no discussion of the outstanding code violation on the property (except for a reference in Bio-9). Impacts should be assessed according to what vegetation should be there, not the disturbed vegetation that still exists because the code violation was not addressed. This applies to the analysis of indirect impacts as well. The proposed project impacts (direct and indirect) should be evaluated against the habitat that would exist had the restoration occurred for the code violation.

2. How will impacts related to storm channel and rip rap occur without impacts to necessary staging and access areas?

3. There is no discussion of existing wetlands functions and values. This analysis will direct what the necessary buffer will be to protect the sensitive wetland areas.

4. The discussion of impacts to vegetation does not include an analysis of impacts from the construction of the river pathway and improvements to an existing pedestrian bridge. Construction of a river pathway would permanently change the existing habitat.

5. The justification for a 30-foot buffer is the U.S. Army Corps of Engineers Fischer and Fischenech (2000) document. Page 2 of the biological technical report refers to a 30-foot buffer in the Atlas permit and a 15-foot buffer according to the F and F (2000) document. The project is proposing a Land Use Amendment to remove the project site from the Atlas Specific Plan; therefore would the Atlas permit still be relevant? Also, in reviewing the F and F (2000) document and the recommended width for riparian habitat (see Table 4) is 30 to 500 meters. A 5 to 30 meter buffer is recommended when the buffer is being established only for water quality protection.

   According to page 10 of the City Biology Guidelines, "the wetland buffer shall be maintained as around all wetlands as appropriate to protect the functions and values of the wetland." The criteria provided for consideration when evaluating wetlands functions and values should include wildlife habitat (spawning, nesting, rearing and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection from storm and floodwaters. These criteria are found in Section 320.4(b)(2) of the US Army Corps of Engineers General Regulatory Practices (33CR 320-330).

   The F and F document (2000) states that "Recommended widths for ecological concerns in buffer strips typically are much wider than those recommended for water quality concerns." The City's criterion of wildlife habitat provided above, it would follow that Tables 2 and 3 from F and F (2000) apply to the Town and Country project. Table 2 from the F and F (2000) document suggests that the minimum recommended widths of corridors and vegetated buffer strips for vegetation, reptiles, amphibians, mammals, fish, and invertebrates range between 30 and 165 meters (roughly 90 to 495 feet). Based on Table 3 of that document, it would appear that the recommended buffer width for birds ranges between 40 and 500 meters (roughly 120 to 1500 feet).

EAS has reviewed and accepted the biological technical report prepared by AECOM (XXXX); thereport concluded XXXX. EAS has no further comments related to this issue.

GEOLOGIC CONDITIONS

Geology has requested that an addendum geotechnical report be prepared. Additionally, staff has raised issues related to remedial grading, liquefaction, and storm water BMPs; refer to their comments for further direction. Please provide EAS with a copy of the requested technical study along with any other documentation submitted for review. EAS staff will coordinate with Geology staff to assess potential geological impacts and determine what, if any, mitigation is required.

Geology has reviewed and accepted the submitted geotechnical documents. Based on that review, the geotechnical consultant has adequately addressed the soil and geologic conditions potentially affecting the proposed project. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

GHG

EAS has reviewed the greenhouse gas emissions report prepared by AECOM (April 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study.

EAS has reviewed and accepted the green house gases emissions analysis prepared by XX (XX). The study determined that no impacts (construction or operational) would result; therefore, mitigation measures are not necessary. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

HEALTH & SAFETY (HAZMAT) – NOT INCLUDED WITHIN PTS COMMENTS
Due to age of structures … what about completing an Asbestos/lead paint analysis?

HISTORICAL RESOURCES (ARCHY)
The project site is located within a high sensitivity area on the City of San Diego's Historical Resources Sensitivity Maps. Furthermore, the project site is located within a recorded archaeological site. Although most of the archaeological site has been disturbed due to development of the area, qualified City staff conducted a record search of the California Historic Resources Information System (CHRIS) digital database and reviewed archaeology site forms and determined that could be a potential for the site to be present beneath the street and existing residences. Therefore upon project resubmittal, written acknowledgement by the applicant to implement the specific historical resources (archaeology monitoring) mitigation, monitoring and reporting program is required prior to a formal environmental document determination being made.

HISTORICAL RESOURCES (BUILT ENV)
Plan-Historic is requesting additional information in order to facilitate the 45-year review of the existing structures to be demolished; refer to their comments for further direction. EAS defers to Plan Historic on issues related to the built environment; please provide copies of the additional information requested to EAS. EAS will coordinate with staff.
Historical Resources previously determined that the property / structure is not an individually designated resource and is not located within a designated historic district. Furthermore, the property does not meet designation criteria as a significant resource under any adopted criteria. EAS has no further comments on this issue. All pertinent information will be included within the appropriate environmental document.

HYDROLOGY/DRAINAGE
LDR Engineering Review is requesting revisions to the hydrology/drainage study; please provide a copy of the revised technical study to EAS. Additionally, refer to comments provided by LDR Engineering Review for further direction. EAS will coordinate with staff.
Issues raised by Engineering Review have been resolved. The technical study prepared by (XXXX) has been reviewed and accepted. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

NOISE
EAS has reviewed the noise report prepared by AECOM (March 2015) and is providing redlines directly to the consultant. Please be aware that the technical study may require revisions pending review of the traffic study.
EAS has reviewed and accepted the acoustical analysis noise report prepared XX (XXXX). The study determined that no impacts (construction or operational) would result; therefore, mitigation measures are not necessary. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

PALEONTOLOGICAL RESOURCES

The project site is underlain by Undocumented Fill, Alluvium, and Stadium Conglomerate. Both Undocumented Fill and Alluvium have zero to low moderate potential for recovery of paleontological resources; whereas Stadium Conglomerate has been categorized as having a high sensitivity rating and a potential for recovery of paleontological resources in the project area.

Paleontological monitoring during grading activities may be required if it is determined that the project's earth movement quantity exceeds the Paleontological threshold (if greater than 1,000 cubic yards and 10 feet deep for formations with a high sensitivity rating; and, 2,000 cubic yards and 10 feet deep for formations with a moderate sensitivity rating). In addition, monitoring may be required for shallow grading (less than ten feet) when a site has previously been graded and/or unweathered formations are present at the surface. Please be aware that monitoring is always required when grading occurs on a known fossil recovery site in the same geologic formation.

In order for staff to determine if a potential impact would result to paleontological resources, please provide the total amount of grading and/or disturbance (import/export, amount of fill, and depth of cut) proposed for the entire project.

This information is advisory, no reports or surveys are required to assist us in our evaluation of potential paleontological impacts.

Therefore, upon resubmittal of the project, acknowledgement by the applicant to implement the mitigation measures related to paleontological resources is required.

Per e-mail/applicant submittal correspondence, dated XXXXX, the applicant has agreed to implement the specific paleontological resources Mitigation, Monitoring and Reporting Program (MMRP). All pertinent information will be incorporated within the appropriated environmental document. EAS has no further comment on this issue.

PUBLIC FACILITIES (PARKS)

Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Parks. Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with Long-Range and Park and Recreation staff to identify, what if any impacts would result and any required mitigation.

EAS Note: By paying the appropriate Facility Benefit Assessment (FBA) fees, the project would be ensuring that the effects on population based parks acreage would be delt with by paying the appropriate FBA fees as required. However, this is a public

service that is a component of the community plan process and is based on constraints of the City budget and approved by City Council. Therefore, this is not considered an issue under CEQA and no mitigation measures are required. Refer to comments in the EIR for further direction on the significance call on this issue.

PUBLIC FACILITIES (SCHOOLS)

Senate Bill (SB) 50 was enacted on August 27, 1998 which authorized a K-12 school and higher education bond to be presented to the voters of California and subsequently on November 3, 1998. SB 50 revised developer fees and mitigation procedures for school facilities as set forth in Government Code Section 65996. The legislation holds that the statutory fees are the exclusive means of considering and mitigating schools impacts. SB 50 limits the scope of review and the findings to be adopted for school impacts. Once the appropriate fee is paid, the impact would be mitigated because provisions that the statutory fees constitute full and complete mitigation.

The environmental document should include information provided by the appropriate school district(s) about the existing conditions and capacities, but should conclude that impacts are mitigated through implementation of SB 50.

PUBLIC FACILITIES (LIBRARIES)

Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Parks. Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with Long-Range staff to identify, what if any impacts would result and any required mitigation.

PUBLIC SERVICES (POLICE/FIRE)

The project would exceed the 75 unit thresholds and consequently would need to be reviewed by the Police and Fire Departments. Per the City's Significance Determination Thresholds a project that would conflict with the community plan in terms of the number, size, and location of public facilities could result in a significant impact to public facilities as it relates to Police and Fire rescue services. Appendix G of the CEQA Guidelines identify if a project would result in a substantial adverse physical impact from construction or alteration of governmental facilities need to maintain acceptable service rations or performance objectives for a public service. Therefore, the evaluation of impacts should focus on physical effects of constructing or altering public facilities. EAS will coordinate with appropriate staff to identify, what if any impacts would result and any required mitigation.

PUBLIC UTILITIES

In view of the continued growth experienced within the City of San Diego, it is the City's goal to ensure that public utilities will be made available on an equitable basis, without jeopardizing human health and safety. Utility providers are typically a combination of City, quasi-public agencies, and privately owned companies and corporations.

Electrical power and natural gas is commonly provided by San Diego Gas and Electric throughout the San Diego metropolitan area. Forecasting future needs is performed on a continued basis. Direct impacts are addressed and mitigated by SDGE at the time incoming development projects occur. Please provide

any correspondence from SDG&E with respect to demand and availability of electrical power and natural gas consumption for the proposed expansion. Per Appendix G of the CEQA Guidelines the evaluation of impacts should focus on physical effects of constructing, altering, or installing the utilities.

PUBLIC UTILITIES (SOLID WASTE)

The California Public Resources Code requires each city within the state to divert at least 50 percent of its solid waste from landfill disposal through source reduction, recycling, composting, and transformation. The City of San Diego has enacted codes and policies aimed at helping achieve a 75 percent diversion level. Projections indicate that diversion rates achieved by the various City of San Diego regulations and ordinances alone will not be sufficient to achieve the 75 percent diversion level. At this rate of waste disposal, the City's only landfill, the Miramar Landfill, will be filled to capacity by 2016, making efforts that preserve landfill space especially important. Based on the City of San Diego's Significance Determination Thresholds, a project that includes 40,000 square-feet or more of building space may generate 60 tons of waste or more and are considered to have a cumulative impact on solid waste facilities.

Construction of project would exceed the threshold for solid waste generation; therefore the project must prepare a conceptual waste management plan that is reviewed and accepted by Environmental Services Department and EAS. Please refer to the City of San Diego Significance Thresholds for what items and/or information is required in the waste management plan.

While all projects are required to comply with the City's waste management ordinances, cumulative impacts are mitigated to below a level of significance through the implementation of the project–specific waste management plan.

PUBLIC UTILITIES (WATER/SEWER)

XXXXX

PUBLIC UTILITIES (WATER SUPPLY ASSESSMENT)

Senate Bill 610 requires that the environmental document prepared for a project of this size contain a discussion regarding the availability of water to meet the projected water demands of the proposed project for a 20-year planning horizon, including single and multiple dry years. Senate Bill 221 requires the decision-maker to make a finding that the project's water demands for the planning horizon be met before approving a Tentative Map.

The types of project subject to Senate Bills 610 and 221 are the following:

a. Residential developments of more than 500 units;

b. Shopping center or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;

c. Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;

d. Hotels or motels having more than 500 rooms;

e. Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 square feet of floor space;

f. Mixed use projects that include one or more of the above types of projects;

g. Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Once a formal project submittal is made, EAS will coordinate with the applicant and the Public Utilities Department in order to process the necessary water availability report. Should additional information be required, staff will contact the applicant.

WATER QUALITY

Engineering Review is requesting revisions to the water quality technical report; please provide a copy of the technical study to EAS. Furthermore, LDR Engineering is requesting various revisions/clarification pertaining to the plan set; refer to their comments for further direction. EAS will coordinate with staff. Issues raised by Engineering Review have been resolved. The technical study prepared by (XXXX) has been reviewed and accepted. All pertinent information will be included within the appropriate environmental document. EAS has no further comments related to this issue.

OTHER (OFFSITE IMPROVEMENTS)

- -INFORMATIONAL ONLY- -

Should it be determined that off-site improvements are necessary, please ensure that the plans reflect all areas of work (on and off the site) so that quantification of all potential impacts can occur.

OTHER (SUSTAINABLE DEVELOPMENT)

- -INFORMATIONAL ONLY- -

The applicant is encouraged to utilize energy efficiency factors in the design of the proposed project following the Leadership in Energy and Environmental Design (LEED) rating system. If energy efficient features will be incorporated into the project design, please describe them.

OTHER (DEVIATIONS)

- -INFORMATIONAL ONLY- -

Should it be determined by Planning Review that deviations are required, please complete and provide the Affordable/In-Fill Housing & Sustainable Buildings Deviation Request Form so that the information can be included within the appropriate environmental document. This information is necessary prior to distribution of the environmental document for public review.

ENVIRONMENTAL DETERMINATION

Until the requested information has been provided, staff is not able to complete the environmental review for the project and the environmental processing timeline will be held in abeyance. EAS will coordinate with the other reviewers as the review progresses regarding any additional potential environmental impacts.

Please be aware that the environmental review may change in response to any project changes and/or new information. Additionally, the new information may lead to the requirement of new and/or additional technical studies. A determination as to the appropriate environmental document will be made based on all reviewed and submitted information.

ENERGY

Appendix F of the State CEQA Guidelines requires that potentially significant energy implications of a project be considered to the extent relevant and applicable to the proposed project. Particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy shall be included in this section. The environmental document would need to address the estimated energy use for the project and assess whether the project would generate a demand for energy (electricity and/or natural gas) that would exceed the planned capacity of energy suppliers. A description of any energy and/or water saving project features should also be included in this section (cross reference with the GHG Emissions, Land Use [Conservation Element], and Public Utilities sections as appropriate). Please describe any proposed measures included as part of the project or required as mitigation measures directed at conserving energy and reducing energy consumption.

COMMENT LETTER B

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TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM USFWS AND CDFW (LETTER B)

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
760-431-9440
FAX 760-431-9624

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, California 92123
858-467-4201
FAX 858-467-4239

In Reply Refer To:
FWS/CDFW-16B0367-16TA0966

October 17, 2016
Sent by Email

Ms. Elizabeth Shearer-Nguyen
Environmental Planner
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101
DSDEAS@sandiego.gov

Subject: Comments on the Draft Environmental Impact Report and Biologically Superior Alternative for Town and Country Redevelopment Project, City of San Diego, San Diego County, California (Project Number 424475, SCH # 2015121066)

Dear Ms. Shearer-Nguyen:

The U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the above-referenced Draft Environmental Impact Report (DEIR) and Biologically Superior Alternative for the Town and Country Redevelopment Project. The public review period for this DEIR ended on October 3, 2016. The Wildlife Agencies appreciate the time extension until October 17, 2016, granted by the City of San Diego (City) for providing comments to the DEIR. On August 16, 2016, the City requested a review of the biologically superior alternative in the biological technical report (BTR) in conformance with the City's Environmentally Sensitive Lands (ESL) wetland deviation process. The Wildlife agencies are providing comments on the BTR as Attachment A to this letter. The comments and recommendations provided herein are based on the information provided in the DEIR, the Wildlife Agencies' knowledge of sensitive and declining vegetation communities in the region, and our participation in the Multiple Species Conservation Program (MSCP) and the City's MSCP Subarea Plan (SAP). The Department previously commented on the Notice of Preparation (NOP) of the DEIR in a letter dated January 16, 2016.

B-1

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(1) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation

B-2

B-1 Comment noted. In this comment, the U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (Department), herein collectively referred to as the Wildlife Agencies, make their introductions, provide the list of environmental documents that were reviewed, and describe the intent of said review. No further response is required.

B-2 Comment noted. In this comment, the Wildlife Agencies state their jurisdictions under federal and state law, citing project-relevant policy such as the Federal Endangered Species Act, the California Endangered Species Act, the California Environmental Quality Act, and the California Natural Communities Conservation Planning program. No further response is required.

planning program. The City participates in the Department's NCCP and the Service's HCP programs by implementing its SAP. B-2

The project site is located at 500 Hotel Circle North, within the City Mission Valley Community Plan and the Atlas Specific Plan. The City's Multi-Habitat Planning Area (MHPA) is located within the adjoining San Diego River. The central and southern portions of the site are currently developed as a 954-room hotel, a 200,000-square-foot convention center, a 258-space subterranean parking structure, food and spa facilities, landscaped grounds, hotel services facilities, and parking areas. The northern portion of the site includes the San Diego River. The majority of this area is undeveloped open space however a portion is currently developed as a parking lot. Vegetation communities found on site include southern cottonwood-willow riparian forest (3.49 acres), coastal and valley freshwater marsh (0.02 acres), emergent wetland (0.06 acres), open water (0.07 acres), eucalyptus woodland (3.88 acres), non-native grassland (0.18 acres), disturbed (1.21 acres), and developed (46.37 acres).

The proposed project includes the redevelopment of the existing 39.7-acre Town & Country Hotel and Convention Center including (1) consolidating and renovating the hotel and convention center; (2) developing a multi-family residential neighborhood; (3) restoring San Diego River open space habitat; (4) construct a new public park; and (5) construct a multi-use River pathway to connecting to a regional recreational corridor. B-3

The proposed project would also implement outstanding actions required by a stipulated judgement for a past City code violation for unauthorized grading in the San Diego River (*City of San Diego* v. *Town and Country Hotel LLC*, Case No. GIC880884). A site development permit was issued by the City (SDP #400602) to authorize habitat restoration and enhancement required to mitigate the unauthorized grading that would include:

1. Restore 1.25 acres of southern cottonwood-willow riparian forest habitat;
2. Enhance 1.28 acres of southern cottonwood-willow riparian forest habitat;
3. Plant a 30-foot average coastal sage scrub buffer zone (approximately 0.23 acre total area);
4. Provide a Covenant of Easement to preserve MHPA lands; and
5. Provide a future San Diego River Pathway.

The Department is charged with administrating and enforcing regulations promulgated by the Fish and Game Commission. The California Fish and Game Commission have adopted a Wetlands Resources Policy (Commission Policy) which, in part, acknowledges that "California's remaining wetlands provide significant and essential habitat for a wide variety of important resident and migratory fish and wildlife species." In recognition of the importance of wetlands to the State of California, the Commission Policy establishes that "…the protection, preservation, restoration, enhancement and expansion of wetlands as migratory bird breeding and wintering habitat are justly recognized as being critical to the long-term survival of such species" concluding that "…it is the policy of the Fish and Game Commission to seek to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California." In addition to the Commission Policy, the Wildlife Agencies administer the MSCP and the City's SAP, all of which prioritize the protection of wetlands, including the San Diego River. We are therefore tasked with seeking opportunities to enhance and expand wetlands resources. B-4

B-3 Comment noted. In this comment, the Wildlife Agencies summarize the project location, Project Description and the outstanding actions required by a stipulated judgment for a past City code violation for unauthorized grading in the San Diego River. As stated by the Wildlife Agencies, a site development permit was issued by the City (Site Development Permit #400602) to authorize habitat restoration and enhancement required to mitigate the aforementioned violation. No further response is required.

B-4 Comment noted. In this comment, the Department summarizes its role in California wetland enhancement, restoration, expansion, protection and preservation through the Wetlands Resources Policy adopted by the California Fish and Game Commission. In addition, the Wildlife Agencies claim their administration over the City's Multiple Species Conservation Plan (MSCP) and state the intent of the comment letters as they relate to the project alternatives and aforementioned federal, state and local policy. The Multiple Species Conservation Plan does n*ot prioritize wetland protection over other native habitats. The Multiple Species Conservation Plan i*s designed to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. Additionally, because the project now avoids impacts to wetlands, it will not require a deviation from the City's Environmentally Sensitive Lands guidelines or the designation of being the biologically superior option. No further response is required.

