



Land Development
Review Division
(619) 446-5460

Environmental Impact Report

Project No. 31245
SCH No. 2004031041

SUBJECT: Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA) COUNCIL APPROVAL to allow for revisions to the Municipal Code Chapter 12, Article 2, Division 4 to modify the requirements of brush management and revisions to the Municipal Code Chapter 4, Article 4, Division 3, Section 44.0307, et seq, to allow goats for thinning in zone two brush management areas, pursuant to the recommendations of the Fire Chief as a result of the 2003 Cedar fire. The project proposes a City wide 100 foot brush management zone consisting of 35' of Zone One and 65' of Zone Two. Project implementation on City property is proposed to be initially funded by a grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA), which is being applied for by the City of San Diego Park and Recreation Department. The project is located within the City of San Diego, public and private lands and includes the City of San Diego Multi-Habitat Planning Area (MHPA). Applicant: City of San Diego, Fire-Rescue Department.

CONCLUSIONS:

This Draft Subsequent Environmental Impact Report/Environmental Assessment (SEIR/EA) addresses the potential impacts resulting from, or related to, revising the brush management regulations contained in Municipal Code Chapter 12, Article 2, Division 4. The current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code on January 3, 2000. Specifically, the SEIR/EA addresses public (including Right-Of-Entry Permits) and private activities that would implement the ordinance on existing developed property, not for undeveloped property.

The primary focus of the 1997 changes was to simplify regulations, to improve predictability, to make them more enforceable, and to coordinate brush management requirements with the City's goal to preserve environmentally sensitive habitat. Changes to the regulations included replacement of the complex three zone system of brush management of varying widths (50' to 110') based upon classifications of fire severity with a two zone system based upon the location of the property's location west or east of Interstate 805 and El Camino Real. The dividing line of Interstate 805 and El Camino Real was selected based upon analysis of historical fire data in and outside areas of climatic coastal influence. However, analysis of the Cedar Fire indicates that if the Santa Ana winds had continued, it is likely that the fire could have burned all the way to the ocean. The climatic coastal influence would not have been a factor in this event. This has prompted the Fire-Rescue Department to re-evaluate the current distinction and propose a single citywide brush management system.

Brush Management Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Brush Management Zone Two is an area of native plant material thinned to reduce fuel load. The width of Zone One currently varies from 20 feet to 40 feet west of Interstate 805 and El Camino Real, and 30 feet to 45 feet east. Zone Two currently varies from 20 feet to 30 feet west of Interstate 805 and El Camino Real, and 40 feet to 50 feet further east.

Current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the MSCP. Since the adoption of the MSCP in 1997, brush management zone one associated with new development has been located within the development footprint and is not allowed within the MHPA. With the proposed revisions to the LDC, zone one would be increased to thirty-five feet. For some existing structures, zone one may not be able to expand to thirty-five feet without impacting native habitat. In lieu of expanding zone one into native habitat, the proposed code amendments would increase the width zone two one foot for every one foot of zone one that could not be provided, unless the Fire Chief approved a modification on a case-by-case basis.

In light of the size and severity of the Cedar fire, and other wildfires in October of 2003, the Fire Chief is recommending a City wide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. A standard 100 foot brush management zone would allow for a greater defensible space against impending fire.

Under the existing Municipal Code § 142.0412(i), the Fire Chief has the ability to enforce modification to the brush management regulations for purposes of fire protection on a case-by-case basis. As a result of the Cedar Fire, the Fire Chief is recommending implementation of the 100 foot citywide brush management regulations on a volunteer basis, until the proposed revisions to the brush management regulations can be considered for adoption by City Council. In the Coastal Zone, final adoption of the proposed revisions would require approval by the California Coastal Commission to modify the City's Local Coastal Program.

Project implementation on City property would initially be partially funded by the Office of Emergency Services (OES), via a Federal Emergency Management Agency (FEMA) grant that is currently being applied for by the City of San Diego Park and Recreation Department. Based on the results of the Initial Study and the proposed use of FEMA funds, ~~EAS~~ the Environmental Analysis Section (EAS) has determined that a joint SEIR/EA shall be prepared and circulated for public review in accordance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) to tier off of the *Land Development Code EIR*, LDR No. 96-0333, Sch No. 96081056. The SEIR/EA shall adequately address and analyze potential impacts in the areas of: Land Use, Biological Resources, Hydrology/Water Quality, and Neighborhood Character/Aesthetics.

~~Implementation of the proposed Mitigation, Monitoring and Reporting Program (MMRP), which is included to in this SEIR/EA, would reduce all of the environmental effects of the project, except land use and biological resources, to below a level of significance. The evaluation of~~

environmental issue areas in this SEIR/EA concludes that implementation of the Project would result in significant impacts to the following issue areas: land use and biological resources, related to non-covered species located outside the MHPA. The significant impacts associated with ~~these~~ this issues are significant and unmitigated. The project does not propose any mitigation measures in the form of a Mitigation Monitoring and Reporting Program (MMRP), can be partially mitigated to below a level of significance through mitigation measures outlined in the SEIR/EA and Mitigation Monitoring and Reporting Program (MMRP). The Project would not result in significant impacts or contribute to significant cumulative impacts to: land use, geology/soils, hydrology/water quality, air quality, aesthetics, agricultural resources, hazards and hazardous materials, mineral resources, population/housing, public services, recreation, or utilities/services systems therefore, no mitigation is required for these issue areas.

SIGNIFICANT UNMITIGATED IMPACTS:

The significant impacts identified in the SEIR/EA could be partially mitigated to below a level of significance through mitigation measures outlined in Section V.B of the SEIR/EA and Mitigation Monitoring and Reporting Program (MMRP), ~~however the applicant has not agreed to these measures~~. Therefore, However, impacts associated with land use and biological resources, related to non-covered species located outside the MHPA, would remain significant and unmitigated.

ALTERNATIVES FOR SIGNIFICANT IMPACTS:

Alternatives that would avoid and/or reduce significant direct impacts are as follows:

No Project Alternative. Pursuant to CEQA, the No Development Alternative, the existing brush management zones would remain in effect. Current brush management regulation state that the width of zone one varies from twenty feet to thirty-five feet west of Interstate 805 and El Camino Real, and thirty feet to forty-five feet on the east. Zone two currently varies for twenty feet to thirty feet west of Interstate 805 and El Camino Real, and forty feet to fifty feet on the east.

In the absence of implementing any of the activities associated with the proposed brush management revisions, none of the environmental impacts described in Section V would directly occur.

No Action Alternative. NEPA requires that the No Action Alternative be described. The No Action Alternative assumes that there would be no federal funding available for the implementation of the brush management revisions within City owned open space areas and as a result, no federal action to approve. The proposed brush management revisions could still be implemented by the City; however, funding would need to be acquired from different sources. This alternative would not achieve the objectives of the project of providing additional defensible space from structures to vegetation because the City does not have alternative sources of funding for the project.

Clear and Re-plant zone two Alternative. Under ~~Alternative 4~~ this alternative complete clearing would occur in zone two and would be re-planted with low height native or naturalized plant types. Proper planting protocol would be to lightly scarify the soil surface before planting for better seed/soil contact. Temporary irrigation would be installed for a period of up to two years for plant establishment. The assumption associated with this alternative is that the irrigation would not be installed or monitored properly thereby allowing runoff to occur down slope of zone two. This can be substantiated by evidence that irrigation runoff is the primary source of water in City drainages during the summer.

Under this alternative, significant impacts to biological resources in zone two would not occur as the habitat being replaced would be native or naturalized, non-invasive and low-growing. Potentially significant impacts to the habitat down slope of zone two could result from irrigation runoff from the temporary irrigation lines. This would include the establishment of plant types that thrive in wetter soil conditions as a result of the runoff. In addition, impacts to sensitive species, i.e. gnatcatcher would remain significant as the existing habitat would be completely removed.

The clear and re-plant alternative would utilize temporary irrigation for a period of up to two years to allow plant establishment in zone two. Based on the assumption noted above, monitoring of irrigation is not anticipated and would therefore create a significant impact to soil erosion down slope of zone two due to runoff from the temporary irrigation lines. Potentially significant impacts associated with water quality would also occur from the runoff which carries silt and sediment down slope and could potentially impact any off-site water body. Impacts associated with erosion and water quality would be considered significant and unmitigated.

Increasing Building Regulations Alternative. Under this alternative, proposed changes to the building regulations would occur thereby reducing the need for increased brush management zones. Revisions to the building regulations could include fire walls which would be constructed at the boundary between zone two and open space. Additional building regulations could include alternative architectural features for structures where brush management would normally be required.

While the proposed project allows development features as an alternative to or in addition to reduced brush management zones, under this alternative there would be no impacts to biological resources or sensitive species because brush management would not occur. The building regulations would reduce the fire hazard to structures and the habitat on site would remain undisturbed. This alternative would require that increased building regulations be implemented and would not give citizens the choice of either providing zone two brush management or providing alternative architectural features to structures as is the case with the current regulations. No impacts to hydrology/water quality/erosion or neighborhood character/aesthetics would result from this alternative.

MITIGATION, MONITORING AND REPORTING PROGRAM INCORPORATED INTO THE PROJECT:

In an effort to reduce or avoid those impacts identified as potentially significant with implementation of the proposed project to below a level of significance, the following mitigation measures have been incorporated into Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services, FEMA Project.

Biological Resources: ~~The thinning and pruning of sensitive habitat would be done at any time of the year and there would be no restrictions during the breeding season. This would result in significant impacts to sensitive species, specifically the California gnatcatcher. Impacts associated with the California gnatcatcher could be reduced to below a level of significance by acquiring an amount of acreage, approximately 198 acres per table V.b 4 in the Biological resources section, of equal gnatcatcher habitat over a time period to be determined by the City Manager, or by restricting timing of thinning activities outside the gnatcatcher breeding season. This mitigation has not been agreed to by the applicant.~~

Limiting brush management activities within the MHPA, would mitigate impacts to gnatcatchers to below a level of significance, and is proposed by the applicant. Brush management activities would be limited to occur outside of the California gnatcatcher breeding season (March 1 – August 15). Since brush management activities will be limited, direct impacts to gnatcatcher nests would not be significant; therefore, mitigation is not required.

In order to mitigate significant impacts to non-covered species located outside the MHPA, a mitigation measure ~~biological resources as a result of the establishment of invasive species in brush management zone two and possibly down slope, the Land Development Code EIR identified that mitigation~~ would be required to the same extent as brush management zone 1, based on the mitigation ratios per habitat type identified in the City of San Diego Biology Guidelines. This mitigation however, is not proposed.



Chris Zirkle
Assistant Deputy Director
Development Services Department

May 25, 2004
Date of Draft Report

September 23, 2004
Date of Final Report

Analyst: ~~Krebs~~ Black

PUBLIC REVIEW:

The following individuals, organizations, and agencies received a copy or notice of the draft SEIR/EA and were invited to comment on its accuracy and sufficiency:

Federal Government

U.S. Naval Facilities Engineering Command, Environmental Planning Division (12)
Marine Corps Air Station, Miramar (13)
U.S. Environmental Protection Agency (19)
U.S. Fish and Wildlife Service (23)
U.S. Department of Agriculture (25)
U.S. Army Corps of Engineers (26)
Federal Emergency Management Agency, Office of Emergency Services

Native Americans

Ron Christman (215)
Louie Guassac (215A)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution (225 A-R)*

State of California

California Department of Transportation (31)
California Department of Fish and Game (32)
California Integrated Waste Management Board (35)
California Environmental Protection Agency (37)
California Department of Parks and Recreation (40)
Resources Agency (43)
California Regional Water Quality Control Board (44)
State Clearinghouse (46)
California Coastal Commission (47)
Native American Heritage Commission (222)

County of San Diego

Department of Planning and Land Use (68)
County Water Authority (73)
Hazardous Materials Management Division (75)

City Government

City of San Diego:
Mayor Murphy
Councilmember Peters, District 1
Councilmember Zucchet, District 2

Councilmember Atkins, District 3
Councilmember Lewis, District 4
Councilmember Maienschein, District 5
Councilmember Frye, District 6
Councilmember Madaffer, District 7
Councilmember Inzunza, District 8
Development Services Department (78, 78A)
Engineering & Capital Projects Department (86)
Historical Resources Board (87)
Library Department (81)
Metropolitan Wastewater Department
Park and Recreation Department, Ann Hix, Deputy Director, MS 804A
Fire-Rescue Department, Samuel Oates, Fire Marshall, MS 603
Planning Department - MSCP (MS 5A)
Police Department
Real Estate Assets Department (65)
Transportation Department
Water Department, Nicole McGinnis, MS 501
Community Forest Advisory Board (90)
Wetlands Advisory Board (171)
Otay Mesa/Nestor Community Service Center (236)
Clairemont Community Service Center (247)
Golden Hill Community Service Center (261)
Mid-City Community Service Center (295)
Navajo Community Service Center (337)
Carmel Valley Community Service Center (344A)
North Park Community Service Center (365)
Peninsula Community Service Center (389)
Rancho Bernardo Community Service Center (399)
San Ysidro Community Service Center (435)
Scripps Ranch Community Service Center (442)
Central Community Service Center (451)
Market Street Community Service Center (451A)
College/Rolando Community Service Center (455A)
Tierrasanta Community Service Center (460)

City of Chula Vista (94)
City of Del Mar (96)
City of El Cajon (97)
City of Escondido (98)
City of Imperial Beach (99)
City of La Mesa (100)
City of Lemon Grove (101)
City of National City (102)
City of Poway (103)
City of Santee (104)
City of Solana Beach (105)

Other Organizations and Interested Individuals

University of California, San Diego (134)
San Diego Association of Governments (108)
San Diego Unified Port District (109)
San Diego Transit Corporation (112)
San Diego Gas and Electric (114)
Metropolitan Transit Development Board (115)
San Dieguito River Park (116)
Del Mar Union School District (119)
Poway Unified School District (124)
San Diego Unified School District (125, 132)
Solana Beach School District (129)
South Bay Unified School District (130)
San Diego Apartment Association (152)
Building Industry Federation (158)
San Diego River Park Foundation (163)
California Native Plant Society (170)
Sierra Club (165, 165A)
San Diego Audubon Society (167)
San Diego Regulatory Alert (174)
Center for Biological Diversity (176)
Endangered Habitats League (182)
Surfrider Foundation (183)
Dave Potter, Community Planners Committee (194)
Jerry Schaefer, Ph.D. (208A)
South Coastal Information Center, San Diego State University (210)
San Diego Historical Society (211)
San Diego Archaeological Center (212)
San Diego Natural History Museum (213)
Save Our Heritage Organization (214)
San Diego County Archaeological Society (218)
Otay Mesa/Nestor Community Planning Group (228)
Tijuana River National Estuarine Reserve (229)
Janay Kruger (233)
Otay Mesa Planning Committee (235)
Clairemont Mesa Planning Committee (248)
University of San Diego (251)
Tecolote Canyon Citizens Advisory Committee (254)
Friends of Tecolote Canyon (255)
Tecolote Canyon Rim Owner's Protection Association (256)
Clairemont Town Council (257)
Greater Golden Hill Planning Committee (259)
Golden Hill Community News (260)
Kearny Mesa Town Council (263)
Serra Mesa Planning Group (263A)

Serra Mesa Community Council (264)
Kearny Mesa Planning Group (265)
Linda Vista Community Planning Committee (267)
Marian Bear Natural Park Recreation Council (267A)
San Diego Mesa College (268)
La Jolla Shores Association (272)
La Jolla Town Council (273)
La Jolla Historical Society (274)
La Jolla Community Planning Association (275)
La Jolla Shores PDO Advisory Board (279)
La Jollans for Responsible Planning (282)
City Heights Area Planning Committee (287)
Rolando Community Council (288)
Kensington/Talmadge Planning Committee (290)
Normal Heights Community Planning Committee (291)
Normal Heights Community Association (292)
Normal Heights Community Center (293)
Oak Park Community Council (298)
Webster Community Council (301)
Eastern Area Planning Committee (302)
Marshall Community Council (304)
Darnell Community Council (306)
Midway Community Planning Advisory Committee (307)
Mira Mesa Community Planning Group (310)
Mira Mesa Town Council (311)
Friends of Penasquitos Preserve, Inc. (313)
Mira Mesa Branch Library (315)
Mission Bay Park Committee (320)
League of Conservation Voters (322)
Citizens Coordinate for Century III (324A)
Mission Beach Precise Planning Committee (325)
Mission Beach Town Council (326)
Mission Hills Association (327)
Mission Valley Community Council (328C)
Friends of the Mission Valley Preserve (330)
Mission Valley Unified Planning Organization (331)
River Valley Preservation Project (334)
Friends of Adobe Falls (335)
Navajo Community Planners Inc. (336)
San Carlos Area Council (338)
Mission Trails Regional Park Citizens Advisory Committee (341)
Carmel Mountain Ranch Community Council (344)
Carmel Valley Community Planning Board (350)
Carmel Valley Trail Riders Coalition (351)
Carmel Mountain Conservancy (354)
Arroyo Sorrento Homeowners Association (356)
Los Penasquitos Canyon Preserve Citizens Advisory Committee (360)

Del Mar Mesa Community Planning Board (361)
Greater North Park Planning Committee (363)
Burlingame Homeowners Association (364)
North Park Community Association (366)
Ocean Beach Planning Board (367)
Ocean Beach Town Council, Inc. (367A)
Old Town Community Planning Committee (368)
Pacific Beach Town Council (374)
Pacific Beach Community Planning Committee (375)
Crown Point Association (376)
Rancho Penasquitos Community Council (378)
Torrey Pines Association (379)
Rancho Penasquitos Planning Board (380)
Friends of Los Penasquitos Canyon Preserve, Inc. (382)
Rancho Penasquitos Town Council (383)
Los Penasquitos Canyon Preserve Citizens Advisory Committee (385)
Sunset Cliffs Natural Park Recreation Council (388)
Peninsula Community Planning Board (390)
Rancho Bernardo Community Council, Inc. (398)
Rancho Bernardo Community Planning Board (400)
Sabre Springs Planning Group (406B)
Sabre Springs Community Planning Group (407)
Carmel Mountain Conservancy (408)
The San Dieguito Lagoon Committee (409)
San Dieguito Planning Group (412)
San Dieguito River Park Citizens Advisory Committee Project Review Committee (415)
Friends of San Dieguito River Valley (419)
San Dieguito River Valley Conservancy (422)
San Dieguito River Park Joint Powers Authority (425A)
San Pasqual-Lake Hodges Planning Group (426)
San Ysidro Planning and Development Group (433)
United Border Community Town Council (434)
Beeler Canyon Conservancy (436)
Scripps Ranch Community Planning Group (437)
Miramar Ranch North Planning Committee (439)
Scripps Ranch Civic Association (440)
Skyline/Paradise Hills Planning Committee (443)
Sorrento Hills Community Planning Board (444A)
Southeastern Development Corporation (448)
Southeastern San Diego Development Committee (449)
Encanto Neighborhoods Community Planning Group (449A)
Central Imperial Redevelopment Project Area (452)
College Area Community Council (456)
Malcolm A. Love Library (457)
Tierrasanta Community Council (462)
Murphy Canyon Community Council (463)
Mission Trail Regional Park, Citizens Advisory Committee (465)

Torrey Pines Community Planning Group (469)
Torrey Pines Association (472)
Crest Canyon Citizens Advisory Committee (475)
University Community Planning Group (480)
University City Community Association (486)
University City Library (488)
University Heights Community Association (497)
Uptown Planners (498)
Hillside Protection Association (501)
Allen Canyon Committee (504)

Mr. Jimmy Ayala
C/O Pardee Homes
12626 High Bluff Drive, Suite 100
San Diego, CA 92130

Mr. Mike Singleton
3916 Normal Street
San Diego, CA 92103

City of Poway
Planning Department/Mr. Jim Lyon
13325 Civic Center Drive
Poway, CA 92064

County of San Diego
Planning Department-MSCP/Mr. Thomas Oberbauer
5201 Ruffin Road, Suite B-5
San Diego, CA 92106

* Notice only

Copies of the draft SEIR/EA, the Mitigation Monitoring and Reporting Program and any technical appendices may be reviewed in the office of the Land Development Review Division or purchased for the cost of reproduction.

RESULTS OF PUBLIC REVIEW:

- No comments were received during the public input period.
- Comments were received but the comments do not address the accuracy or completeness of the environmental report. No response is necessary and the letters are attached at the end of the EIR.
- Comments addressing the accuracy or completeness of the EIR were received during the public input period. The letters and responses follow.

BRUSH MANAGEMENT REVISIONS TO THE LAND DEVELOPMENT CODE EIR COMMENTS TABLE

AUTHOR OF COMMENT LETTER	DATE OF LETTER	COMMENT LETTER	COMMENT NUMBERS
State Agencies			
Joint Letter from U.S. Fish and Wildlife Services and the California Department of Fish and Game: O'Rourke, Therese and Chadwick, Donald	7/9/2004	A	A-1 through A-57
California Coastal Commission: Sarb, Sherilyn	7/9/2004	B	B-1 through B-10
Local Organizations			
Building Industry Association of San Diego County: Molloy, Scott C.	7/9/2004	C	C-1 through C-10
Joint Letter from Center for Biological Diversity; Endangered Habitats League; Friends of Los Penasquitos Canyon; Friends of Rose Canyon; San Diego Audubon Society; San Diego Chapter California Native Plant Society; San Diego Chapter Sierra Club; Thirty-Second Street Canyon Task Force: Hogan, David	7/9/2004	D	D-1 through D-39
City Heights Area Planning Committee: Sprague, Michael	7/9/2004	E	E-1 through E-4
Community Forest Advisory Board: Hughes, Nancy J.	6/14/2004	F	F-1 through F-33
Friends of Ruffin Canyon: Hough MD., Bonnie	7/9/2004	G	G-1 through G-16
Friends of Sunset Cliffs: Ridenour, Dedi	7/9/2004	H	H-1 through H-5
San Diego Audubon Society: Paugh, James A.	7/8/2004	I	I-1 through I-31
San Diego County Archaeological Society: Royle, James W.	7/10/2004	J	J-1 through J-3
Serra Mesa Planning Group: Moore, Cindy	7/7/2004	K	K-1 through K-8
Tecolote Canyon Citizens Advisory Board: Battle, M. Eloise	7/5/2004	L	L-1 through L-3
Thirty-Second Street Canyon Task Force: d'Elgin, Terahia	6/26/2004	M	M-1 through M-34
Uptown Community Planning Committee: Gardner, David	8/10/2004	N	N-1 through N-10
Concerned Public			
Burkhardt Environmental Consulting: Burkhardt, Brad	7/4/2004	O	O-1 through O-49
Fege, Anne S.	7/9/2004	P	P-1 through P-5
Seltzer, Caplan, McMahon, Vitek; Steinke, Thomas F.	7/9/2004	Q	Q-1 through Q-10
Stewart, Kay	6/30/2004	R	R-1 through R-27
Willson, Andrew	7/9/2004	S	S-1 through S-3
Letters Received After Close of Public Review Period			
State of California - Governor's Office of Planning and Research, State Clearinghouse and Planning Unit: Roberts, Terry	8/3/2004	T	T-1

Comment Letter A

U.S. Fish and Wildlife Service
Charles Fish and Wildlife Office
6040 Hidden Valley Road
Cuddalore, California 92003
(760) 491-5446
FAX (760) 431-5902 + 9618



CA Dept. of Fish & Game
South Coast Regional Office
4949 Viewridge Avenue
San Diego, California 92123
(619) 467-4201
FAX (619) 457-4299

In Reply Refer To:
FWS-SDG-4072.1

Ms. Allison Raup
Environmental Planner
City of San Diego Development Services Department
1222 First Avenue, MS 501
San Diego, California 92101

JUL 09 2004

Re: Draft Subsequent Environmental Impact Report/Environmental Assessment for Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services, Federal Emergency Management Agency (SCEM# 2004031041)

Dear Ms. Raup:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department), collectively the "Wildlife Agencies," have reviewed the above-referenced Draft Subsequent Environmental Impact Report/Environmental Assessment (SEIR/EA), which lists off of the EIR that was prepared for the City's *Local Development Code*.¹ Final adoption of the proposed revisions would require approval by the California Coastal Commission for modifications of the City's Local Coastal Plan necessitated by the revisions. We have also reviewed the January 21, 2004, City Manager's Report regarding the proposed revisions, and the March 9, 2004, letter from the City of San Diego's (City) Development Service's Department to the City's Fire-Rescue Department regarding the scope of work for the SEIR/EA, and listened to deliberations on the proposed building code revisions for buildings adjacent to high fire hazard areas. In addition, we met with Ms. Ann Hix and Mr. Keith Greer of the City on January 9, 2004, to learn about the proposed brush management revisions, and the Department wrote a comment letter (April 8, 2004) on the Notice of Preparation (NOP) of this SEIR/EA.

The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act, Sections 15386 and 15381, respectively. The Department is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning program. The primary concern and

¹ The City prepared the Land Development Code EIR in 1999 and revisions to the Land Development Code (LDC), including the brush management regulations, that were made in conjunction with the MSCP.

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 endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Existing Conditions

The current brush management regulations were developed in conjunction with the City's Multiple Species Conservation Program (MSCP). Under current regulations of the MSCP, brush management Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Brush management Zone Two is an area of native plant material thinned to 50 percent plant cover to reduce fuel load. The width of Zone One varies from 20 to 40 feet west of Interstate 805 and El Camino Real, and 30 to 45 feet east of this intersection. Zone Two varies from 20 to 30 feet west of the intersection, and 40 to 50 feet east of it. Put another way, Zones One and Two have a combined range of 40 to 70 feet west of Interstate 805 and El Camino Real, and 70 to 95 feet east of this intersection.

Currently, brush management in Zone Two occurs on 3,753 acres within the City. Of that, 3,222 acres are on private land, and 531 acres are on public land. Of the 3,753 acres, 526 are within the City's Multiple Species Conservation Program (MSCP) Multiple Habitat Preservation Area (MHPPA) (para. comm., Chad Kane, City MSCP, June 25, 2004).²

The City's Park and Recreation Department (PRD) manages approximately 22,600 acres of open space, much of which is in the MHPPA. This open space includes 220 linear miles of urban wildlife interface. The PRD is responsible for conducting brush management in city-owned open space areas within the City, including Zone Two.

Proposed Project

The City's Fire-Rescue Department is proposing revisions to the brush management regulations in response to the fires in the City and the County of San Diego in October of 2003, and pursuant to the recommendations of the Fire Chief. Their purpose is to allow for a greater defensible space against impending fire. The proposed revisions would entail establishing a 100-foot wide brush management area consisting of 35 feet in Zone One and 65 feet in Zone Two throughout the City. This would result in 15 - 45 foot expansion of Zone Two, depending on the existing width per the current requirements. In addition, Zone Two would be expanded by 1 foot for every foot by which Zone One falls short of 35 feet. Existing requirements allow for the decrease of Zone Two by 1½ feet per 1 foot of increase in Zone One. The proposed revisions would limit this to a maximum reduction of 30 feet of Zone Two. Brush management activities by the City would likely occur every one to three years.

² The City's portion of the MSCP's MHPPA is approximately 58,831 acres and includes approximately 47,810 acres within the City's jurisdiction, and additional City-owned lands. Approximately 60 percent (52,012 acres) of the MHPPA lands within the City's control is intended to be reserved for biological purposes, including 77 percent of the core biological resource areas and 77 percent of the habitat mosaics within the subarea.

Project Objectives

The three objectives of the proposed revisions, as provided in the SEIR/EA are to:

- a. complete in a timely and comprehensive manner the revisions to current brush management regulations;
- b. identify and implement efficient, effective, and environmentally sensitive means to accomplish the revised brush management Zones One and Two; and
- c. provide for effective and environmentally sensitive long-term maintenance of brush management zones in open space, private lands, and other environmentally sensitive lands.

Alternatives

In addition to the proposed action and the no-project alternative, the SEIR/EA described the following alternatives: (a) the no action alternative which assumes that there would be no federal funding available to the City for brush management within the open space it manages, thereby reducing the amount of brush management the City would be able to conduct; (b) the clear and re-plant Zone Two alternative which assumes complete clearing of Zone Two and re-planting with low-growing native plants; and (c) an alternative involving strengthening the building code regulations as they pertain to fire protection in high fire hazard areas. Alternatives that the City considered but rejected are (a) education / training, and (b) prescribed burning.

Impacts / Mitigation

The SEIR/EA indicates that the proposed brush management revisions would result in an additional City-wide impact of approximately 2,880 acres within Zone Two. Of this total, an estimated 715 acres would be within the MHPA, which represents an approximately 136 percent increase over the current coverage of Zone Two within the MHPA. The 715 acres of impacts includes 46 acres of Tier I habitats, 312 acres of Tier II habitats, 222 of Tier III habitats, and 135 of Tier IV habitats. Of the 715 acres, 242 are within the core biological resource areas and habitat linkages, and of which 198 acres are California gnatcatcher (*Polioptila californica*, greatest) habitat (in Tier II). In addition, the SEIR/EA indicates that the proposed project would result in the loss of five out of 377 occurrences of gnatcatcher in the MHPA within the City.

The SEIR/EA indicates that the impact analysis in the MSCP EIR/Environmental Impact Statement (EIS) indirectly accounted for any potential project-related impacts on preserve configuration, structural diversity, and habitat interfaces of the MHPA. The SEIR/EA concludes that conservation of covered species would be maintained and there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act.¹⁷ However, the SEIR/EA concludes that implementation of the proposed brush management revisions would result in significant impacts on:

- a. land use;
- b. biological resources;
- c. gnatcatchers, when the brush management activities are conducted within the MHPA during the gnatcatcher breeding season;
- d. Tier I, II, and IIIA and IIIB habitats within Zones One and Zone Two; and
- e. sensitive species.

In addition, cumulative impacts related to biological resources are considered to be significant and unmitigated. Though the SEIR/EA identifies measures to mitigate for some of these significant impacts, the City does not propose to implement any of the mitigation measures.

Because the SEIR/EA concludes that the proposed action would result in significant environmental effects, the Federal Emergency Management Agency (FEMA) should prepare an EIS as required by the National Environmental Policy Act. In addition, the action as proposed may affect listed species. Therefore, FEMA should initiate section 7 consultation to fulfill its obligations under the ESA.

Of particular concern to the Wildlife Agencies are the effects of the proposed brush management revisions on the MSCP and MEPA. The proposed revisions conflict with specific requirements (e.g. regarding clearing during the avian breeding season and loss of habitat within the MEPA) in the City's take permit for the MSCP. Further exacerbating this conflict is the lack of mitigation for these impacts. While we recognize the need to provide an adequate defensible space against impending fire, it needs to be done in a manner consistent with the City's permit. Clearing should occur outside the breeding season as indicated in Table 3-5 of the MSCP Plan and condition 3 of the permit, and any unavoidable loss of habitat in the MEPA should be fully mitigated. If these two measures are not included for implementation in the revised and/or final EIS/EA, we will have to evaluate how the proposed revisions affect your permit for the MSCP. Because of the severity of the project-related impacts and the difficulty of mitigating such impacts, we strongly urge the City to consider strengthening the building code to protect structures in high fire hazard areas sufficiently to avoid and/or minimize the need for additional brush management.

A-1

A-1

Comment noted. The brush management ordinance has been revised to restrict brush management activities within coastal sage scrub habitat during the California Gnatcatcher breeding season.

We realize that CEQA allows CEQA lead agencies to make statements of overriding considerations that adverse environmental effects may be considered "acceptable" in situations where the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects [CEQA Guidelines, section 15093(a)]. The City may develop a statement of overriding considerations for this SEIR/EA that satisfies CEQA. However, for the reasons given above, it would be difficult to provide adequate substantiation for such a statement to demonstrate that the project-related impacts on the MSCP and MHPA would be "acceptable." Furthermore, it would be inappropriate for the City to use a statement of overriding considerations to justify lack of adequate enforcement of the existing

A-2

A-2

Comment noted.

Ms. King (FWS-SDO-0772-1)

3

brush management regulations, particularly without trying first to establish a reliable source of funding to underwrite the costs of enforcement. In addition, given our concerns regarding the project-related potential negative biological impacts, we question how the above project objectives "b" and "c" would be realized.

Our detailed comments on the proposed brush management activities are attached. The Wildlife Agency appreciates the opportunity to comment on this SERVA. The Department finds that the implementation of the revised brush management regulations would not be desirable in its effects on fish and wildlife per section 711.4 of the California Fish and Game Code. Please contact Libby Lopez of the Department at (838) 467-4230 or Ben Frazier of the Service at (760) 431-9440, or if you have any questions or comments concerning this letter.

Sincerely,



Thomas O'Rourke
Assistant Field Supervisor
U.S. Fish and Wildlife Service



Dennis Chadwick
Habitat Conservation Planning Supervisor
California Department of Fish and Game

cc: Alessandro Amaglio, Federal Emergency Management Agency, Office of Emergency Services

Alt Fossil, City of San Diego Development Services Department
Kath Lopez, City of San Diego Planning Department
Ann Hix, City of San Diego Park and Recreation Department
Sam Oates, City of San Diego Fire-Rescue Department
Stanlyn Smith, California Coastal Commission
Steve Chandrajones

WILDLIFE AGENCY COMMENTS AND RECOMMENDATIONS ON THE SEIR/EA FOR BRUSH MANAGEMENT REVISIONS TO THE LAND DEVELOPMENT CODE

1. The SEIR/EA, Shyrdil, Bg. Revisited

Several of our comments identify where the SEIR/EA lacks information which we believe is necessary to determine whether the proposed brush management revisions would affect (a) the assumptions that were made (during the MSCP negotiations) regarding the habitat that is to be preserved under the MSCP, and/or (b) the covered status of any of the species covered by the MSCP. Absent this additional information, it is infeasible for us to make these determinations, and the SEIR/EA is inadequate and conclusory relative to impacts on biological resources and the MEPA (CEQA Section 15088.5(a)(4)). In addition, we believe that there are feasible mitigation measures, considerably different from the ones previously analyzed that would lessen the project-related significant biological impacts (e.g., comment 4). The City's determination to adopt these measures would also warrant the recirculation of the SEIR/EA (CEQA Section 15088.5(e)(3)).

A-3

The Department's NOP letter emphasized that the SEIR/EA must ensure and verify that all requirements and conditions of the MSCP Subarea Plan and associated implementing Agreement would be met if the proposed brush management revisions were approved and implemented. The NOP letter also indicated that the discussion in the SEIR/EA about the project-related loss of habitat within the MEPA should (a) thoroughly address the assumptions that were made regarding the protection of MSCP-covered species, (b) include full consideration of a reduction of impacts from brush management afforded by revisions to the building code, and (c) describe how the City would compensate for the loss of sensitive habitats within the MEPA, the net loss of habitat within the MEPA, and the potential impacts on MSCP covered-species. The SEIR/EA lacks adequate information regarding the above-identified issues, information that is needed to determine the validity of several of the conclusions regarding biological impacts in the SEIR/EA.³

A-4

We appreciate the efforts of City staff in preparing the SEIR/EA under the pressure of emergency conditions. However, because the Uniform Fire Code gives the Fire Marshal the authority to implement the recommended changes administratively, there is no emergency relative to a need to adopt the proposed revisions or some version thereof. Rather, the emergency is in the need to enforce (a) the proper implementation of the existing brush management requirements by the City (in City-owned open spaces) and by private parties, and (b) the recent building code revisions (e.g., requirement of Class "A" roofing assemblies, prohibition on wood shakes and wood shingles). The January 21, 2004, City Manager's

A-5

³ The conclusions that are not adequately substantiated are that (a) the conservation of covered species would be maintained, (b) that there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the Federal or state Endangered Species Act, (c) that the contribution of the MEPA would remain unaffected, (d) that the project-related potential impacts would be unlikely to affect the structural diversity within the MEPA, and (e) that the habitat habitats of the MEPA would remain unaffected.

Comment noted.

A-3

A-4

The MSCP assumptions are discussed in Section V.A of the SEIR/EA. The document incorporates by reference the MSCP EIR/EIS (LDR No. 93-0287; Sol. No. 93121073) which assumed and analyzed a 200-foot indirect impact area and assumed brush management impacts in this area (MSCP EIR/EIS pages 4.3-183). As such all assumptions in the MSCP EIR/EIS regarding covered species are also included in the current SEIR by reference. A potential reduction of brush management impacts via revisions to the building code is analyzed as project alternative number four. Because potential MEPA habitat and covered species impacts were deemed less than significant, no compensation/mitigation is required for these resources. However, as noted in section V.B, potential project impacts associated with habitat loss due to establishment of invasive species remain significant but mitigated with areas within the MEPA, by implementation of the MSCP as described in the LDC FIE. However, non-covered species located outside of the MEPA would still be considered significant impact. Additionally, please note that potential impacts to the California Gnatcatcher during breeding season have been mitigated to below a level of significance through incorporation of ordinance language that prohibits brush management activities in coastal sage scrub habitats during the species' breeding season.

A-5

This comment does not address the adequacy of the SEIR/EA. Therefore, no comment is required.

Report regarding the proposed brush management revisions documents the serious staffing shortfall the PRD has to meet its obligations for brush management.

We note that the January 21, 2004, City Manager's Report regarding the proposed revisions, states, "the State and Federal Wildlife Agencies appear amenable to the changes in the brush management regulations in preliminary discussions." At the meeting on January 9, 2004, we inquired about how the proposed revisions would affect the assumptions regarding the habitat that is to be conserved under the MSCP. Because the estimates of the potential impacts on the acres within the MHTA and on covered species were not yet available, it was not possible for the Wildlife Agencies to evaluate the proposed revisions at that meeting. Therefore, while we understood the need for the 100-foot wide brush management area, we made no conclusions regarding the proposed revisions' implications for the MSCP. Upon review of the SEIR/EA, we are concerned about the adoption of the proposed widths for Zones One and Two without adequate analysis of the their biological implications, and without mitigation.

Recommendations:

The Wildlife Agencies recommend that the City revise the SEIR/EA to provide the information requested in our comments below, and reinitiate it for additional public review. The additional information should be included in a recirculated SEIR/EA (CEQA Section 15084.5) or in the recirculated and/or final SEIR/EA that is made available for review to the public and consulting agencies prior to approving the project (CEQA Section 15089). The public review period should be a minimum of 30 days.

2. Proposed Widths for Zones One and Two Require Justification

The Wildlife Agencies acknowledge the need to provide an adequate defensible space against impending fire, and that the proposed 100-foot wide brush management area is consistent with the Memorandum of Understanding, dated February 26, 1997, among the Wildlife Agencies, the California Department of Forestry, the San Diego County Fire Chief's Association, and the Fire District's Association of San Diego County. However, it is not clear how the proposed widths of Zones One and Two were determined. Specifically, the reasons for the disparity between the proposed widths of the two zones are not apparent, and it is unclear why Zone One, which is outside of the MHTA, is proposed to be the narrower of the two zones.

Recommendations

a. We recommend that the recirculated and/or final SEIR/EA explain the reasoning behind the proposed zone widths.

A-6 Comment noted.

A-6

A-7 Comment noted.

A-7

A-8 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-8

A-9 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-9

4 At its current staffing level, the PRD fires an average of 70 acres per year. The dedicated acreage needed for brush management at the urban-wildland interfaces at least once annually is 1,750 acres.

A-10

b. Existing requirements allow for the decrease of Zone Two by 1 1/2 feet per 1 foot of increase in Zone One. The proposed revisions would limit this to a maximum reduction of 30 feet of Zone Two. We recommend that the revisions be modified to require that Zone One be as wide as possible (i.e., not be limited to a 20 foot increase - - 30 + 1.5) when parcels meet all of the following three parameters: (a) Zone One would be entirely outside the MHRPA, as is currently required; (b) Zone Two does/would encroach into the MHRPA; and (c) there is room for more than 30 feet in Zone One. This should be applied both retroactively and to future development, and to residential, business, and institutional development alike. This approach would reduce the City-wide need for ongoing brush management in Zone Two, thereby reducing the on-going biological impacts (e.g., edge effects and disturbance of avian breeding activity), the need for ongoing enforcement, and the on-going costs associated with brush management City-wide.

A-11

c. The proposed revisions require that Zone Two would be expanded by 1 foot for every 1 foot by which Zone One falls short. However, unlike the proposed revisions for the reverse situation described in the preceding comment, the revisions do not establish a limit for increasing Zone II. We are concerned about the related potential implications for the MHRPA, and recommend that the revisions be modified to establish a limit for Zone Two areas within the MHRPA.

d. Please see comment 8 for additional suggested modifications to the proposed revisions.

3. Methodology for Analyzing Impacts on Habitat and MSCP-Covered and Non-Covered Sensitive Species is Inadequate

Discussion

a. Based on the SEIR/EA, it seems that very little consideration was given to the potential project-related impacts on MSCP-covered or non-covered sensitive species, with the exception of the grandditch. For example, regarding narrow endemic plant species, the SEIR/EA states only, "No impacts to narrow endemic species are expected to occur because these species are generally less than eight inches in height and would not be subject to thinning per the brush management regulations. The exception is *Eriogonum fasciculatum* (*Ruschia's Yucca*), which has an average height of eight inches; however, no known locations of this species are within the proposed brush management area." In addition to *Eriogonum fasciculatum*, other narrow endemic species that grow to exceed 18 inches in height and that might occur within the expanded Zone Two areas, include Gray trumpet (*Desmodium corymbosum*), daisy sp. (i.e., their flower stalks), and snake cholla (*Yucca parryi* var. *asperata*). In addition, willow manzanilla (*Leucophaea thurberii* ssp. *whitfordii*), a state and federally listed MSCP covered species (though not a narrow endemic species), grows to exceed 18 inches in height and might occur within the

A-12

5 The brush management regulations require that, within Zone Two, all plants remaining after 50 percent of the plants over 18 inches in height are thinned shall be pruned to reduce fuel loading in accordance with the Landscape Standards in the Land Development Manual (Section 142.0412b)(3). Thinned in the proposed language.

A-10

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-11

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. The proposed brush management ordinance allows an overall maximum distance of 100 feet for zone one and zone two brush management zones.

A-12

The SEIR incorporates by reference the MSCP EIR/EIS (DDR No. 93-0287; Set No. 93121073) which assumed and analyzed a 200-foot indirect impact area and assumed five management impacts in this area. The proposed ordinance would allow brush management in 65 feet of the 200-foot impact area analyzed in the MSCP EIR/EIS. As such, all analyses of impacts to habitats and species in the certified MSCP EIR/EIS related to brush management within the 200-foot indirect impact area are also included in the current SEIR by reference. All impacts, including five management impacts within the 200-foot indirect impact area, identified within the MSCP EIR/EIS were mitigated to below a level of significance through implementation of the MSCP subarea plans and associated regulations, and through implementation of monitoring and reporting requirements of the plan. The City of San Diego continues to be committed to implementing all required measures identified in the MSCP EIR/EIS. Additionally, the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) Memorandum of Understanding with state and local fire departments (1997), which allows a 100-foot clearing buffer from structures, streets, "This MOU authorizes the release of species listed as threatened, endangered, or candidate species (under Chapter 1.5 of Division 3 of the Fish and Game Code) for management purposes necessitated by or incidental to those certain fire protection measures described herein." Finally, the MOU authorizes take by the USFWS for three federally listed species and all state listed endangered, threatened and candidate species. Additional information regarding narrow endemic's has been included in the SEIR in Section V.A.

expanded Zone Two areas. As to animals, coastal cactus wren is just one of several species that warrant more thorough analysis than was apparently conducted.

- b. Page 49 of MSCP Subarea Plan states, Zone Two "may be located in the MHPA...except where narrow wildlife corridors require it to be located outside of the MHPA." In a discussion about wildlife corridors, the SEIR/EA states, where corridors are narrow and already narrow, special management measures are required, including implementing measures to control mow, mow, lighting, exotic predators and invasive plants." However, the SEIR/EA does not provide any analysis of whether, or where, the proposed revisions would expand existing Zone Two areas, or locate future Zone Two areas, in narrow wildlife corridors within the MHPA and how this would be addressed.

- c. We believe that the project-related impacts on the MHPA and the species it supports are under-estimated. The impact analysis conducted for the SEIR/EA encompassed extant brush management zones for already developed properties, lands that are graded, and lands for which the City has issued grading permits (peta. comm., Joaquin Kirsch, City MSCP, June 24, 2004). Because this analysis did not include future projects' brush management areas, the estimates in the SEIR/EA of the aerial extent of the impacts do not reflect the full project-related impacts on habitats within the MHPA and the species it supports (e.g., gnatcatcher).

Recommendations

- a. The recalculated and/or final SEIR/EA should identify the MSCP-covered species and uncovered sensitive species that are likely to occur within the expanded Zone Two area, and provide a thorough analysis of the potential project-related impacts on these species.

- b. We assume that implementation of the proposed revisions would continue to restrict Zone One to areas outside of the MHPA to be consistent with the MSCP Subarea Plan (page 49 of the Subarea Plan). The recalculated and/or final SEIR/EA should clarify whether this is the case, and if it is not, the impact analysis should be revised to include the impacts from Zone One encroaching into the MHPA.

- c. The recalculated and/or final SEIR/EA should provide an analysis of locations where the proposed revisions would expand existing Zone Two areas, or locate future Zone Two areas, in narrow wildlife corridors within the MHPA and how this would be addressed. Preferably, the proposed revisions should be modified to reflect that Zone Two areas are not to occur within narrow wildlife corridors and the recalculated and/or final SEIR/EA should evaluate this restriction.

- d. We appreciate that it is infeasible to quantify potential future impacts. However, the recalculated and/or final SEIR/EA should discuss the fact that the project-related impacts would extend beyond the expansion of the extant brush management areas, and, if possible, provide an estimate of the additional acreage and species that would be directly affected. This discussion should include the potential expansion of invasive species beyond the proposed brush management footprint (comment 6). Preferably, brush

A-13

Additional analysis was conducted to identify where all major wildlife corridors are less than 250 feet in width and how the proposed expanded zone 2 brush management would impact these areas. The analysis concluded no significant impacts would occur, as the zone 2 brush management would be outside these narrow wildlife corridors areas with the exception of one area which was located at the end of the corridor.

A-14

It is not possible to quantify or estimate future brush management impacts. However, given that compliance with the MSCP would mitigate any impacts to habitat and species, quantification is not necessary. Clarifying language has been added to the Final SEIR/EA. Mitigation for future projects is not required under current regulations. City staff is currently proposing revisions to the CEQA Significance Thresholds which would consider Brush Management Zone 2 impacts to be significant, thereby requiring mitigation and/or findings.

A-15

Refer to comment A-12. This information is provided in Tables VB-2 and VB-3.

A-16

Under the proposed revisions, Zone One would continue to be restricted to areas outside of the MHPA, consistent with the MSCP Subarea Plan.

A-17

Refer to comment A-13.