Ms. Elizabeth Shearer-Nguyen- (FWS/CDFW-16B0367-16TA0966) 3

The comments and recommendations below and attached are provided to assist the City in minimizing potential biological effects associated with the proposed project while maximizing wetland enhancement – a common theme among the Commission Policy, the MSCP, and the guidance found within multiple City planning documents. We believe the following comments to be germane to all project alternatives, particularly to the biologically superior alternative required by the City's ESL deviation guidelines. B-4

The DEIR acknowledges that the proposed project may directly and indirectly impact riparian habitat and sensitive species within the San Diego River corridor by introducing additional public uses within and immediately adjacent to the San Diego River corridor through the construction of the new park space (p. 4.4-57), and by increasing the density of development adjacent to the San Diego River. The DEIR concludes "[t]his park space, while it would not function directly as wildlife habitat, would benefit wildlife movement by providing transitional area between development and native habitats that will limit edge effects on movement through the BSA [Biologic Survey Area]." However, the DEIR does not provide any analysis to support this conclusion.

The Wildlife Agencies are concerned about locating these types of activities and developments within the San Diego River corridor and the edge effects of development on biological resources located therein. In addition, we are concerned that the DEIR does not fully analyze the impacts from these activities on the river corridor, nor does it provide adequate measures to address these impacts. B-5

Human habitation and recreational uses have been demonstrated to impact a suite of avian, mammalian, amphibian, and reptile species; for example, Bosakowski *et al.* (1992) found that nest site location in Copper's hawks appeared to be significantly more tolerant of car traffic than sources of human habitation; similarly, Knight and Skagen (1988) observed that the effects of recreation activities on raptor species include: (1) altering the distribution of raptors, (2) disrupting nest attentiveness, (3) causing abandonment of breeding territories, (4) reducing productivity, and (5) altering foraging behavior. Miller *et al.* (2001) found that natural land managers can implement spatial and behavioral restrictions to reduce the effects of recreationists' presence on wildlife while Knight and Skagen (1988) conclude that recreational activities can be mitigated either through preclusion of recreation or through spatial and temporal restrictions on recreational opportunities. In order to address potential impacts from edge effects we recommend the City and the applicant review alternatives that maximize the width of the native habitat within this reach of the San Diego River corridor and include measures in the proposed park and development that would avoid or minimize edge effects to the maximum extent possible.

In conformance with City Land Development Code section 143.0510(d), impacts to wetlands require an Environmentally Sensitive Lands (ESL) Wetland Deviation which can be permitted through one of three options. The DEIR states that the proposed project qualifies for a wetland deviation under the Biologically Superior Option. Under the Biologically Superior Option, "[a] deviation may be requested to achieve a superior biological result which would provide a net increase in quality and viability (functions and value), relative to existing conditions or the project originally proposed by the applicant, and long term biological benefit." In addition, the biologically superior alternative must find that there are no feasible mitigation measures that would further minimize impacts to ESL wetlands. As a component of the Wetland Deviation process the Wildlife Agencies must provide written concurrence that the "…biologically superior project design has been fully described and analyzed" and conforms to ESL Guidelines. We do not concur that the analysis in the DEIR for a Wetland Deviation under the City's ESL regulations has been adequately supported and the project, as currently proposed, does not achieve a biologically superior design. In order for us to support a B-6

B-5 The quoted statement from the Draft EIR implies that the park provides a physical buffer between the existing movement corridor (San Diego River) and the existing and proposed development. The Draft EIR will be clarified as follows:

This park space, while it would not function directly as wildlife habitat, is not expected to interfere with wildlife movement as it provides a physical barrier between development and native habitats that will serve as additional buffer to limit edge effects on wildlife movement through the existing corridor (i.e., the San Diego River). Conversion of existing parking lot into passive park space will result in a reduction of light and noise edge effects (see Section 4.1.6.1). The increased distance between human activities at the hotel and the River corridor also would attenuate noise and visual disturbance. Section 6.13 of the Draft EIR addresses project-related reduction of edge effects from light despite increased density of development and proposed park space. Similarly, Section 4.7-9 of the Draft EIR addresses project-related reduction of noise effects on the river corridor. (Also see Response B-33).

The Wildlife Agencies raise concerns that human habitation and recreational uses of the passive park will indirectly impact species utilizing the San Diego River corridor such as nesting raptors. To address the issue, the Wildlife Agencies recommend maximizing the width of native habitat within the San Diego River Corridor and redesigning the park to include measures that reduce edge effects to the maximum extent possible.

Since the public release of the Draft EIR, the proposed acreage and configuration of the park has been revised to accommodate additional native habitat outside the park along the River-facing edges of both the northern and southern park parcels, thereby increasing the width of the San Diego River Corridor to the maximum extent possible, while still providing park space required by the San Diego River Park Master Plan (Master Plan). In total, the project contributes approximately 0.51 acre of native habitat to the River Corridor.

As described in Section 3.2.1.1 of the Draft EIR, the 3.31-acre park area is designed for passive recreation. Under *Population-Based Public Park* of Section 3.2.1.1 describes these uses as including passive lawn areas, signage, and benches for wildlife observation and education, in accordance with San Diego Municipal Code §1514.0302. Also, as stated in Section 4.1.6.3, new fencing and signage would be installed around the Multi-Habitat Planning Area (MHPA) to serve as a spatial restriction to discourage trespass into sensitive habitats. Currently no barrier exists to discourage such trespassing. No temporal restrictions will be implemented as the park space is designed to be passive and will not be actively managed to be able to enforce temporal restrictions.

Ms. Elizabeth Shearer-Nguyen- (FWS/CDFW-16B0367-16TA0966) 4

biologically superior alternative the project must show that the project achieves all of the criteria under section C: *Biologically Superior Option* on page 26 of the City's Biology Guidelines which include:

1. *"The proposed project, a no project alternative, a wetlands avoidance alternative, and a biologically superior alternative shall be fully described and analyzed in an appropriate CEQA document. The CEQA document must fully analyze and describe the rationale for why the biologically superior option (this could be the proposed project) would result in the conservation of a biologically superior resource compared to strict compliance with the provisions of the ESL..."*

B-6

The DEIR does not include a wetlands avoidance alternative that avoids wetland impacts from the bridge widening. The final EIR should include a wetlands avoidance alternative.

As part of the process of evaluating a biologically superior option per City ESL regulations, we recommend a comparative analysis of each alternative with the River corridor improvement elements (e.g., habitat creation, buffers, and River widening) specified by the Atlas Specific Plan. The biologically superior option should demonstrate how the biologically superior option provides greater *biological* value than the wetlands avoidance alternative or the buildout of the Atlas Specific Plan (Alternative 1a). We acknowledge that the Atlas Specific Plan would result in the buildout of a higher capacity hotel facility and increase the channel width of the San Diego River; however, in evaluating a biologically superior option, the River Improvement Element of the Atlas Specific Plan (Improvement Element) would not introduce a population-based park adjacent to sensitive habitat resources and would widen the River corridor and revegetate the widened channel with approximately 7.88 acres of riparian corridor habitat (see Enclosure B for our synopsis of the River Improvement Element of the Atlas Specific Plan). The DEIR concludes that "[a]lternative 1a would result in greater impacts when compared to the proposed project to transportation/circulation, biological resources, air quality and odors, hydrology and water quality…" without first analyzing the widening of the River, the net increase of riparian habitat specified in the Atlas Specific Plan, or the biological ramifications of siting a park within a highly constrained corridor of the River. We recommend that the final EIR compare the post-project River width and total acreage of riparian habitat created or restored for each project alternative with the riparian habitat acreage specified by the Atlas Specific Plan; in addition, the analysis should evaluate the differences in land uses adjacent to the San Diego River between the build out of the Atlas Specific Plan and the proposed project.

B-7

We also have concerns regarding the project's proposed buffers and consistency with the Biological Guidelines ESL A 1(b) p. 9:

1. *"A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b)(2) of the U.S. Army Corps of Engineers General Regulatory Policies (33CFR 320-330) list criteria for consideration when evaluating wetland functions and values. These include wildlife habitat (spawning, nesting, rearing, and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection from storm and floodwaters."*

B-8

The DEIR does not include an analysis demonstrating if the proposed buffer will protect the functions and values of the wetland. The final EIR should include this analysis.

During a September 27, 2016, site visit, we observed significant down cutting/vertical slopes along the banks of the San Diego River. We are concerned that the vertical slopes cannot be planted and

B-9

A reasonable range of feasible alternatives were considered for the project. City standards define the amount of park space and parking spaces that are required in response to the development program. These requirements limit the space available for further expansion of the river corridor. The project has been designed to avoid indirect impacts through conformance with the MHPA Land Use Adjacent Guidelines and with the conditions of project approval.

B-6 This comment is no longer applicable because the project no longer impacts wetlands. Replacement of the pedestrian bridge will be accomplished with no wetland impacts. The existing bridge will be removed using a crane staged on the existing parking lot to the south of the San Diego River. The new bridge will be assembled in the existing parking lot and lowered into place using a crane. Additionally, the project has removed the new outfall structure associated with the water quality detention basin. Instead, water will be pumped from the detention basin to an existing outfall structure near the pedestrian bridge thereby avoiding wetland impacts. The revised Project Description is provided in Chapter 3.0.

B-7 See Response B-6. Because the project avoids wetland impacts, a wetland deviation from the Environmentally Sensitive Lands regulations and designation of the project as the Biologically Superior Option is no longer required.

Chapter 10.0 of the Draft EIR provides an evaluation of the Atlas Specific Plan alternative for the project property. This analysis addresses all environmental resource areas, including biological resources. Additionally, as stated in Chapter 3.0 of the Draft EIR and Section 1.6.3 of the Town & Country Master Plan, the Master Plan requires an amendment to remove the project site from the Atlas Specific Plan. The Master Plan replaces in full authority all the guidelines and development standards of the Atlas Specific Plan for the project property.

It should be noted that though the project results in impacts to urban/developed areas (Table 4.4-3 Direct Impacts to Vegetation Communities and Land Covers) and requires no mitigation, 8.11 acres of total habitat restoration/enhancement including 6.7 acres of riparian habitat and 1.4 acres of coastal sage scrub will be provided. Proposed habitat restoration/enhancement would result in no impacts to existing native vegetation.

B-8 Section 4.4.5.2 of the Draft EIR includes a discussion of both existing wetland buffer and wetland buffer following implementation of the proposed project. This discussion includes an analysis of the existing and proposed functions and values according to criteria listed in Section 320.4(b)(2) of the USACE General Regulatory Policies. The analysis demonstrates that the buffer will protect and improve the functions and values of wetlands on-site.

B-9 An EIR assesses and mitigates a project's impact on the physical environment. Bank improvement and channel widening is not within the scope of the project. The project does not propose to widen the River and reduce the elevation of the bank, which would result in impacts to existing vegetation. The following discussion of hydrology, hydraulics, and groundwater provides evidence that grading in the proposed buffer is not necessary for riparian species to establish in the restoration/enhancement areas. Furthermore, geotechnical analyses conducted in support of the proposed project indicate that grading of these areas and widening/braiding of the San Diego River channel would be detrimental to project goals and ecological function. The discussion below also provides a more detailed discussion of restoration techniques, including soil preparation work, that would be implemented to ensure restoration success.

HYDROLOGY AND HYDRAULICS

Chang Consultants conducted a hydrologic and hydraulic analysis of the site, which is included as Appendix H to the Draft EIR. In response to the Wildlife Agencies' comment pertaining to grading of the riparian buffer, Chang Consultants determined that lowering the restoration areas within the site can create adverse hydraulic impacts. The current River corridor has a relatively uniform cross-section along the site, which was created at least partially by natural flow processes over many decades. The natural processes attempt to achieve uniformity in sediment transport and power expenditure, which resulted in the current efficient channel cross-section. Altering the channel cross-section by lowering the restoration area will disrupt the hydraulics and can create increased turbulence due to the channel width and elevation changes. As a result, unpredictable and undesirable impacts can occur, such as scour along the channel. Scour will result in greater sediment transport downstream, which is undesirable from a water quality standpoint. In addition, there are major existing improvements immediately adjacent to the channel corridor such as the trolley line and Riverwalk Drive. Channel scour could reduce the stability of these facilities and create health and safety concerns.

GROUNDWATER

Geocon, Inc. conducted a geotechnical investigation of the site that included a review of prior geotechnical reports pertaining to the site, a site reconnaissance, field exploration, and engineering analysis. These reports are included in a Geotechnical Report (Appendix J of the Draft EIR). The site was explored on November 19 and 20, 2013, by advancing 12 cone penetrometer tests (CPTs) to depths between 43 and 79 feet below the existing ground surface. The approximate locations of the CPTs are indicated on the Geologic Map (Attachment 1 of this letter). As illustrated in the figure, the CPTs within the northern portion of the project site (i.e., within and adjacent to the River

corridor) were located in areas that were representative of the (higher) elevations of the restoration/enhancement areas. Section 5 of the Geocon report states that they encountered groundwater within areas targeted for southern cottonwood-willow riparian forest at depths of approximately 10 feet below grade on average in the CPTs during their preliminary field investigation. No drilling was completed in the areas targeted for restoration to oak riparian woodland; however, Geocon noted that they estimate the groundwater level for the entire project site ranges between 8 and 14 feet below grade. The depth to groundwater would decrease moving closer to the River channel and lower in surface elevation. The following section, Restoration, includes discussion of how the depth to groundwater on-site is capable of supporting riparian restoration/enhancement. Geocon does not expect the groundwater flow or quality in the immediate vicinity of the project to be impacted by the proposed project structures and improvements, including the installation of deep foundations or stone columns.

RESTORATION

Although the project does not involve grading down the vertical slopes adjacent to the river, successful establishment of riparian habitat within the buffer area is expected based on the creation of a sound revegetation plan developed by a team of experienced restoration ecologists.

To start, appropriate vegetation composition and structure is critical for achieving riparian restoration goals that include erosion control, channel stabilization, runoff reduction, and wildlife and fishery habitat enhancement. Root systems of riparian species help stabilize soils and channel embankments thereby reducing runoff, erosion, and sedimentation. Thus, plant species and container stock selected for restoration and site characteristics such as depth to groundwater, soil texture, and chemistry will be compatible with this goal (Dumrose et al. 2002). Other important elements of the restoration process such as the development of the planting plan, seed source, and amendments to soil conditions. These key components of a successful restoration plan are discussed in greater detail below.

Depth to Groundwater

Existing depth to groundwater is expected to support restoration efforts proposed for the riparian buffer. As described above, the results of the geotechnical study indicate that ground water throughout the areas designated for restoration occur at a depth of between 8 to 14 feet below the surface. Because plant species vary in optimum depth to groundwater, it is anticipated that Southern Cottonwood-Willow Riparian Forest (SCWRF) species will be successful within the riparian buffer, despite the vertical slopes. Fremont's

cottonwood, a dominant species in SCWRF, typically prefers a groundwater depth of between 6 and 12 feet and Goodding's black willow, also characteristic of SCWRF, prefers groundwater at 4 to 8 feet (Dumrose et al. 2002), but can occur outside those ranges. Thus existing on-site groundwater depths of approximately 10 feet should be sufficient to support SCWRF success in the riparian buffer area.

Oak riparian woodland is found in a wide range of soil moisture conditions, from highly saturated to very dry. Its natural positioning is dependent upon other factors, including seasonal variation in soil moisture, exposure to sunlight through the forest canopy, and soil microorganisms. In coastal San Diego, it typically occupies elevations higher than cottonwood and willow species. On-site groundwater depths of 8 to 14 feet below the surface and good sun exposure in areas proposed for oak riparian woodland restoration indicate that restoration efforts will be successful.

Planting Plan

Specific planting patterns for container plants will mimic those found on-site and/or in local oak-riparian corridors to address the issue of placement relative to groundwater. For example, mulefat (*Baccharis salicifolia*), California buckwheat (*Eriogonum fasciculatum*), bush monkeyflower (*Mimulus aurantiacus*), and coast live oak, are more prominent in the higher, drier areas of the riparian corridor, whereas Fremont's cottonwood (*Populus fremontii* ssp. *fremontii*), willows (*Salix* spp.), and, to a lesser extent, California sycamore, more often occur in the wetter areas at the center of the riparian corridor where they can tap into the water table during the dry season. The wetland restoration/enhancement areas are designed to have wet soils and adequate water under natural seasonal conditions; irrigation is used only to ensure survival of container plantings until root systems are well enough developed to access groundwater in the dry season.

Seed Source

The riparian restoration sites will be seeded with locally collected native species. Localized collection provides for the best possible genetic match to site conditions, and hand seeding allows for the most precise seed application to respond to microhabitat variation on-site.

Soil Preparation

Soil conditions on portions of the restoration area are currently not ideal for restoration. Portions of the area that had been previously graded are compacted and have minor levels of construction debris, such as asphalt chunks. Soils on-site will be prepped by decompacting to a depth of 24 inches, then removing any deleterious materials found, including asphalt, concrete, or imported soils

that the down cutting will severely limit the hydrology needed to support riparian wetland within the proposed buffer and mitigation area required by the stipulated judgement. Therefore, we recommend the buffer be graded to remove these vertical slopes and as much fill as possible to maximize riparian wetland within the proposed buffer and mitigation area. B-9

We strongly encourage the City to reevaluate the proposed project with a focus on providing an increase in the width of the San Diego River corridor and associated riparian habitat. Existing planning documents specific to this area (e.g., Final Regional Plan for the MSCP and the City of San Diego SAP, the Atlas Specific Plan, the San Diego River Park Master Plan [Master Plan], and the Mission Valley Community Plan) include guidance for improving the River corridor on behalf of biological resources. The objective of widening the San Diego River is identified in the following current planning documents: 1) the MSCP Biological Core and Linkage Areas (section 2.2) identifies the San Diego River west of Mission Trails as a core biological resource area (Figure 2-2), and the SAP requires that "[n]ative vegetation shall be restored as a condition of future development proposals along this portion of the San Diego River corridor." (B15, Figure 4, p. 21); 2) the Atlas Specific Plan, which establishes a "…focus on accommodating all of these facilities, while at the same time provide the maximum degree of flood protection and wetlands mitigation possible;" 3) the Master Plan, which states "[w]ater bodies, wildlife and people need 'breathing room' to maintain health and integrity" and establishes a river corridor that "will be measured by the 100-year Floodway, as mapped by FEMA, plus 35 feet on either side of the floodway;" and 4) the Mission Valley Community Plan, which states that"[n]atural environmental features should be preserved and recreated within the floodway proper and should be incorporated as much as possible in areas beyond the floodway boundary to maintain and enhance the habitat and aesthetic values of the river." Each alternative analyzed in the DEIR should describe if it widens the San Diego River corridor or otherwise improves the riparian habitat. B-10

We appreciate the opportunity to comment on the DEIR. If you have questions regarding this letter, please contact Eric Weiss of the Department at 858-467-4289 or Patrick Gower of the Service at 760-431-9440, extension 352. B-11

Sincerely,

Digitally signed by DAVID ZOUTENDYK
Date: 2016.10.17 14:56:17 -07'00'

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

Enclosure(s):
A. Wildlife Agency Comments on the Biological Technical Report
B. Wildlife Agency Review of the Atlas Specific Plan

cc:
State Clearinghouse

unsuitable for restoration. The soils will then be tested for salinity, nutrients and toxins and amended based on the results of the tests. Finally, the soils will be finished to create soil surface microhabitats that support success of the restoration (e.g., depressions that will collect dew and shading). The top 10 inches of soil will be moist (from natural conditions or watering) before plant installation. Native soil will be used in the plant containers to provide mycorrhizae and other microorganisms that enhance native plant growth.

OTHER AGENCY COORDINATION

On September 28, 2016, AECOM and Lowe Enterprises met with the City and the U.S. Army Corps of Engineers (Corps) staff (Layna Thrush) to tour the site and discuss impacts to federally jurisdictional wetlands and waters. In response to the Wildlife Agencies' request to widen or braid the San Diego River channel, the Corps responded that altering the River channel in one isolated area would be detrimental to both the existing native habitats upstream and downstream of the site and the proposed restoration areas due to potential erosion, sediment deposit, scouring, and undercutting of the banks during larger storm events (conversation with Corps representative Layna Thrush). To successfully braid or widen the San Diego River channel on-site, would require modifying a significant stretch of the River both upstream and downstream to ensure continuity of hydrology and protection of the native habitats along the banks.