A-18

Refer to comment A-14.

management zones should be incorporated into the footprint of all future projects. The redeveloped and/or final SEIR/EA should evaluate this requirement.

e. The recalculated and/or final SEIR/EA should also discuss the potential for additional impact areas within the MHPA that would arise from the expansion of Zone Two areas within the MHPA by 1 foot for every 1 foot by which Zone One falls short, as proposed. Again, we understand that this impact cannot be quantified, but it should at least be qualitatively identified.

A-19

The SEIR/EA impact averages include expanded Zone 2 brush management areas where existing development is less than 35 feet from native habitat. Please see Appendix E for full discussion of analysis methodology. Please note that pursuant to Section 142.0412(b)(7) of the ordinance revision, only existing structures are allowed the provision to increase Zone 2 for one foot for each foot of required Zone width that cannot be provided and may use alternative compliance measures to offset the zone 1 reduction if approved by the fire chief.

f. The recalculated and/or final SEIR/EA should clarify whether the estimates include the potential impacts from the construction of staging areas, and access roads or paths, if any, that might be necessary to reach the expanded areas of Zone Two.⁶ If they do not, the redeveloped and/or final SEIR/EA should also address this and any ongoing maintenance of the roads/paths that would be necessary.

A-20

The brush management activities allowed under the revised ordinance will be performed immediately adjacent to structures accessible by roadways. The ordinance allows brush management activities only within the areas discussed within the code and SEIR/EA. Creation of access roads is not facilitated by the project.

g. If the additional analyses recommended in the foregoing comments reveal significant impacts that the current SEIR/EA has not addressed, we recommend that the redeveloped and/or final SEIR/EA propose mitigation to bring the impacts to a level less than significant.

A-21

Comment noted.

4. Project-Related Impacts on the MHPA and the Species it Supports Would Likely be Significant

Regarding the project-related impacts on the MHPA and the species it supports, the SEIR/EA states, "Since potential impacts would be within the 200-foot buffer analyzed in the MSCP EIR/MS for edge effects, no additional impacts to the preserve (contingent, structural diversity and habitat interferences of the MHPA) would occur. Impacts would generally be limited to areas outside the core biological areas and would not impact major habitat linkages or wildlife corridors, therefore the conservation of covered species would be maintained and there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act."

Background

For the MSCP EIR/MS, several assumptions were used to evaluate whether the proposed MHPA preserve scenario would result in adequate coverage of species and habitats. A minimum edge effect of 200 feet along the inside boundary of the preserve was one of the assumptions. (City of San Diego 1996). The RE/SER for the MSCP includes the following pertinent statements:

a. "Indirect impacts to covered species would result from edge effects within and adjacent to the preserve and increased development pressure outside the preserve. Assuming a 200-

⁶ The Department's MHP letter stated requested that the impact analysis include the impacts from access roads, if any.

foot wide strip of preserve boundary. It is estimated that approximately 20% (34,000 acres) of the MHPA area could be subject to edge effects depending on how well the local jurisdictions implement their preserve management guidelines and land use planning tools. Because these edge effects could adversely impact covered species, this indirect impact is regarded as significant" (City of San Diego, 1996; page 4.3.151) -- the analysis of significance for the MHPA scenario (i.e., the proposed project for the MSCP EIS/EIR).

- b. "Indirect impacts to covered species, uncovered species, and sensitive vegetation communities/habitats would result from permitted uses within the preserve, edge effects from uses adjacent to the preserve, and increased development pressures outside the preserve. These impacts are considered significant" (City of San Diego, 1996; page 4.3.159) -- the analysis of significance for the MHPA scenario, in the section for the City's MSCP Subarea Plan).
- c. "These impacts would be mitigated through implementation of the guidelines and ordinances identified in the City of San Diego Subarea Plan and the City's RPO [Resource Protection Ordinance] to a level below significant" (City of San Diego, 1996; pages 4.3.193 -- the discussion of mitigation for the MHPA scenario, in the section for the City's MSCP Subarea Plan).

The MSCP EIR/EIS then cites the RPO and identifies sections in the City's Subarea Plan containing relevant requirements, two of which address brush management and invasive species -- Sections 1.4.3 and 1.5.2 (City of San Diego, 1996; page 4.3.193 and 194).

Discussion

The 200-foot buffer for edge effects was based on the understanding of the impacts on the MHPA at the urban-wildland interface at the time the EIR/EIS for the MSCP was prepared. Implementation of the proposed revisions would result in an approximately 136 percent increase of Zone Two within the MHPA at the urban-wildland interface, plus the increase unaccounted for (comment 3). This would significantly expand the areas both directly and indirectly (i.e., edge effects) affected by brush management in this already biologically vulnerable area, relative to what was contemplated during the preparation of the MSCP. The Wildlife Agencies believe that the 200-foot buffer for edge effects that was assumed in the analyses for the EIR/EIS for the MSCP is misapplied in the impact analysis for this SEIR/EA, and that the conclusions drawn from the current analysis are therefore not supported by substantial evidence in the record.

Based on the above statements in the EIR/EIS for the MSCP, it is evident that (a) the 200-foot wide strip around the preserve boundary was intended for analyses of edge effects only, and (b) adequate mitigation for the impacts within the buffers is to be achieved by implementation of the mandatory requirements cited in the MSCP EIR/EIS.

- a. We consider the impacts resulting from activities associated with brush management within Zone Two as direct impacts because they result in direct disturbance/loss of the

A-22

Refer to comment A-12. The City brush management regulations previously impacted a smaller portion of the 200 foot impact area analyzed, the certified MSCP EIR/EIS addressed indirect impacts, including fire management, within a 200 MHPA buffer area. The proposed regulation is consistent with the 1997 USEFWS and CDFG Memorandum of Understanding which allowed 100 feet of brush clearance. Subsequent changes to the brush management regulations were evaluated in the LDC EIR. This SEIR/EA is consistent with the findings of the LDC EIR.

A-23

Refer to comment A-12.

A-24

habitat within the brush management footprint and the access routes to the area, and direct disturbances of wildlife within these areas. As such, the 200-foot wide buffer used in the MSCP EIR/EIS for the impact analysis of edge effects is not applicable to the direct impacts of brush management, though it may be applicable to the indirect impacts of brush management (e.g., establishment of invasive plant species; comment 6) in the areas of Zone Two proposed to be widened. It is unacceptable to call the 200-foot wide strip a buffer from edge effects if it experiences direct impacts from on-going activities.

A-24

Pursuant to the MSCP Biological Opinion (1997) 'general indirect effects' section, "The biological integrity of habitats adjoining development can be diminished by adverse effects of noise, lighting, exotic plant and animal invasion, dust/air pollution, predators, parasites, disturbance from human activities, pesticides, fuel modifications, and other factors".

A-25

b. Even if the application of the 200-foot wide buffer was acceptable in this context, it is clear that brush management-related impacts on biological resources within the buffer are not being mitigated per the City's requirements. The prevalence of invasive exotic plant species at the urban-wildland interface throughout the City, including brush management areas within the MHPA, confirms lack of compliance with the City's requirements, including the brush management regulations (comment 6), by both the City on public lands and private parties (i.e., lack of enforcement by the City). Absent compliance with these requirements, the City cannot demonstrate that the extent impacts within the 200-foot wide area, much less future impacts, will be mitigated to a level less than significant. The existing unmitigated conditions render the application of the 200-foot wide buffer unjustified.

A-25

Prior to the adoption of the MSCP, there was no overall requirement to weed zones two brush management areas, only the discretion to require weeding of areas that were adjacent to natural areas and which were disturbed and required to be revegetated. Therefore, the MSCP was adopted without the assumption that zone two brush managed areas would be impacted.

A-26

Brush management in Zones Two is currently considered impact neutral for the purposes of determining habitat mitigation needed for projects for which the City issues discretionary permits. However, just as with the 200-foot buffer for edge effects, the impact neutral status for Zone Two was based on the understanding of the related impacts on the MHPA at the urban-wildland interface at the time the EIR/EIS for the MSCP was prepared. It was also based on a commitment to the preservation of a specified number of acres. In addition, the impact-neutral status cannot be applied to brush management areas in or adjacent to greater-than habitat within the MHPA if the brush management occurs during the greater-than breeding season, nor can it be applied to areas that do not undergo weed control as required by the brush management regulations. One biologically defensible approach to allow a continuation of the impact neutral status would be to, minimally, (i) demonstrate that there is no net loss of habitat within the MHPA, (ii) apply the seasonal prohibition required by the MSCP, and (iii) enforce the weed control within Zone Two already required.

A-26

Prohibition of brush management activities during the California Grackle breeding season has been added to the proposed code change in §142.0412(f)(1) as follows: "Brush management activities are prohibited within coastal sage scrub habitat from March 1 through August 15." The MSCP is committed to meeting its habitat preservation goals. As noted in comment A-25, impacts associated with invasive species were determined to be significant. Refer to comment A-25.

Conclusions and Recommendations

a. The SHER/EA currently lacks sufficient information for the Wildlife Agencies to concur with the City's conclusions that: (a) the conservation of covered species would be maintained; (b) there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act; and (c) the configuration of the MHPA would remain unaffected, particularly considering that the implementation of the proposed revisions would significantly increase Zone Two within the MHPA at the urban-wildland interface, which would result in a net loss of habitat within the MHPA. We therefore recommend that the recirculated and/or final SHER/EA substantiate these conclusions.

A-27

A-27

Refer to comment A-12.

b. We do not concur with the City's conclusions that the project-related potential impacts would be unlikely to affect the structural diversity within the MHPA, and that the habitat interfaces of the MHPA would remain unaffected. The recontoured and/or final SEIR/EA should better substantiate those conclusions, considering that both the structural diversity and the habitat interfaces within the area of direct and indirect project-related influence would experience significant negative impacts.

A-28

Refer to comment A-12.

c. The recontoured and/or final SEIR/EA should elaborate on the condition of the 135 acres within Tier IV habitat. If they are considered disturbed, the SEIR/EA should discuss the potential causes of their disturbed condition, particularly for those Tier IV areas whose status results from invasive species whose establishment was caused or facilitated by brush management activities.

A-29

Further analysis of the 135 acres of Tier IV habitat is beyond the scope of this document. Please note that the Tier IV designation is based on the coarse vegetation mapping performed during the creation of the MSCP. It is unlikely that a significant amount of these lands are disturbed due to brush management activities; in the experience of staff, many lands that are mapped as Tier IV habitat are non-native habitats due to ornamental plantings (e.g. Eucalyptus woodland, etc.).

d. Based on the recommendations above (a, b, c), we recommend avoidance measures for MSCP covered species, and mitigation for the identified impacts to the MHPA through preservation of additional in-kind habitat in a manner that maintains the design and structural integrity of the preserve. If unmitigated, the loss of habitat within the MHPA would significantly degrade this preserve, and may warrant reconsideration of the City's coverage for some species under the MSCP. We recommend that the re-circulated and/or final SEIR/EA clearly explain what mitigation measures will be taken.

A-30

Comment noted. Refer to comment A-12 and A-26.

5. Impacts on the Gnatcatcher Should be Avoided or Mitigated

Information on the SEIR/EA

According to the SEIR/EA, implementation of the proposed revisions would affect 198 acres of gnatcatcher habitat, and 5 out of 377 occurrences of gnatcatcher in the MHPA within the City.⁷ However, the SEIR/EA also indicates that the database used to estimate the impacts on the gnatcatcher occurrences does not contain a comprehensive survey of all lands in the City of San Diego, that occupation of habitat varies annually, and that the true impacts to individual birds cannot be assessed.

The SEIR/EA indicates that brush management in Zone Two is currently allowed year-round within the MHPA.⁸ However, private properties within the MHPA are normally required to restrict brush management activities within Zone Two to outside the breeding season for the gnatcatcher. The SEIR/EA states, "if the brush management activities [within the MHPA] cannot be conducted outside of the gnatcatcher breeding season, then the impact is considered significant." Nevertheless, the City proposes to allow brush management within the MHPA during the breeding season.

⁷ The 377 occurrences of gnatcatcher are the City's share of the total 1,818 known locations (in 1997) of gnatcatchers that are to be conserved by the MSCP. "Occurrences" is synonymous with "location" (p. viii, comment, Melanie Johnson, July 7, 2004).

⁸ We understand that the City's current regulations do not specifically state this, but that it is implicit because the regulations do not impose seasonal restrictions (aws.com, Justin Kirsch, City MSCP, June 24, 2004).

Brush management activities would likely occur every one to three years and last for one to two days. Hand tools and small mechanical tools, such as weed whackers would be utilized. The principle concern relating brush management during the avian breeding season is the loss of active nests. In addition, indirect noise and activity impacts can disturb nesting that could result in nest abandonment for periods long enough to affect eggs or young through chilling, predation, or starvation. The SEIR/EA does not address the direct destruction of nests and stands. Due to the short duration of the work and localized activities associated with brush management zone two, it is not anticipated that a significant noise impact would occur during the breeding season of sensitive species.

The SEIR/EA identifies the following measures to mitigate the potentially significant project-related impacts to the gnatcatcher.

Impacts associated with the California gnatcatcher would be reduced to below a level of significance by acquiring an amount of acreage, approximately 198 acres, of equal value gnatcatcher habitat over a time period to be determined by the City Manager.

Mitigation is also available in the form of requiring a qualified biologist prior to commencing brush management activities to survey the project sites for gnatcatcher nests.

However, the City does not propose to carry out these, nor any other measures, to mitigate for potential project-related impacts on the gnatcatcher, nor does the SEIR/EA provide an explanation as to why, other than that the applicant, the Fire Rescuer Department, has not agreed to such mitigation.

Discussion

In addition to the uncertainty of the project-related impacts on gnatcatcher reflected by the SEIR/EA, and the already-discussed problems with the methodology used to estimate the loss (comment 3), it appears that the estimate of impacts on gnatcatcher occurrences does not account for the potential loss of or effects on gnatcatchers in habitat adjacent to Zone Two. This habitat would be subject to negative indirect effects of brush management conducted during the breeding season.

Regarding brush management within the MPPA during the gnatcatcher breeding season, it is inappropriate for brush management activities not to comply with the requirements with which all other projects must comply. The MSCP states, "no clearing of occupied [gnatcatcher] habitat within the cities' MHPAs and within the County's Biological Resource Corps Area may occur between March 1 and August 15" (entry for the gnatcatcher in Table 2-5 of the MSCP Plan).

Regarding disturbance from noise and visual impacts (the latter is not addressed by the SEIR/EA) associated with brush management activities during the gnatcatcher breeding season, we assume that the description in SEIR/EA of brush management practices reflects

A-31

Refer to comment A-12 and A-26.

A-32

Refer to comment A-12 and A-26.

A-31

A-32

the City's procedures. This does not necessarily reflect the methods used by others who conduct brush management. They may take longer and generate louder noise than does the City, and they may not keep their work area so localized as does the City. The SEIR/EA does not address direct loss of nests and provides insufficient information to support the conclusion that indirect effects from conducting brush management would not negatively affect gnatcatcher breeding behavior or success, particularly relative to others' brush management activities. Therefore, we do not agree with the conclusion in the SEIR/EA about potential indirect impacts on the gnatcatcher during the breeding season.

A-33

Recommendations

3. In comment 4, we recommend mitigation for any identified impacts to the MEPA through preservation of additional in-kind habitat in a manner that maintains the design and structural integrity of the preserve. Therefore, we concur with the conclusion in the SEIR/EA that the impacts on 198 acres of gnatcatcher habitat would be significant and should be mitigated.

A-34

b. The recalculated and/or final SEIR/EA should prohibit brush management within the MEPA during the breeding season (again, see Table 3-5 of the MSCP Plan), and should modify the proposed revisions to reflect this prohibition (i.e., assume occupancy by gnatcatcher). The recalculated and/or final SEIR/EA should explain how the City will inform members of the public who conduct brush management of the location of the MEPA (i.e., whether it's within their Zone Two), and how PRD staff/contractors would also be so informed about the lands they brush manage.

A-35

c. The entry for the gnatcatcher in Table 3-5 of the MSCP Plan, states "Area specific management directives [ASMDs] must include measures to reduce edge effects and minimize disturbances during the nesting period, fire protection measures to reduce the potential for habitat degradation, and management measures to maintain or improve habitat quality including vegetation structure." The final SEIR/EA should address this requirement as it relates to the areas that the proposed revisions would affect (e.g., San Clemente Canyon), and should establish a schedule for the development of the ASMDs. They ASMDs should be reviewed by the Wildlife Agencies prior to finalization, their development should be complete prior to the date that the proposed revisions become effective, and they should be implemented concurrently with the activities they are intended to address.

A-36

6. Invasive Exotic Plant Species/Lack of Adequate Enforcement

a. Previous comments have alluded to the indirect impacts from brush management. The results of this City's Brush Management Evaluation (City's Evaluation) conducted for the SEIR/EA indicate that eight of the 25 sites observed had 50 percent or more cover of exotic plant species (Brush Management Evaluation / Biological Technical Report -- Appendix B). This bears out the common knowledge that brush managed areas are highly susceptible to being invaded by exotic plant species, even if the surrounding

Refer to comment A-12 and A-26.

A-33

The California Gnatcatcher habitat acquisition mitigation measure is no longer applicable; potential impacts are now mitigated to below a level of significance through an ordinance change to expressly prohibit clearing activities in gnatcatcher habitat during the breeding season. Refer to comment A-26.

A-34

Refer to comment A-26. Restriction of brush management activities within coastal sage scrub habitats is not limited to MEPA areas.

A-35

Impacts to nesting California Gnatcatchers will be avoided through the prohibition of brush management activities within the species habitat during the breeding season. The MSCP EIR/EIS anticipated indirect effects from fire management and exotic species within a 200-foot buffer area. The City has developed several management plans and area specific management plans for MEPA lands (i.e., Mission Bay, 1990; Fairness Slough, 1993; Martin Bear Memorial Park, 1994; Los Peranquitos Canyon, 1998; Pacific Highlands Ranch, 2000; Mission Trails San Diego Arborea Plan, 2000; Rancho Encinitas, 2001; Mirron Valley, 2001; San Pasqual/Lake Hodges, 2003; First San Diego River Improvement Project, 2004) and is in the process of developing several others (i.e., Western City Valley Regional Park, Blank Mountain Open Space Park, Carmel Mountain and Del Mar Mesa, San Diego River west of MTRP, and Doheny Canyon), and continues to be committed to preparing and implementing management plans for all City MEPA lands.

A-36

habitat is solely or predominantly occupied by native species. Based on the City's evaluation, staff concluded that invasion of exotic species into brush management areas appears to be the greatest impact associated with biological resources and brush management. We classify the invasion of exotic plant species as the most biologically damaging indirect impact of brush management, for brush management itself results in direct impacts on sensitive habitats and species.

A-37

The prevalence of invasive exotic species in brush managed areas poses several biological problems. These include: alteration of ecosystem functions such as nutrient cycles, hydrology, and wildfire frequency; outcompeting and exclusion of native plants (i.e., habitat type change) and animals, which results in reduced biological diversity; hybridization with native plants; and supporting non-native animals, fungi, and microbes. Rare species seem to be particularly vulnerable to the changes wrought by non-native invaders. For example, the California Natural Diversity Database indicates that 181 of the state's rare plant species are experiencing threats from invasive weeds (Bossant et al. 2000). Establishment of invasive species also increases the potential for progression of invasion into adjacent native habitats, and an increase in the availability of propagules to travel and to establish in more distant habitats. We are concerned that the proposed increase in the Zone Two width would expand invasive exotic species both within the added Zone Two area and surrounding habitats. This would effectively increase the edge effect of brush management activities and the affected area within the MRP, above the current estimates which now include only direct impacts.

A-38

Many exotic species that establish in the brush management areas, including several those observed by City staff, are as or more flammable than the native species they displace (City of Laguna Hills). Fire-prone exotic plant species include pampas grass (*Cortaderia* sp.), star thistle (*Centaurea melitensis*), castor bean (*Ricinus communis*), black mustard (*Brassica nigra*), Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), and wild oats (*Avena barbata*), all of which were observed during the City's evaluation. Pampas grass, star thistle, castor bean, and black mustard are also invasive species on the California Exotic Pest Plant Council's Lists A or B. The presence of fire-prone exotics is clearly counterproductive to brush management efforts.

A-39

A report by the San Diego County Wildland Fire Task Force states, "Unfortunately, many homeowners ignore the need for defensible space, because they misunderstand the 'defensible' concept. They believe it to mean the complete removal of any vegetation on the land around their homes. Other homeowners do not want to touch any native vegetation for environmental or aesthetic reasons. Other homeowners do not have the time or money to remove and dispose of vegetation, which could involve costly tree felling and landfill charges" (San Diego County, 2003). The City's Evaluation substantiates this statement.

In the discussion of the rejected education/training alternative, the SEIR/EA states, "It is assumed that not everyone who requires brush management... would conduct brush management per the required procedures in the regulations or as required in development permit conditions". The SEIR/EA goes on to state, "Based on the assumption..., these

A-37

This comment is consistent with the SEIR/EA, which includes potential non-native species invasion into native habitats as a significant project impact.

A-38

Comment noted. Refer to comments A-25 and A-37. The MSCF EIR/EIS analyzed a 200-foot buffer area and the proposed ordinance would allow brush management activities only within the first 65 feet of the buffer area.

A-39

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

would be a significant impact to sensitive biological resources as a result of the establishment of non-native plant species in zone two and downlope of zone two."

Based on these observations and the City's Bylaws, it is apparent that, for the most part, brush management is currently not conducted or not conducted properly. Therefore, it is difficult to understand how maintaining a wider brush management area in Zone Two will achieve its intended purpose of providing more defensible space, without adequate City-wide enforcement.

A-40

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

d. One of the assumptions used in the preparation of the SEIR/EA was that weeding, as required by the City's current brush management regulations, does not occur.⁹ This assumption is valid because it correctly reflects existing conditions. However, because the existing conditions are unlawful, they should not serve as a frame of reference for evaluating impacts from the proposed project.

A-41

The SEIR/EA assumptions on how brush management would be implemented is described on page D1-6 of the DEIR/EA. The language in the rejected alternative section has been revised for consistency. City staff prefers not to base impact analyses on assumptions of illegal activities. However, in this case, observation of non-compliance leads staff to make reasonable assumptions based on this fact, that non-compliance would continue, thus satisfying 15064(b)(5).

e. An additional need for enforcement of the brush management regulations is evidenced by opposition to a requirement that was proposed in the building code revisions¹⁰ - that all accessory structures (e.g., fences, patios, play structures), on a lot adjacent to or containing a high fire hazard area or anywhere within 300 feet of such a lot, be non-combustible. The City's current brush management regulations for Zone One already prohibit combustible construction that provides a means for transmitting fire to habitable structures, and state, "structures such as fences, walls, and nonhabitable gazebos that are located within brush management Zone One shall be of noncombustible construction" (Chapter 14, Article 2, Division 4, page 24 of the Municipal Code). No structures are allowed in Zone Two. That even the Building Industry Association (which was among those opposed to this proposed revision) apparently did not know about the existing requirement, again underscores the lack of enforcement of the brush management regulations despite the iterations in 1997 (BIA, 2004). According to the SEIR/EA, when the City modified the brush management regulations in 1997, one of the purposes of the modifications was to make the regulations more enforceable. It appears that enforcement is large by involving

A-42

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

f. The SEIR/EA indicates that the project includes a proposed code amendment to allow Zone Two burning by goats, and that the impacts analysis includes impacts attributable to goats. The proposed revisions do not mention the use of goats, nor is it apparent that the impact analysis in the SEIR/EA includes impacts from the use of goats. Potential impacts from the use of goats for brush management include, but are not limited to, overgrazing which in turn would likely result in an increase in invasive plant species and

A-43

Refer to page V.B-35 within the Final SEIR/EA. The SEIR/EA does not describe impacts due to weed invasion downlope of zone two brush managed areas. This conversation is still called out as "significant" in the Final SEIR, however, consistent with the LDC EIR, the impact is mitigated by MSCP implementation (except for impacts to non-covered species outside the MHPA).

⁹ The City's current brush management regulations require that Zone Two be maintained on a regular basis by pulling and burning plants, shrubs, etc. and maintaining any remaining vegetation system (Section 4.2.04.12(b)(3)), complete removal, in addition, Sections 4.4.3 and 4.5.2 of the MSCP Subarea Plan prohibit the introduction of invasive exotic plant species into the MHPA and areas adjacent to the MHPA, and calls for monitoring and removal of invasive exotic plant species within the MHPA as funding or other assistance becomes available.

¹⁰ This was one of the proposed revisions to the Building code for high fire hazard areas; the City Council considered adoption of the revisions on January 20, 2004.

possibly erosion, spread (e.g., by coat, feces) of invasive plant propagules from one brush management enclosure to the next (and areas between), degradation of water quality from bacteria in the goats' feces, and impacts on narrow endemic plant species.

8. The SHERMA proposes no mitigation for impacts from invasive species, stating, "In order to mitigate significant impacts to biological resources as a result of the establishment of invasive species in brush management zone two possibly down slope, the Land Development Code EIR identified that mitigation would be required to the same extent as brush management zone 1, based on mitigation ratios per habitat type identified in the City of San Diego Biology Guidelines. This mitigation however, is not proposed." We agree with the mitigation measures, even though brush management in Zone Two is currently considered impact neutral for the purposes of determining habitat mitigation needed for projects for which the City issues discretionary permits. As discussed previously, the impact neutral status is not currently defensible (Comment 4).

Recommendations

a. We recommend the City come into compliance with its regulations regarding brush management by amending the invasive species in the existing brush management areas within the MHPA, and provide on-going City-wide enforcement (including invasive species control) of the brush management regulations on both private and City-owned land. This is not to be considered as mitigation because weed control within Zone Two is an assumed condition of the MSCP. However, not only would it provide a significant improvement overall for the MHPA, it is also essential to meeting the purpose of the proposed revisions -- to provide an effective defensible space for firefighters.

A-44

Comment noted. Refer to comment A-25.

b. To achieve "g" above, we recommend that the City take immediate action to establish a reliable source of funding.¹¹ Until the City has sufficient funding for enforcement, it is difficult to justify formally widening Zone Two. We urge the City to defer making decisions on this proposed brush management revisions until there is adequate funding to enforce the existing and proposed regulations, and until there has been further consideration of the building code revisions for high fire hazard areas (comment 7).

A-45

Comment noted.

¹¹ The City's General Fund has supported the brush management program since 1996, but clearly does not provide sufficient funding for enforcement of the brush management regulations. The one-time grant for which the City has applied for to the Office of Emergency Services is only for the initial implementation of the proposed project. The City needs an ongoing source of funding dedicated to brush management. One option, as mentioned in the January 21, 2004, City Manager's report, would be for the City to assess a brush management and invasive species control fee (e.g., establish a benefit or neighborhood assessment district) of residents (single and multi-family homes/condos), apartment managers, business owners and landlords (e.g., University of San Diego, University of California at San Diego) who have structures that require brush management, or whose structures are within 500 feet, in any direction, of any lot containing structures that require brush management. This fee should be assessed even if residents of Right-Of-Entry permits from the PFD, because enforcement oversight by the City is still needed for City-owned open areas that are brush managed by others to ensure that the brush management is done correctly and invasive species do not establish. Alternatively, as mentioned by the San Diego County Wildlife Fire Task Force report (San Diego County, 2003), it may be possible to add the City's cost of brush management and associated weed control to property tax bills.

- A-46** **c.** The final EIR/EA should address the fact that many exotic species that establish in the brush management areas are as or more flammable than the native species they displace. **Comment noted.**
- A-47** **d.** The proposed revisions include the following (strikeouts are proposed deletions and underlined text is proposed additions): "Zone Two shall be maintained on a regular basis by pruning and thinning plants, controlling weeds, and maintaining any temporary irrigation system until plantings are established, and by removing temporary brush from areas after establishment." **This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.**
- A-48** **e.** We recommend that (i) this revision be worded in such a way that it is clear that the weed control must be on-going and not only "until plantings are established," and (ii) the revisions better reflect the requirements in Sections 1.4.3 and 1.5.2 of the MSCF Subarea Plan regarding invasive species. **Refer to page V.C-14 for additional information regarding goals.**
- A-49** **f.** The recirculated and/or final SEIR/EA should include proposed language for the code amendment pertaining to the use of goats for brush management, and specify the section of the municipal code to be amended. The recirculated and/or final SEIR/EA should provide a discussion of the impacts from using goats for brush management. Particularly if goats would be allowed for use within or adjacent to the MHPA, the discussion should specifically address how goats would be controlled to ensure that they: **All sites were assumed to be infested with invasive species. In that this comment notes that the alternative would not substantially reduce biological impacts, the alternative has been moved to the "Alternatives Considered but Rejected" section of the final SEIR.**
- i. thin, don't clear, the vegetation, per the code;
 - ii. don't thin beyond the required 50 percent of vegetation, per the code;
 - iii. restrict their grazing to plants over 18 inches in height, per the code;
 - iv. don't damage narrow-endemic species; and
 - v. don't spread invasive species from one site to other sites.
- A-50** **7. Alternatives Analysis**
- a.** The SEIR/EA indicates that the alternative involving clearing and re-planting Zone Two with low height native plant species would not result in significant biological impacts. However, it also identifies potential significant impacts on habitats downstream from Zone Two from irrigation runoff from the temporary irrigation lines, potential type change of habitat downstream, and significant impacts on the groundwater as a result of the loss of the habitat. The recirculated and/or final SEIR/EA should reflect that the permanent type change of the cleared and planted area itself would be a significant impact, as would potential loss of sensitive plant species, both of which would require mitigation. **This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.**
- b.** Regarding the alternative involving strengthening the building code regulations as they pertain to fire protection in high fire hazard areas, the SEIR/EA indicates that such revisions would eliminate the need for increased brush management zones. Consistent with the Department's NOP letter, we support this alternative, particularly for structures that would/should require brush management within or adjacent to the MHPA. For such structures, we recommend that structural and material alternatives be the first line of defense against fire, rather than expanded brush management. That is, structural designs and materials that reduce the need for brush management, should be employed first and then brush management requirements determined. For new construction, structural and

material alternatives should be required, and not considered optional. As to existing structures, the building code should be revised to require that certain features of structures at the urban-wildland interface be upgraded to meet the revised building codes. We applaud the City Council for adopting building code revisions that require Class "A" zoning suitability and prohibit the use of wood shales and wood shingles. We urge the City Council to further strengthen the building code revisions to optimize the protection of structures in high hazard fire areas. We understand that, in many cases, such revisions would not eliminate extant brush management needs. However, they would greatly minimize the need for, and thus the serious biological impacts associated with, extant brush management activities, and particularly the proposed widening of Zones One and Two.

A-51

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

As discussed previously, the serious lack of enforcement of the brush management regulations points to the need for actions that would reduce the need for that enforcement. The already approved revisions to the building code and the further strengthening of the building code would reduce the City's brush management operational costs in Zone Two. The regulations and or final SEIR/EA should thoroughly address the issue of concurrent and communicate levels of effort to revise the City's brush management regulations and building code to achieve protection from fire at the urban-wildland interface.

A-52

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

8. Suggested Modifications to Proposed Brush Management Revisions

We add the following suggested modifications of the proposed revisions to those already recommended. Suggested deletions are struck out, and suggested additions are underlined.

a. One of the assumptions used in the preparation of the SEIR/EA is that no impacts to wetlands would occur. The proposed revisions state, "No brush management is required in areas containing wetland vegetation." This language is under the section entitled *Zone Two Requirements*. We recommend that the statement be placed instead at the end of section 142.0412(b), so that it is clear that the statement applies to both Zones One and Two. In addition, we recommend that the revisions provide a brief explanation regarding what constitutes wetlands (e.g., refer to Table 2 in the Biology Guidelines), and indicate when to contact to find out whether habitat is within wetlands. This is an important issue as the City is currently proposing brush management that may impact wetlands (e.g., Coral Gate development in the Tijuana River Valley).

A-53

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required. The section discussing wetlands has been revised within the Final SEIR.

b. Section 142.0412(f) allows the Fire Chief to modify the brush management requirements under certain conditions which are identified. The language should be modified to clarify whether this section allows for the widening of Zones One and Two beyond the respective proposed 35 and 65 feet. In addition, the SEIR/EA states, "the LDC [Land Development Code] allows for alternative compliance to brush management in the form of architectural features which can be included as permit conditions for projects requiring a development permit". If section 142.0412(f) is intended to mirror this provision in the LDC, the language should be modified to make it more apparent.

A-54

Page 11-3 has been revised to clarify that the Fire Marshall can reduce or extend the brush management zones one and two areas, however, the SEIR assumes a 100 foot average impact.

A-55 This project does not amend the provisions regarding the location of zone one brush managed areas relative to the MHPA.

A-56 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-57 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-58 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-59 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

A-60 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

c. To be consistent with the City's MSCF Subarea Plan, the proposed revisions should be modified to clarify that Zone One must be outside of the MHPA.

d. The City of Laguna Hills requires property owners to remove all dead, overgrown, or dried out vegetation, plants, and trees within 100 feet of any structure including wooden fences (City of Laguna Hills). The San Diego County Wildland Fire Task Force recommends that ordinances include language that "declared dead or substantially dead acacia, groves, vines, and trees as fire hazards" (San Diego County, 2003). We recommend that the City's landscape/brush management regulations be amended to include similar requirements, while remaining consistent with the prohibition on flammable structures with Zone One and a maximum combined width of 100 feet for Zones One and Two.

e. Section 142.0412, Table 142.04A, row #9. "All existing or proposed lots where any open space, park area, and undeveloped public or private lands containing native or naturalized vegetation, and/or areas containing environmentally sensitive lands are within 100 feet of an existing or proposed flammable structure."

f. Section 142.0412(c). This section states, "Both Zone One and Zone Two shall be provided on the subject property unless a recorded easement is granted by an adjacent property owner to the owner of the subject property to establish and maintain the required brush management zone(s) on the adjacent property in perpetuity." While this practice is followed now, our understanding is that for future development, if a new structure is built that would require Zone Two to extend into adjacent private property, the fire Marshall would not allow this, and would require alternative measures (e.g., structures) to meet the brush management requirements (pers. comm., Jeanne Kroesch, June 30, 2004). We agree with the latter approach for new development, and recommend that it also apply to adjacent public property (e.g., City open space), and that the proposed revisions be modified to reflect it.

g. Section 142.0412(d). "All existing and new structures subject to this division shall comply with all requirements of Chapter 14, Article 5, Division 5 - Additional Building Standards for Buildings Located Adjacent to Hazardous Areas of Native or Naturalized Vegetation." While the City Council adopted regulations requiring Class "A" roofing assemblies, and prohibiting wood shakes and wood shingles, they have not yet adopted additional building standards for buildings located adjacent to hazardous areas of native or naturalized vegetation. As previously stated, we support the adoption of such building standards.

h. Section 142.0412(e). "Where Zone One width is required adjacent to the MHPA or within the Coastal Overlay Zone, any of the following modifications to development regulations of the Land Development Code or standards in the Land Development Manual are permitted to accommodate the increase in width 25 feet (or greater if the Zone One width is making up for a shortcoming in Zone Two):"

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i. This reference to the MHPA should be spelled out, and a footnote added that briefly explains to the reader the purpose of the MHPA and whom to contact to find out whether their land is within or adjacent to it.

A-61

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

j. We recommend that proposed sections 142.0412(b)(7) be placed instead immediately after section 142.0412(f).

A-62

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

k. Just as the proposed brush management revisions cite and require compliance with the proposed building code revisions, we recommend that the latter cite and require compliance with the former.

A-63

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

9. Discrepancies That Require Reconciliation

Please reconcile the following apparent discrepancies in the SEIR/EA.

a. Please clarify/correct the acreages on page IV-2, section D. Our understanding is that currently, brush management in Zone Two occurs on 3,753 acres within the City. Of that, 3,222 acres are on private land, and 531 acres are on public land. Of the 3,753 acres, 526 are within the City's Multiple Species Conservation Program (MSCP) Multiple Habitat Preservation Area (MHPA) (pers. comm., Chad Kama, City MSCP, June 25, 2004).

A-64

Page IV-2, section D has been revised as follows: MHPA land within the City of San Diego is approximately 47,019 56,851 acres.

b. Page V.C-12 indicates that currently brush management affects 3,815 acres of vegetation, with no distinction between Zones One and Two, whereas our understanding is that current brush management in Zone Two alone occurs on 3,753 acres within the City (pers. comm., Chad Kama, City MSCP, June 25, 2004).

A-65

Page V.C-12, Water Quality, has been revised as follows: Current brush management regulations, based on the current assumptions and existing GIS data, would impact approximately 3,815 3,753 acres of vegetation. Implementation of the proposed brush management revision would impact an additional 3,424 2,880 acres, for a total impact to vegetation of 6,239 6,663 acres.

c. Page V.C-12 indicates that the proposed revisions would affect an additional 2,474 acres, whereas Table V.A-1 on page V.A-13, indicates that additional acres would be 2,880.

A-66

Refer to comment A-65.

d. The January 21, 2004, City Manager's Report indicates that the City hopes to thin the entire area within Zone Two on an average of every two years, whereas the SEIR/EA indicates that brush management activities would likely occur every one to three years.

A-67

Thinning of vegetation is required as frequently as necessary to keep vegetation at the prescribed levels. Therefore, the frequency of thinning activities is dependent upon vegetation growth, not the passage of a specific period of time.

References

EIA, 2004. Letter from the Building Industry Association to Mayor Dick Murphy regarding the proposed building and fire code changes. January 20, 2004.

Bogard, Carla C., John M. Rendell, and Marc C. Hoshovsky (eds). 2000. Invasive Plants of California's Wetlands.

City of Laguna Hills. City of Laguna Hills Weed Abatement Supplemental Guidelines & Fact sheet entitled Fire Prone Plant Species.

http://www.ci.laguna-hills.ca.us/news/Weed_Abatement_Guidelines.pdf

Ms. Resp (FWS-SDG-4072.1)

Enclosure-18

City of San Diego, 1996. City of San Diego, Development Services Department, Environmental Analysis Section/Public Projects and United States Fish and Wildlife Service. Reconstituted Draft Joint EIR/EIS Issuance of Take Authorizations for Tricolored and Ridgway's Species Due to Urban Growth Within the MSCP Planning Area. LDR. No. 93-0287, SCEH No. 93121073. August.

San Diego County, 2003. *Mitigation Strategies for Reducing Wildland Fire Risks*. San Diego County Wildland Fire Task Force Findings and Recommendations. Report to the Board of Supervisors. August 13, 2003.



July 9, 2004

Ms. Allison Raap
 City of San Diego
 Development Services Center
 1223 First Ave., MS 501
 San Diego, CA 92101

Re: Project No. 31248, SCH No. 2004031041 - Draft SEIR/EA for
 Brush Management Revisions to the Land Development Code

Dear Ms. Raap:

Commission staff has reviewed the above referenced environmental document addressing proposed revisions to the City of San Diego Land Development Code brush management regulations. The portion of the City's Land Development Code to be revised is part of the City's Local Coastal Program (LCP) implementation plan; thus, the proposed revisions will require an LCP amendment approved by the Coastal Commission prior to implementation within the coastal zone.

We understand revisions to the brush management regulations are proposed in response to recommendations of the Fire Chief as a result of the 2003 Cedar fire. The project proposes a City-wide 100 foot wide brush management zone consisting of a 35 foot wide Zone One and 65 foot wide Zone Two. The project will affect both public and private lands in the City of San Diego and includes impacts to the City of San Diego Multi-Habitat Planning Area (MHPA).

We support the need for revised regulations to protect both urban development and sensitive habitat from damage due to fires and brush clearance. Development of a stable boundary at the urban/wildland interface for both existing and new development will reduce risks to personal property in the future and avoid or minimize to the extent possible adverse long-term impacts to environmentally sensitive habitat areas, public recreational areas and preserved open space. As proposed, the project would implement a 100 foot brush management zone, where a 40 to 70 foot wide brush management zone currently exists for property west of Interstate 805, and a 70 to 95 foot wide zone exists for property east of I-805.

To summarize, the environmental analysis concludes implementation of a 100 ft. wide brush management zone will result in 2,880 acres of additional impacts to vegetation within Zone Two. Of that, 715 acres would be within the MHPA, of which 242 acres would be within biological core areas; however, 50 acres in the core area are Habitat Type IV (developed/disturbed/ag/catalytus) which was likely included for connectivity, but not susceptible to significant habitat disruption from brush management.

Regarding impacts to gnatcatcher habitat, the analysis concludes five of the 377 known occurrences of gnatcatcher will be affected; however, the true impacts cannot be assessed

B-1

B-1

Comment noted.

due to the lack of appropriate data. Approximately 429 acres (396 ac. high or very high quality) of grasscatcher habitat in the City will be affected, including 198 acres (184 high or very high quality) in the MEHPA.

Studies by the City biologist demonstrate that the effect of thinning in Zone Two is a significant invasion of exotic weeds which degrades the habitat value and may result in increased extirps in adjacent natural areas. All of the identified impacts to biological resources are considered significant. Additionally, all of the impacts would be within the 200 foot buffer identified in the EIR/BUS prepared for the City Multiple Species Conservation Plan (MSCP) for ridge effects. No impacts to narrow endemic species are expected to occur because these species are generally less than eighteen inches in height and would not be subject to thinning or clearing pursuant to the brush management regulations.

Regarding potential mitigation measures, the draft EIR suggests the following:

- 1) Requiring brush management activities within MEHPA lands to occur outside the grasscatcher breeding season (March 1 through August 15);
- 2) Requiring a qualified biologist prior to commencing brush management activities to survey the project sites for grasscatcher nests;
- 3) Acquiring an amount of acreage, approximately 198 acres per table V B-4 in the Biological Resources Section, of equal value grasscatcher habitat over a time period to be determined by the City Manager; and
- 4) Requiring mitigation for Zone Two impacts based on the mitigation ratios for habitat type required for Zone One impacts identified in the City of San Diego Biology Guidelines.

The draft EIR indicates all of the above mentioned mitigation measures are not proposed or accepted by the applicant and it is not clear whether or not these measures will be required as part of the changes to the regulations. The draft EIR indicates that incorporating the identified mitigation measures into the project would reduce the impacts to biological resources to below a level of significance; therefore, we believe such mitigation should be required in the final EIR as certified by the City, and incorporated into the revised brush management regulations. Although the LDC was approved allowing Zone Two impacts in the MEHPA as "impact neutral", the changes to the regulations would affect a greater amount of habitat in Zone Two within the MEHPA which is significant and can no longer be considered a neutral effect.

Regarding alternatives, Alternative 4 - Increasing Building Regulations states that, under this alternative, "proposed changes to building regulations would occur thereby eliminating the need for increased brush management zones. Revisions to the building regulations could include fire walls which would be constructed at the boundary between Zone Two and open space. Additional building regulations could include alternative architectural features for structures where brush management would normally be required. The revisions to include fire walls has been added to the LDC regulations included in the proposed ordinance". However, the draft EIR did not include an analysis

B-2

The mitigation as outlined in the SBIR/EA will only be implemented if the City Council directs the applicants to adhere to the mitigation.

B-3

Refer to comment A-12

B-2

B-3


- B-4 The addition of firewalls or other architectural features in lieu of brush management are identified as options within the ordinance and can only be approved by the Fire Marshall. Any impacts associated with installation of a firewall or some other feature would be analyzed on a case by case basis.
- B-5 Per CEQA Section 15126.6 (g) "the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."
- B-6 Comment noted.
- B-7 This comment does not address the adequacy of the SEIR/EA. Therefore, no comment is required.
- B-8 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.
- B-9 The two responsible property owners would have to work together to resolve the brush management issues between the two lots. Section 142.0412 (h) (7) of the proposed ordinance includes alternative measures which can be approved by the Fire Marshall in lieu of brush management.

- B-4 of the impact of the fire walls on habitat and visual quality, or their effectiveness in reducing the need for brush management. We request such an analysis be provided.
- B-5 Additionally, we believe discussion of the "increased building regulations" alternative should be expanded to identify the range of possible structural or other modifications to a residential structure, such as alternative building or roof materials, sprinkler systems and firewalls, that would actually have the effect of reducing or avoiding the need for additional Zone Two brush management. The regulations should require implementation of such structural modifications as the first line of defense, prior to allowing the additional impacts within the MHPA, preserved open space and public lands associated with the revised Zone Two brush management.
- B-6 The impacts identified in the draft EIR relate to implementation of the revised brush management regulations to protect existing structures, some of which were built prior to any brush management requirements and some built in accordance with a 30 foot wide Zone One. We recognize that given the increased risk due to drought conditions and concerns evident from the Cedar fire, that additional impacts to environmentally sensitive lands in the coastal zone will occur. However, the changes to the regulations should be drafted in a way that acknowledges these impacts, and analysis and promotes alternatives that would avoid such impacts, if possible. Otherwise impacts to sensitive biological resources and steep hillsides should be minimized and mitigated.
- B-7 As proposed, the regulations would apply to existing and proposed lots. Given what is known about the risk to urban development that is sited too close to preserved wildlands and protected open space, and the resultant call for brush clearance to protect such structures, new development should be sited and designed to avoid potential impacts to environmentally sensitive lands, parks and open space. Therefore, the regulations should establish different standards for brush management for existing structures, existing undeveloped legal parcels, and new subdivisions. New subdivisions should be required to provide all the 100 foot brush management zone outside the MHPA and, when present, steep hillsides. New development on existing lots should be analyzed on a case by case basis, and avoid impacts to MHPA lands and steep hillsides when possible. This would assure new development is not located in a hazardous location, will reduce risk to property and protect valued open space, natural landforms and critical habitat consistent with the MSCP requirements and the Coastal Act.
- B-8 Our final comments relate, again, to the proposed regulations. Commission staff is particularly concerned when brush management requirements will adversely affect public lands and preserved open space. Therefore, we recommend the City add some clarifying language as to the responsible parties when the structure being protected is not located on the lot containing the flammable vegetation, to protect both public and private interests. We encourage the City to consider carefully how and when a distinction should be made if Zone Two brush management would impact public lands, preserved open space and/or MHPA lands. The regulations should incorporate measures that assure alternatives to reduce or avoid such impacts will be thoroughly considered and implemented first.

Finally, we've noted a change in the regulations where the words "cut and cleared" are replaced with the word "thinned" in reference to vegetation in Zone Two. Please define each term and give examples as to their difference.

Thank you for the opportunity to comment on the draft EIR/EA for revisions to the brush management regulations. We recognize this is an important effort necessary to protect both personal property and open space, and that both are highly valued by the citizens of San Diego. We would welcome a meeting to discuss our concerns, if time permits, prior to action by the City Council. Please call me with any questions or comments.