In summary, the restoration/enhancement areas and the River channel do not require grading for the following reasons:

- Depth to groundwater is relatively shallow in the restoration/enhancement areas (10 to 11 feet below the surface at a time when the San Diego River was at a major low of 3 feet).
- The top 2 feet of soil will be prepared to support the appropriate microhabitats for riparian restoration/enhancement.
- Grading would cause the soils, banks, and habitats within the River corridor to become unstable, leading to erosion, sediment deposit, scouring, and undercutting.

B-10 The City acknowledges the Wildlife Agencies' concern for widening the San Diego River corridor per the guidelines in the Atlas Specific Plan, the Master Plan, and the Mission Valley Community Plan. Since the public release of the Draft EIR, the proposed acreage and configuration of the park has been revised to accommodate additional native habitat outside the park along the River-facing edges of both the northern and southern park parcels, thereby increasing the width of the San Diego River Corridor, while still providing park space per the Master Plan. A total of approximately 0.51 acre of native habitat has been added

to the River Corridor. In Section 5.1.4 of the BTR under *Wetland Buffer - Post Project Implementation*, the width and location of the wetland buffer is explained in full detail.

The Wildlife Agencies state the objectives of each aforementioned plan for widening the river corridor as follows:

1. *The MSCP Biological Core and Linkage Areas (section 2.2) identifies the San Diego River west of Mission Trails as a core biological resource area (Figure 2-2), and the Subarea Plan requires that "[n]ative vegetation shall be restored as a condition of future development proposals along this portion of the San Diego River corridor" (B15, Figure 4, p. 21);*

   The Final Regional Plan for the Multiple Species Conservation Plan (Final MSCP) Section 2.2 states in reference to Figure 2-2 "The core linage map was developed as an analytical tool to assist in testing preserve design criteria and levels of species conservation. It is not a regulatory map." Further the sections clarifies the intent of the regional biological core mapping which states in reference to Figure 2-2 "Although this map was used to identify important biological areas and linkages, the habitat evaluation map is not intended to replace site-specific field survey data and evaluations." Therefore, the "objective of widening the San Diego River" stated in this comment is not reflected in Section 2.2 of the Final MSCP and site specific analysis has been provided which demonstrates various factors that support widening the river in this location is not proposed. See Response B-9.

   As illustrated in Figure 5 of the BTR, the project proposes considerable restoration and enhancement of native vegetation communities within the San Diego River corridor in order to implement and comply with Multiple Species Conservation Plan Subarea Plan Multi-Habitat Planning Area Guideline B-15.

2. *The Atlas Specific Plan, which establishes a "…focus on accommodating all of these facilities, while at the same time provide the maximum degree of flood protection and wetlands mitigation possible;"*

   As stated in Chapter 3.0 of the Draft EIR and Section 1.6.3 of the Town & Country Master Plan, an amendment is required to remove the project site from the Atlas Specific Plan. This Master Plan replaces in full authority all the guidelines and development standards of the Atlas Specific Plan for the project property. For reference, an evaluation of the Atlas Specific Plan alternative on all environmental resources areas, including biological resources, was provided in Chapter 10.0 of the Draft EIR.

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3. *The Master Plan, which states "[w]ater bodies, wildlife and people need 'breathing room' to maintain health and integrity" and establishes a river corridor that "will be measured by the 100-year Floodway, as mapped by FEMA, plus 35 feet on either side of the floodway;"*

   See Response B-18 for a description of the River Corridor, River Pathway and consistency with the Master Plan. The passive park space provides an adequate buffer or "breathing room" for both wildlife and people.

4. *The Mission Valley Community Plan, which states that "[n]atural environmental features should be preserved and recreated within the floodway proper and should be incorporated as much as possible in areas beyond the floodway boundary to maintain and enhance the habitat and aesthetic values of the river."*

   As stated in Responses B-5, and B-15, the proposed acreage and configuration of the park has been revised to increase the width of the San Diego River Corridor to the maximum extent possible, while still providing park space per the Master Plan. A total of approximately 0.51 acre of native habitat will be added to the River Corridor with the implementation of the project.

B-11 Comment noted. This comment indicated the Wildlife Agencies appreciated the opportunity to comment on the Draft EIR and gave contacts to reach out to with any questions.

Enclosure A

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (collectively, Wildlife Agencies) Comments on the Biological Technical Report Town & Country Project, City of San Diego, California

1. According to the conditions provided in the stipulated judgement (City of San Diego v. Town and Country Hotel LLC, Case No. GIC880884) the "[*d*]*efendants, their successors and assigns, and any of its agents, employees, representatives and all persons, corporations or other entities acting…*" are "*…permanently enjoined from…*" granting subsequent project entitlements or undertaking construction activities. The Wildlife Agencies believe that because the habitat restoration/mitigation required by the stipulated judgement was unfulfilled at the time the City granted discretionary approval for site development permit (SDP) 400602 (Town and Country Parking Lot Project), the property owner is thereby prohibited from… "[*p*]*erforming any construction activity at the PROPERTY*" (i.e., the proposed project—Town and Country Redevelopment Project). B-12

2. Page V, paragraph 2. "*The Site is located at one of the most constricted and lowest quality section*[*s*] *of the entire length of the San Diego River. The riparian habitat associated with the river is narrow and surrounded by a combination of degraded undeveloped areas, parking lots, commercial development, and transportation corridors. These existing land uses surrounding the river have degraded habitat quality for decades. In addition, the entire Site has no meaningful orientation to the river, thereby limiting public enjoyment of this valuable resource. The existing development essentially turns its back to the river.*" The degraded lands surrounding the San Diego River afford the proposed project an opportunity to widen and improve the habitat quality of the San Diego River. We have previously commented on the Town and Country redevelopment proposal in response to the January 15, 2016, Notice of Preparation, during the March 18, 2016, Boundary Line Adjustment meeting, during the July 5, 2016 teleconference with the City and the proposed project's consultants, and during the September 16, 2016, coordination meeting among the Wildlife Agencies, City and project proponent. Prior to those meetings, we also provided similar comments requesting the restoration of the San Diego River during the September 21, 2011, Boundary Line Adjustment meeting, and in our May 24, 2011, comments on the Draft Mitigated Negative Declaration, for the Town and Country Parking Lot Project (SDP 400602) (Town and Country Parking Lot; City Project Number 118318; State Clearinghouse No. 2011041092); comments are incorporated here by reference. We have and continue to emphasize the need for the proposed project to first rectify unmet riparian mitigation obligations, and then design the redevelopment project in a manner which improves upon the conditions required by the stipulated judgement (SDP 400602). Additionally, we have requested information during our meetings on the specific design features of the various open space and park areas depicted in Figure 11 of the Biological Technical Report (BTR) as a population-based public park. We have continued concerns with locating parks, or their equivalent, within such a narrowly constricted reach of the San Diego River. While the public trail is located outside of the minimum width riparian buffer, an opportunity to better buffer the riparian area by locating the trail on the outer boundary of the population-based public park remains. The proposed project, in particular the biologically superior alternative, should maximize the available avoidance and minimization measures. B-13 B-14

B-12 The Project Description includes implementation of the stipulated judgment. All restoration requirements will be satisfied as part of the project, and no project component interferes with the required restoration. The project design does not preclude the implementation of the stipulated judgment. As stated in Section 3.3 of the Draft EIR, the Site Development Permit restoration requirements will be initiated concurrent with the proposed construction in Phase 1 of the project. The restored areas will be conserved under a Covenant of Easement (as required by law), thereby preventing encroachment into the designated restoration area.

B-13 See Responses B-5 and B-12. The restoration required by the stipulated judgment will be implemented as part of the project. Since the public release of the Draft EIR, the proposed acreage and configuration of the park has been revised to accommodate additional native habitat outside the park along the River-facing edges of both the northern and southern park parcels, thereby increasing the width of the San Diego River Corridor, while still providing park space per the Master Plan. A total of approximately 0.51 acre of native habitat has been added to the River Corridor.

B-14 See Response B-5.

3. Page V, BTR. According to the BTR, "[*t*]*he Proposed Project seeks to improve the Site by balancing redevelopment goals with enhancing the ecological function of the river corridor and providing positive river-related experiences for the Mission Valley neighborhood*" and "[*t*]*he Proposed Project avoids impacts to sensitive biological resources to the maximum extent feasible. Further, as noted above, the Proposed Project incorporates design features that will protect and improve the function of biological resources on-site.*" The Wildlife Agencies request that the City provide responses to our January 15, 2016, Notice of Preparation, the March 18, 2016, Boundary Line Adjustment meeting, and July 5, 2016, comments that requested a demonstration that such measures have been incorporated into the redevelopment project (e.g., widening of the river corridor, and River buffer) for reducing impacts to the San Diego River corridor (or alternatively, how the City has determined that our suggestions would not result in a reasonable and feasible enhancement of the ecological function of the river corridor). B-15

4. Page 4, BTR. The Wildlife Agencies disagree with the City's assertion that "[*t*]*he Proposed Project is designed around a wetland buffer to protect the functions and values of existing wetland habitats on-site.*" According to the stipulated judgement the Defendants—Town and Country Hotel and American Asphalt and Concrete, Inc.—were required to "*…either repair the two impacted sites (OPTION ONE) or repair portions of the two impacted sites and develop a portion of the impacted site upon which the parking lot is constructed (OPTION TWO) in the manner described below* [see stipulated judgement]" as restitution for illegal grading activities within the San Diego River. Furthermore, "[*i*]*n order to repair impacts to sensitive biological resources and the Special Flood Hazard Area, Defendant Town and Country Hotel must submit a complete application to the Development Services Department* [*DSD*] *at the direction of the Neighborhood Code Compliance Division of DSD for all necessary discretionary permits from DSD including but not limited to a Site Development Permit* [*SDP*]; *California Environmental Quality Act* [*CEQA*] *review; and a grading landscape plan to address the impacts to Environmentally Sensitive Lands* [*ESL*] *and to address the impacts allegedly caused by grading operations including the repair of the damage to native habitat (vegetation, trees, etc.).*" Despite being enjoined by the stipulated judgement (SDP 400602), the City granted discretionary approval for the Town and Country Parking Lot mitigated negative declaration without having completed the mitigation requirements of the stipulated judgement (SDP 400602) prior to, or concurrent with, project approval. Because the Town and Country Parking Lot Project was approved without the City ensuring that the habitat restoration was completed, the final EIR should include a measure requiring the applicant to implement the proposed mitigation prior to or concurrent with proposed construction. In addition the City should require the applicant to provide a secured funding source based upon a Property Analysis Record (PAR) or similar instrument, for the restoration prior to the initiation of project impacts. B-16

5. Page 4 BTR. The BTR states, "[*a*] *new drainage channel will be graded from the storm water management area to the San Diego River channel to convey treated water from the outfall to the river channel.*" The Wildlife Agencies recommend that the project applicant continue to coordinate with the Department regarding a notification for a streambed alteration agreement for areas subject to the Department's jurisdiction per Fish and Game Code section 1600 *et seq.* and the U.S. Army Corp of Engineers for any Section 404 of the Clean Water Act permits that may be needed. B-17

B-15 In this comment, the Wildlife Agencies request that the City provide responses to questions and concerns that were brought up during various stages of the project review process (e.g., Notice of Preparation, meetings, etc.). The measures identified in these letters focus primarily on widening the river corridor and river buffer. In particular, the Wildlife Agencies request that the City demonstrate how widening of the river corridor and the river buffer was incorporated into the project. Alternatively, the Wildlife Agencies would like the City to demonstrate how those recommendations would not result in a reasonable and feasible enhancement. See Response B-9 that provides hydrological and geotechnical issues that preclude the widening the river corridor and the associated buffer beyond what has been currently proposed. Since the public release of the Draft EIR, the proposed acreage and configuration of the park has been revised to accommodate additional native habitat outside the park along the River-facing edges of both the northern and southern park parcels, thereby increasing the width of the San Diego River Corridor, while still providing park space per the Master Plan. A total of approximately 0.51 acre of native habitat has been added to the River Corridor. Section 4.4.5 of the Draft EIR discusses the wetland buffer. Additionally, Section 5.1.4 of the Biological technical report under *Wetland Buffer - Post Project Implementation* goes into a more detailed discussion of the width and location of the wetland buffer.

As described in Section 4.4.5 in the Draft EIR, the project would provide a widened riparian buffer and enhance total ecological function of the River corridor because:

- The project no longer impacts wetlands. This is also addressed in Response B-6.
- The project would conform with the MHPA Land Use Adjacency Guidelines through improved management of trash, debris, noise, and lighting.
- The project would implement restoration and enhancement of the riparian corridor.
- The conversion of asphalt to permeable surfaces will facilitate increased filtration of storm water runoff into the San Diego River. Furthermore, the project would create a wetland buffer where one does not currently exist between existing developments and wetland habitats associated with the San Diego River. As described in Section 4.4.5.2 of the Draft EIR, the project would widen the River buffer by providing upland (Diegan coastal sage scrub) and transitional riparian habitat (oak riparian woodland) between the existing development and southern cottonwood willow riparian forest.

B-16 As stated in Section 3.3 of the Draft EIR, the Site Development Permit restoration requirements will be initiated concurrently with the proposed construction in Phase 1 of the project as noted in the comment:

Phase 1 would also include the implementation of the 2013 Site Development Permit requirements for 2.76 acres of mitigation, restoration, and habitat enhancement within the riparian open space alongside the San Diego River. During this phase, the new public park, San Diego River Pathway, and the habitat restoration would be constructed. Table 3-2 summarizes the demolition and construction activities for Phase 1.

The funding for restoration and enhancement will come from the applicant. Per the City's 2012 Biology Guidelines, a Property Analysis Record (PAR) is required only for mitigation that will be managed in perpetuity by the City. The area identified by the stipulated judgement will not be managed in perpetuity by the City. The restoration and enhancement areas outside of the stipulated judgement will be managed in part by the City, but are not considered mitigation because there are no impacts to native vegetation associated with the project. Thus, a PAR is not required for the proposed project.

B-17 The project design has been modified to avoid impacts to wetlands. The referenced outfall structure associated with the water quality detention basin has been removed. Instead, water will be pumped from the detention basin to an existing outfall structure near the pedestrian bridge (Chapter 3.0 provides further details of the Project Description).

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6. Both Figure 10 and Figure 11 depict a 35-foot wide San Diego River Pathway corridor; however, a discussion of the effects of locating public uses within the 35-foot wide corridor is not analyzed within the BTR. The BTR does not include the various design criteria provided in the San Diego River Park Master Plan (Master Plan). For example, the Master Plan identifies that the "[*r*]*iver Corridor Area will include the river itself and the land immediately adjacent to it. This corridor will be measured by the 100-year floodway, as mapped by FEMA* [*Federal Emergency Management Agency*]*, plus 35 feet on either side of the floodway.*" The Master Plan identifies that a 35-foot wide area will provide an opportunity for wildlife habitat, native vegetation, and a multi-use pathway to accommodate people. "*It will be a natural environment providing for the river ecology, enhancement of wildlife habitat and movement, and allowing for passive recreation, such as walking, bicycling, sitting and observation.*" The DEIR should discuss how the current trail alignment is consistent with any of the aforementioned design elements. B-18

7. Page 7, BTR. We suggest the City avoid locating parks within sensitive habitats including ESL-defined habitat, particularly those supporting threatened or endangered species for which the City is not authorized incidental take (Fish and Game Code § 86, U.S. Army Corps of Engineers jurisdictional) under the SAP until potential impacts from the park are analyzed and addressed under section 7 of the Endangered Species Act if needed. B-19

We have requested the City provide clarification of the nature and uses of the population-based public park during the NOP comment period and during subsequent project meetings. Therefore, the following sentence should be revised to denote the nature of the proposed park's use within the BTR, accompanied by a graphic depicting park acreage outside of ESL lands: "[*i*]*n addition, to meet park standards for residential development established by the City's General Plan, the Proposed Project will establish approximately 4.33 acres of park space on-site.*" B-20

8. Page 8, BTR. According to the BTR, "*SDP #400602 was issued to authorize habitat restoration and enhancement required to mitigate illegal grading that occurred during paving of an overflow parking lot.*" However, the habitat restoration has yet to occur despite the City previously granting discretionary approval for SDP 400602. The BTR and DEIR should provide a chronology of the property's history including the conditions covered in the stipulated judgment. The chronology should detail when the habitat restoration will occur in relation to the Town and Country Redevelopment (e.g. the addition of residential units and redevelopment of the hotel and appurtenances). The Wildlife Agencies do not believe that the stipulated judgement (SDP 400602) allows for yet a second discretionary action (e.g., project or permit approval) prior to satisfying the habitat restoration required in the stipulated judgement (SDP 400602). Per the stipulated judgement "[*i*]*f Defendant is unsuccessful in ultimately obtaining approvals necessary to exercise OPTION TWO, Defendant understands that OPTION ONE* (*repair of the site*) *is required to comply with the Municipal Code.*" Accordingly, the Wildlife Agencies believe that the defendant or their successors have not fulfilled the approvals necessary for OPTION TWO by failing to implement the requisite habitat restoration concurrent with obtaining approval for SDP 400602, which, according to the 2013 City Report to the Hearing Officer states "…*this after the fact Site Development Permit* [*SDP #400602*] *is required to permit the remediation and to complete the project mitigation.*" Because the habitat restoration is outstanding despite the City's approval of SDP 400602, the Wildlife Agencies recommend a letter of credit for habitat restoration is established prior to project B-21

B-18 The Wildlife Agencies requested a discussion of how the current trail alignment is consistent with the design elements identified in the Master Plan and whether the trail alignment was analyzed at all. To show consistency with the Master Plan the following language was added to the BTR and will also be added to appropriate sections of the Draft EIR:

(Under BTR Section 1.2.2, Draft EIR Section 2.9.1) *As defined in the Master Plan,* the *River Corridor Area includes the River itself and the land immediately adjacent to it. This corridor is measured by the 100-year floodway, as mapped by the Federal Emergency Management Agency (FEMA), plus 35 feet on either side of the floodway. This 35-foot wide area will provide an opportunity for wildlife habitat, native vegetation, and a multi-use pathway to accommodate people. Consistent with the design criteria in the Master Plan, the 35-foot wide area will be a natural environment providing for the river ecology, enhancement of wildlife habitat and movement, and allowing for passive recreation, such as walking, bicycling, sitting and observation (Section 4.1.6.1).*

The River Pathway illustrated in Figure 3 is a 10-foot-wide concrete surface with a 2-foot width of decomposed granite on each side of the concrete. It is a multi-use trail for pedestrians and bicyclists. The River Pathway on the north side extends the width of the property. The River Pathway on the south side extends from the adjacent property (Union-Tribune site) to the existing pedestrian bridge.

The conceptual alignment of the River Pathway depicted in the Master Plan is entirely within a recreation easement for a population-based public park. The City of San Diego Park and Recreation Board recommended approval of the General Development Plan for the park on January 19, 2017. The design of the park and its components was determined per City Council Policy 600-33 Public Notification and Input for City-wide Park Development Projects. The alignment for the approved River Pathway was intended to minimize anthropogenic impacts (e.g., noise) to sensitive biological resources in the River.

(Under Section 5.2.2) *The concentration of human-induced noise is not anticipated to rise above the existing levels that have been outlined in the noise analysis conducted by AECOM in 2016. Per page 45 of the Noise Technical Report, an analysis was conducted using 100 people dispersed throughout the park, speaking at regular conversation levels for 30 minutes each hour. The study found that the predicted noise levels would be around 46.5 dBA. Therefore the study concluded "at its predicted level, noise emitted from park operations would not exceed the Multi-Habitat Planning Area threshold for mitigation 60 dBA." Therefore, N*oise impacts resulting from long-term operation of the Proposed Project are considered less than significant.