Sincerely,


Sherilyn Stebb
District Manager

cc: Deborah Lee
Cris Camacho
Libby Lucas
Benjamin Frazier

B-10

Per the Land Development Code, Section 113.0103, "Clearing" is defined as the cutting and removal of existing vegetation from a premise without disturbance to the soil or surface or destruction of the root system. "Thinning" is referred to in the draft ordinance as pruning of 50% of the plants over 18 inches in height to a height of 6 inches. Clearing is not limited to 50% of the plants.

B-10

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APPLICANTS

City of San Diego
Industry Association
National Association
of Home Builders
National Association
of Landscape and
Other Professions

July 9, 2004

Ms. Allison Raap
Environmental Planner
City of San Diego Development Services
1722 First Avenue, MS 501
San Diego, CA 92101

RE: Draft Land Development Code EIR for Brush Mgt. Revisions

Dear Allison:

We have reviewed the EIR for the proposed revisions to the Land Development Code to implement a city-wide 100 foot wide brush management standard. We do not concur with the conclusion in the EIR that the proposed brush management revisions would result in significant impacts to biological resources.

C-1

Comment noted

We are very concerned with the potential problems this conclusion will create for development in the City. The Multiple Species Conservation Program Implementing Agreement stipulates that Brush Mgt. Zone 2 is to be treated as Impact neutral and the EIR for the MSCP was prepared under this assumption. Although we appreciate the fact that the Draft EIR is not proposing that Brush Mgt. Zone 2 be mitigated in accordance with MSCP mitigation ratios, the Draft EIR has reached the conclusion that this is the mitigation needed for the impacts to be less than significant.

C-2

The draft SEIR/EIR identifies significant impacts to biological resources as a result of invasive plants types establishing in zone two once thinning has occurred. The SEIR/EIR is flawed off the Land Development Code EIR which reached the same conclusion.

The Draft EIR has erred in this regard with respect to this conclusion. The Draft EIR has not demonstrated that a significant impact would occur; and the Draft EIR has not demonstrated that, were a significant impact to occur, the impact would be equivalent to the total removal of habitat upon which the MSCP mitigation ratios.

C-3

Appendix B - Biological Resources Report identifies 25 sites within the City which were surveyed by staff Biologists. The majority of these sites revealed that invasion of exotic plant species had established with zone two therefore impacting the sensitive vegetation. While this information is anecdotal, evaluation of these 25 sites can assist the City of San Diego in determining general impacts associated with brush management. The City's Biology Guidelines do not provide for a larger mitigation ratio in situations where the level of impact may differ.

The EIR is deficient in several fundamental ways that make its determination of significant impacts to biological resources invalid.

The EIR only evaluated a handful of sites and prevents the report on "sparely anecdotal" information. The EIR analyzed 25 sites where brush management activities have or continue to occur. 13 of the sites were sites where the Park and Recreation Department conducts periodic brush management activities. Of

C-4

See comment C-3 above. Staff is not aware of any substantial evidence that would contradict the determination that habitat impacts would be less than significant. It is anticipated that the proposed revisions to the brush management ordinance will provide clarification and guidance to homeowners when conducting brush management, therefore eliminating confusion.



the other 12 sites, 11 of them are thinned by private landowners, and only one is thinned by a Home Owners Association (HOA). The Parks and Recreation Department has been grossly under-funded. Of the minimum 1,750 acres the Department is responsible for brush thinning every two years, approximately only 140 acres are being thinned every two years. Private landowners with no enforcement entity such as an HOA are less likely to properly maintain brush management areas. Added to this, often in response to complaints from neighbors, the City's code enforcement division has been overly aggressive in pursuing brush management activities as potential code violations, even in areas entirely outside of the MEPA. As a result, many landowners have been confused by this mixed message from government agencies and intimidated into not properly maintaining their brush management areas.

• Although the EIR indicates that 96% of the sites evaluated contained some level of exotic plant invasion, no assessment of the average level of invasion is provided. The EIR also does not indicate which type of sites had more or less exotic invasion. From the information provided in Table 1 of Appendix B, the Brush Management Evaluation and Biological Technical Report, out of the 25 sites evaluated, 16 (64%) had 25% or less coverage with exotic species. In other words, 64% of the sites evaluated were at a minimum 75% free of exotic species, with nine of those sites 90% or more free of exotic species. It is difficult to conclude then that significant biological impacts will result with Brush Management Zone 2 thinning.

• The EIR was not able to identify the frequency and quality of the brush management activities that occurred for most of the sites evaluated. According to the Brush Management Evaluation, no information on when and how often brush management activities have occurred is available for any of the private landowner sites evaluated.

• By analyzing only one HOA-managed area, and providing no information as to when the individual landowner sites were first developed, no conclusions can be reached regarding the potential for significant biological impacts from future development.

• Lastly, the EIR states that "site visits conducted by City staff revealed that weeding consistent with the regulations is not occurring in brush management zone two," holding that the correct mitigation measure is enforcement of brush management regulations, not mitigation based on the mitigation ratios per habitat type established with the City's Biology Guidelines. Whether the conclusion that impacts to biological resources are significant can be validated or not, the City still must demonstrate that the type of impact is equivalent to outright habitat removal, on which the biological mitigation ratios are based.

C-5 Habitat with one quarter of its land area occupied by invasives is considerably degraded. Please note also that the assessment of 25 brush management sites was not a scientific study, but provided anecdotal information about the state of brush managed sites within the City.

C-6 Comment noted. Such information was not available to the report author.

C-7 Comment noted. It is reasonable to assume that impacts from future brush management will be comparable to those from existing brush management.

C-8 Enforcement of brush management regulations is carried out by Neighborhood Code Compliance Department and is not a form of mitigation. The City's Biology Guidelines do not provide for a larger mitigation ratio in situations where the level of impact may differ.

C-5

C-6

C-7

C-8


In order to justify the use of the MSCP ratios contained in the City's Biology Guidelines, the EIR would need to demonstrate that brush thinning activities result in the complete loss of biological function and value. The EIR does not demonstrate this.

C-9 Comments noted.

In short, the Draft EIR has not presented valid evidence that brush management activities are resulting and will result in a significant biological impact and the EIR's conclusion that a significant biological impact exists is, therefore, invalid. We request that the EIR be revised based on a more thorough analysis of the potential for significant biological impacts.

C-10 Comments noted.

Very truly yours,


Scott C. Molloy
Public Policy Advocate

C-9

C-10

Comment Letter D

Center for Biological Diversity
Endangered Habitats League
Friends of Los Peñasquitos Canyon
Friends of More Canyon
San Diego Audubon Society
San Diego Chapter Native Plant Society
San Diego Chapter Sierra Club
Thirty-Seventh Street Canyon Back Force

July 7, 2004

Ms. Allison Barr, Environmental Planner
City of San Diego
Development Services Center
1722 First Avenue MS 501
San Diego CA 92101

Re: Brush management revisions to the Land Development Code

Dear Ms. Barr:

Thank you for the opportunity to comment on the brush management revisions to the Land Development Code. These comments are provided on behalf of the Center for Biological Diversity, Endangered Habitats League, Friends of Los Peñasquitos Canyon, Friends of More Canyon, San Diego Audubon Society, San Diego Chapter California Native Plant Society, San Diego Chapter Sierra Club, and Thirty-Seventh Street Canyon Back Force.

Our groups strongly support efforts by the City of San Diego to reduce the risk loss of life and property from wildfires. Fire safety activities and natural resources protection are highly compatible, and we are dedicated to working closely with you to achieve these goals.

Unfortunately, the City appears to want to pursue a one-size-fits-all brush management solution without due consideration of alternatives that might reduce natural resource impacts. Code revisions requiring fire resistant material retrofits for existing structures and in new structures will likely prove far more effective in achieving fire safety goals than scheduled brush management. This is even more true given the City's assumed invasion of highly flammable weeds into brush management areas.

D-1

This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

The City also appears to weighfully demand reasonable mitigation measures for impacts to biological resources and others. Impacts to biological resources are highly significant, are likely to reduce the effectiveness of the Multiple Species Conservation Program, and should be fully mitigated. Many impacts such as those to the California gnatcatcher during the breeding season are totally unnecessary and easily addressed with reasonable limits on the timing of brush clearing. Yet the City proposes no mitigation measures to offset brush management impacts.

Code revisions requiring fire resistant building materials is a reasonable alternative to brush management, especially in sensitive natural areas. Expanded brush management may also provide some limited additional fire safety benefit, but the best available data indicate that this already minimal benefit may be lost when highly flammable, woody, exotic species invade managed areas and weed control requirements are not enforced. The best available data also indicate that any brush management benefit is likely so small that it cannot outweigh the harm of unmitigated, significant impacts to biological resources.

The City cannot justify any statement of overriding considerations for the proposed brush management code revisions. The availability of reasonable alternatives alongside the limited benefits of expanded brush management remove the City's ability to find that the benefit of the proposed action will outweigh significant environmental harm.

The following are specific comments on the brush management code revisions.

1. Expanded jurisdiction of fire-resistant building requirements on alternatives to brush management

The RIR/EA's analysis of the "increasing building regulations" alternative to brush management appears cursory and insufficient for CEQA compliance. Possible methods to implement this alternative should be described in more detail prior to selection of the proposed brush management alternative.

Code revisions requiring fire-resistant or "fire-proof" materials for new structures and remodels are likely to prove much more effective than brush management in preventing future loss of property and life to fire. The City should specifically describe why brush management code revisions are superior to "fire-proof" building code revisions, and why existing brush management combined with code revisions regarding "fire proof" buildings will not accomplish desired goals.

A number of articles are attached indicating the importance of fire-resistant building materials as a first defense against wildfire. Data presented here and elsewhere strongly indicate that airborne-burning material (firebrands, embers, etc.) is the primary cause of structure ignition - not direct ignition from burning brush located at a reasonable distance from a structure. Code

D-2 This impact is considered significant because the applicant has declined to implement the identified mitigation. Refer to comment A-26.

D-3 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

D-4 Comment noted. This comment addresses the findings/assessment of overriding consideration which would be needed to certify the SEIR/EA, as written in draft form.

D-5 Per CEQA Section 15125.5 (d) the EIR shall include an objective information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.

D-6 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

D-7 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

D-2

D-3

D-4

D-5

D-6

D-7

revisions requiring fire-resistant materials are likely to be the most effective tool in preventing structure ignition from airborne burning particles.

II. Expanded awareness of context brush management.

Proposed code revisions do not appear to provide adequate awareness that property owners will carry out brush management consistent with the City's proposed code revisions. City staff have assumed that property owners will "partition the context aspect of planting" in zone 2. Yet the EIR/EA also indicates that past fire protection improvements (e.g. weed control) have been ignored, and proposed code revisions contain no language anything thinking to the extent proposed by the City in the EIR/EA.

Additional language should be added to the code clearly stating that brush management shall not exceed parameters established in the EIR/EA. The code should also be amended to specifically authorize code enforcement and penalties for any brush management exceeding EIR/EA parameters.

III. Clarify the location of zone 1 entirely within new development footprint.

The EIR/EA is not clear that zone 1 will still be entirely located within the footprint of any single residential, commercial, or other development. The EIR/EA should clarify that this is the case.

QUESTION -- Will zone 1 still be entirely located within the footprint of any single residential, commercial, or other development?

IV. Clarify code revision on brush management prohibition

Proposed brush management code revisions appear inconsistent with the text of the EIR/EA and Vice versa. The City should ensure consistency between these documents.

Some brush management procedures presented in the EIR/EA do not appear to be reflected in the proposed code revisions. Proposed code revisions do not appear to address methods of preliminary site evaluation, brush management implementation including preparation of a brush management plan, hauling and burning methods, equipment type, measures to avoid sensitive resources, and any required permits, closures, or approvals. See EIR/EA at III-3. According to the EIR/EA, "...if the regulations are silent on methods for providing and thinking". The same appears true for other procedures. Proposed code revisions should be revised to incorporate all of these procedures at III-3. Code revisions should also provide for some level of City concurrence with property owner's brush management proposals / plans to prevent excessive

Refer to comment B-10.

This comment addresses the merits of the project, not that accuracy or adequacy of the EIR/EA. No response is required. The staff's response clearly states the regulations may violate provisions pertaining to the regulations is handled by Neighborhood Code Compliance on a complaint basis.

Future development will be required to comply with the approved ordinances.

Zone one brush management is considered to be within the footprint of disturbance for development.

Comment noted.

Procedures for brush management within the EIR/EA are from a current informational bulletin "The City of San Diego Fire Safety and Brush Management Guide For Private Property", as referenced in the draft EIR/EA. This information is currently available to the owners for guidelines on how to perform brush management on privately owned property.

This comment addresses the merits of the project, not that accuracy or adequacy of the EIR/EA. No response is required.

alarming impacts to biological resources and others are likely to be even more significant than anticipated if the code remains silent on these topics.

D-15 QUESTION - What brush management procedures presented in the EIR/EA at III-3 are or will be included in the proposed code revisions?

D-16 QUESTION - How will the City ensure procedures at III-3 will be followed by property owners carrying out independent brush management if these are not fully incorporated into the code revisions, with provisions for enforcement?

D-17 V. Equivalent fire safety benefits of brush management with assumed invasion by flammable exotic vegetation

The EIR/EA does not appear to address likely significant negative impacts of brush management on the safety of people and property. Invasion of highly flammable woody species into managed zone 2 areas as anticipated by the EIR/EA may increase the threat of fire, or at the very least greatly reduce the effectiveness of brush managed in achieving desired goals.

D-18 Project assumptions include a conclusion that required weeding is not occurring in zone 2. See EIR/EA at III-6. This assumption appears accurate given public misperceptions regarding the greater importance of clearing brush via smaller woody species. The EIR/EA also overlooks the "invasion of exotic plant species into brush management areas appears to be the largest impact associated with biological resources and performing brush management." See EIR/EA at Y.D-26. Many of these exotic species are established brush fields and are likely to burn even more readily than native brush species.

D-19 Exotic species involving managed areas may therefore present a greater fire risk than native brush species. The reasonably assumed invasion of these species is likely to outweigh any perceived benefits of brush management under the proposed code revisions.

D-20 VI. Expanded discussion of impacts to biological resources

The analysis of impacts to biological resources appears insufficient and inconsistent with the City's biology guidelines. Analysis of impacts appears far below that normally encountered for urban development projects impacting biological resources. Lacking any expanded analyses or proposed mitigation, the City must make broad, categorical, and definitive conclusions that expanded brush management will in fact result in significant impacts to the EIR/EA, native vegetation and all potentially affected special status species.

Neither the biological resources environmental analysis nor biological technical report

D-15 Refer to comment D-13. The proposed land development code amendment is attached, in its entirety, to the SEIR/EA as Appendix C.

D-16 This comment addresses the needs of this project, not that accuracy or adequacy of the SEIR/EA. No response is required. The SEIR/EA, based on evaluations of existing brush management rules, makes certain assumptions about how the proposed code amendment would be implemented. Compliance with all aspects of the informational bulletin is not necessarily assumed.

D-17 The SEIR/EA assumes that vegetation, whether native or nonnative, would be thinned currently.

D-18 Comment noted.

D-19 Refer to D-17. Fire risks would not increase. This comment addresses the needs of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

D-20 Refer to comment A-12. The data provided for the Brush Management SEIR/EA is consistent with the mapping and analysis required for projects reviewed at a City-wide level. The Biology Guidelines refer to requirements for proposed developments at the project-specific level.

- D-21 appear to provide adequate detail on the specific impacts of expanded brush clearing on biological resources, especially with regard to special status species other than the California gnatcatcher.
- D-22 Environmental analysis for impacts to sensitive species appears to have relied only on 1995 GIS data for the MSCP and land use plans. See BUR/EA at 1-4. Tables V.B.2 and 3 appear to provide the most comprehensive assessment of impacts to special sensitive species other than the California gnatcatcher. 1995 MSCP GIS data is likely to be significantly out of date. The Section V.B.3 tables are extremely cursory and appear to eliminate the absence of any comprehensive field surveys or even area tabulation of information contained in the Natural Diversity Data Base or other records.
- D-23 Analysis of biological resources impacts presented in the aging databases and Section V.B. tables does not appear to comply with the City's biology guidelines of Section III(A). The City should articulate any specific measures taken to comply with the biology guidelines. The City should also articulate whether the biologist's conclusion that the expanded brush management proposal is not subject to the biology guidelines.
- D-24 The apparent lack of required analysis leaves the City with two choices. Either the City must expand its efforts to identify impacts to biological resources, consistent with Section III(A) of the biology guidelines; OR the City must categorically and definitively conclude that expanded brush management will in fact result in significant impacts to the MHPA, native vegetation in the I, II, IIIA, and IIIB, and all potentially affected state and federally-listed species, narrow endemic species, and any other potentially affected special status species. The City appears to have reached this conclusion for consistency with the MHPA, but other conclusions regarding the significance of biological resources impacts is not clear. See *Id.* at V.B-24.
- D-25 The BUR/EA also fails to address an apparent proposed code amendment to connect fire walls between zone 2 and open spaces. According to the BUR/EA,
- D-26 The revision to include fire walls has been added to the land development code regulations (502) in no letter in the proposed ordinance which is attached to this BUR/EA as Appendix C.
- D-27 See *Id.* at VIII-3. Consideration of fire walls between zone 2 and open space is a very significant impact to biological resources, neighborhood character/aesthetics, and other resources. The biological resources analysis does not appear to address the possible significant effects of this action, including fragmentation of natural open space, the MHPA, and core habitat and linkage areas. It is unclear from the BUR/EA and appendices whether this action is actually proposed as part of the preferred alternative. If proposed, the BUR/EA should be expanded to address any significant fire wall impacts.
- D-28 Refer to comment A-12.
- D-29 Refer to comment A-12.
- D-30 Refer to comments A-12, A-34, and D-20. Paragraphs to BUR/EA Section V.B. impacts associated with the establishment of invasive species in brush management zone 2 were determined to be significant for areas both in and outside the MHPA.
- D-31 Refer to page VIII-3, Alternative 4 – Increasing Building Regulation.
- D-32 Fire walls are a proposed alternative within the proposed ordinance, section 142.0412 (b)(7) when sites cannot provide the proposed 100 foot wide brush management zone and zone two.

D-27 QUESTION - Were any field surveys conducted to identify the possible location of any sensitive species besides the gnatcatcher in relation to the extent of expanded brush management?

D-28 QUESTION - What steps if any has the City taken to identify known locations of Natural Diversity Data Base sensitive species and others in relation to the extent of expanded brush management?

D-29 QUESTION - Has the City concluded that impacts to any state or federally-listed species, narrow endemic species, or sensitive species besides the California gnatcatcher will be individually or categorically significant?

D-30 QUESTION - Does the proposed action under consideration in this EIR/EA include any revisions to resolve construction of any fire walls? If yes, how will the environmental impacts of fire walls be addressed?

D-27 No field surveys beyond those described in Appendix B were performed for the project. Refer to comment A-12 regarding the MSCF consistency analysis.

D-28 The MSCF database was reviewed for the project, and the California Natural Diversity Database was reviewed for known narrow endemic locations within the expanded brush management area.

D-29 Refer to comment A-12.

VII. Clarify extent of anticipated brush management in areas previously established as mitigation for development projects

The EIR/EA does not appear to address impacts to biological resources which may have been established previously as mitigation for specific development projects. Previous brush management impacts may have been considered "impact neutral" - subsequently resulting in no impacts to biological resources and not counted as mitigation. But the proposed brush management code revisions will require clearing and/or thinning in areas beyond the previous "impact neutral" zone into lands which may have been protected as development project mitigation. The EIR/EA should clearly indicate the extent of these impacted areas and identify measures to fully mitigate these impacts.

D-31 Based on the review of the regulations regarding mitigation lands, the City does not anticipate that there would be a significant impact to mitigation lands due to the proposed increase in brush management Zone Two. Acceptable mitigation per the City's Biology Guidelines includes off-site Acquisition Fund; purchase from mitigation banks; and payment into the Habitat Acquisition Fund; all these methods of mitigation would result in lands being acquired within areas of the MHPA, generally located further than 100 feet from any structures. Additionally, isolated areas at an urban interface (i.e. areas adjacent to brush management zones) would not generally be acceptable for on-site preservation/mitigation. For existing projects where mitigation has potentially occurred adjacent to brush management areas (these areas are located adjacent or within the MHPA), applicants would have been allowed to either dedicate their land in fee to the City or place an easement over the property. The City's easement language, which is based in Department of Fish and Game's conservation easement, allows for fire protection activities and fire breaks as required by law.

VIII. Clarify the extent of Coastal Commission jurisdiction over proposed code revisions

The EIR/EA is unclear on the extent of Coastal Commission authority over the proposed action. Some brush management will obviously occur within the coastal zone.

D-32 The proposed ordinance will require approval by the California Coastal Commission for adoption and implementation in the Coastal Zone.

IX. Recommendations for project improvement and mitigation

The City cannot justify any statements of overwriting considerations for brush management code revisions, as discussed above. The City should therefore revise the EIR/EA to include detailed measures necessary to reduce impacts below a level of significance. These measures should include improvement of the proposed code revisions and mitigation of impact to sensitive biological resources, at a minimum.

D-33 The proposed EIR/EA will go forward to the City Council with Findings and a Statement of Overriding Considerations, which is subject to their approval. Refer to D-4.

Comments on Brush Management Revisions to the Land Development Code

July 7, 2014

Page 7

Code reviewers should be expanded to expressly prohibit any brush management exceeding parameters considered in the SEIR/EA. Code revisions should also be expanded to expressly authorize penalties, enforcement, and remedies (e.g. restoration of native vegetation) for any brush management exceeding SEIR/EA parameters.

D-34

Refer to comment D-9.

Code revisions should also be expanded to include brush management procedures identified by the SEIR/EA at III.3. Code revisions should expressly require or specify a preliminary site evaluation, preparation of a brush management plan, clearing and pruning methods, equipment type, measures to avoid sensitive resources, and any required permits, clearances, or approvals. Code revisions should also provide for some level of City concurrence with property owner's brush management projects / plans to prevent excessive thinning or overcutting. Impacts to biological resources and others are likely to be even more significant than anticipated if the code remains silent on these topics.

D-35

Refer to comment D-16.

The City should aggressively promote an education campaign emphasizing the importance of proper brush management consistent with SEIR/EA parameters, including the fire safety and legal consequences of excessive brush management (e.g. more flammable weeds and pests), and the effectiveness of fire-resistant building materials over brush management. At the very least the education campaign should include regularly scheduled direct mailings, community meetings, and other outreach efforts targeting property owners at the urban - wild lands interfaces. Printing and distribution of brush management brochures along is important to ensure necessary fire safety public education.

D-36

Educational outreach is currently underway through the Park and Recreation and Development Services Departments.

The City should also act to fully avoid, minimize, and mitigate all impacts to sensitive biological resources consistent with the biology guidelines. All impacts to native vegetation should be mitigated according to biology guideline mitigation ratios, just like any other project, and irrespective of the location of impacts in relation to the MHPA and/or core and corridor areas. Sensitive species location records should be carefully reviewed in relation to anticipated brush management, and activities at these sites prohibited or modified to protect the species.

D-37

Refer to D-2.

Protective regulations for sensitive biological resources must necessarily be expanded for other development activities authorized by the City to ensure successful MSCRP implementation, in the event that recommended biological resource mitigation measures are not implemented. For example, the City should modify the biology guidelines to require in-kind (vs. in-lieu) mitigation for impacts to native vegetation resulting from any other City-authorized development activities should the City elect to forego brush management mitigation.

D-38

Comment noted. The City's Biology Guidelines were approved by the US Fish and Wildlife Service and California Department of Fish and Game as part of the City's MSCRP Implementing Agreement (Exhibit C). No revisions to the City's Biology Guidelines, including mitigation requirements, are proposed as part of the Brush Management Revisions to the LDC.

Please specify which if any of the above recommended code revision modifications and mitigation measures will be recommended by City staff for adoption by Council.

D-39

The draft SEIR/EA in draft on which mitigation measures are and are not proposed. However, the draft proposal is subject to change at any time before or at the public hearing. Changes may or may not affect the ability to use the draft SEIR/EA as written. Refer to comment D-15.

Thank you for your consideration. Please contact me at 619-574-6800 if you have any questions regarding these comments.

Sincerely,



David Hogan

FSF
Center for Biological Diversity
Endangered Habitats League
Friends of Los Peñasquitos Canyon
Friends of Escondido Canyon
San Diego Audubon Society
San Diego Chapter California Native Plant Society
San Diego Chapter Sierra Club
Thirty-Second Street Canyon Task Force

cc: City of San Diego Mayor Dick Murphy and Councilmembers
California Coastal Commission



Allen Grass Invasion and Fire in the Seasonal Submontane Zone of Hawaii

Filint Hughes, Peter M. Vitousek, Timothy Tunison

Ecology, Vol. 72, No. 2, (Apr., 1991), 743-747.

NOTE: http://www.jstor.org/stable/2864412 45388281 19910402072863.963C744%3AALLEN%20GRASS%20INVASION%20AND%20FIRE

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TABLE 1. Cover of native and alien species (%) in this seasonal submontane zone of Hawaii's Volcanoes National Park, Midway Island, during the same succession from the 1970s to the 1980s (n = 3; P < .05).

Table with columns: Species, Mean, SE, Mean, SE, Mean, SE, Mean, SE, Mean, SE. Rows include Native grasses (Melinis pacifica, etc.), Native forbs (Machaonia, etc.), Alien grasses (Sclerochloa, etc.), and Alien forbs (Eriophorum, etc.).

Melinis pacifica is the dominant species in this seasonal submontane zone of Hawaii's Volcanoes National Park, Midway Island, during the same succession from the 1970s to the 1980s (n = 3; P < .05). Melinis pacifica is the dominant species in this seasonal submontane zone of Hawaii's Volcanoes National Park, Midway Island, during the same succession from the 1970s to the 1980s (n = 3; P < .05).

The change in dominance from Sclerochloa to Melinis in burned areas is consistent with the cover of Melinis in burned areas in the 1970s.

had diversity of native shrubs and tree populations declined sharply. Shortly after fire, *Protonotaria* was the only shrub found in significant numbers, and shrub cover in areas burned 18 yr before sampling represents a further development of trends observed in recently burned areas. The absence of three of the four common shrub species from burned areas probably is not due to their inability to disperse, they are among the first species to colonize relatively young lava flows. Instead, their failure to recolonize is more likely a function of the dense grass canopy established soon after fire. The inability of most native shrubs to recolonize in burned areas even after nearly two decades of positive recovery is contrary to conclusions from studies of coniferous conifers that colonization of fire soil result in the reestablishment of native woody species (Rydgren et al. 1978, Howlett and Reddy 1979). Nevertheless, conservative fires invariably the negative impact of grasses on native vegetation.

Although our sampling was limited to the effect of two fires in one area over a relatively short 18-yr period, the results suggest that the consequences of biological invasion by alien grasses and the subsequent fires they consume can be both persistent and profound. Most of the native species in the area developed in isolation from fire and are unable to tolerate it, invasion by *Schizochrysalis* communities alone is apparently sufficient to initiate a cycle in which long-lived, relatively diverse *Merrillia*-dominated prostrate woodland is converted to a less diverse, highly flammable *Merrillia* *mutabilis*. Some native species, including the candidate endangered species *Pinus ponderosa* *arizonensis*, may be driven to extinction as a consequence. Further studies that conclude that biological invasions by exotic species can alter whole-ecosystem characteristics whereas the invader alters ecosystem-level resources available to trophic structure (Vitousek 1990); this study demonstrates that an invader that alters disturbance type and intensity can also alter ecosystem characteristics.

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Literature Cited:
 Rydgren, J. 1978. *Burns and forest dynamics in the Hawaiian Islands*. Ph.D. thesis, University of California, Berkeley.
 Howlett, R. J., and Reddy, J. 1979. *Forest dynamics in the Hawaiian Islands*. Ph.D. thesis, University of California, Berkeley.

area, Tall Timbers Research Station, Tallahassee, Florida.
 Bonner, F., and M. Madley. 1979. The ecology of tropical rain forests. Annual Review of Ecology and Systematics 10: 115-137.
 Chudston, N. L. 1983. Shrubland fire ecology and distribution in the Hawaiian Islands. Ph.D. thesis, University of Hawaii, Honolulu.
 Christensen, J. E., and N. D. Turner. 1986. Fire in an old-growth forest. Pages 37-102 in R. H. G. Jongman and J. I. Burdon, editors. *Ecological and biological dynamics of tropical forests*. Academic Press, New York, New York, USA.
 Oudiz, L. V., and C. P. Bazzaz. 1989. Adaptation of native Hawaiian vegetation to fire: patterns and their implications. University of Hawaii Press, Manoa, Hawaii, USA.
 Flora, C. S. 1938. The ecology of variations of animals and plants. University of Hawaii Press, Honolulu, Hawaii, USA.
 Baker, M. T. 1982. Biological invasions and long-term biological effects. *Vegetatio* 53: 3-17.
 Baker, M. T., and J. W. S. W. Baker. 1975. *Biological invasions: United States Government Printing Office, Washington, D.C., USA.*

Lead Study Team. 1985. *Disturbed land classification system of Hawaii*. University of Hawaii, Honolulu, Hawaii, USA.
 Lopez, J. T., and D. M. Donohue. 1989. *Chaparral*. University of California Press, Berkeley, California, USA.
 Jones, J. A., D. A. Drake, M. G. Moore, F. C. C. Chitt, R. H. G. Jongman, J. J. Kershner, M. J. McDonnell, and J. W. S. W. Baker. 1983. *Biological invasions: United States Government Printing Office, Washington, D.C., USA.*
 McArthur, R. H. 1963. *Population biology of invasive species*. University of Chicago Press, Chicago, Illinois, USA.
 Mack, R. N. 1984. Alien plant invasion from the tropics: a case history. Pages 191-213 in R. H. G. Jongman and J. A. Drake, editors. *Ecology of biological invasions in North America and Hawaii*. Springer-Verlag, New York, New York, USA.
 Madole-Dunham, D. 1973. A tree-sapling vegetation inventory with water resource in a tropical rain forest area in Hawaii. *Tropical Ecology* 14: 1-13.

1976. The major vegetation types and their ecological significance in Hawaii Volcanoes National Park and their application to park management and research. Pages 149-161 in C. W. Smith, editor. *Proceedings of the First Cooperative National Park Resources Study Unit, University of Hawaii Botany Department, Honolulu, Hawaii, USA.*

1981. Fire in tropical systems. In R. A. Munn, T. M. Bonfield, N. L. Christensen, J. E. Long, and W. A. Rattan, editors. *Fire ecology and ecosystem processes*. Proceedings of the conference, United States Department of Agriculture General Technical Report WO-38, Madison, Wisconsin, USA.
 Madole-Dunham, D., and H. E. Shreve. 1974. *Alien and native vegetation ecology*. John Wiley & Sons, New York, New York, USA.
 Madole-Dunham, D., and R. R. Reddy. 1974. *Vegetation of Hawaii Volcanoes National Park* (1970-1974). Cooperative National Park Resources Study Unit, University of Hawaii, Honolulu, Hawaii, USA.

of Hawaii's Technical Report 4, University of Hawaii's Botany Department, Honolulu, Hawaii, USA.
 National Park Service. 1978. Fire management plan for the Hawaiian National Park. United States Department of the Interior, Washington, D.C., USA.
 Parsons, J. F. 1973. *Species of Hawaii*. University of Hawaii Press, Honolulu, Hawaii, USA.
 Smith, C. W. 1983. *Forest of Hawaii*. University of Hawaii Press, Honolulu, Hawaii, USA.
 Turner, N. D. 1983. *Forest ecology of Hawaii*. University of Hawaii Press, Honolulu, Hawaii, USA.
 Vogel, S. L. 1970. *Biological invasions and ecosystem dynamics*. University of Hawaii Press, Honolulu, Hawaii, USA.

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**THE SELF-THINNING RULE:
 A REPLY TO LONSDALE**
 DORIS B. WELLS¹

Recent conclusions have rejected the plant self-thinning rule (Wells 1981, 1987; Wells 1987a, b, 1990), stating that crowded, even-aged stands form a straight line of slope -1/2 in a log-log plot of stand biomass versus plant density (see review by Westoby 1984). In fact, Lonsdale (1990) found best variability from the ideal -1/2 value and weaker evidence of systematic variation than did Wells (1987a, b) and concluded that, while there is no evidence for a thinning rule, the evidence is insufficient for rejection. Here, I will discuss some problems with Lonsdale's analysis, clarify some points from my work, and consider whether further testing of the thinning rule is needed.

Lonsdale applied a thinning procedure that introduced a systematic bias and prejudiced the subsequent conclusions. He differed from previous thinning procedures in that he used the standard deviation of density variation among the stands used to fit the thinning line; inclusion of pre-thinning data biases thinning slope toward steeper, the steeper thinning slope in any data base (Wells 1987a) compared with data sets with equal density variance (Lonsdale 1990; Fig. 3), and the mean thinning slope becomes steadily shallower as one raises the required amount of density change (Lonsdale 1990; Fig. 4).

¹ Sandhills, Environmental Research Center, P.O. Box 18, Edgewater, Maryland 21037-0018 USA.

process reveals an integration of population biology and ecosystem fluxes. *Ecology* 57: 1-13.
 Vitousek, P. M., and L. R. Walker. 1988. Biological invasions by *Myrica* spp. in Hawaii: plant demography, nitrogen fixation, and ecosystem effects. *Ecological Monographs* 58: 147-167.
 Vogel, S. L. 1975. *Forest dynamics of Hawaii*. Ph.D. thesis, University of Hawaii, Honolulu, Hawaii, USA.
 Westoby, M. 1984. *Plant density and biomass in natural stands*. Ph.D. thesis, University of Queensland, St. Lawrence, Queensland, Australia.

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 final version received 13 June 1990

Although true, these observations do not justify our rejection of the thinning procedure. A decrease in density does not necessarily result from including pre-thinning data, and a large density range in no way ensures the exclusion of inappropriate points (Fig. 1). Also, the thinning equation dictates that stands with steep thinning lines will be observed over steeper density ranges. Therefore, the patterns that motivated Lonsdale's data screening (Lonsdale 1990: Figs. 3 and 4) are actually natural patterns that arise independently of the issue of data screening (Fig. 2). Furthermore, a population with a steeper thinning line must accu-

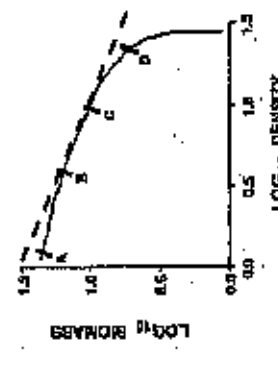


FIG. 1. Slope (steepness) of the maximum density-biomass relation. Biomass units are grams per square meter; density units are plants per square meter. The actual thinning lines (solid lines) are approximately parallel to the relation line (dashed line). Lines fit to data about 40, 60, 80, and 100% of the non-thinning data and do not represent the original data, but show how world-wide data would be affected by the thinning procedure. A line fit to points along BC would overestimate the slope, but would be unbiased by Lonsdale's procedure. Density change is simply the relative biomass of two well-aired data set represents an appropriate thinning line.



STRUCTURE IGNITION ASSESSMENT CAN HELP REDUCE FIRE DAMAGES IN THE W-UJ

Jack Cohen and Jim Seveland

The wild land-urban interface (W-UJ) refers to residential areas surrounded by or adjacent to wildland areas. In recent years, significant W-UJ residential fire losses have occurred within the United States that have focused attention on the principal W-UJ problem areas of fire and property protection.

W-UJ fires with significant residential losses differ from typical residential fires in that W-UJ situations usually include the following:

- Large numbers of substantially exposed structures,
- Rapid involvement of residential areas,
- Overwhelmed fire-protection capabilities, and
- Total loss of residences per structure ignited.

Wildland vegetation fuels initially contribute to rapid-fire growth. Large areas of burning that result cut simultaneously expose numerous structures to flames and, eventually, can rain firebrands (burning embers) on homes over a wide area. Although advances in

And Cohen Seveland published *Wildland Fire: A Handbook for Firefighters and Fire Managers* in 1987. The book is available from the International Association of Fire Chiefs, 1500 Pennsylvania Avenue, N.W., Washington, D.C. 20004.

Wildland fire, the principal fire hazard in the United States, is a major cause of property loss and human injury. The National Fire Protection Association (NFPA) estimates that in 1987, wildland fires caused \$1.5 billion in property damage and 100 deaths.

To assess potential ignition, SEAM uses an analytical approach and worst-case assumptions to establish relationships between the design of a structure and its exposure to fire.

Whether a W-UJ fire occurs in Oakland, CA, as in 1981; Spokane, WA, (in 1991); Georgia, MI, (in 1990); or Palm Coast, FL (in 1985), it is similar to others nationwide. A recent example occurred in October 1993, when the Laguna Hills fire in southern California destroyed in 5 minutes nearly all the 368 homes (not during that fire). Despite three fires swiftly overtake residential areas, many structures do not survive a W-UJ fire such as the structure in Laguna Hills. As a result, typical peak fire statistics reveal that homes

At the author's invitation, Cohen and Seveland were invited to contribute to this special issue of *Fire Protection Engineering*. Cohen is a senior advisor at the U.S. Forest Service, Intermountain Region, Ogden, UT 84403.

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either active or are easily destroyed. Relatively few structures suffer partial damage.

The W-UJ fire problem can be characterized as the exposure of a residence to flames and firebrands resulting in problems that produce widespread, extreme losses. If residential fire losses did not occur during wildland fires, the W-UJ fire problem would not exist. Thus, the principal issue is residential structure survival.

History of the W-UJ Problem

Since 1985, the problem has become increasingly present at the W-UJ fire problem. During this time period, fire agencies have devoted increasing amounts of time and effort to prevention and suppression of W-UJ fires. Since 1993, structures losses during wildfires occurred in such diverse locations as New York, Texas, New Mexico, and Colorado. However, the W-UJ fire problem is not new.

Historically, large urban losses have accompanied wildland fires. For example, such losses occurred in Peabody, WI, in 1871; Wallace, ID, in 1910; Berkeley, CA, in 1923; and the State of Maine in 1987 (Martin and Sapsis 1992). Over the last four decades, frequent wildland fires in California have resulted in significant residential losses. After major forest, government agencies generated reports that identified the W-UJ fire problem and provided mitigation guidelines (e.g., California Department of Conservation 1972; California Department of Forestry 1986; County Supervisors Association of California 1985; Howard et al. 1973; Radtke 1983). These comprehensive reports provided

recommendations, including revised specifications for W-UJ urban planning, fire suppression, vegetation management, and building construction. However, recent events indicate that W-UJ fire remains a problem. In California and elsewhere, which suggests a lack of societal acceptance for W-UJ firewise guidelines.

People often use terms such as "wildfire" or "back to electric" to describe how some homes survive the destruction of their neighbors' residences. These words imply helplessness, a lack of control, and a detachment from responsibility. While these phrases may seem readily describe the emotional state of those who just experienced wildfires, the assumption that homeowners cannot decrease fire losses is incorrect. Choice or "luck" does play a part in home survival, but the chances for home survival can be significantly improved when homeowners implement W-UJ firewise recommendations.

During workshops in 1985 and 1987 (Laughlin and Page 1987; Cole and Cooper 1987), scientists and managers began to understand that societal attitudes were a critical part of the problem. Participants recognized that homeowners in W-UJ areas were not readily implementing the available W-UJ firewise recommendations. During the "Wildfire Strikes Home" conference, the research subgroup concluded that homeowners' acceptance depended on their increased understanding of W-UJ fire hazards and aesthetically acceptable firewise measures (Laughlin and Page 1987). The conference made the following research recommendations: Manage W-UJ hazards in an aesthetically acceptable

manner, Understand the relationship of building design and clearance to fire hazards, Learn more about ignitions from burning embers (firebrands) that have been unpredictably transported, and Develop techniques to evaluate and identify fire risk.

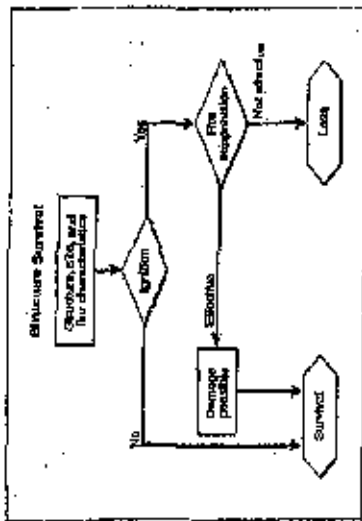
These recommendations reflected the confidence participants had in their ability to take the protection agencies could not cope with the W-UJ fire problem without firewise home and landscape designs.

Ignition Assessment for Surviving Structures

What we observe after a W-UJ fire is, in varying degrees, structure survival. The degree of survival results from a complex, interactive sequence of events involving the ignition and burning of vegetation and structures, accompanied by varying fire-weather effects by homeowners and firefighters. The development of an assessment method requires an explicit description (at some resolution) of the processes involved.

Structure survival involves factors that influence fire ignition; and, if an ignition occurs, the survival of a structure involves factors that influence fire suppression. Thus, structure survival assessments require comprehensive consideration of structure ignitability and suppression effectiveness. The factors influencing suppression effectiveness (availability, capability, and success of urban and suppression forces and homeowners) greatly depend on the real-time situation.

Figure 7. Structure survival depends on factors that determine ignition and spread of fire suppression. Response to the fire suppression effectiveness survival ability depends on structure resistance.



safety and identify potential W-UJ fire problems. In its basic form, the model has a range of applications, from providing assessments of existing single houses to assessing branding developments in the planning stages. The basic model can provide the following:

- A means for developing regulations to establish fireflow requirements based on potential ignition risk for a mix of factors.
- A means for integrating a residential's exterior home design and landscaping elements with fireflow requirements.
- A means for integrating a developer's house and neighborhood design interests with fireflow requirements.
- A means for fire agencies to assess W-UJ fire risks for suppression and suppression/branding.

To achieve these applications, SIAM uses an analytical approach to establish relationships between structure design and fire exposure that results in the assessment of potential ignition. Because actual fire conditions of a future fire are unknown, SIAM uses worst-case assumptions. For example, how and in what sequence the vegetation and other combustible materials adjacent to a structure will burn is unpredictable. Therefore, SIAM assumes all combustibles will burn at the same time. The model also assumes that no fire protection will occur, a worst-case condition suggested by the nature of W-UJ fire bases. Where ignition processes are not explicitly understood,

Continued on Page 23

Background of the Wildland-Urban (W-UJ) Interface And SIAM

The term "wildland-urban interface" (W-UJ), or "wildland-urban interface," refers to residential areas in locations subject to wildland fire. Although the W-UJ fire problem has received increased attention since the mid-1980's, the problem is not new.

The W-UJ fire problem can be characterized as the exposure of a residence to flames and firebrands resulting in ignitions that produce widespread structure loss. W-UJ has been observed in other W-UJ fire in, in varying degrees, structure survival.

Assessments of the survival of structures require comprehensive consideration of separate

ignitability and suppression effectiveness. Improving structure survival ability depends on improving ignition resistance. In the Forest Service fire research, an SIAM project has been developed to develop the structure ignition Assessment Model (SIAM) to assess residential ignition resistance.

Current fire inventory systems do not adequately address the W-UJ problem. Future systems should include W-UJ residential ignition resistance, site topography, and residential loss in addition to suppression effectiveness. These concepts and methods form a technical basis for a strategy of assisted and managed community self-sufficiency.

vegetation management away from the structure would not affect ignition from fire exposure and would not significantly reduce ignitions from firebrands. For example, a flame front 60 feet (18 m) high at a distance of 150 feet (46 m) requires some time to ignite wood siding from radiation than the vegetative fuel's burning time. However, 150 feet (46 m) represents a very short distance for firebrands.

Fire Inventory Implications

Since their inception, wildland fire inventory systems in the United States have focused on inventorying wildland fire suppression effectiveness. In 1914, Courtland "Systematic Fire Protection in the California Forests" established the individual fire report as the fundamental unit

of information and demonstrated how using that information could improve the program. Since then, fire inventory systems have been used to assess and thereby improve wildland fire suppression effectiveness. The primary elements of the wildland fire inventory systems have been wildland area burned, number and type of suppression resources assigned, and the three types of fire, including the extinguishing the fire. While this focus on wildland fire suppression effectiveness is not surprising, it comes as no surprise that there is no readily available public database in the United States that adequately describes the W-UJ problem of structure loss to analyze and improve fire programs in the wildland-urban interface.

Structure Ignition Assessment Research

USDA Forest Service Fire Research recognizes the need for a greater understanding of the W-UJ

The unpredictability of the real time situation makes descriptions of suppression effectiveness unavailable (Cohen 1991). Figure 1 diagnoses the general process leading to structure survival or loss. As the figure illustrates, the structure survival process must pass through the occurrence or non-occurrence of an ignition. The likelihood of ignition depends on the level of stimulus about structure loss strongly suggests that expected fire suppression effectiveness is very low. Thus, improving structure survival depends on improving ignition resistance, at least initially. Improved structure ignition resistance leads to improved suppression effectiveness by both means and fire agencies.

SIAM assesses the potential for structure ignitions from wildfires burning in vegetation and other structures. SIAM is based on the premise that structure survival is the essence of the W-UJ fire problem, but structure ignition is the critical element for survival. Thus, this model specifically addresses the potential for structure ignition rather than the potential for structure survival.

SIAM is designed to improve the

The minimum characteristics of a fire inventory system that would address the W-II are feedback, risk, and accountability. The inventory system should provide feedback on structure ignitability, as well as suppression

effectiveness. To address risk, defined as the chance of loss, a fire inventory system must provide information on the susceptibility of loss, the likelihood of loss, and the amount of insured loss is one way to assess the major risks. The ability to link to demographic databases will provide information on who is exposed to loss.

A peak inventory system can foster homeowner responsibility by helping retain the faulty assumption that homeowners cannot decrease fire losses. As a minimum, a fire inventory system in the United States should consider collecting and archiving the following information on each structure within the perimeter of major W-II fires:

- The log-assessed value of the structure.
- The value of the structure's insured loss.
- The structure's ignition risk factors, and
- Suppression effectiveness.

Conclusion

Past reports and recommendations as well as experimental research and modeling suggest that W-II fire-loss mitigation should concentrate on the residence and its immediate surroundings. Any strategy for effectively reducing the W-II fire problem must initially focus on residential fire resistance.

RIAM is designed to assess ignition resistance and thereby facilitate firewise buildings and landscaping practices. Fire inventory systems should also include W-II information.

These concepts and methods form a technical basis for a strategy of reduced and managed community self-sufficiency. Instead of all fire protection responsibilities residing with fire agencies, homeowners take responsibility for ensuring firewise conditions and the initial fire defense of their residences during wildland fires. This fire agencies provide information, coordination and assist in meeting firewise requirements, and provide fire suppression assistance.

Literature Cited

California Department of Conservation. 1992. Recommendations to solve California's wildland fire problem. (In cooperation with the Department of Forestry and Fire Protection, Sacramento, CA.) 38 p.