B-19 The park space is not located within sensitive habitats and avoids U.S. Army Corps of Engineers wetlands and waters and City-defined wetlands. The figures in the Draft EIR and BTR have been updated to show how the project now avoids sensitive habitats. It is also important to note that the picnic area and pedestrian bridge within the MHPA are existing conditions to be improved as part of the project. The project site has not supported threatened or endangered species such as southwestern willow flycatcher or least Bell's vireo since the late 1990s (Draft EIR Section 4.4.1.3). It is also important to note that the picnic area and pedestrian bridge within the MHPA are existing conditions to be improved as part of the project.

B-20 In compliance with the San Diego River Park Master Plan, the park space would be designed for passive recreation. According to San Diego Municipal Code §1514.0302 passive recreation includes picnic areas, scenic and interpretive overlooks, seating, and educational exhibit areas. These uses are included in the description of the project park on page 3-7 of the Draft EIR. The location of the park in relation to the project and San Diego River is shown in Figure 3-3 of the Draft EIR.

B-21 See Response B-16, B-22 and B-24. Because the Draft EIR and BTR now states that the project is implementing Option 2 of the stipulated judgment, in-kind contribution is not necessary. In light of the new owner's resources and the nature of the proposed project, a letter of credit also is not necessary. Furthermore, the spring of 2016 focused least Bell's vireo surveys yielded negative results. The habitat onsite within the MHPA has not been occupied by least Bell's vireo since the late 1990s (see Response B-19).

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entitlements. The letter of credit should be based on: a) the acquisition costs of 7.1 acres of MHPA supporting least Bell's vireo along the San Diego River (valued at $125,000.00 per acre in 2007 dollars); and b) the restoration costs for 2.76 acres of MHPA restoration and perpetual management along the San Diego River. B-21

9. Page 8, BTR. The BTR does not adequately disclose that the stipulated judgement (referred to as SDP 400602 in the BTR) provides two mitigation options —option one and option two. Both mitigation options should be described within the BTR and subsequent DEIR, and both documents should describe the preferred mitigation option. B-22

10. Page 8, BTR. Update the *Implementation of Site Development Permit #400602 Mitigation* section to identify that an open space easement to preserve 7.1 acres of land including MHPA lands is required by the stipulated judgement (SDP 400602). B-23

11. Page 11, BTR. For reader clarity, please make a global change throughout the BTR and DEIR that states that SDP 400602 refers to conditions of the stipulated judgement. Referencing a prior site development permit could confuse the reader regarding the conditions of the stipulated judgement. SDP 400602 references the Town and Country Parking Lot Project that was previously entitled although the mitigation was and is outstanding. B-24

12. Page 11, BTR. We are concerned that the BTR, which is included in the circulated DEIR, states that a portion of the restoration area "*…will be restored to coast live oak woodland under the Proposed Project's plan.*" The Department previously commented on the proposed restoration of the area and expressed concerns that coast live oak woodland is not a viable restoration option and would not be consistent with the stipulated judgment. Per the stipulated judgement, it is our understanding that prior to the public comment period of a discretionary action, the state and federal agencies were afforded a review and acknowledgement of any recommendations for any mitigation proposal which reads "[*i*]*n the event NCCD, DSD, or a federal or state agency requests corrections to the submitted plans described in OPTION ONE AND TWO above, Defendant Town and Country Hotel agrees* [*emphasis added*] *to exercise due diligence and resubmit the corrected plans and any other applicable documents no later than 30 calendar days….*" B-25

13. Page 11, BTR. The BTR states that the restoration proposed by the Conceptual Mitigation Plan (5.5 acres) is greater than the required 2.76 acres associated with the Site Development Permit. This statement does not identify that the 2.76 acres of restoration along with the dedication of 7.1 acres of open space easement is required per the stipulated judgement (SDP 400602). The restoration of the 2.76 acres and dedication of 7.1 acres of open space should therefore be considered the baseline condition for the proposed project. Any mitigation specified by the stipulated judgment should be considered as if the mitigation were completed and used as a baseline for any subsequent environmental analysis for project mitigation and determination of a biologically superior option. Please revise the BTR and DEIR accordingly. B-26

14. Page 24, BTR. Please provide additional discussion on how condition 3 of Section 3.2 (BTR) accounts for the previously unauthorized grading within the wetland area. B-27

15. Page 27, BTR. Please provide a discussion regarding the difference in acreage of eucalyptus woodland identified by Figure 7 and Table 1 Vegetation Communities and B-28

B-22 Under *Implementation of Site Development Permit #400602 Mitigation* (Section 3.4.7 of the Draft EIR and Section 1.2.3 of the BTR), the two options presented in the stipulated judgment are discussed along with a statement identifying the preferred mitigation option. The addition has been made to the BTR and EIR as follows:

Per the stipulated judgment, Town and Country Hotel was required to dedicate approximately 7.1 acres to the City in the form of an open space easement valued at $125,000 per acre. The project is proposing to dedicate approximately 8.11 acres of open space to the City, thereby exceeding the requirement in the stipulated judgment.

Town and Country hotel was also required to elect to either repair the two areas involved in the violation (i.e., parking lot and illegal fill along the San Diego River) (Option One) or repair portions of the two impacted sites and develop a portion of the impacted site upon which the parking lot is constructed (Option Two). Option two has been selected and is described below:

Option 2: Repair and Development

In order to repair the damage to sensitive biological resources and the Special Flood Hazard Area, Defendant Town and Country Hotel must submit a complete application to the Development Services Department [DSD] at the direction of the Neighborhood Code Compliance Division of DSD for all necessary discretionary permits from DSD including but not limited to a Site Development Permit [SDP]; California Environmental Quality Act [CEQA] review; and a grading/landscape plan to address the impacts to Environmentally Sensitive Lands [ESL] and to address the impacts allegedly caused by grading operations including the repair of the damage to native habitat (vegetation, trees, etc.). Necessary to the application process are the written evaluations provided by a qualified biological consultant and civil engineer hired by defendants as referenced in Paragraph 17 of this STIPULATED JUDGMENT.

In addition, defendant Town and Country Hotel must submit plans with its application which would allow for:

A. the legal and proper development of the impacted area which is approximately 212 feet x 280 feet in size and located in the south portion of the newly constructed northeasterly parking lot;

B. the development, excluding repair work, must adhere to the design sensitive zone as identified in the Atlas Specific Plan and other City plans and ordinances as applicable;

C. a demonstration by way of hydraulic modeling of the pre-conditions and post-conditions that show no increase occurred in the base flood elevations for the parking lot.

B-23 The stipulated judgement required that 7.1 acres be preserved within an open space easement, but the current project proposes to preserve 8.11 acres. This updated acreage is reflected in the BTR and in Section 4.4 of the EIR.

B-24 The BTR and Draft EIR have been revised to clarify that SDP 400602 refers to conditions of the stipulated judgment.

B-25 Section 4.4.5.2 in the Draft EIR and Section 5.1.4 in the BTR explain why a transitional riparian vegetation community (i.e., oak riparian woodland) was used to replace the southern cottonwood willow riparian forest in the southernmost area (Area C) of the SDP restoration area. During a meeting with the City and the Wildlife Agencies on September 16, 2016 it was discussed and decided that oak riparian woodland would include a plant palette that resembles the upland-riparian transition zone of an oak-riparian corridor in order to adhere to the terms of the stipulated judgment and ensure that the restoration efforts succeed (i.e., the vegetation is self-sustaining after 5 years). The description of the oak-riparian vegetation community and the associated restoration/ enhancement plant palette have been updated in the BTR and EIR according the terms agreed upon in the September 16, 2016 meeting.

B-26 The BTR has been revised as follows:

The Conceptual Mitigation Plan identifies an approximately 5.5-acre area in which the required 2.76 acres of restoration and enhancement (including the 30-foot average coastal sage scrub buffer zone) must occur. The Conceptual Mitigation Plan notes that restoration will begin at the upstream end of the site on the southern bank and move downstream until the mitigation acreage is fulfilled (RECON 2012).

See Response B-22 regarding the comment on the 7.1 acres of dedication to the City. The stipulated judgment will be implemented as part of the project and none of the project components will directly impact the defined restoration and enhancement area. Also see Response A-24 for a further explanation of the baseline analysis assumed for the project.

B-27 Conditions listed in Section 3.2 of the BTR are the parameters used to identify City wetlands. This section of the BTR is meant to describe methodology. The area of unauthorized grading referenced by comment B-27 was appropriately identified as wetland and addressed *through the implementation of SDP No. 400602 and associated Mitigated Negative Declaration, as described in a letter from the Army Corps of Engineers to Atlas Hotels dated September 14, 2006.*

Other Land Cover Types within the BSA (Biological Survey Area) of the BTR with the acreage of eucalyptus woodland identified within the Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project San Diego, Project No. 118318. Significantly less eucalyptus woodland and more disturbed riparian habitat was mapped by the 2012 report. According to the BTR "[*i*]*nvasion by exotic weeds, such as palms, eucalyptus, and pepper trees, has altered and displaced the native plant community of the San Diego River channel within the project site*," suggesting that subsequent to the stipulated judgement (SDP 400602) a significant acreage of disturbed riparian habitat has type converted to eucalyptus woodland, presumably due to failing to manage as required by the stipulated judgement. B-28

16. Page 50, BTR. The BTR states on page 50 that "[*t*]*he Proposed Project is designed to avoid permanent direct impacts to biological resources to the maximum extent feasible.*" While page 44 of the BTR recognizes that "[*t*]*he corridor or linkage should be buffered from human encroachment and other disturbances* (*e.g., light, loud noises, domestic animals*) *associated with developed areas that have caused habitat fragmentation* (*Schweiger et al. 2000*)." In order to minimize potential project impacts and buffer habitat from human encroachment we have recommended that the San Diego River Pathway be located south on the southernmost edge of the population-based public park depicted in Figure 10 of the BTR and turn north at a right angle, continuing to the existing pedestrian bridge. The City has provided us directly revised drawings to reflect this; such drawings should be incorporated into the BTR/BSA and all other relevant documents. B-29

17. Page 52, BTR. Please either include the wetlands mitigation ratios (see Biological Guidelines, Table 2a and 2b) proposed by the project within Table 4 of the BTR or provide a separate table illustrating the impact acreages with their respective mitigation ratios. B-30

18. Page 55, BTR. According to conditions in the stipulated judgement a covenant of easement shall be placed over lands within the City's Multi-Habitat Planning Area. Please provide information on the acreage total for the Covenant of Easement. B-31

19. Pages 55-56, BTR. Given the proximity of the proposed project to the San Diego River and its location within the Pacific Flyway, the proposed project should include avian collision reduction measures. The Wildlife Agencies recommend the City consider guidance by the American Bird Conservancy (ABC, http://collisions.abcbirds.org/). This includes measures such as retrofitting existing buildings (e.g., Royal Palm Tower), as well as incorporating measures specific to new constructions (e.g., Residential Parcel 4). The ABC Building Guide offers multiple solutions for reducing impacts to avian species, including recommendations that also qualify for Leadership in Energy and Environmental Design (LEED) credits. The BTR further concludes that direct impacts to potentially occurring special-status bird species from collision would be less than significant because the structures "…*would not be designed with predominantly reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials*…." ABC provides project design measures that are specific to the goal of reducing avian collisions with buildings while also being specific and enforceable (see Public Resource Code §21081.6 (c)). B-32

20. Page 56, BTR. The BTR asserts that "…*the Proposed Project is expected to result in long-term benefits to special-status wildlife species given that existing habitat would be* B-33

B-28 The 2012 RECON report does not quantify or include acreages for existing eucalyptus woodland and disturbed riparian habitat, whereas the Draft EIR does provide acreages, therefore it is not possible to compare the EIR acreages to the RECON figure. Furthermore, the 2012 RECON report only describes the habitat within and directly adjacent to the previously unauthorized grading site; the BTR includes acreages for the entire Biological Study Area (BSA), which is larger than the area described in the 2012 report. The differences in vegetation mapping where the two figures overlap can be attributed to type conversion and/or differences in mapping techniques by surveyors. Type conversion due to lack of management is possible; however, the area in question will be restored/enhanced with the implementation of the project.

B-29 The San Diego River Pathway has been relocated to the south along the southernmost edge of the population-based public park and turns north at a right angle, continuing to the existing pedestrian bridge. All figures within the BTR and EIR have been revised accordingly.

B-30 The project has been redesigned to avoid wetland impacts. Mitigation is not required.

B-31 See Response B-22.

B-32 While the proposed project does not include retrofitting the existing Royal Palm Tower, the BTR was revised to include mention of the American Bird Conservancy Bird-Friendly Building Design as follows:

The structures would not be designed with a predominantly reflective material and would comply with the American Bird Conservancy Bird-Friendly Building Design recommendations to the extent practicable (ABC 2016). Therefore, direct impacts to potentially occurring special-status bird species from collisions with the project components would be less than significant.

B-33 Comment noted. Draft EIR Section 4.1.1 notes that there will be an increase in the density of development and introduction of public uses adjacent to the San Diego River and Multi-Habitat Planning Area; however, the area in question is highly developed with multiple roads/sidewalks, a pedestrian bridge, the trolley station, the Fashion Valley Mall, and parking lots (which exhibit a proportional amount of pedestrian traffic as vehicle traffic). These existing anthropogenic disturbances have created an environment that caters to pedestrian activity, noise, etc. (see Response B-41 for information on noise impacts). Species utilizing these areas around and within the project site are habituated to the high level of human activity within Mission Valley. The addition of residential complexes nearby is not anticipated to increase the level of disturbance by humans significantly more than what exists today. As stated in Response B-5, split-rail fencing will be installed around the Multi-Habitat Planning Area to

keep people out and reduce the level of disturbance. Furthermore the project is consistent with the City's Land Use Adjacency Guidelines, MSCP, and indirect impacts would be avoided.

Both the City's Multiple Species Conservation Plan Subarea Plan and Final Multiple Species Conservation Plan allow public uses within and adjacent to the Multi-Habitat Planning Area. Pursuant to Final MSCP Section 6.2.1 Public Use, "Active recreational uses such as camping, athletic fields, and other organized sports activities are generally incompatible with preserve areas and linkages but may be compatible at the edges of the preserves provided that light, noise, and trash impacts are controlled." The City's Multiple Species Conservation Plan Subarea Plan Section 1.5.2 states passive uses are allowed adjacent to the Multi-Habitat Planning Area.

The proposed public uses are passive, located outside the Multi-Habitat Planning Area, and the aforementioned impacts are avoided through compliance with MHPA Land Use Adjacency Guidelines and project permit conditions. See Response B-5.

As requested by the Wildlife Agencies, the trail has been relocated as far away from the San Diego River as possible (Draft EIR Section 3.2.1.1) and is consistent with the Multiple Species Conservation Plan. The redesigned trail configuration has been incorporated into the figures of the BTR.

Further, Section 6.1.3 of the BTR explains how the proposed project will reduce the overall amount of light that is currently spilling into the Multi-Habitat Planning Area (i.e., lighting within 100 feet of the Multi-Habitat Planning Area will be shielded and directed away from the Multi-Habitat Planning Area; the conversion of parking lot to habitat and park space will reduce the amount of light entering the Multi-Habitat Planning Area compared to existing conditions; and landscaping within the parking lot and park space will be strategically planned to help shield light from vehicles).

See Response B-41 for impacts related to the anticipated levels of noise resulting from park use.

improved. Thus, impacts to special-status wildlife species are considered mitigated to a level below significance." The Wildlife Agencies do not concur that the proposed project would result in a benefit to special-status species because the project would:

a) Introduce additional public uses within and immediately adjacent to the San Diego River, MHPA, and sensitive habitats supporting special status species; B-33

b) Increase the density of development adjacent to the San Diego River and MHPA; and

c) Not include specific mitigation measures to minimize impacts to biologic resources including revisions to the proposed park space, and reorienting parking lot spaces and other sources of lighting to minimize impacts to adjacent habitat. (Note: The City has provided us directly revised drawings to reflect a redesign of the proposed trail; such drawings should be incorporated into the BTR/BSA and all other relevant documents.)

21. Page 59 and Page 51, BTR. Figure 11, Jurisdictional Waters and Wetlands, depicts an area "*Proposed Drainage Channel – Extent of Grading*" which exceeds the acreage described on page 51 of the BTR "*[i]n addition, approximately 0.01 acre of southern cottonwood-willow riparian forest would be graded to create a drainage channel between a new outfall structure.*" The BTR should be revised for consistency. All design proposals and acreages will be evaluated through the Department of Fish and Wildlife's streambed alteration agreement process. B-34

Based on discussions between the Streambed Program staff and project representatives, we anticipate an updated jurisdictional delineation will be provided. Accordingly, water quality treatment basin(s) should either be located outside of the regularly inundated portions of the San Diego River or be designed to accommodate the inundation and prevent the release of contaminants to the San Diego River. B-35

22. Page 69, BTR. As noted above, Streambed Program staff has previously requested that the jurisdictional delineation be updated. The wetland buffer described on page 61 of the Biological Technical Report should be updated using the appropriate hydraulic modeling to reflect the updated jurisdictional delineation. B-36

23. Page 61, BTR. The southern cottonwood-willow riparian wetland likely meets the City definition of wetland. This section should be revised accordingly. B-37

24. Page 62, BTR. The Wildlife Agencies agree that if the habitat restoration associated with the stipulated judgement (SDP 400602) was implemented prior to the proposed project the City defined wetlands would encompass a larger area than they do presently. According to the BTR, "[i]*mplementation of the stipulated judgment would have resulted in a wider band of City-defined wetlands beyond the limits of what is described above, and a narrower wetland buffer between the restored/enhanced habitats and the Union Tribune parking lot to the south.*" B-38

25. Page 65, BTR. The Wildlife Agencies remain concerned that the project's proposed 3.22 acres of "*…combination habitat park space for passive recreation…*" will result in adverse edge effects associated with introducing park uses within and adjacent to sensitive habitats. While the BTR states that the "*… edge effects associated with park use are generally* B-39

B-34 This comment is no longer applicable because the project now avoids impacts to wetlands (see Response B-6). The BTR and Draft EIR have been revised accordingly.

B-35 Per conversations with representatives of the regulatory agencies (Kelly Fisher from the CDFW and Rose Galer and Lanya Thrush from the Corps) resulting from site visits conducted in 2016, the jurisdictional delineation report will not be updated due to the avoidance of direct wetland impacts. The treatment basins have been designed to accommodate inundation from the San Diego River and prevent the release of contaminants. The text in the Draft EIR and BTR has been updated accordingly, and the figures in both documents have been updated to remove the proposed drainage channel connecting the water quality basin to the San Diego River.

B-36 See Response B-35 regarding the jurisdictional delineation and submittal of the updated information. This information includes updated hydraulic modeling data of the various storm events (2-year, 5-year, and 10-year) to determine the extent of bed and bank (as requested by Streambed Program staff). The wetlands buffer is based on the City Biology Guidelines and has been evaluated according to wetlands functions and values provided in United States Army Corps of Engineers General Regulatory Policies (33 CFR 320-330).

B-37 As stated on page 61 of the BTR under *Wetland Buffer-Existing*, the justification for wetland exclusion is provided:

Although the southern cottonwood-willow riparian forest canopy extends outward from the center of the river corridor over the banks of the San Diego River, habitat beneath the outer canopy is composed of nonnative upland grasses. This area occurs along the upper banks of the San Diego River and does not support hydrology indicators, hydric soils, or dominance of hydrophytic vegetation. Therefore, the wetland buffer delineated for the Proposed Project does not currently support United States Army Corps of Engineers or City-defined wetlands.

B-38 Comment noted.