California Department of Forestry. 1980. Firewise guides for residential development in California. (CA Fire in the California Department of Forestry and Fire Protection, Sacramento, CA.) 38 p.

Cohen, Jack D. 1997. A self-inspection approach for assessing the fire risk to structures in the wildland/urban interface. In: Proceedings of the Fire and the Environment Symposium and Conference, 1999 March 20-24, Knoxville, TN. Gen. Tech. Rep. SE-377-09, Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 212 p.

Cohen, Jack D., William P. 1995. Current needs for Structure Ignition Assessment Model (SIAM) research. In: Typicus, Cindy, ed. Proceedings of the Fire Management in the Wildland/Urban Interface: Sharing Solutions Symposium, 1994 October 2-4, Kapuskasing Village, AB, Canada. Edmonton, AB: Province of Alberta, 120-132.

Cohen, Jack D. 1986. Structure Ignition Assessment Model (SIAM). In: Wildland/Urban Interface: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 1984 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-370-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

Cohen, Jack D., William P. 1994. Living safely in the wildland/urban interface. Gen. Tech. Rep. PSW-47, Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 31 p.

Cohen, Jack D. 1996. Structure Ignition Assessment Model (SIAM). In: Wildland/Urban Interface: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 1994 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-470-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

Cohen, Jack D., William P. 1997. Living safely in the wildland/urban interface. In: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 1997 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-470-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

Cohen, Jack D., William P. 1998. Living safely in the wildland/urban interface. In: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 1998 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-470-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

Cohen, Jack D., William P. 1999. Living safely in the wildland/urban interface. In: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 1999 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-470-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

Cohen, Jack D., William P. 2000. Living safely in the wildland/urban interface. In: Proceedings of the National Symposium on Fire and Structures in Urban Environments, 2000 February 15-17, Boulder, CO. Gen. Tech. Rep. PSW-470-158, Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 35-52.

An Examination of the Summerhaven, Arizona Home Destruction Related to the Local Wildland Fire Behavior during the June 2003 Aspen Fire

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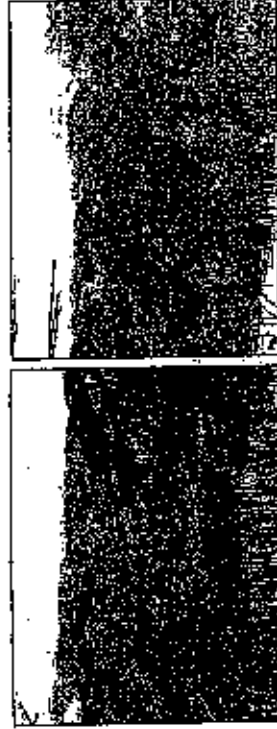
August 1, 2003

Summary

I examined the home destruction in Summerhaven associated with the 2003 Aspen Fire on July 31 and August 1. My examination was prompted by questions regarding the wildfire behavior related to home destruction and specifically whether homes could have survived the wildfire in the Summerhaven area. The evidence revealed by my examination indicates that the wildfire in the Summerhaven area largely spread as a surface fire not as a high intensity crown fire. The differences in the direct flame and firebrand exposures related to the home characteristics revealed in one house surviving next to its destroyed neighbor. Although the wildland fire largely spread on the surface, high intensity burning occurred in several locations of high structure density. The burn pattern suggests that high intensity fire spread occurred from structure to tree canopy to structure.

Executive Summary

The Aspen Fire started on June 17, 2003 in the Santa Catalina Mountains north of Tucson, Arizona. On June 19 the fire spread into the mountain community of Summerhaven. Over 300 homes and cabins burned in association with the wildfire. Photos 1 and 2 show the character of the wildfire. Crown fire occurred in limited patches and on the slopes to the west and above the residential area.



Photos 1 and 2—crown fire spreading above and to the west of Summerhaven. Photo 2—crown fire spreading above and to the west of Summerhaven but did not spread into the residential area.

High intensity waves are spread in the arcs of the main gold, where
 Some of the waves reach. Photo 3 shows the post burn situation along the main road shown above
 and typical from structural functions. Photo 4 shows surface fire spread that was typical under
 the canopy canopy. Although the surface fire spread does not indicate high intensity burning, the
 intensity and distance produced significant canopy damage.

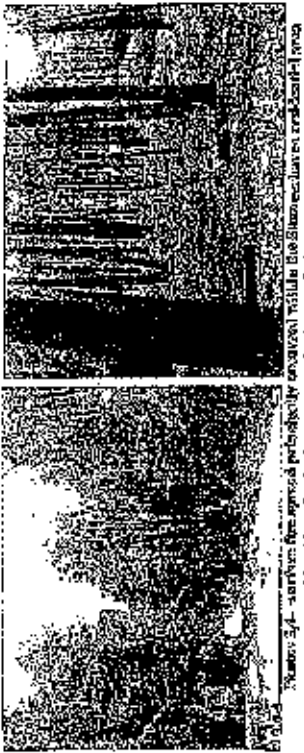


Photo 3 - surface fire spread from a fire source from the
 Photo 4 - surface fire spread from a fire source from the
 Photo 5 - surface fire spread from a fire source from the
 Photo 6 - surface fire spread from a fire source from the

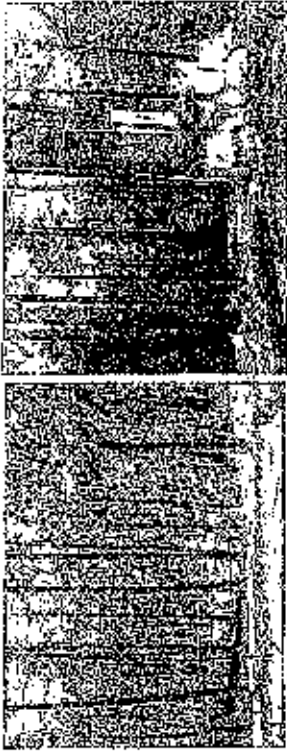


Photo 5 - surface fire spread from a fire source from the
 Photo 6 - surface fire spread from a fire source from the

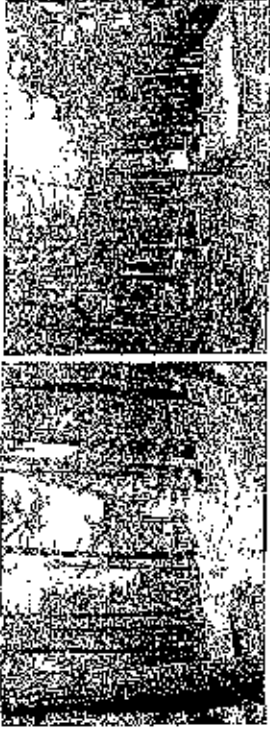


Photo 7 - surface fire spread from a fire source from the
 Photo 8 - surface fire spread from a fire source from the

The evidence indicates that burning began immediately behind the adjacent and
 burning less. The canopy burning began at the adjacent structure, in several areas of
 dense structure nearby, the evidence suggests that burning began behind the tree canopy that
 subsequently moved into adjacent structures. An early structure ignited about canopy ignition. The
 evidence from photos indicates that the fire spread from the tree canopy into the structure.
 Photo 9 shows the remains of a structure that was completely destroyed. The structure was
 by unburned tree canopy. The remains of the original and early in relationship with trees
 destruction. Photos 11-12 show the human destruction and canopy consumption with the
 and canopy as the distance away from a structure increases. Note the number of trees that
 the tree canopy. The unburned portion is where all trees were consumed during the burning process.
 The side view is charged but that remains. Without examining the large scale patterns of canopy
 destruction associated with the burning process, the likely sequence of canopy destruction, the likely
 the destruction rather than the likely sequence of canopy destruction, the likely
 canopy fire involvement.

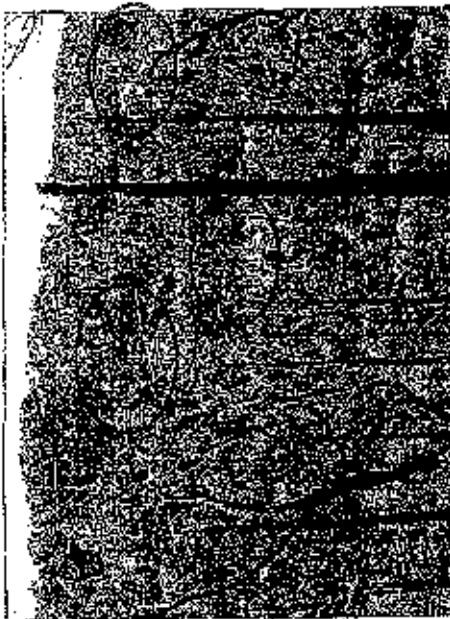


Figure 10—patches of burned trees that are associated with multiple highly damaged houses in the heavily damaged area of the town. The red marks show a comparison of the burned trees.



Figure 11, 12—burning houses commonly occur in this proximity. Where houses are destroyed, the trees have survived and because the houses produced noise at the destroyed houses and associated forest in an unusual, noisy way, possible houses present in each photo.

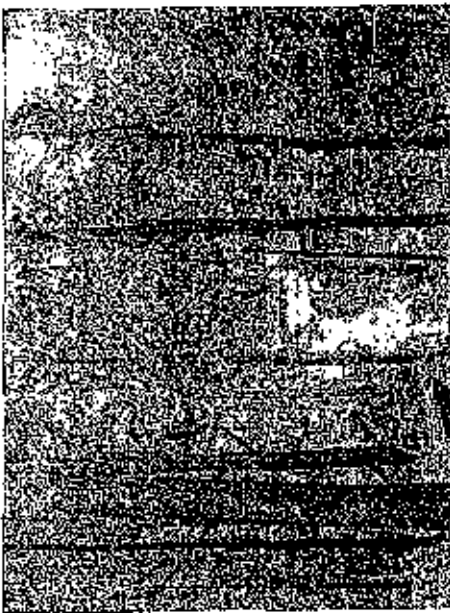
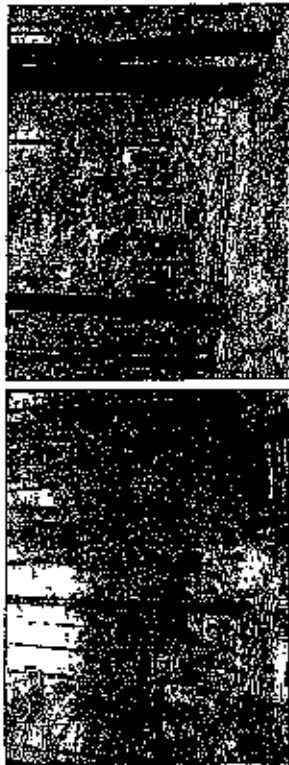


Figure 13, 14—the red arrows indicate the complete burnt canopy (the forest) in the sky. In the left photo, the red arrow points to the burnt canopy. In the right photo, the red arrow points to the burnt canopy. The red arrow indicates the burnt canopy and that as the forest from the burnt canopy is shown.

That leaves the question of how one home can survive adjacent to total home destruction. Photos 15-16 show such a situation. Fire does not behave capriciously; it either meets the requirements for combustion or not. If a high intensity crown fire had spread through the entire residential area then the distances between structures would not have made significant differences in the requirements for combustion. But even crown fires do not have the ability to directly ignite wood at distances greater than 100 feet. Thus, when surface fire principally occurs, the ability to directly ignite a home must occur within a few feet of or in contact with the flammable parts of the structure. A structure may ignite directly from firebrands that have come from an intense wildland fire at over 1/2 mile away, but these ignitions are dependent on the materials and design of the structure. Thus, significant differences in the requirements for combustion can occur from one home to an adjacent house. These differences in the direct flame and firebrand exposures related to the home characteristics result in one house surviving next to its destroyed neighbor.



Photos 15, 16--houses destroyed adjacent to houses survived indicates that significant differences existed in the fire and home characteristics necessary to meet the requirements for home ignition.

Comment Letter E

7/13/2004

The City Heights Area Planning Committee voted July 7, 2004 by a vote of 11/0/5 to recommend four comments regarding the Brush Management EIR:

- | | | | |
|-----|---|-----|--|
| E-1 | 1) The recommended clearing to improve fire safety does not appear to provide adequate protection to native species and habitat. | E-1 | Comment noted. Impacts to native species and habitat are considered significant. |
| E-2 | 2) The educational requirements that could provide protection from clearing of sensitive and protected species does not seem adequate. | E-2 | Education and Training was rejected as an alternative. |
| E-3 | 3) Educational requirements do not seem to be in place or to be required the world. Determine information regarding how to protect the habitat in general and specifically the canyon rim from erosion by both reducing vegetation near houses but replanting it with vegetation that will require more irrigation and possible runoff. | E-3 | Refer to comment number D-36. |
| E-4 | 4) Every effort should be made to require the protection of the Great Catcher habitat. | E-4 | Comment noted. |

Best Regards,

Michael Giacino
619, 255-7902
michael@jacobino.com

4243 Marzanilla Drive
San Diego, California 92105



THE CITY OF SAN DIEGO

June 14, 2004

Allison Raop
Environmental Planner
City of San Diego Development Services Center
1722 First Ave., MS #501
San Diego, CA 92101

Reference: Draw RIR/EA (JC: 1193) for Brush Management Revisions to the Land
Development Code and Federal Grant from the Office of Emergency Services
(OES), Federal Emergency Management Agency (FEMA)

Dear Ms. Raop:

On June 9, 2004, the City of San Diego's Community Forest Advisory Board voted unanimously
to provide the following comments on subject RIR/EA.

General Comments

Though the Code Fire had many devastating effects on our community and environment, one
potential positive effect that this fire provided was a "real world laboratory" to test the dynamics
of fire, fire spread, behavior, building material susceptibility to ignition, brush management
effectiveness and species-specific flammability. However, we see nothing within the brush
management ordinance or the RIR that reflects any research or collected data that supports the
need for expanding the width of brush management zones or supporting the effectiveness of
brush thinning in general. A simple comparison showing the performance of areas burnt that had
recently been brush thinned compared with those that did not would have either proved or
disproved the effectiveness of the proposed changes to the ordinance.

The fact is that large wind-driven fires are minimally affected by the implementation of brush
management thinning. Small fires are very defensible given the 25' Zone 1 approach and do not
require Zone 2 thinning. Only a small number of mid-range slower moving fires would receive a
positive effect from thinning in Zone 2. We are not convinced that the positive benefits outweigh
the negative impacts. However, if the ordinance is to be implemented, then all possible
alternatives and impact mitigations must be considered by the RIR.

The CFAD is concerned that the emphasis on a "one size fits all" brush management policy that
is not clearly defined and without scientific basis will result in excessive clearing of native
vegetation and tree removals. Some slopes would not require a 50% reduction in fuel widths

F-1

This comment addresses the merits of the project, not that accuracy or
adequacy of the SEIR/EA. No response is required.

F-2

This comment addresses the merits of the project, not that accuracy or
adequacy of the SEIR/EA. No response is required. CBQA requires
evaluation of: "reasonable range of alternatives (evidence)" and "feasible
mitigation measures" per section 15126.4 (g)

F-3

This comment addresses the merits of the project, not that accuracy or
adequacy of the SEIR/EA. No response is required.

F-1

F-2

F-3



Community Forest Advisory Board
3150 La Jolla Village Road
San Diego, CA 92161
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offices are likely to read more than 50%. The CPAB is especially concerned about the negative publicity that trees (native or non-native) are receiving from the press and city representatives. This is despite the well-known principle that effectively planted trees represent a very low fire hazard. When other plants of large trees still standing around residences, often staged on the inside from the house fire but unaffected on the other side, were examined after the Cedar fire. It appears that these changes to the brush management plan are undervalued more by political expediency and visibility than science or research.

F-4

Specific Comments for Alternatives in the Draft Environmental Impact Report for the revised Brush Management Plan

a). An alternative allowing the replacement of highly flammable natives with low flammable natives was considered to have significant impacts based on the assumption that supplemental irrigation would create significant impacts. This is inconsistent with the language of the brush management ordinance, which allows for supplemental, temporary irrigation. To assume that all supplemental irrigation will result in runoff that will create impacts to biology, erosion, and water quality is not sustainable. An effectively established native zone of low flammable vegetation is the best solution for fuel management and would result in fewer impacts to biology, erosion and water quality. Most native vegetation is not negatively affected by additional irrigation, though direct aerial spray of water can create problems. However, this alternative should assume that non-aerial spray irrigation techniques would be used (bubbles, low flow flood and drip). Moisture in the environment is a setback to fire spread, not a contributor. The conclusions of this alternative are not appropriate and should be reconsidered.

F-5

Any property owner that chooses an alternative fuels management approach should be allowed to apply for alternative conformances under a ministerial permit if the application meets important conditions and findings. Approaches allowed under this alternative conformances should include:

1). The phased replacement of highly flammable native vegetation with other sustainable native vegetation that has a significantly lower fuel index, utilizing accepted standards such as the flammability list of natives provided by the California Native Plants Society.

F-6

2). For those existing properties (prior to 1989) that do not have a full 35' around the structures because some or most of this distance is on slopes, the property owner should be allowed to plant and irrigate non-native or native low-fuel species. Invasive species would not be allowed next to native areas on these slopes. Irrigation would be recommended to be temporary, but based under certain conditions, the irrigation should be allowed, by permit, to be permanent.

F-7

3). Allow for the use of irrigation systems (temporary or permanent) during Santa Ana conditions or other official fire hazard warning conditions to help reduce the risk of fire. Restrictions on irrigation practices and types of irrigation would need to be put in place to discourage excessive brush growth, runoff, or the support of non-native invasives that might increase flash fires. Accommodation in the ordinance for right

F-8

This comment addresses the merits of the project, not that accuracy or adequacy of the SHIR/EA. No response is required.

F-4

Vegetation within brush management Zone two is not allowed to be irrigated. Temporary irrigation may be allowed under specific circumstances. For example, when new plants are planted within brush management zones two. These plants will have temporary irrigation until the plants have been established. It is well documented that water in excess of that found in natural sources can adversely impact native plants by increasing pathogens in the soil, root rot, and increased evaporation from more hydrophytic plants. A prohibition of overhead sprinklers in favor of bubbler systems in Zone 2 would not be enforceable. Staff believes that overhead sprinklers would be installed regardless of the regulation for fire protection purposes.

F-6

Refer to comment A-49

F-7

Comment noted.

F-8

This comment addresses the merits of the project, not that accuracy or adequacy of the SHIR/EA. No response is required.

or partly) should be made to include the use of special purpose irrigation systems designed for fire protection of the structure or grounds.

b). The inclusion of a public education program was an alternative considered, but rejected (VII-4). It is stated that these educational materials are already available. However, many of the materials are contradictory and do not provide enough specifics related to the City of San Diego Brush Management Ordinance. Since the Fire Chief has the ability and responsibility to define which properties will have the brush management ordinance apply to them and which notification is required to let the public know of their responsibilities, a specific brochure addressing the issues brought up in this letter should be considered. The intent was not to have public education as a stand-alone alternative, but rather to have it serve as a possible mitigation to several impacts listed in the EIR.

A public education and training program is needed as part of this ordinance. This would include definitions of pruning, thinning, cabling, culling, plant removal without root removal, tree fuel management, and other terms that may not be understood by the general public. Without the commitment of a training program with materials to be given to the public, it is difficult to see how the project could be implemented. The ordinance should require an education program that would train city crews and supervisors in correct thinning methods. The ordinance should set up a certification process for contractors offering this service. The ordinance should require inspections and allow for the denial of payment for services that do not follow guidelines. Some of this education should include the following concepts:

- F-9 - Removal of non-native plants first to best towards developing 50% covered soil area with fuel reduction within final remaining vegetation that provides 50% coverage.
- F-10 - Recognition that there are native plants and naturalized plants that are naturally low-fuel, or that can be easily managed to be low in fuel and invasive plants that are both high in fuel and damaging to native habitat.
- F-11 - Pruning should always be done from the bottom up, removing dead wood with no "hedging" of the top of the plant, which causes externally exposed woody branches to die drying effects of the sun and increased growth of small diameter flush of growth which increases the plants' susceptibility to ignition.
- F-12 - Removal of annual plants over 18" high should be done prior to the fire season but after the rainy season to avoid erosion and runoff.
- F-13 - An appropriately pruned shrub will need to be pruned every four to six years to remove deadwood that has accumulated, or to reduce the crown again. Avoid annually shearing off new low growth which may result in proliferation of combustible twigs if done in the growth season, or may kill the shrub if done in the dry season.
- F-14 - Avoid defoliation of healthy pruned broadleaf evergreen native shrubs in Zone 2, which could lead to type conversion to exotic grasses and annuals, which extend the fire season and ignite more readily than healthy pruned native shrubs.

Refer to comment D-35.

F-9 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required. Education would be unadvisable as a mitigation measure for the same reason the alternative was rejected as unworkable.

F-10 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

F-11 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

F-12 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

F-13 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

F-14 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

F-15 This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

Specific Comments for Impact Analysis in the Draft Environmental Impact Report for the revised "Brush Management Plan"

1). CEAB recommends a change to the title of ordinance and the text to "Vegetative Brush Management" to alter the public's perception that all brush (vegetation) is dangerously flammable. The emphasis should be on managing fuel, not brush, since fuel is in all different forms of vegetation, whether natural or planted introduced, as well as furnishings and building materials.

F-17

F-17

Comment noted.

2). CEAB believes that the review of potential neighborhood character / aesthetics is totally inadequate. The lack of public education and the excessive requirement to remove branches up to three times the height of adjacent understorey, will result in the complete removal of everything except the trunk of many trees. Most native brush is often five to seven feet in height, thereby requiring up to 21 feet of branch clearance, which is more than the total height of most of our native or indigenous trees.

F-18

F-18

Comment noted. The ordinance simply expands brush management zones. No changes are proposed regarding the way trees are dealt with in the current ordinance; therefore, the additional brush management zone area is expected to look like existing zone two areas, only larger.

CEAB is concerned that without public education and clarification in the brush management ordinance, trees or large vine-like shrubs are likely to be removed, resulting in a significant visual / neighborhood / aesthetic impact. Native, naturalized or non-native trees should not be removed as part of either zone. Pruning of ladder limbs assuring a 10' clearance around a structure should be encouraged. For trees on slopes with indigenous native vegetation, fallen branches, leaf buildup or lower branches, the ordinance should provide a policy and guidelines on tree fuel management.

F-19

F-19

Refer to comment F-13. The pruning requirements only affect new trees.

To make native vines, the ordinance language is not clear. It states that only trees that are considered to be fire-resistant natives can remain. Most plants, except for young succulents are not fire-resistant. Only those that are in riparian areas are even potentially fire-resistant. This would mean that most native and all non-native and indigenous trees would be subject to removal. In addition, it appears that groves are to be eliminated since the ordinance only allows for single stand-alone specimens and / or species that are situated so as not to transfer fire to the structure. Based on these definitions, many trees are likely to be removed, creating an energy, erosion and aesthetic impact.

F-20

F-20

This is existing, not proposed, land development code language affecting new, not existing, trees.

3). CEAB is also concerned about tree removals in Zone 1. The ordinance states that trees shall be at least 10 feet away from a structure, measured at the drip line based on the mature size of the tree. If the tree was trimmed regularly, it would never expand to the mature size of the species, so this guideline is confusing and excessive. We believe the existing code is adequate, because no real data suggests otherwise. The fire code says trees should not hang over the house nor be 10' from chimneys. This standard seems reasonable; but the fact is there is no real data to support it. Encouraging members of the public via ordinances based on guesswork is not justifiable. The post-fire damage assessment found that over 60% of the houses in the Cedar fire had a burned tree "within 10' of the house." The data gathering was very haphazard, so we don't know if the tree trunk or tree canopy was within 10', nor do we

F-21

F-21

This is existing, not proposed, land development code language.

know, if there were other trees further away, and if they burned also. In many cases, the tree may have been burned by the house, not vice versa.