B-39 See response to comment B-33 as it relates to increased human disturbance. Section 4.4.3.2 of the Draft EIR discusses how the project would decrease edge effects from the current levels. Since the public release of the Draft EIR, the proposed acreage and configuration of the park has been refined to accommodate additional native habitat outside the park along the River-facing edges of both the northern and southern park parcels, thereby increasing the width of the San Diego River Corridor. Furthermore the project is consistent with the City's Land Use Adjacency Guidelines and indirect impacts would be avoided.

expected to be less intense than existing edge effects from adjacent parking areas" we remain concerned that the proposed park increases land use intensity due to the redevelopments proposal's continued commercial use and added 840 units of residential use. This marks an increase in land use density. Passive recreation should be sited in a manner which maximizes the San Diego River corridor. The Atlas Specific Plan directs Town and Country to focus on providing "…*the maximum degree of flood protection and wetlands mitigation possible*." We believe there is an opportunity to meet the objectives of the Atlas Specific Plan (that is maximizing and the flood protection riparian habitats). B-39

26. Page 65, BTR. The Wildlife Agencies do not concur with the BTR's assumption that "[*i*]*mproving the habitat quality of the portions of the wetland buffer outside of the MHPA will subsequently also improve the function of the MHPA as a sanctuary and refuge by providing an additional (and natural) cushion between the MHPA and adjacent developments.*" For example, neither section 5.2.1 nor 5.2.2 (pp. 70-71, BTR) has analyzed the direct and indirect effects the increased and introduced anthropogenic activities the proposed project would have on adjacent MHPA. The BTR states that "…noise resulting from on-site human activity (e.g., trail and park use) is not expected to increase ambient noise levels within sensitive habitats" but does not acknowledge that the project-proposed population-based public park would introduce human activity along both banks of the San Diego River where this use did not previously exist. The BTR does not analyze the number, type, frequency, or intensity of introducing park uses on either side of such a narrow riparian corridor. Additionally, the proposed project is silent on how the addition of 840 full-time multifamily residential units (where there was no previous residential use) would increase the visitation and uses of the proposed park. The DEIR should evaluate the number of projected visitors, type of uses, frequency of uses, and intensity of uses that would be directly introduced by the proposed project as well as those uses which would cumulatively be introduced by connecting public parks, regional trails, and new residential development adjacent to sensitive habitats. B-40

27. Page 65, BTR. The BTR does not substantiate its position that "…*noise resulting from on-site human activity* (*e.g., trail and park use*) *is not expected to increase ambient noise levels within sensitive habitats*" with site-specific studies of existing human-activity noise levels contrasted with the post-project projected human-activity noise levels. We believe it is therefore premature to conclude "… *permanent, noise attenuating berms or walls are not required.*" B-41

28. Page 66, BTR. The following BTR statement appears to be inaccurate: "*the wetland buffer and the wetlands it surrounds would remain undeveloped to ensure existing wetland characteristics* (*e.g., drainage and sedimentation patterns*) *within the Site are not altered.*" Figure 11 depicts a proposed drainage channel extending from the proposed water quality basin into the San Diego River; the Wildlife Agencies request that the BTR is revised to reflect the proposed development. B-42

29. Page 68, BTR. The Department has previously recommended that the riparian habitat restoration associated with the proposed project be widened beyond the current proposal. The BTR states "[*t*]*he Proposed Project represents a Biologically Superior Option compared to an alternative that avoids wetland impacts because it will result in the maximum amount of habitat restoration and enhancement of wetlands on-site while limiting impacts to the minimum necessary.*" Per ESL regulations, a wetlands deviation could accommodate the implementation of a wider riparian buffer and remove or relocate B-43

As stated in Chapter 3.0 of the Draft EIR and Section 1.6.3 of the Town & Country Master Plan, the Master Plan requires an amendment to remove the project site from the Atlas Specific Plan. The Master Plan replaces in full authority all the guidelines and development standards of the Atlas Specific Plan for the project property. For reference, an evaluation of the Atlas Specific Plan alternative on all environmental resources areas, including biological resources, was provided in Chapter 10.0 of the Draft EIR.

B-40 See Response B-33.

B-41 The concentration of human-induced noise is not anticipated to rise above the existing levels that have been outlined in the Noise Section of the Draft EIR (Appendix I, Noise Technical Report, Table 8, page 30). Per page 45 of the Noise Technical Report, an analysis was conducted using 100 people dispersed throughout the park, speaking at regular conversation levels for 30 minutes each hour. The study found that the predicted noise levels would be around 46.5 dBA. Therefore the study concluded "at its predicted level, noise emitted from park operations would not exceed the Multi-Habitat Planning Area threshold for mitigation at 60 dBA." Section 6.1.4 of the BTR and Section 4.7 of the EIR have been updated to explain the noise study and less than significant impact determination.

B-42 See Response B-6 for information on the omission of impacts to wetlands. Avoidance of wetland impacts includes eliminating the proposed drainage channel that this comment references. No further action required.

B-43 As stated in Response B-6, the project now avoids impacts to wetlands. Consequently, a wetlands deviation and Biologically Superior Option are not required.

population-based public parks further away from the San Diego River, maximizing the amount of habitat restoration and enhancement of wetlands. Additionally, the BTR and DEIR have not provided an analysis of the buildout of the Atlas Specific Plan, which, among other things, includes the artificial widening of the San Diego River (to increase flood capacity) and restoration of native riparian vegetation. This alternative, which does not require amendments to specific or community plans, should be evaluated in the context of riparian habitat restored and created with the amount of habitat restored and created with other alternatives. B-43

30. Page 68, BTR. The Wildlife Agencies disagree with the BTR's assertion that "*…the Proposed Project represents the most Biologically Superior Option, the Project has been reconfigured several times to ensure that the final design is the least impactful on the environment*" without having analyzed the potential to maximize the restoration of native habitats (in lieu of a population-based public park) in conformance with the Atlas Specific Plan or the Master Plan (see previous comment). While the BTR states that the biologically superior alternative has been based upon multiple reconfigurations, these reconfigurations (including the removal 416 parking spaces) stem from what is already required by the stipulated judgement (SDP 400602) or to facilitate the proposed project's newly introduced 840 residential housing units. The DEIR should evaluate a project alternative that focuses on maximizing riparian habitat in lieu of amenities associated with the commercial and residential uses of the proposed project. B-44

31. Page 68, BTR. We request that the City clarify its position regarding the enforcement and follow through of the stipulated judgement (SDP 400602). In stating "[*i*]*f the Proposed Project were not implemented, only the outstanding habitat restoration and enhancement requirements of SDP #400602* [*stipulated judgement*] *would be completed to abate the previous code violation* (*i.e., restoring 1.25 acres of southern cottonwood-willow riparian forest habitat, enhancing 1.28 acres of southern cottonwood-willow riparian forest habitat, and planting a 0.23- acre coastal sage scrub buffer zone around the designated wetlands*)" the BTR infers that the City is not pursuing the dedication of approximately 7.1 acres of open space required by the stipulated judgement (SDP 400602). The BTR should be revised to make clear how the proposed project would fulfill the conditions of the stipulated judgement (SDP 400602). B-45

32. Page 77, BTR. The Wildlife Agencies do not concur with the City's position regarding the biologically superior alternative. We have continued to advocate design alternatives that maximize native vegetation and remove or relocate anthropogenic uses outside of sensitive habitats and their respective buffers. To date, we have not seen an alternative that we feel is responsive to our prior comments. We recommend that the following statement be removed from the BTR: "[*t*]*he wildlife agencies* (*i.e., USFWS and CDFW*) *have been consulted regarding design of the project as a Biologically Superior Option. Final concurrence by the City and wildlife agencies for the Biologically Superior Option is required prior to finalization of the Environmental Document.*" B-46

33. Page 69, BTR. With regard to the biologically superior alternative's effect on wildlife corridors, we disagree that the City has demonstrated that the population-based park space would "*… limit edge effects on movement through the BSA*" because the proposed park space would introduce anthropogenic activities within a reach of the San Diego River that has previously received comparatively less recreation. In addition, the proposed project B-47

B-44 See Response B-43.

B-45 Section 1.2.3 of the BTR lists out the Site Development Permit requirements and states that those requirements are part of the Project Description. This text will also be included in Section 3.4.7 of the Draft EIR. As stated, the proposed project will implement all requirements of the Site Development Permit. See Response B-22 regarding the dedication of the 8.11 acres of open space, which is more than the 7.1 acres required by the stipulated judgement (Site Development Permit 400602).

B-46 Impacts to wetlands are now avoided thereby eliminating the need for a wetland deviation or the Biologically Superior Option designation.

B-47 Impacts to wetlands are now avoided thereby eliminating the need for a wetland deviation or the Biologically Superior Option designation. See Response B-5 for information on the passive park and Response B-33 for analysis pertaining to the construction of 840 residential units adjacent to sensitive habitat areas. Specifically, zoning prohibits special event uses of the park. Additionally, the park has been designed to avoid indirect impacts through implementation of a wetland buffer, planting of native species, compliance with the MHPA Land Use Adjacency Guidelines, and compliance with project permit conditions.

would construct 840 residential units—a new source of anthropogenic uses located immediately adjacent to sensitive habitat areas. Lastly, the BSA has remained silent regarding the nature of the allowable uses within the public park spaces. Specifically, we are concerned that special event uses (e.g., weddings, birthdays, and other large gatherings) are incompatible with sensitive habitat. The proposed project and subsequent DEIR should be clear in prohibiting special event uses. B-47

34. Page 71, BTR. The Wildlife Agencies agree with the BTR's assertion that because formal and informal parking areas on the north bank of the San Diego River exist "[*t*]*he Proposed Project does have the potential to increase human presence in vicinity of sensitive habitats with construction of new park space adjacent to the river corridor*." The formal and informal parking lots are not representative of the type, nature, duration, or intensity of land uses that are likely to increase should the proposed project formalize a park and draw additional visitors. Additionally, the construction of 840 new residential units will also increase the number of visitors to these areas as evidenced by the BTR: "*…the Proposed Project is designed to reorient development toward the river corridor, thus potentially increasing the amount of human activity that occurs adjacent to sensitive habitats*." B-48

35. Page 71, BTR. The we agree that "[*t*]*he impact of noise on wildlife differs from species to species, and is dependent on the source of the noise (e.g., vehicle traffic versus blasting) and the decibel level, duration, and timing*" but disagree that the "[*n*]*oise resulting from on-site human activity (e.g., trail and park use) is not expected to increase ambient noise levels within sensitive habitats*." As previously stated (see comment number 30, BTR) we disagree because the proposed park space would introduce anthropogenic activities within a reach of the San Diego River that has previously received comparatively less recreational use. B-49

36. Page 72, BTR. Native habitat can benefit from the active management of invasive plant species within and adjoining them. Any project alternative that proposes the siting of turf or non-native habitats immediately adjacent to MHPA should also include a resource management plan to defray the indirect impacts associated with the proposed development. B-50

37. Page 72-73, BTR. With regard to the indirect effects of the proposed project's lighting "[*t*]*he Proposed Project would not eliminate existing nighttime lighting around the sensitive habitats and reorienting development on-site toward the San Diego River (including construction of new park space adjacent to the river) will increase the amount of light sources adjacent to sensitive habitats*" (Town & Country Project Biological Technical Report, p.72-73). To further minimize indirect effects of lighting on avian species we recommend that the project be designed in conformance with the American Bird Conservancy guidelines for reducing avian collisions (see comment p.55-56, BTR). B-51

38. Page 76, BTR. The BTR should indicate whether lighting is proposed in conjunction with the park space. If lighting is proposed, the plans and specifications should be provided in the BTR and should include a discussion of how the lighting proposal conforms to the City Land Use Adjacency Guidelines. B-52

39. Page 77, BTR. Please revise section 6.1.5 Barriers; paragraph one states that to prohibit trespass into MHPA fencing (among other options) is optional while the following paragraph explicitly states that split-rail fencing and signage will be a requirement. The revised BTR should indicate that fencing and signage is mandatory, while other options B-53

B-48 Comment noted.

B-49 See comment B-41.

B-50 There is a 5-year restoration and monitoring plan for restoration and enhancement adjacent to the park. Section 4.4.4.4 of the Draft EIR discusses long-term management of the passive park. Long-term management of the passive park will focus on noise control, trash removal, and nonnative species management. Long-term management will be the responsibility of the Project proponent. This stipulation, including the creation and implementation of a Park Management Plan, will be part of the Conditions of Approval of the project. The Covenant of Easement will also include this language. The BTR has been edited to remove the City as the responsible party for this long-term responsibility.

B-51 The project has been redesigned to be in conformance with the American Bird Conservancy's guidelines for reducing avian collisions (ABC 2016), and to avoid impacts from lighting. The BTR and EIR have been updated to reflect this change.

B-52 Final design information on lighting has not yet been developed. The design must comply with the MSCP Land Use Adjacency Guidelines. Section 6.1.3 of the BTR and Section 4.4.3.2 of the Final EIR discuss how lighting impacts will be avoided. All lighting will conform to Multi-Habitat Planning Area Land Use Adjacency Guidelines regarding lighting, such as shielded lighting directed away from the San Diego River and Multi-Habitat Planning Area areas, conversion of existing parking lot space to habitat and park space, and adding landscaping within the park to further shield natural areas from vehicle and development lighting.

B-53 Final design information on barriers has not yet been developed. The design must comply with the MSCP Land Use Adjacency Guidelines. The first paragraph of Section 6.1.5 in the BTR (in italics) summarizes the language in the Land Use Adjacency Guidelines while the second paragraph provides the specific project response. The project will implement fencing and signage as required to comply with Multiple Species Conservation Plan requirements.

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(e.g., boulders, rocks, and walls) are optional treatments. The BTR should include a graphic conceptualizing the proposed barrier types and locations. B-53

40. Page 79, BTR. Impacts to MHPA should be mitigated in accordance with Land Use Development Code Biology Guidelines, which state "[*f*]*or permanent wetlands impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new in-kind habitat to the fullest extent possible and at the appropriate ratios* [see Table 2, Biology Guidelines]." As a component of mitigation proposals the Biology Guidelines affirm that the "[*r*]*estoration of illegally filled historic wetland areas will not be considered for restoration…*." The BTR should be revised for consistency with the mitigation prescribed by the Biology Guidelines. B-54

41. Page 80, BTR. As a means of minimizing lighting spillover from the parking lot nearest the MHPA, we have consistently recommended the reorientation of existing parking spaces to parallel (east-west) as opposed to intersect (the current north-south configuration) the San Diego River. The proposed project has not been revised to incorporate this recommendation nor has the document demonstrated why the recommendation might be infeasible. B-55

42. Page 84, BTR. The designated uses, frequency of uses, and limitations of special events that could be held within the park spaces should be detailed within the BTR. Given the proximity of the park space and confined nature of the San Diego River, special events (e.g., weddings, marathons, or other large gatherings) should be prohibited. B-56

43. Page 85, BTR. The BTR should make clear how the removal of debris and trash from the park will be funded and monitored over the life of the proposed project. B-57

44. Page 92, BTR. Mitigation Measure BIO-2 should be revised to specify the monitoring interval expected of the biological monitor in satisfying mitigation measure BIO-2. B-58

45. Page 94, BTR. Mitigation for wetlands impacts should be revised to be consistent with City Biology Guidelines Section III—impact analysis so that "[*a*]*s part of the project-specific environmental review pursuant to CEQA, all unavoidable wetlands impacts (both temporary and permanent) will need to be analyzed and mitigation will be required in accordance with Table 2a and/or Table 2b….*" The BTR should analyze how the City Biology Guidelines Standard Mitigation Table 2a or Extraordinary Mitigation Table 2b will be applied. In order for Standard Mitigation Table 2a to be applicable the biologically superior alternative must include wetland creation or restoration and include a biologically superior project design that "*…optimizes the potential long-term biological viability of the on-site sensitive biological resources…*." To demonstrate the applicability of Standard Mitigation Table 2a, we recommend that the proposed project and biologically superior alternative increase the width of the San Diego River corridor. The City has provided us directly revised drawings to reflect a relocation of the proposed trail to the edge of the development; such drawings should be incorporated into the BTR/BSA and all other relevant documents. If the biologically superior alternative maximizing the San Diego River Park corridor width is not accomplished, then Extraordinary Mitigation Table 2b would apply. B-59

B-54 The proposed project would have no impacts on wetlands and therefore would have no requirement for restoration/mitigation. The wetlands that would be restored per the requirements of the stipulated judgment (which includes the historic wetlands that were illegally filled) are not being considered for restoration/mitigation credit. The driving force for the restoration of the illegally filled wetlands is the stipulated judgment, rather than the Biology Guidelines.

B-55 Reorienting the parking spaces in the parking lots nearest the Multi-Habitat Planning Area after implementation of the project is not part of the project design. The space available for parking is a rectangular space oriented east-west. Reorienting parking bays within that space would be infeasible because an adjusted parking configuration would drastically reduce the number of spaces available. Native landscaping within the parking lot and park space will be strategically planned to help shield light from vehicles. The landscape plan includes a 5-foot wide planting buffer comprised of dense coastal sages scrub between the parking lot and the public park space. Additionally, native trees would be planted along the perimeter of the parking lot and throughout the public park to further shield the light from vehicles.

B-56 See Response B-5 and B-47 Allowable passive park activities include passive lawn areas, signage, and benches for wildlife observation and education.

B-57 The General Development Permit will be processed by the City for the portion of the Master Plan Area delineated within the recreation easement providing for the population-based public park. This Permit will describe how the removal of debris and trash from the park will be funded and monitored over the life of the proposed project. This will be the responsibility of the project proponent and will be a Condition of Approval, as well as a condition of the Covenant of Easement of the park.

B-58 Mitigation Measure BIO-2 has been modified to state the following: "The project has been designed to avoid impacts to biological resources. Monitoring requirements are included in project City permit conditions. Frequency of monitoring would be based on the presence of sensitive resources and the timing of construction activities that could impact resources.

B-59 The project has been redesigned to avoid impacts to wetlands thereby eliminating the need for a wetland deviation, Biologically Superior Option designation, or compensatory mitigation. Revised drawings illustrating the redesigned trail have been included in the most current version of the BTR and Draft EIR.

Ms. Elizabeth Shearer-Nguyen- (FWS/CDFW-16B0367-16TA0966) Enclosure Page 11

46. Page 95, BTR. Section 7.1.3 Nesting Bird Mitigation measure should be included within the BTR's Summary of Mitigation Measures and carried forward as an enforceable mitigation measure within the MMRP. B-60

47. The minimum necessary restoration acreage and open space dedication acreage required by the stipulated judgement (SDP 400602) of the Town and Country Project Restoration Plan (Appendix A) should be specifically described within the text of the BTR and included in the body of the DEIR and its MMRP. As an example, BTR Section 1.2.3 *On-Site Habitat Improvements* should describe the total habitat improvement while also describing that of the total 7.5 acres of habitat restoration proposed in Appendix A, the stipulated judgement (SDP 400602) requires 2.76 acres of riparian restoration, and the "*[d]edication to the City of approximately 7.1 acres in the form of an open space easement valued at $125,000 per acre.*" B-61

48. Appendix A, Page. 2. In order to increase diversity, we recommend adjusting the seed per acre of *Amsinckia menziesii* down from the 11 pounds per-acre specified in the Target Seed List-Upland Coastal Sage Scrub and adding another native herbaceous species. In addition, herbaceous species specified in the Atlas Specific Plan *Selected Plants for Use in Revegetation* (*Table 9*) should be cross referenced to add herbaceous diversity. B-62

49. Appendix A, Page. 3. In order to increase diversity, we recommend adjusting the seed per acre of *Bromus carinatus* down from the 11 pounds per-acre specified in the Target Seed List-Upland Coastal Sage Scrub and adding another native herbaceous species to offset the reduction in *Bromus carinatus* seed pounds per-acre and increase diversity. In addition, herbaceous species specified in the Atlas Specific Plan *Selected Plants for Use in Revegetation* (*Table 9*) should be cross referenced to add herbaceous diversity. B-63

50. Appendix A, Page. 3. To meet the requirements of the stipulated judgement (SDP 400602), the Town and Country Revegetation Plan identifies 0.64 acre of riparian habitat restoration consisting of "*... removal of exotic species (e.g. eucalyptus), protection of existing native species, installation of container plants, seeding, and maintenance and monitoring.*" However, the City Biology Guidelines define wetland restoration as "*... an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.*" The BTR should describe how the 0.64 acre restoration will meet the City criteria. B-64

51. Appendix A, Page. 4. The statement from Appendix A that the "*[p]roposed restoration and enhancement exceeds existing requirements by approximately 4.74 acres (i.e., of the 7.50 acres of total restoration/enhancement proposed by the Project, 2.76 acres are required by SDP #400602 and 4.74 acres are proposed in addition to SDP requirements)*" should be revised to conform with the terms of the stipulated judgement (SDP 400602), which in part required the restoration of 2.76 acres and the placement of an open space easement over 7.1 acres. The BTR should be clear that of the 7.5 acres of total restoration and enhancement proposed by the project, an open space easement over 7.1 acres and the restoration of 2.76 acres of riparian habitat are required by the stipulated judgement (SDP 400602). If using the BTR's numbers, this results in an addition of 0.4 acre of open space dedication and an additional 4.74 acres of habitat restoration beyond what is required in the stipulated judgement. B-65

B-60 Avoidance of impacts would be accomplished through compliance with the MHPA Land Use Adjacency Guidelines and project permit conditions, ensuring they are enforceable.

B-61 See Response B-22.

B-62 Comment noted. Appendix A (Town and Country Project Revegetation Plan) of the BTR was updated to increase herbaceous diversity. *Artemisia douglasiana* and *Mimulus guttatus* was added to increase herbaceous diversity. These species are not included in the Atlas Plan List (which was cross referenced). The selected species occur in the river corridor, are appropriate for the habitat type, and provide the same ecological functions as the herbaceous species noted in the Atlas list.

B-63 Comment noted. Appendix A (Town and Country Project Revegetation Plan) of the BTR was updated to increase herbaceous diversity for Oak Riparian Woodland (comment includes an incorrect reference to the Coastal Sage Scrub seed list) target seed list. *Artemisia douglasiana* and *Mimulus guttatus* were added to increase herbaceous diversity. These species are not included in the Atlas Plan List (which was cross referenced). The selected species occur in the river corridor, are appropriate for the habitat type, and provide the same ecological functions as the herbaceous species noted in the Atlas list.

B-64 The stipulated judgment is the driving force in the restoration and all requirements contained therein will be met. However, the Revegetation Plan was updated to state that native wetland vegetation will be reestablished in the 0.64 acre of riparian habitat as detailed below.

Restore 0.64 acre of riparian habitat on the south side of the San Diego River to meet the 1:1 mitigation requirement. Work in this area will generally consist of removal of exotic species (e.g. eucalyptus), protection of existing native species, reestablishment of native wetland vegetation through installation of container plants, native seeding bank, and maintenance and monitoring.

B-65 See Response B-22.

Ms. Elizabeth Shearer-Nguyen- (FWS/CDFW-16B0367-16TA0966) Enclosure Page 12

52. The BTR and DEIR should be clear that the applicant will grant an open space easement over no less than the 7.1 acres—as required by the stipulated judgement (SDP 400602). The requirement to place a minimum of 7.1 acres under an open space easement should be included in the BTR narrative, the body of the DEIR, and included in the MMRP as an enforceable mitigation measure. B-66

B-66 See Response B-22. An open space easement over the 8.11 total acres of open space is noted in the BTR and EIR and will be a condition of the final permit, but will not be in the Mitigation Monitoring and Reporting Program as it is not project related mitigation.

REFERENCES FOR LETTER B RESPONSES

American Bird Conservancy (ABC). 2016. Bird-Friendly Building Design. Accessed November 11, 2016: https://abcbirds.org/results/publications/#special-reports

RECON Environmental, Inc. (RECON). 2012. *Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project*. Project No. 118313. June 13, 2012.

Dumrose, R. K., Riley, L. E., and Landis, T. D. 2002. *Riparian Restoration in the Southwest – Species Selection, Propagation, Planting Methods, and Case Studies.* National nursery proceedings–1999, 2000, and 2001. USDA Forest Service, Rocky Mountain Research Station, Proceedings RMRS-P-24. 370 pp.

Enclosure B

Wildlife Agency Review of the Atlas Specific Plan

The River Improvement Element of the Atlas Specific Plan was intended to develop a coordinated flood control and wetlands management program. The design concept was a natural-appearing, enhanced river channel providing a natural and useable open space corridor within Mission Valley. It was to provide a comprehensive flood protection program for existing and future development within the valley and provide preservation and enhancement of existing wetland habitats and compensation for habitat loss as a result of development.

Related to comment B-7

The river corridor design concept took into consideration the existing development of the Town and Country and Fashion Valley Shopping Center as well as planned public facilities such as the light rail transit right-of-way and station, construction of Camino de la Reina, and pedestrian and bicycle pathways, while providing the maximum degree of flood protection and wetlands mitigation possible.

Hydraulic modeling indicated that in order to contain the 100-year flow, the channel would need to be 400 feet wide. Because of existing development, that was not an option so alternatives were explored. The selected option would result in containment of a 100-year event by the south bank, and a 10-year event by the north bank. That is, in a 100-year event the Town and Country site would not flood, but in a greater than 10-year event, some inundation of Fashion Valley was expected. The plan included deepening and widening the existing pilot channel from 110 feet to an average width of 200 feet between Fashion Valley Road and Camino de la Reina Bridge, increasing to approximately 300 feet wide at SR-163. There was to be a 30-foot-wide buffer between the top of the south bank and the Town and Country development and a landscape setback of 30 feet between the top of the north bank and Fashion Valley development. (The north side is termed a "landscape setback" and not a "buffer" because, in the San Diego River Wetlands Management Plan, "buffers" needed to be outside the floodway, and even after the channel widening the river would occupy the Fashion Valley parking lot in a greater-than-10-year event.)

The plan allowed for a 10-foot wide pedestrian/bicycle path south of the river, which could occur within the buffer. The buffer and landscape setback areas were to be planted with native vegetation, including sycamore, cottonwood, and coast live oak, with a densely planted understory. The higher areas of the 2.5:1 channel bank were to be planted with a cottonwood association of species, and the lower areas of the bank with a willow association or wetter habitat type. Freshwater marsh species were to be planted at the water's edge on the more gently sloped bench along each bank. It was estimated the flood control project would result in temporary impacts of 4.37 acres consisting of 0.45 acre open water, 1.11 acre freshwater marsh, and 2.81 acre riparian woodland. The resulting stream corridor was to contain 3.09 acre open water, 1.22 acre freshwater marsh species, and 3.57 acres riparian woodland species, covering a total area of 7.88 acres. The revegetation was to be held to success criteria and monitored and maintained for a period of five years, after which period Atlas Hotels, Inc. was to participate in a maintenance district to be formed to provide future maintenance of the channel and wetland habitats in perpetuity. Atlas Hotels, Inc. was to bond for the river channel improvements and revegetation prior to the issuance of building permits for their first phase of development.

The River Improvement Element of the Atlas Specific Plan called for features to be incorporated into the design of the Town and Country site to "encourage river orientation and definition of the river corridor as natural and useable open space. In order to essentially shift the orientation of the Town and Country site from Hotel Circle North to the river, a pedestrian promenade, plaza, and other public uses including a restaurant and lounge with outdoor dining have been incorporated into the design of the Town and Country site adjacent to the river."

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COMMENT LETTER C

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San Diego County Archaeological Society, Inc.

Environmental Review Committee

18 September 2016

To: Ms. Elizabeth Shearer-Nguyen
Development Services Department
City of San Diego
1222 First Avenue, Mail Station 501
San Diego, California 92101

Subject: Draft Environmental Impact Report
Town and Country
Project No. 424475

Dear Ms. Shearer-Nguyen:

I have reviewed the cultural resources aspects of the subject DEIR on behalf of this committee of the San Diego County Archaeological Society. C-1

Based on the information contained in the DEIR and its Appendices D-1 through D-3, we agree with the archaeological monitoring program as proposed. Given the extensive modifications to nearly all of the structures onsite, we also agree with the assessment of those structures in the appendices and the proposed mitigation measures for the one structure deemed historic.

Thank you for including SDCAS in the public review of this project's environmental documents.

Sincerely,

James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: AECOM
SDCAS President
File

P.O. Box 81106 San Diego, CA 92138-1106 (858) 538-0935

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM SAN DIEGO COUNTY ARCHAEOLOGICAL SOCIETY (LETTER C)

C-1 Comment acknowledged.

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COMMENT LETTER D

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Anders, Patricia

From: Mark Polinsky <mpo711@aol.com>
Sent: Saturday, August 20, 2016 2:40 PM
To: DSD EAS
Subject: Town & Country # 424475

I Mark Polinsky , 7047 Camino Degrazia , SD , CA 92111 am not opposed to this project but I am adamant about demolition and all construction noise taking place during legal Code hours ! I will be the first to call Code Compliance the minute I hear any violations of the hours. I am a resident of the Mission/Fashion Valley areas of 28 years. This redevelopment sight is withing " earshot " of several residential communities that sit on the North Rim of Mission Valley consisting of about 3,000 homes. Thank you. D-1

1

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM MARK POLINSKY (LETTER D)

D-1 Comment acknowledged. The project will be built in compliance with the San Diego Municipal Code, Noise Ordinance, including hours of construction and operation.

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COMMENT LETTERS E1 AND E2

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STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

October 4, 2016

RECEIVED
OCT 07 2016
Development Services

Elizabeth Shearer-Nguyen
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: Town and Country
SCH#: 2015121066

Dear Elizabeth Shearer-Nguyen:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on October 3, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. E1-1

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM STATE CLEARINGHOUSE AND PLANNING UNIT (LETTER E1)

E1-1 Comment noted.

Document Details Report
State Clearinghouse Data Base

SCH# 2015121066
Project Title Town and Country
Lead Agency San Diego, City of

Type EIR Draft EIR

Description The project is requesting General Plan Amendment and Community Plan Amendment to amend the Atlas Specific Plan and the Mission Valley Community Plan; Rezone; Vesting Tentative Map for a nine lot subdivision; a Planned Development Permit (PDP) to amend Planned Commercial Development (PCD) 88-0585; a Site Development Permit (SDP) to amend SDP 400602, CUP to amend CUP 88-0585; and various Easement Vacation to construct a mixed use transit oriented development through the consolidation, renovation, and infill development of the existing town and country hotel through a master plan that would establish three districts: park district, residential district, and hotel distirct. The master plan elements include a renovation of portions of the hotel and convention buildings while demolishing other structures to accommodate construction of new hotel facilities and residential uses.

Lead Agency Contact

Name Elizabeth Shearer-Nguyen
Agency City of San Diego
Phone 619-446-5369 **Fax**
email
Address 1222 First Avenue, MS-501
City San Diego **State** CA **Zip** 92101

Project Location

County San Diego
City San Diego
Region
Lat / Long 32.762975° N / -117.169177° W
Cross Streets Hotel Circle North / Fashion Valley Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-5, 8,15,805 SR-163
Airports Montgomery Field
Railways San Diego Trolley
Waterways San Diego River
Schools
Land Use Various

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Geologic/Seismic; Noise; Public Services; Solid Waste; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Resources, Recycling and Recovery; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 11; Department of Health Services; Regional Water Quality Control Board, Region 3; Native American Heritage Commission; Public Utilities Commission

Date Received 08/18/2016 **Start of Review** 08/18/2016 **End of Review** 10/03/2016

EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

KEN ALEX
DIRECTOR

October 18, 2016

RECEIVED
OCT 25 2016
Development Services

Elizabeth Shearer-Nguyen
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: Town and Country
SCH#: 2015121066

Dear Elizabeth Shearer-Nguyen:

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on October 3, 2016. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project. E2-1

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2015121066) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

TOWN & COUNTRY PROJECT RESPONSES TO COMMENTS ON THE DRAFT EIR FROM STATE CLEARINGHOUSE AND PLANNING UNIT (LETTER E2)

E2-1 Comment noted. See Letter B for Response to Comments to the U.S. Fish and Wildlife and California Department of Fish and Wildlife letter dated October 17, 2016, also attached to this letter.

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
760-431-9440
FAX 760-431-9624

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, California 92123
858-467-4201
FAX 858-467-4239

In Reply Refer To:
FWS/CDFW-16B0367-16TA0966

late 10/31/16 C

October 17, 2016
Sent by Email

Governor's Office of Planning & Research

OCT 17 2016

STATE CLEARINGHOUSE

Ms. Elizabeth Shearer-Nguyen
Environmental Planner
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101
DSDEAS@sandiego.gov

Subject: Comments on the Draft Environmental Impact Report and Biologically Superior Alternative for Town and Country Redevelopment Project, City of San Diego, San Diego County, California (Project Number 424475, SCH # 2015121066)

Dear Ms. Shearer-Nguyen:

The U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the above-referenced Draft Environmental Impact Report (DEIR) and Biologically Superior Alternative for the Town and Country Redevelopment Project. The public review period for this DEIR ended on October 3, 2016. The Wildlife Agencies appreciate the time extension until October 17, 2016, granted by the City of San Diego (City) for providing comments to the DEIR. On August 16, 2016, the City requested a review of the biologically superior alternative in the biological technical report (BTR) in conformance with the City's Environmentally Sensitive Lands (ESL) wetland deviation process. The Wildlife agencies are providing comments on the BTR as Attachment A to this letter. The comments and recommendations provided herein are based on the information provided in the DEIR, the Wildlife Agencies' knowledge of sensitive and declining vegetation communities in the region, and our participation in the Multiple Species Conservation Program (MSCP) and the City's MSCP Subarea Plan (SAP). The Department previously commented on the Notice of Preparation (NOP) of the DEIR in a letter dated January 16, 2016.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(1) of the Act. The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) program, a California regional habitat conservation

planning program. The City participates in the Department's NCCP and the Service's HCP programs by implementing its SAP.

The project site is located at 500 Hotel Circle North, within the City Mission Valley Community Plan and the Atlas Specific Plan. The City's Multi-Habitat Planning Area (MHPA) is located within the adjoining San Diego River. The central and southern portions of the site are currently developed as a 954-room hotel, a 200,000-square-foot convention center, a 258-space subterranean parking structure, food and spa facilities, landscaped grounds, hotel services facilities, and parking areas. The northern portion of the site includes the San Diego River. The majority of this area is undeveloped open space however a portion is currently developed as a parking lot. Vegetation communities found on site include southern cottonwood-willow riparian forest (3.49 acres), coastal and valley freshwater marsh (0.02 acres), emergent wetland (0.06 acres), open water (0.07 acres), eucalyptus woodland (3.88 acres), non-native grassland (0.18 acres), disturbed (1.21 acres), and developed (46.37 acres).

The proposed project includes the redevelopment of the existing 39.7-acre Town & Country Hotel and Convention Center including (1) consolidating and renovating the hotel and convention center; (2) developing a multi-family residential neighborhood; (3) restoring San Diego River open space habitat; (4) construct a new public park; and (5) construct a multi-use River pathway to connecting to a regional recreational corridor.

The proposed project would also implement outstanding actions required by a stipulated judgement for a past City code violation for unauthorized grading in the San Diego River (*City of San Diego* v. *Town and Country Hotel LLC*, Case No. GIC880884). A site development permit was issued by the City (SDP #400602) to authorize habitat restoration and enhancement required to mitigate the unauthorized grading that would include:

1. Restore 1.25 acres of southern cottonwood-willow riparian forest habitat;

2. Enhance 1.28 acres of southern cottonwood-willow riparian forest habitat;

3. Plant a 30-foot average coastal sage scrub buffer zone (approximately 0.23 acre total area);

4. Provide a Covenant of Easement to preserve MHPA lands; and

5. Provide a future San Diego River Pathway.

The Department is charged with administrating and enforcing regulations promulgated by the Fish and Game Commission. The California Fish and Game Commission have adopted a Wetlands Resources Policy (Commission Policy) which, in part, acknowledges that "California's remaining wetlands provide significant and essential habitat for a wide variety of important resident and migratory fish and wildlife species." In recognition of the importance of wetlands to the State of California, the Commission Policy establishes that "...the protection, preservation, restoration, enhancement and expansion of wetlands as migratory bird breeding and wintering habitat are justly recognized as being critical to the long-term survival of such species" concluding that "...it is the policy of the Fish and Game Commission to seek to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California." In addition to the Commission Policy, the Wildlife Agencies administer the MSCP and the City's SAP, all of which prioritize the protection of wetlands, including the San Diego River. We are therefore tasked with seeking opportunities to enhance and expand wetlands resources.

The comments and recommendations below and attached are provided to assist the City in minimizing potential biological effects associated with the proposed project while maximizing wetland enhancement – a common theme among the Commission Policy, the MSCP, and the guidance found within multiple City planning documents. We believe the following comments to be germane to all project alternatives, particularly to the biologically superior alternative required by the City's ESL deviation guidelines.

The DEIR acknowledges that the proposed project may directly and indirectly impact riparian habitat and sensitive species within the San Diego River corridor by introducing additional public uses within and immediately adjacent to the San Diego River corridor through the construction of the new park space (p. 4.4-57), and by increasing the density of development adjacent to the San Diego River. The DEIR concludes "[t]his park space, while it would not function directly as wildlife habitat, would benefit wildlife movement by providing transitional area between development and native habitats that will limit edge effects on movement through the BSA [Biologic Survey Area]." However, the DEIR does not provide any analysis to support this conclusion.

The Wildlife Agencies are concerned about locating these types of activities and developments within the San Diego River corridor and the edge effects of development on biological resources located therein. In addition, we are concerned that the DEIR does not fully analyze the impacts from these activities on the river corridor, nor does it provide adequate measures to address these impacts.

Human habitation and recreational uses have been demonstrated to impact a suite of avian, mammalian, amphibian, and reptile species; for example, Bosakowski *et al.* (1992) found that nest site location in Copper's hawks appeared to be significantly more tolerant of car traffic than sources of human habitation; similarly, Knight and Skagen (1988) observed that the effects of recreation activities on raptor species include: (1) altering the distribution of raptors, (2) disrupting nest attentiveness, (3) causing abandonment of breeding territories, (4) reducing productivity, and (5) altering foraging behavior. Miller *et al.* (2001) found that natural land managers can implement spatial and behavioral restrictions to reduce the effects of recreationists' presence on wildlife while Knight and Skagen (1988) conclude that recreational activities can be mitigated either through preclusion of recreation or through spatial and temporal restrictions on recreational opportunities. In order to address potential impacts from edge effects we recommend the City and the applicant review alternatives that maximize the width of the native habitat within this reach of the San Diego River corridor and include measures in the proposed park and development that would avoid or minimize edge effects to the maximum extent possible.

In conformance with City Land Development Code section 143.0510(d), impacts to wetlands require an Environmentally Sensitive Lands (ESL) Wetland Deviation which can be permitted through one of three options. The DEIR states that the proposed project qualifies for a wetland deviation under the Biologically Superior Option. Under the Biologically Superior Option, "[a] deviation may be requested to achieve a superior biological result which would provide a net increase in quality and viability (functions and value), relative to existing conditions or the project originally proposed by the applicant, and long term biological benefit." In addition, the biologically superior alternative must find that there are no feasible mitigation measures that would further minimize impacts to ESL wetlands. As a component of the Wetland Deviation process the Wildlife Agencies must provide written concurrence that the "...biologically superior project design has been fully described and analyzed" and conforms to ESL Guidelines. We do not concur that the analysis in the DEIR for a Wetland Deviation under the City's ESL regulations has been adequately supported and the project, as currently proposed, does not achieve a biologically superior design. In order for us to support a

biologically superior alternative the project must show that the project achieves all of the criteria under section C: *Biologically Superior Option* on page 26 of the City's Biology Guidelines which include:

1. *"The proposed project, a no project alternative, a wetlands avoidance alternative, and a biologically superior alternative shall be fully described and analyzed in an appropriate CEQA document. The CEQA document must fully analyze and describe the rationale for why the biologically superior option (this could be the proposed project) would result in the conservation of a biologically superior resource compared to strict compliance with the provisions of the ESL..."*

The DEIR does not include a wetlands avoidance alternative that avoids wetland impacts from the bridge widening. The final EIR should include a wetlands avoidance alternative.

As part of the process of evaluating a biologically superior option per City ESL regulations, we recommend a comparative analysis of each alternative with the River corridor improvement elements (e.g., habitat creation, buffers, and River widening) specified by the Atlas Specific Plan. The biologically superior option should demonstrate how the biologically superior option provides greater *biological* value than the wetlands avoidance alternative or the buildout of the Atlas Specific Plan (Alternative 1a). We acknowledge that the Atlas Specific Plan would result in the buildout of a higher capacity hotel facility and increase the channel width of the San Diego River; however, in evaluating a biologically superior option, the River Improvement Element of the Atlas Specific Plan (Improvement Element) would not introduce a population-based park adjacent to sensitive habitat resources and would widen the River corridor and revegetate the widened channel with approximately 7.88 acres of riparian corridor habitat (see Enclosure B for our synopsis of the River Improvement Element of the Atlas Specific Plan). The DEIR concludes that "[a]lternative 1a would result in greater impacts when compared to the proposed project to transportation/circulation, biological resources, air quality and odors, hydrology and water quality..." without first analyzing the widening of the River, the net increase of riparian habitat specified in the Atlas Specific Plan, or the biological ramifications of siting a park within a highly constrained corridor of the River. We recommend that the final EIR compare the post-project River width and total acreage of riparian habitat created or restored for each project alternative with the riparian habitat acreage specified by the Atlas Specific Plan; in addition, the analysis should evaluate the differences in land uses adjacent to the San Diego River between the build out of the Atlas Specific Plan and the proposed project.

We also have concerns regarding the project's proposed buffers and consistency with the Biological Guidelines ESL A 1(b) p. 9:

1. *"A wetland buffer shall be maintained around all wetlands as appropriate to protect the functions and values of the wetland. Section 320.4(b)(2) of the U.S. Army Corps of Engineers General Regulatory Policies (33CFR 320-330) list criteria for consideration when evaluating wetland functions and values. These include wildlife habitat (spawning, nesting, rearing, and foraging), food chain productivity, water quality, ground water recharge, and areas for the protection from storm and floodwaters."*

The DEIR does not include an analysis demonstrating if the proposed buffer will protect the functions and values of the wetland. The final EIR should include this analysis.

During a September 27, 2016, site visit, we observed significant down cutting/vertical slopes along the banks of the San Diego River. We are concerned that the vertical slopes cannot be planted and

that the down cutting will severely limit the hydrology needed to support riparian wetland within the proposed buffer and mitigation area required by the stipulated judgement. Therefore, we recommend the buffer be graded to remove these vertical slopes and as much fill as possible to maximize riparian wetland within the proposed buffer and mitigation area.

We strongly encourage the City to reevaluate the proposed project with a focus on providing an increase in the width of the San Diego River corridor and associated riparian habitat. Existing planning documents specific to this area (e.g., Final Regional Plan for the MSCP and the City of San Diego SAP, the Atlas Specific Plan, the San Diego River Park Master Plan [Master Plan], and the Mission Valley Community Plan) include guidance for improving the River corridor on behalf of biological resources. The objective of widening the San Diego River is identified in the following current planning documents: 1) the MSCP Biological Core and Linkage Areas (section 2.2) identifies the San Diego River west of Mission Trails as a core biological resource area (Figure 2-2), and the SAP requires that "[n]ative vegetation shall be restored as a condition of future development proposals along this portion of the San Diego River corridor." (B15, Figure 4, p. 21); 2) the Atlas Specific Plan, which establishes a "...focus on accommodating all of these facilities, while at the same time provide the maximum degree of flood protection and wetlands mitigation possible;" 3) the Master Plan, which states "[w]ater bodies, wildlife and people need 'breathing room' to maintain health and integrity" and establishes a river corridor that "will be measured by the 100-year Floodway, as mapped by FEMA, plus 35 feet on either side of the floodway;" and 4) the Mission Valley Community Plan, which states that"[n]atural environmental features should be preserved and recreated within the floodway proper and should be incorporated as much as possible in areas beyond the floodway boundary to maintain and enhance the habitat and aesthetic values of the river." Each alternative analyzed in the DEIR should describe if it widens the San Diego River corridor or otherwise improves the riparian habitat.

We appreciate the opportunity to comment on the DEIR. If you have questions regarding this letter, please contact Eric Weiss of the Department at 858-467-4289 or Patrick Gower of the Service at 760-431-9440, extension 352.

Sincerely,

Digitally signed by DAVID ZOUTENDYK
Date: 2016.10.17 14:56:17 -07'00'

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

Enclosure(s):
A. Wildlife Agency Comments on the Biological Technical Report
B. Wildlife Agency Review of the Atlas Specific Plan

cc:
State Clearinghouse

LITERATURE CITED

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Enclosure A

The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (collectively, Wildlife Agencies) Comments on the Biological Technical Report Town & Country Project, City of San Diego, California

1. According to the conditions provided in the stipulated judgement (City of San Diego v. Town and Country Hotel LLC, Case No. GIC880884) the "*[d]efendants, their successors and assigns, and any of its agents, employees, representatives and all persons, corporations or other entities acting…*" are "*…permanently enjoined from…*" granting subsequent project entitlements or undertaking construction activities. The Wildlife Agencies believe that because the habitat restoration/mitigation required by the stipulated judgement was unfulfilled at the time the City granted discretionary approval for site development permit (SDP) 400602 (Town and Country Parking Lot Project), the property owner is thereby prohibited from… "*[p]erforming any construction activity at the PROPERTY*" (i.e., the proposed project—Town and Country Redevelopment Project).

2. Page V, paragraph 2. "*The Site is located at one of the most constricted and lowest quality section[s] of the entire length of the San Diego River. The riparian habitat associated with the river is narrow and surrounded by a combination of degraded undeveloped areas, parking lots, commercial development, and transportation corridors. These existing land uses surrounding the river have degraded habitat quality for decades. In addition, the entire Site has no meaningful orientation to the river, thereby limiting public enjoyment of this valuable resource. The existing development essentially turns its back to the river.*" The degraded lands surrounding the San Diego River afford the proposed project an opportunity to widen and improve the habitat quality of the San Diego River. We have previously commented on the Town and Country redevelopment proposal in response to the January 15, 2016, Notice of Preparation, during the March 18, 2016, Boundary Line Adjustment meeting, during the July 5, 2016 teleconference with the City and the proposed project's consultants, and during the September 16, 2016, coordination meeting among the Wildlife Agencies, City and project proponent. Prior to those meetings, we also provided similar comments requesting the restoration of the San Diego River during the September 21, 2011, Boundary Line Adjustment meeting, and in our May 24, 2011, comments on the Draft Mitigated Negative Declaration, for the Town and Country Parking Lot Project (SDP 400602) (Town and Country Parking Lot; City Project Number 118318; State Clearinghouse No. 2011041092); comments are incorporated here by reference. We have and continue to emphasize the need for the proposed project to first rectify unmet riparian mitigation obligations, and then design the redevelopment project in a manner which improves upon the conditions required by the stipulated judgement (SDP 400602). Additionally, we have requested information during our meetings on the specific design features of the various open space and park areas depicted in Figure 11 of the Biological Technical Report (BTR) as a population-based public park. We have continued concerns with locating parks, or their equivalent, within such a narrowly constricted reach of the San Diego River. While the public trail is located outside of the minimum width riparian buffer, an opportunity to better buffer the riparian area by locating the trail on the outer boundary of the population-based public park remains. The proposed project, in particular the biologically superior alternative, should maximize the available avoidance and minimization measures.

3. Page V, BTR. According to the BTR, "[*t*]*he Proposed Project seeks to improve the Site by balancing redevelopment goals with enhancing the ecological function of the river corridor and providing positive river-related experiences for the Mission Valley neighborhood*" and "[*t*]*he Proposed Project avoids impacts to sensitive biological resources to the maximum extent feasible. Further, as noted above, the Proposed Project incorporates design features that will protect and improve the function of biological resources on-site.*" The Wildlife Agencies request that the City provide responses to our January 15, 2016, Notice of Preparation, the March 18, 2016, Boundary Line Adjustment meeting, and July 5, 2016, comments that requested a demonstration that such measures have been incorporated into the redevelopment project (e.g., widening of the river corridor, and River buffer) for reducing impacts to the San Diego River corridor (or alternatively, how the City has determined that our suggestions would not result in a reasonable and feasible enhancement of the ecological function of the river corridor).

4. Page 4, BTR. The Wildlife Agencies disagree with the City's assertion that "[*t*]*he Proposed Project is designed around a wetland buffer to protect the functions and values of existing wetland habitats on-site.*" According to the stipulated judgement the Defendants—Town and Country Hotel and American Asphalt and Concrete, Inc.—were required to "*...either repair the two impacted sites (OPTION ONE) or repair portions of the two impacted sites and develop a portion of the impacted site upon which the parking lot is constructed (OPTION TWO) in the manner described below* [see stipulated judgement]" as restitution for illegal grading activities within the San Diego River. Furthermore, "[*i*]*n order to repair impacts to sensitive biological resources and the Special Flood Hazard Area, Defendant Town and Country Hotel must submit a complete application to the Development Services Department* [*DSD*] *at the direction of the Neighborhood Code Compliance Division of DSD for all necessary discretionary permits from DSD including but not limited to a Site Development Permit* [*SDP*]; *California Environmental Quality Act* [*CEQA*] *review; and a grading landscape plan to address the impacts to Environmentally Sensitive Lands* [*ESL*] *and to address the impacts allegedly caused by grading operations including the repair of the damage to native habitat (vegetation, trees, etc.).*" Despite being enjoined by the stipulated judgement (SDP 400602), the City granted discretionary approval for the Town and Country Parking Lot mitigated negative declaration without having completed the mitigation requirements of the stipulated judgement (SDP 400602) prior to, or concurrent with, project approval. Because the Town and Country Parking Lot Project was approved without the City ensuring that the habitat restoration was completed, the final EIR should include a measure requiring the applicant to implement the proposed mitigation prior to or concurrent with proposed construction. In addition the City should require the applicant to provide a secured funding source based upon a Property Analysis Record (PAR) or similar instrument, for the restoration prior to the initiation of project impacts.

5. Page 4 BTR. The BTR states, "[*a*] *new drainage channel will be graded from the storm water management area to the San Diego River channel to convey treated water from the outfall to the river channel.*" The Wildlife Agencies recommend that the project applicant continue to coordinate with the Department regarding a notification for a streambed alteration agreement for areas subject to the Department's jurisdiction per Fish and Game Code section 1600 *et seq.* and the U.S. Army Corp of Engineers for any Section 404 of the Clean Water Act permits that may be needed.

6. Both Figure 10 and Figure 11 depict a 35-foot wide San Diego River Pathway corridor; however, a discussion of the effects of locating public uses within the 35-foot wide corridor is not analyzed within the BTR. The BTR does not include the various design criteria provided in the San Diego River Park Master Plan (Master Plan). For example, the Master Plan identifies that the "[*r*]*iver Corridor Area will include the river itself and the land immediately adjacent to it. This corridor will be measured by the 100-year floodway, as mapped by FEMA [Federal Emergency Management Agency], plus 35 feet on either side of the floodway.*" The Master Plan identifies that a 35-foot wide area will provide an opportunity for wildlife habitat, native vegetation, and a multi-use pathway to accommodate people. "*It will be a natural environment providing for the river ecology, enhancement of wildlife habitat and movement, and allowing for passive recreation, such as walking, bicycling, sitting and observation.*" The DEIR should discuss how the current trail alignment is consistent with any of the aforementioned design elements.

7. Page 7, BTR. We suggest the City avoid locating parks within sensitive habitats including ESL-defined habitat, particularly those supporting threatened or endangered species for which the City is not authorized incidental take (Fish and Game Code § 86, U.S. Army Corps of Engineers jurisdictional) under the SAP until potential impacts from the park are analyzed and addressed under section 7 of the Endangered Species Act if needed.

   We have requested the City provide clarification of the nature and uses of the population-based public park during the NOP comment period and during subsequent project meetings. Therefore, the following sentence should be revised to denote the nature of the proposed park's use within the BTR, accompanied by a graphic depicting park acreage outside of ESL lands: "[*i*]*n addition, to meet park standards for residential development established by the City's General Plan, the Proposed Project will establish approximately 4.33 acres of park space on-site.*"

8. Page 8, BTR. According to the BTR, "*SDP #400602 was issued to authorize habitat restoration and enhancement required to mitigate illegal grading that occurred during paving of an overflow parking lot.*" However, the habitat restoration has yet to occur despite the City previously granting discretionary approval for SDP 400602. The BTR and DEIR should provide a chronology of the property's history including the conditions covered in the stipulated judgment. The chronology should detail when the habitat restoration will occur in relation to the Town and Country Redevelopment (e.g. the addition of residential units and redevelopment of the hotel and appurtenances). The Wildlife Agencies do not believe that the stipulated judgement (SDP 400602) allows for yet a second discretionary action (e.g., project or permit approval) prior to satisfying the habitat restoration required in the stipulated judgement (SDP 400602). Per the stipulated judgement "[*i*]*f Defendant is unsuccessful in ultimately obtaining approvals necessary to exercise OPTION TWO, Defendant understands that OPTION ONE (repair of the site) is required to comply with the Municipal Code.*" Accordingly, the Wildlife Agencies believe that the defendant or their successors have not fulfilled the approvals necessary for OPTION TWO by failing to implement the requisite habitat restoration concurrent with obtaining approval for SDP 400602, which, according to the 2013 City Report to the Hearing Officer states "*...this after the fact Site Development Permit [SDP #400602] is required to permit the remediation and to complete the project mitigation.*" Because the habitat restoration is outstanding despite the City's approval of SDP 400602, the Wildlife Agencies recommend a letter of credit for habitat restoration is established prior to project

entitlements. The letter of credit should be based on: a) the acquisition costs of 7.1 acres of MHPA supporting least Bell's vireo along the San Diego River (valued at $125,000.00 per acre in 2007 dollars); and b) the restoration costs for 2.76 acres of MHPA restoration and perpetual management along the San Diego River.

9. Page 8, BTR. The BTR does not adequately disclose that the stipulated judgement (referred to as SDP 400602 in the BTR) provides two mitigation options —option one and option two. Both mitigation options should be described within the BTR and subsequent DEIR, and both documents should describe the preferred mitigation option.

10. Page 8, BTR. Update the *Implementation of Site Development Permit #400602 Mitigation* section to identify that an open space easement to preserve 7.1 acres of land including MHPA lands is required by the stipulated judgement (SDP 400602).

11. Page 11, BTR. For reader clarity, please make a global change throughout the BTR and DEIR that states that SDP 400602 refers to conditions of the stipulated judgement. Referencing a prior site development permit could confuse the reader regarding the conditions of the stipulated judgement. SDP 400602 references the Town and Country Parking Lot Project that was previously entitled although the mitigation was and is outstanding.

12. Page 11, BTR. We are concerned that the BTR, which is included in the circulated DEIR, states that a portion of the restoration area "*...will be restored to coast live oak woodland under the Proposed Project's plan.*" The Department previously commented on the proposed restoration of the area and expressed concerns that coast live oak woodland is not a viable restoration option and would not be consistent with the stipulated judgment. Per the stipulated judgement, it is our understanding that prior to the public comment period of a discretionary action, the state and federal agencies were afforded a review and acknowledgement of any recommendations for any mitigation proposal which reads "[*i*]*n the event NCCD, DSD, or a federal or state agency requests corrections to the submitted plans described in OPTION ONE AND TWO above, Defendant Town and Country Hotel agrees* [*emphasis added*] *to exercise due diligence and resubmit the corrected plans and any other applicable documents no later than 30 calendar days....*"

13. Page 11, BTR. The BTR states that the restoration proposed by the Conceptual Mitigation Plan (5.5 acres) is greater than the required 2.76 acres associated with the Site Development Permit. This statement does not identify that the 2.76 acres of restoration along with the dedication of 7.1 acres of open space easement is required per the stipulated judgement (SDP 400602). The restoration of the 2.76 acres and dedication of 7.1 acres of open space should therefore be considered the baseline condition for the proposed project. Any mitigation specified by the stipulated judgment should be considered as if the mitigation were completed and used as a baseline for any subsequent environmental analysis for project mitigation and determination of a biologically superior option. Please revise the BTR and DEIR accordingly.

14. Page 24, BTR. Please provide additional discussion on how condition 3 of Section 3.2 (BTR) accounts for the previously unauthorized grading within the wetland area.

15. Page 27, BTR. Please provide a discussion regarding the difference in acreage of eucalyptus woodland identified by Figure 7 and Table 1 Vegetation Communities and

Other Land Cover Types within the BSA (Biological Survey Area) of the BTR with the acreage of eucalyptus woodland identified within the Conceptual Mitigation Plan for the Town and Country Hotel Interim Parking Lot Expansion Project San Diego, Project No. 118318. Significantly less eucalyptus woodland and more disturbed riparian habitat was mapped by the 2012 report. According to the BTR "*[i]nvasion by exotic weeds, such as palms, eucalyptus, and pepper trees, has altered and displaced the native plant community of the San Diego River channel within the project site,*" suggesting that subsequent to the stipulated judgement (SDP 400602) a significant acreage of disturbed riparian habitat has type converted to eucalyptus woodland, presumably due to failing to manage as required by the stipulated judgement.

16. Page 50, BTR. The BTR states on page 50 that "*[t]he Proposed Project is designed to avoid permanent direct impacts to biological resources to the maximum extent feasible.*" While page 44 of the BTR recognizes that "*[t]he corridor or linkage should be buffered from human encroachment and other disturbances (e.g., light, loud noises, domestic animals) associated with developed areas that have caused habitat fragmentation (Schweiger et al. 2000).*" In order to minimize potential project impacts and buffer habitat from human encroachment we have recommended that the San Diego River Pathway be located south on the southernmost edge of the population-based public park depicted in Figure 10 of the BTR and turn north at a right angle, continuing to the existing pedestrian bridge. The City has provided us directly revised drawings to reflect this; such drawings should be incorporated into the BTR/BSA and all other relevant documents.

17. Page 52, BTR. Please either include the wetlands mitigation ratios (see Biological Guidelines, Table 2a and 2b) proposed by the project within Table 4 of the BTR or provide a separate table illustrating the impact acreages with their respective mitigation ratios.

18. Page 55, BTR. According to conditions in the stipulated judgement a covenant of easement shall be placed over lands within the City's Multi-Habitat Planning Area. Please provide information on the acreage total for the Covenant of Easement.

19. Pages 55-56, BTR. Given the proximity of the proposed project to the San Diego River and its location within the Pacific Flyway, the proposed project should include avian collision reduction measures. The Wildlife Agencies recommend the City consider guidance by the American Bird Conservancy (ABC, http://collisions.abcbirds.org/). This includes measures such as retrofitting existing buildings (e.g., Royal Palm Tower), as well as incorporating measures specific to new constructions (e.g., Residential Parcel 4). The ABC Building Guide offers multiple solutions for reducing impacts to avian species, including recommendations that also qualify for Leadership in Energy and Environmental Design (LEED) credits. The BTR further concludes that direct impacts to potentially occurring special-status bird species from collision would be less than significant because the structures "*...would not be designed with predominantly reflective material and would comply with the City's Lighting and Glare Regulations for light reflectivity materials....*" ABC provides project design measures that are specific to the goal of reducing avian collisions with buildings while also being specific and enforceable (see Public Resource Code §21081.6 (c)).

20. Page 56, BTR. The BTR asserts that "*...the Proposed Project is expected to result in long-term benefits to special-status wildlife species given that existing habitat would be*

improved. Thus, impacts to special-status wildlife species are considered mitigated to a level below significance." The Wildlife Agencies do not concur that the proposed project would result in a benefit to special-status species because the project would:

a) Introduce additional public uses within and immediately adjacent to the San Diego River, MHPA, and sensitive habitats supporting special status species;

b) Increase the density of development adjacent to the San Diego River and MHPA; and

c) Not include specific mitigation measures to minimize impacts to biologic resources including revisions to the proposed park space, and reorienting parking lot spaces and other sources of lighting to minimize impacts to adjacent habitat. (Note: The City has provided us directly revised drawings to reflect a redesign of the proposed trail; such drawings should be incorporated into the BTR/BSA and all other relevant documents.)

21. Page 59 and Page 51, BTR. Figure 11, Jurisdictional Waters and Wetlands, depicts an area "*Proposed Drainage Channel – Extent of Grading*" which exceeds the acreage described on page 51 of the BTR "*[i]n addition, approximately 0.01 acre of southern cottonwood-willow riparian forest would be graded to create a drainage channel between a new outfall structure.*" The BTR should be revised for consistency. All design proposals and acreages will be evaluated through the Department of Fish and Wildlife's streambed alteration agreement process.

Based on discussions between the Streambed Program staff and project representatives, we anticipate an updated jurisdictional delineation will be provided. Accordingly, water quality treatment basin(s) should either be located outside of the regularly inundated portions of the San Diego River or be designed to accommodate the inundation and prevent the release of contaminants to the San Diego River.

22. Page 69, BTR. As noted above, Streambed Program staff has previously requested that the jurisdictional delineation be updated. The wetland buffer described on page 61 of the Biological Technical Report should be updated using the appropriate hydraulic modeling to reflect the updated jurisdictional delineation.

23. Page 61, BTR. The southern cottonwood-willow riparian wetland likely meets the City definition of wetland. This section should be revised accordingly.

24. Page 62, BTR. The Wildlife Agencies agree that if the habitat restoration associated with the stipulated judgement (SDP 400602) was implemented prior to the proposed project the City defined wetlands would encompass a larger area than they do presently. According to the BTR, "*[i]mplementation of the stipulated judgment would have resulted in a wider band of City-defined wetlands beyond the limits of what is described above, and a narrower wetland buffer between the restored/enhanced habitats and the Union Tribune parking lot to the south.*"

25. Page 65, BTR. The Wildlife Agencies remain concerned that the project's proposed 3.22 acres of "*...combination habitat park space for passive recreation...*" will result in adverse edge effects associated with introducing park uses within and adjacent to sensitive habitats. While the BTR states that the "*...edge effects associated with park use are generally*

expected to be less intense than existing edge effects from adjacent parking areas" we remain concerned that the proposed park increases land use intensity due to the redevelopments proposal's continued commercial use and added 840 units of residential use. This marks an increase in land use density. Passive recreation should be sited in a manner which maximizes the San Diego River corridor. The Atlas Specific Plan directs Town and Country to focus on providing "*...the maximum degree of flood protection and wetlands mitigation possible*." We believe there is an opportunity to meet the objectives of the Atlas Specific Plan (that is maximizing and the flood protection riparian habitats).

26. Page 65, BTR. The Wildlife Agencies do not concur with the BTR's assumption that "*[i]mproving the habitat quality of the portions of the wetland buffer outside of the MHPA will subsequently also improve the function of the MHPA as a sanctuary and refuge by providing an additional (and natural) cushion between the MHPA and adjacent developments.*" For example, neither section 5.2.1 nor 5.2.2 (pp. 70-71, BTR) has analyzed the direct and indirect effects the increased and introduced anthropogenic activities the proposed project would have on adjacent MHPA. The BTR states that "...noise resulting from on-site human activity (e.g., trail and park use) is not expected to increase ambient noise levels within sensitive habitats" but does not acknowledge that the project-proposed population-based public park would introduce human activity along both banks of the San Diego River where this use did not previously exist. The BTR does not analyze the number, type, frequency, or intensity of introducing park uses on either side of such a narrow riparian corridor. Additionally, the proposed project is silent on how the addition of 840 full-time multifamily residential units (where there was no previous residential use) would increase the visitation and uses of the proposed park. The DEIR should evaluate the number of projected visitors, type of uses, frequency of uses, and intensity of uses that would be directly introduced by the proposed project as well as those uses which would cumulatively be introduced by connecting public parks, regional trails, and new residential development adjacent to sensitive habitats.

27. Page 65, BTR. The BTR does not substantiate its position that "*...noise resulting from on-site human activity (e.g., trail and park use) is not expected to increase ambient noise levels within sensitive habitats*" with site-specific studies of existing human-activity noise levels contrasted with the post-project projected human-activity noise levels. We believe it is therefore premature to conclude "*... permanent, noise attenuating berms or walls are not required.*"

28. Page 66, BTR. The following BTR statement appears to be inaccurate: "*the wetland buffer and the wetlands it surrounds would remain undeveloped to ensure existing wetland characteristics (e.g., drainage and sedimentation patterns) within the Site are not altered.*" Figure 11 depicts a proposed drainage channel extending from the proposed water quality basin into the San Diego River; the Wildlife Agencies request that the BTR is revised to reflect the proposed development.

29. Page 68, BTR. The Department has previously recommended that the riparian habitat restoration associated with the proposed project be widened beyond the current proposal. The BTR states "*[t]he Proposed Project represents a Biologically Superior Option compared to an alternative that avoids wetland impacts because it will result in the maximum amount of habitat restoration and enhancement of wetlands on-site while limiting impacts to the minimum necessary.*" Per ESL regulations, a wetlands deviation could accommodate the implementation of a wider riparian buffer and remove or relocate

population-based public parks further away from the San Diego River, maximizing the amount of habitat restoration and enhancement of wetlands. Additionally, the BTR and DEIR have not provided an analysis of the buildout of the Atlas Specific Plan, which, among other things, includes the artificial widening of the San Diego River (to increase flood capacity) and restoration of native riparian vegetation. This alternative, which does not require amendments to specific or community plans, should be evaluated in the context of riparian habitat restored and created with the amount of habitat restored and created with other alternatives.

30. Page 68, BTR. The Wildlife Agencies disagree with the BTR's assertion that "*...the Proposed Project represents the most Biologically Superior Option, the Project has been reconfigured several times to ensure that the final design is the least impactful on the environment*" without having analyzed the potential to maximize the restoration of native habitats (in lieu of a population-based public park) in conformance with the Atlas Specific Plan or the Master Plan (see previous comment). While the BTR states that the biologically superior alternative has been based upon multiple reconfigurations, these reconfigurations (including the removal 416 parking spaces) stem from what is already required by the stipulated judgement (SDP 400602) or to facilitate the proposed project's newly introduced 840 residential housing units. The DEIR should evaluate a project alternative that focuses on maximizing riparian habitat in lieu of amenities associated with the commercial and residential uses of the proposed project.

31. Page 68, BTR. We request that the City clarify its position regarding the enforcement and follow through of the stipulated judgement (SDP 400602). In stating "[*i*]*f the Proposed Project were not implemented, only the outstanding habitat restoration and enhancement requirements of SDP #400602* [*stipulated judgement*] *would be completed to abate the previous code violation* (*i.e., restoring 1.25 acres of southern cottonwood-willow riparian forest habitat, enhancing 1.28 acres of southern cottonwood-willow riparian forest habitat, and planting a 0.23- acre coastal sage scrub buffer zone around the designated wetlands*)" the BTR infers that the City is not pursuing the dedication of approximately 7.1 acres of open space required by the stipulated judgement (SDP 400602). The BTR should be revised to make clear how the proposed project would fulfill the conditions of the stipulated judgement (SDP 400602).

32. Page 77, BTR. The Wildlife Agencies do not concur with the City's position regarding the biologically superior alternative. We have continued to advocate design alternatives that maximize native vegetation and remove or relocate anthropogenic uses outside of sensitive habitats and their respective buffers. To date, we have not seen an alternative that we feel is responsive to our prior comments. We recommend that the following statement be removed from the BTR: "[*t*]*he wildlife agencies* (*i.e., USFWS and CDFW*) *have been consulted regarding design of the project as a Biologically Superior Option. Final concurrence by the City and wildlife agencies for the Biologically Superior Option is required prior to finalization of the Environmental Document.*"

33. Page 69, BTR. With regard to the biologically superior alternative's effect on wildlife corridors, we disagree that the City has demonstrated that the population-based park space would "*...limit edge effects on movement through the BSA*" because the proposed park space would introduce anthropogenic activities within a reach of the San Diego River that has previously received comparatively less recreation. In addition, the proposed project

would construct 840 residential units—a new source of anthropogenic uses located immediately adjacent to sensitive habitat areas. Lastly, the BSA has remained silent regarding the nature of the allowable uses within the public park spaces. Specifically, we are concerned that special event uses (e.g., weddings, birthdays, and other large gatherings) are incompatible with sensitive habitat. The proposed project and subsequent DEIR should be clear in prohibiting special event uses.

34. Page 71, BTR. The Wildlife Agencies agree with the BTR's assertion that because formal and informal parking areas on the north bank of the San Diego River exist "*[t]he Proposed Project does have the potential to increase human presence in vicinity of sensitive habitats with construction of new park space adjacent to the river corridor.*" The formal and informal parking lots are not representative of the type, nature, duration, or intensity of land uses that are likely to increase should the proposed project formalize a park and draw additional visitors. Additionally, the construction of 840 new residential units will also increase the number of visitors to these areas as evidenced by the BTR: "*...the Proposed Project is designed to reorient development toward the river corridor, thus potentially increasing the amount of human activity that occurs adjacent to sensitive habitats.*"

35. Page 71, BTR. The we agree that "*[t]he impact of noise on wildlife differs from species to species, and is dependent on the source of the noise (e.g., vehicle traffic versus blasting) and the decibel level, duration, and timing*" but disagree that the "*[n]oise resulting from on-site human activity (e.g., trail and park use) is not expected to increase ambient noise levels within sensitive habitats.*" As previously stated (see comment number 30, BTR) we disagree because the proposed park space would introduce anthropogenic activities within a reach of the San Diego River that has previously received comparatively less recreational use.

36. Page 72, BTR. Native habitat can benefit from the active management of invasive plant species within and adjoining them. Any project alternative that proposes the siting of turf or non-native habitats immediately adjacent to MHPA should also include a resource management plan to defray the indirect impacts associated with the proposed development.

37. Page 72-73, BTR. With regard to the indirect effects of the proposed project's lighting "*[t]he Proposed Project would not eliminate existing nighttime lighting around the sensitive habitats and reorienting development on-site toward the San Diego River (including construction of new park space adjacent to the river) will increase the amount of light sources adjacent to sensitive habitats*" (Town & Country Project Biological Technical Report, p.72-73). To further minimize indirect effects of lighting on avian species we recommend that the project be designed in conformance with the American Bird Conservancy guidelines for reducing avian collisions (see comment p.55-56, BTR).

38. Page 76, BTR. The BTR should indicate whether lighting is proposed in conjunction with the park space. If lighting is proposed, the plans and specifications should be provided in the BTR and should include a discussion of how the lighting proposal conforms to the City Land Use Adjacency Guidelines.

39. Page 77, BTR. Please revise section 6.1.5 Barriers; paragraph one states that to prohibit trespass into MHPA fencing (among other options) is optional while the following paragraph explicitly states that split-rail fencing and signage will be a requirement. The revised BTR should indicate that fencing and signage is mandatory, while other options

(e.g., boulders, rocks, and walls) are optional treatments. The BTR should include a graphic conceptualizing the proposed barrier types and locations.

40. Page 79, BTR. Impacts to MHPA should be mitigated in accordance with Land Use Development Code Biology Guidelines, which state "*[f]or permanent wetlands impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new in-kind habitat to the fullest extent possible and at the appropriate ratios* [see Table 2, Biology Guidelines]." As a component of mitigation proposals the Biology Guidelines affirm that the "*[r]estoration of illegally filled historic wetland areas will not be considered for restoration....*" The BTR should be revised for consistency with the mitigation prescribed by the Biology Guidelines.

41. Page 80, BTR. As a means of minimizing lighting spillover from the parking lot nearest the MHPA, we have consistently recommended the reorientation of existing parking spaces to parallel (east-west) as opposed to intersect (the current north-south configuration) the San Diego River. The proposed project has not been revised to incorporate this recommendation nor has the document demonstrated why the recommendation might be infeasible.

42. Page 84, BTR. The designated uses, frequency of uses, and limitations of special events that could be held within the park spaces should be detailed within the BTR. Given the proximity of the park space and confined nature of the San Diego River, special events (e.g., weddings, marathons, or other large gatherings) should be prohibited.

43. Page 85, BTR. The BTR should make clear how the removal of debris and trash from the park will be funded and monitored over the life of the proposed project.

44. Page 92, BTR. Mitigation Measure BIO-2 should be revised to specify the monitoring interval expected of the biological monitor in satisfying mitigation measure BIO-2.

45. Page 94, BTR. Mitigation for wetlands impacts should be revised to be consistent with City Biology Guidelines Section III—impact analysis so that "*[a]s part of the project-specific environmental review pursuant to CEQA, all unavoidable wetlands impacts (both temporary and permanent) will need to be analyzed and mitigation will be required in accordance with Table 2a and/or Table 2b....*" The BTR should analyze how the City Biology Guidelines Standard Mitigation Table 2a or Extraordinary Mitigation Table 2b will be applied. In order for Standard Mitigation Table 2a to be applicable the biologically superior alternative must include wetland creation or restoration and include a biologically superior project design that "*...optimizes the potential long-term biological viability of the on-site sensitive biological resources....*" To demonstrate the applicability of Standard Mitigation Table 2a, we recommend that the proposed project and biologically superior alternative increase the width of the San Diego River corridor. The City has provided us directly revised drawings to reflect a relocation of the proposed trail to the edge of the development; such drawings should be incorporated into the BTR/BSA and all other relevant documents. If the biologically superior alternative maximizing the San Diego River Park corridor width is not accomplished, then Extraordinary Mitigation Table 2b would apply.

46. Page 95, BTR, Section 7.1.3 Nesting Bird Mitigation measure should be included within the BTR's Summary of Mitigation Measures and carried forward as an enforceable mitigation measure within the MMRP.

47. The minimum necessary restoration acreage and open space dedication acreage required by the stipulated judgement (SDP 400602) of the Town and Country Project Restoration Plan (Appendix A) should be specifically described within the text of the BTR and included in the body of the DEIR and its MMRP. As an example, BTR Section 1.2.3 *On-Site Habitat Improvements* should describe the total habitat improvement while also describing that of the total 7.5 acres of habitat restoration proposed in Appendix A, the stipulated judgement (SDP 400602) requires 2.76 acres of riparian restoration, and the "*[d]edication to the City of approximately 7.1 acres in the form of an open space easement valued at $125,000 per acre.*"

48. Appendix A, Page. 2. In order to increase diversity, we recommend adjusting the seed per acre of *Amsinckia menziesii* down from the 11 pounds per-acre specified in the Target Seed List-Upland Coastal Sage Scrub and adding another native herbaceous species. In addition, herbaceous species specified in the Atlas Specific Plan *Selected Plants for Use in Revegetation* (*Table 9*) should be cross referenced to add herbaceous diversity.

49. Appendix A, Page. 3. In order to increase diversity, we recommend adjusting the seed per acre of *Bromus carinatus* down from the 11 pounds per-acre specified in the Target Seed List-Upland Coastal Sage Scrub and adding another native herbaceous species to offset the reduction in *Bromus carinatus* seed pounds per-acre and increase diversity. In addition, herbaceous species specified in the Atlas Specific Plan *Selected Plants for Use in Revegetation* (*Table 9*) should be cross referenced to add herbaceous diversity.

50. Appendix A, Page. 3. To meet the requirements of the stipulated judgement (SDP 400602), the Town and Country Revegetation Plan identifies 0.64 acre of riparian habitat restoration consisting of "*...removal of exotic species (e.g. eucalyptus), protection of existing native species, installation of container plants, seeding, and maintenance and monitoring.*" However, the City Biology Guidelines define wetland restoration as "*...an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.*" The BTR should describe how the 0.64 acre restoration will meet the City criteria.

51. Appendix A, Page. 4. The statement from Appendix A that the "*[p]roposed restoration and enhancement exceeds existing requirements by approximately 4.74 acres (i.e., of the 7.50 acres of total restoration/enhancement proposed by the Project, 2.76 acres are required by SDP #400602 and 4.74 acres are proposed in addition to SDP requirements)*" should be revised to conform with the terms of the stipulated judgement (SDP 400602), which in part required the restoration of 2.76 acres and the placement of an open space easement over 7.1 acres. The BTR should be clear that of the 7.5 acres of total restoration and enhancement proposed by the project, an open space easement over 7.1 acres and the restoration of 2.76 acres of riparian habitat are required by the stipulated judgement (SDP 400602). If using the BTR's numbers, this results in an addition of 0.4 acre of open space dedication and an additional 4.74 acres of habitat restoration beyond what is required in the stipulated judgement.

52. The BTR and DEIR should be clear that the applicant will grant an open space easement over no less than the 7.1 acres—as required by the stipulated judgement (SDP 400602). The requirement to place a minimum of 7.1 acres under an open space easement should be included in the BTR narrative, the body of the DEIR, and included in the MMRP as an enforceable mitigation measure.

Enclosure B

Wildlife Agency Review of the Atlas Specific Plan

The River Improvement Element of the Atlas Specific Plan was intended to develop a coordinated flood control and wetlands management program. The design concept was a natural-appearing, enhanced river channel providing a natural and useable open space corridor within Mission Valley. It was to provide a comprehensive flood protection program for existing and future development within the valley and provide preservation and enhancement of existing wetland habitats and compensation for habitat loss as a result of development.

The river corridor design concept took into consideration the existing development of the Town and Country and Fashion Valley Shopping Center as well as planned public facilities such as the light rail transit right-of-way and station, construction of Camino de la Reina, and pedestrian and bicycle pathways, while providing the maximum degree of flood protection and wetlands mitigation possible.

Hydraulic modeling indicated that in order to contain the 100-year flow, the channel would need to be 400 feet wide. Because of existing development, that was not an option so alternatives were explored. The selected option would result in containment of a 100-year event by the south bank, and a 10-year event by the north bank. That is, in a 100-year event the Town and Country site would not flood, but in a greater than 10-year event, some inundation of Fashion Valley was expected. The plan included deepening and widening the existing pilot channel from 110 feet to an average width of 200 feet between Fashion Valley Road and Camino de la Reina Bridge, increasing to approximately 300 feet wide at SR-163. There was to be a 30-foot-wide buffer between the top of the south bank and the Town and Country development and a landscape setback of 30 feet between the top of the north bank and Fashion Valley development. (The north side is termed a "landscape setback" and not a "buffer" because, in the San Diego River Wetlands Management Plan, "buffers" needed to be outside the floodway, and even after the channel widening the river would occupy the Fashion Valley parking lot in a greater-than-10-year event.)

The plan allowed for a 10-foot wide pedestrian/bicycle path south of the river, which could occur within the buffer. The buffer and landscape setback areas were to be planted with native vegetation, including sycamore, cottonwood, and coast live oak, with a densely planted understory. The higher areas of the 2.5:1 channel bank were to be planted with a cottonwood association of species, and the lower areas of the bank with a willow association or wetter habitat type. Freshwater marsh species were to be planted at the water's edge on the more gently sloped bench along each bank. It was estimated the flood control project would result in temporary impacts of 4.37 acres consisting of 0.45 acre open water, 1.11 acre freshwater marsh, and 2.81 acre riparian woodland. The resulting stream corridor was to contain 3.09 acre open water, 1.22 acre freshwater marsh species, and 3.57 acres riparian woodland species, covering a total area of 7.88 acres. The revegetation was to be held to success criteria and monitored and maintained for a period of five years, after which period Atlas Hotels, Inc. was to participate in a maintenance district to be formed to provide future maintenance of the channel and wetland habitats in perpetuity. Atlas Hotels, Inc. was to bond for the river channel improvements and revegetation prior to the issuance of building permits for their first phase of development.

The River Improvement Element of the Atlas Specific Plan called for features to be incorporated into the design of the Town and Country site to "encourage river orientation and definition of the river corridor as natural and useable open space. In order to essentially shift the orientation of the Town and Country site from Hotel Circle North to the river, a pedestrian promenade, plaza, and other public uses including a restaurant and lounge with outdoor dining have been incorporated into the design of the Town and Country site adjacent to the river."