This requirement also takes away the ability of a homeowner to shade their house. Many homes do not have sidewalks or backyards capable of supporting a tree at its full mature size drip-line with an additional 10' buffer. The inability to shade prohibited structures would have an energy use impact associated with it as well as related air quality impacts. This Cedar fire does not support the requirement of 10 feet from the drip line. A more effective method would be to be sure that tree branches are pruned to allow for a 10 separation between the structure and the tree. This separation can either be horizontal or vertical, thereby allowing for shade on the structure. Also, certain trees are considered to be fire resistant, and could actually help to filter out airborne firebrands and radiant heat from igniting adjacent structures. The shade from trees, whether over a structure or other landscaped areas, often helps to keep the area from drying out, which is the primary reason for ignition.

4). Under previous analysis of the existing brush management ordinance and as listed on pages V.B-27, brush management in Zone 2 is considered to be "Impact neutral". This is contradicted by a statement on page V.B-30 that reads: "The proposed brush management revisions would result in potentially significant impacts to sensitive species". These impacts are considered to be reduced to below a level of significance through acquiring other habitat. Impacts resulting from invasives colonizing thinned habitat are summarily dismissed, even though the document has provided scientific background showing overwhelming proof that this has occurred in the majority of areas thinned for brush. Under CEQA requirements and guidelines, avoidance of impacts should always be a priority. However, this plan automatically assumes the best mitigation is to offset the impact with purchased habitat, which results in a net loss of habitat in the region and the mitigation is often at a great distance from the impact. Alternatives should be looked at much closer, including methods that allow for replacement of native vegetation with large amounts of fuel with native or non-native (non-invasive) species that produce less fuel.

5). Impacts associated with hydrology and erosion specify that since the soil is not being disturbed, impacts are not anticipated (V.C-11). This assumes that all individuals involved in brush management will understand that roots should not be removed and that low impact thinning techniques and equipment are to be used to limit soil disturbance. Without a public education campaign, brochures or inspections, soil disturbance is very likely to occur. It would be better to list the impact as potentially significant and show that it can be mitigated through a public education campaign.

Under the section on Erosion (V.C-13), data supports the claim that erosion does occur on steep slopes or erodible soils where brush management has occurred. The MOU listed in Appendix D, indicates that under Section II, paragraph 9, a property owner is allowed to do more than thinning. For example, discing is allowed which exposes mineral soil to erosion.

The study does not attempt to quantify the amount of the city's brush management zones that are located on steep slopes or erodible soils, even though the same GIS tools used to determine many of the impacts (or lack of impacts) can easily be used to quantify the total

F-22 Per the current brush management regulations, a ten foot horizontal separation is required between structures and the edge of tree canopy. This regulation is not proposed to be changed in the revised ordinance.

F-23 Per the current brush management regulations, invasive plants that are established after brush management has occurred are to be controlled by weeding the invasive plants within Zone Two. This regulation is not proposed to be changed in the revised ordinance.

F-24 The clear and re-plant Brush Management Zone Two alternative is analyzed in detail on page VII-2 of the draft SEIR/EA.

F-25 Current brush management regulations require that thinning activities not disturb the root system of the plant. Refer to comment D.9.

F-26 The 1997 MOU is an agreement with wildlife agencies and the County Fire Chiefs. The current and proposed brush management regulations for the City of San Diego do not allow discing within Brush Management Zone Two.

F-27 The proposed ordinance does not include grading or grading of soil in zone 2 and zone 1 is not allowed on steep slope, therefore no precise quantification of brush management zones on steep slopes is required for the analysis in the SEIR/EA.

areas of steep slopes and erodible slopes. Again, it would be better to recognize the worst case scenario that brush removal, thinning and the harding of soil will result in erosion. This erosion impact can be reduced to below a level of significance by public education to prevent full plant removal, tree removal and the use of soil-damaging equipment and techniques. Also, actions such as requiring clipped vegetation to be placed over all slopes is effective in reducing erosion and preventing invasive proliferation. Studies show that clipped vegetation is much less flammable than standing vegetation, due to the packing of the matter which prevents air (oxygen) from being available for ignition.

F-28

Comment noted.

6). A determination needs to be made as to the cycle of thinning that may be required as well as advantages to the time of year that this thinning should be done. This management data would indicate that many highly flammable materials would grow back in 2-3 years. This is probably unrealistic and may negatively impact the habitat. Some guidance is needed, perhaps a minimum of 5-year maintenance cycle. The public needs to understand that the desired "50%" refers to area of soil covered by the remaining plant canopy after thinning and pruning not a requirement to take away half of the existing vegetation. This is critical: if the vegetation is already sparse, it may not be necessary to remove very much to achieve 50% coverage.

F-29

This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

7). Given the realities of limited budgets, areas with steep slopes and heavy fuel loads adjacent to inhabited structures should receive a higher priority for fuel management compared to areas with lower fuel loads. A "one size fits all" management zone, with all city-owned lands being held to the same standard of conformance, will expose the city to liability, since it will not be able to give all areas the same level of care, due to the limitations of maintenance cycles, budgets and differences in growth rates on different sites.

F-30

Comment noted.

However, if the ordinance provides a definition for high priority fuel management, then liability would be reduced even when all areas are not treated in a given year. Vegetation with high levels of fuel should receive different priorities for fuel management. Areas that contain small-dimension fuel and deadwood should receive a higher priority than areas that are already quite open in character, or riparian areas with year-round succulents in all plants. Grasslands that support vigorous stands of fast-growing annual exotics such as mustard or fennel should be considered as a high priority due to high fresh fuel fire movement, while low native grasslands may pose a very low fuel risk.

F-31

This comment addresses the merits of the project, not that accuracy or adequacy of the SEIR/EA. No response is required.

8) The city should research and make recommendations for the use of controlled burns or use of goats or other livestock to reduce fuel. Controlled burns may be risky and increase liability. Goats, which might be useful to reduce fast-growing invasive annual exotic vegetation on weedy lands, or after shrubs have been thinned and pruned, are not well suited for methodically thinning or eliminating deadwood in shrub stands, and so should not be used indiscriminately.

F-32

Prescribed burns is an alternative that was considered but rejected in the SEIR/EA. The prescribed burn alternative analysis is on page VII-5 of the SEIR/EA. Controlled grazing by goats is discussed on page VII-4 of the SEIR/EA.

9). Though the ordinance is based on vegetation fuel management, all information from the City needs to continue to emphasize the need to modify building codes for properties bordering on open space. The real solution to limiting property damage from fires is not fuel management in Zones 2. It is the proper use of fire-safe construction materials

F-33

Comment noted.

(including roofing, windows, screens, vents, eaves, siding, decking, soffit enclosures and fascias), the prohibition of small-dimension wood construction (such as trellises, gazebos, fencing, auburn enclosures, balconies, ornamental trim and decks) and the proper guidance for new development that provides adequate and defensible barriers such as perimeter parks, parking lots, large roads, etc., designed into the community layout to reduce exposure of homes to flying embers during high-wind wildfires and to create defensible spaces for firefighters to stage their attacks.

The Board wants to especially recognize one of its members, Mike Singleton, ASLA & ANCP, for his leadership role in reviewing subject documents and compiling these comments.

Thank you for allowing the Community Forest Advisory Board to comment and for considering our input.

Sincerely,



Nancy J. Hughes
Chair, Community Forest Advisory Board

(C:\FAB\Letter\VisesOnDesign\Gardner.Jms)

Comment Letter G

1132 Performance Place
San Diego, CA 92123

July 9, 2004

Allison Ramp
Environmental Planner
City of San Diego Development Services Center
1223 First Avenue, MB #501
San Diego, CA 92101

RE: Draft Supplemental EIR/EA (04-1193) for Brush Management
Regulations to the Land Development Code and Federal Grant from the Office
of Emergency Services (OES), Federal Emergency Management Agency (FEMA)

Dear Mr. Ramp:

I was not able to find any scientific or academic documentation in this
document regarding the proposed brush management ordinance changes that
would justify such unannounced environmental destruction for which the
City of San Diego refuses to require any mitigation. What scientific
research was done to support these rule changes?

Mitigation - the City of San Diego's refusal to mitigate. Whenever the
report stated that "Mitigation is available to mitigate the potential
significant impacts." It is followed by a statement that, "This
mitigation however, has not been agreed to by the applicant."
(Mitigation Monitoring and Reporting Program). This means, per city
ordinance of 2880 refers to the brush ordinance, that FOUR AND A HALF SQUARE
MILERS of native habitat within the City of San Diego will be impacted
without mitigation. That represents over one percent of the total land
area of the city of San Diego, not just open space. If the City were to
require structures to be made fire resistant instead of using brush
management, for which there is no scientific evidence provided for its
efficacy, then mitigation would not even be necessary.

Qualitative effects: Under CEQA, the report should consider the
qualitative effects of this proposal, yet it does not in the following
statements: "Consecutive brownwater resulting brush management next to
the gutterhouse causes residents to be abandoned or baby birds to not
be fed? Would the "temporary" watering over several years increase the
amount of groundwater down the slopes of anyone, increasing plant
growth outside the management zone, and subsequently increasing the fuel
load, especially when watering ceases and there is less water to support
the added growth? Would the accumulation of groundwater in the slope
increase the danger of landslides because the soil is already nearly
saturated when winter rains begin? (The proposed ordinance states:
"Overseer and runoff from the irrigation shall not drip or flow into
adjacent areas of native or water-shed vegetation." This does not
appear to restrict deep watering that could flow into ground down the
slopes.) What are the cumulative effects of denuding such a large area

G-1

The comment addresses the merits of the project, not the accuracy or
adequacy of the SEIR/EA. No response is required.

G-2

The SEIR/EA acknowledges that the impact is significant since mitigation
is not proposed.

G-3

Mitigation is now provided for potential impacts to grasslands as
described in Section V.B of the SEIR/EA.

G-4

Temporary irrigation will not increase the amount of groundwater, nor
would it increase fuel load. Temporary irrigation within Brush
Management Zone Two is provided for plant establishment only when
existing vegetation does not meet coverage requirements.

G-5

Current and proposed regulations require thinning of existing vegetation
within Brush Management Zone Two. It is not anticipated that large areas
of bare soil would be exposed.

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G-6 The ordinance does not authorize denuding of all vegetation, but requires a 50% reduction in fuel load which includes plant coverage of 50%.

G-7 Refer to comment A-12.

G-8 Landfills provide areas for green waste disposal which is mulched for re-use.

G-9 Current regulations require that native or non-irrigated, low fuel and fire resistant plants be planted within Brush Management Zone Two. (a) plant is not a native plant and therefore is not allowed to be planted. This regulation is existing and no proposed change to the language is proposed.

G-10 Comment noted.

G-11 The comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/BA. No response is required. The draft SEIR/BA does address cumulative impacts insofar as it has a citywide focus.

G-12 Comment noted. Potential erosion while performing brush management activities is dependant on the soil type and slope factor of the area, if any. A sandy soil type will be potentially impacted more than a clayey soil type. The hydrology of an area is also dependent on the soil type. A sandy soil has larger void spaces between the grains of soil and will be able to absorb more moisture when monsooned.

G-13 Refer to comment D-36 and F-10.

G-6 that increases the amount of sun exposure to the soil? What is the cumulative effect of reducing habitat for smaller animals, birds and insects to the overall health of the ecosystem? How does this potential reduction in prey impact larger animals and birds of prey?

G-7 Disposal of waste material from brush management: There is no assessment about the disposal of the large volume of plant material discarded. The report states that over four and a half square miles of land would be filled by fifty percent. That is a huge amount of biomass to add in one land fill, or worse, tossed down into everyone to save the homeowner from having to pay to take it to the dump.

G-9 Invasive Plants: The regulations propose that "All new plant material for Zone Two shall be native or non-irrigated, low-fuel, and fire-resistant" if outside the MHTA, which is over 2000 acres. (Draft Ordinance Amending the Brush Management Regulations 143.0412 (b)(5)(XAA)) This means that it is OK to plant things like non native tree plant that is extremely invasive and destructive to our native habitats. The proposed restrictions regarding invasives every one to three years. In three years, the fuel load of invasives could easily surpass the danger of the native plants that were "allowed", thus the thinning of natives could actually increase the fire danger making the brush management program self-defeating. Example: A fire last year in Redfin Canyon burned almost exclusively the invasive plants that had migrated from residences (palm, Brazilian peppers, monkey grass, mustard and ice plant (yes, it burned it to a crisp). Now natives naturally burned, suffering mainly heat damage from the burning non-natives. Most of the natives have recovered, as, unfortunately, did the palms. If there had not been any non-natives, the fire would have likely been a lot less robust.

G-10 Mayor Stadler V.A. states: "Currently, there are no timing restrictions on brush management activities and no changes are proposed with this project." Why not? This simple regulation of timing could reduce the impact on nesting grasshoppers and other species. Also, the cumulative impact on nesting of a number of nestbirds doing brush management was not considered.

G-11 Hydrology and Erosion - Section V.C.: Based upon my experience doing soil observing restoration work in open space easements, brush management will disturb the existing soil conditions. These doing brush management on steep slopes will physically erode the slopes while trying to maintain their footing. This erosion will then be further exacerbated when rains wash away the disturbed soil and rocks. The slopes will be exposed to greater amounts of sun. The sun baked soil will absorb less water and, in combination with the naturally reduced vegetation to slow the impact of rain, the runoff velocity will increase. This combination could lead to both increased erosion and a reduction in the water table. The latter could reduce the ability of the land to support the native vegetation below the brush managed zone.

G-13 Brush Management and Regulation Training: The proposed brush management ordinance does not require persons doing this work to be trained or demonstrate that they know what they are doing or what the regulations are. This is despite the City's own documentation at 25 brush management sites that demonstrated a universal problem with property owners not following the current regulations.

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Neighborhood Characteristics and Mature Trees. The proposal states that mature trees are protected in Zone Two because they may not be removed. However, the ordinance states that fifty percent of all plants over 18 inches will be cut to six inches. If a property owner cuts a fifteen foot tree or ten-foot shrub to 6 inches, you no longer have a tree, even if the stump remains. And the property owner could choose to cut all the trees under the fifty percent rule, leaving a wasteland. Thus, the property owners are allowed to easily deplete (cut to six inches) the trees without permits, all the large evergreen native shrubs and trees. This will probably change the characteristics of canyons from lush oases in the heart of the City into barren wastelands. Canyon properties are some of the most sought after homes in San Diego. This would radically change the neighborhood's character and could even reduce property value (reducing property taxes).

G-14

The proposed brush management revisions are not changing the standards except for when new trees are planted on a property.

Perennial Irrigation - Zone One: There is no provision to allow a property owner to irrigate using irrigation if they are native trees that are not summer-dormant. Why?

G-15

Brush Management Zone One requires permanent irrigation as a part of defense from potential wild fires. A property owner may want non-irrigated, native trees that are not summer-dormant within Brush Management Zone One and would have to be approved by Fire-Plans Officer.

Revegetation: Why is it OK to re-plant fifty percent of the area with plants that do "not" grow taller than twenty four inches, and "the remaining planting may be planted with taller material, but this material shall be maintained in accordance with the requirements for existing plant material in Zone Two." Does this mean that if someone clears away every plant and replants, they are put in twenty four inch plants and the rest with taller that they then have to thin fifty percent to six inches (6 total of twenty five percent of all plants), or do they have to subsequently remove 50% of those to six to six inches? Why are they allowed to plant 24 inch plants when 18 inches is the max for the thing itself? (MGNF) and (D) are in conflict.

G-16

This section does not allow clearing, rather it allows new planting if existing plants do not meet the 50% coverage standard.

Sharonely,

Bonnie Hough, MD

Chair, Friends of Ruffin Canyon

Designated Community Representatives to the Open Space Canyons Advisory Committee, City of San Diego Department of Parks and Recreation

Comment Letter H

Debi Ridenour, Environmental Chair
Friends of Sunset Cliffs
1071 Sunset Cliffs Blvd.
San Diego, CA 92107

Allison Reap
Environmental Planner
City of San Diego Development Services Center
1922 First Avenue, MS 501
San Diego, CA 92101
Rosell DSD/EAS@ssodiego.gov
SUBJECT
Project No. 31245, SCH No. 2004031041
Draft SEIR/EA JO-1193
Brush Management Revisions to Land Development Code

July 9, 2004

The Friends of Sunset Cliffs would like to ask the City to create categories of land that would not be subject to Brush Management due to certain criteria. Sunset Cliffs Natural Park is an example of this type of exception.

1. The 50 acre Hillside Section is entirely MHPA in a dedicated city open space park. This is the only City owned coastal bluff open space park south of Torrey Pines.
2. The park is bounded to the west by the Pacific Ocean with developed residential housing separated by a street to the north and a well irrigated landscaped college to the east and the south boundary is Navy property.
3. To the east is San Diego Bay, thus any eastern wind driven fires would not likely cross this water barrier.
4. Brush management in this park would destroy the efforts to re-vegetate with native coastal sage scrub and link this vital wildlife area with the 640 plus acres of federally protected ecological preserve to the south.
5. The most viable wildlife habitat area is the Northwest Canyon which adjoins the PLNU campus. This canyon is so narrow that 35' of Zone 1 type clearing would denude this small but unique island of refuge for wildlife. There are roads and fire hydrants on the PLNU campus right on the edge of this lovely canyon. Some discussion must be allowed to retain this habitat.

The Friends of Sunset Cliffs has two main concerns:

1. Can adequate notice be given if Brush Management is to be scheduled?
2. Can exceptions to Brush Management be made for areas that have unique potential value to habitat and plant communities and as in this case, are not likely to be subject to catastrophic wild fires and have adequate fire defenses for the developed areas adjacent?

H-1 Comment noted.

H-2 The City of San Diego Park and Recreation Department is responsible for the brush management activities within city owned open space.

H-3 Brush management activities occur to protect structures for potential wild fire hazards. If there are no structures within an open space park, then no brush management activities would occur. Therefore, open space parks would not be impacted by the proposed revisions to the brush management regulations.

H-4 Refer to comment H-2.

H-5 Specific requests should be dealt with through the Fire-Rescue Department and the Park and Recreation Department.

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Thank you for the opportunity to comment on this SEIR. We look forward to your answers.

Sincerely, Debi Ridenour, Environmental Chair of Friends of Sunset Cliffs



Comment Letter I

SAN DIEGO AUDUBON SOCIETY
4891 Pacific Highway, Suite 112 • San Diego CA 92119 • 619/682-7200

July 8, 2004

Via email: DSDEAS@sandiego.gov

Chris Zirkle, Assistant Deputy Director
Development Services Department
City of San Diego
202 C Street
San Diego, CA 92101

Dear Mr. Zirkle:

Subject: Comments on SEIR for Brush Management Revisions
to the Land Development Code, Project No. 31245

The San Diego Audubon Society supports the comment letters submitted by the Native Plant Society and Center for Biological Diversity letters on the subject document. We are concerned that this Subsequent Environmental Impact Report (SEIR) does not adequately describe the potential environmental impacts of the project and does not satisfy the minimum requirements of the California Environmental Quality Act.

We realize that there is a strong need to quickly reduce our vulnerability to wildfires for this fire season. This document was done very quickly with very shallow investigation and analysis to meet a very short deadline. But this inadequate document is meant to guide brush management over thousands of acres for many years. We urge that a temporary ordinance be adopted based on this document for this fire season. Then initiate a better defined and reasoned procedure, a better environmental analysis, including the impacts, appropriate controls, and needed mitigation, and an adequate SEIR be produced for subsequent years.

THE PROJECT IS NOT CLEARLY DEFINED

On the second page (unnumbered) of the document, it explains that the proposed policy is based on the current Brush Management Regulations of the Land Development Code adopted in 1997, but extends the Zone Two to 65 feet in most cases. Page S-1 states that under the current regulations, "Brush Management Zone Two is an area of native plant material thinned to 50% to reduce fuel load."

However, the procedure for clearing appears to be thinning out 50 percent of the plants over 18 inches in height to a height of 6 inches, then pruning the remaining plants to reduce fuel loading. Thus the reduction in vegetation is far more than 50%. The SEIR does not define or limit the amount of the additional pruning. If these plants are limited up to their height (to reduce the fuel ladder effect), and their diameter reduced by 25% (a very typical pruning practice), the pruning alone could reduce the volume of the vegetation remaining to about 28% of the original volume. This, in conjunction with the 50% thinning would result in leaving about 14% of the original vegetation. But the document implies that is just an extension of the 1997 Zone Two to 65 feet, which has a fuel reduction of 50%. So the mass of the vegetation remaining could be down to 14%, not 50% depending on what is meant by pruning. The

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Comment noted.

Comment noted.

The proposed revisions to the Brush Management Ordinance relates to the widths of Zone One and Zone Two, not to the procedures to perform brush management activities. The revised code section 142.0412 (b)(3) states:
"Within Zone Two, 50 percent of the plants over 18 inches in height shall be reduced to a height of 6 inches." Revised code section 142.0412 (b)(4) states: "Within Zone Two, all plants remaining after 50 percent are reduced in height, shall be pruned to reduce fuel loading in accordance with the Landscape Standards in the Land Development Manual." These procedures are not proposed to be changed; however, the language within the code was revised for clarity. The brush management ordinance discusses the thinning of plants to 50% coverage within zone two. The brush management procedures may reduce the vegetation mass over 50%, but the plant coverage shall remain at 50% within zone two.

impacts will be dramatically different. The SEIR needs to state what level of fuel reduction this project will leave/remove in Zone Two

I-4 The SEIR/EA analyzes impacts associated with the proposed revisions to the Brush Management Ordinance, not the provisions which are not proposed for change.

I-4 As such, the document leaves great uncertainty in what will actually be done under the project and it is impossible for a decision maker, the Environmental Analysis Section, or a reviewer to assess the magnitude of the impacts. Clearly this vague project identification does not satisfy the letter or the spirit of CEQA.

IMPACTS OF SUBSEQUENT MANAGEMENT EVENTS

I-5 The procedure appears to be based on managing the fuel on a naturally vegetated site. After the first year's brush management, much of the natural scrub vegetation will recover, but some of it will not, depending on weather and a variety of circumstances. So, each year the baseline will tend to be less, and the amount remaining after fuel reduction will be less. If 90% of the vegetation recovers each year, at the end of 10 years the amount of vegetation will be down to 95%. This progressive reduction of scrub vegetation is a real impact.

I-6 The procedure needs to be revised so that after the vegetation gets down to some defined level, management will be based allowing a fixed level of vegetation (fuel) to remain, not an ever decreasing one. In that way, the SEIR can actually evaluate the long term impact of the project on biological resources and on water quality. If not, the SEIR needs to be expanded to address the environmental impacts of the very likely long term progressive loss of native vegetation in Zone Two.

SAME CRITERIA APPLIED TO SPARSELY VEGETATED SITES

I-7 This procedure of thinning to 50% and then pruning to some percent is applicable even if there are only a few plants and they are a great distance apart. This does not satisfy the stated purpose of the project as there is little likelihood that fire would be supported by the sparse vegetation. Situations like this will have very serious water quality and wildlife movement impacts. As stated in the previous paragraph, there should be some density of native vegetation below which there would not be any thinned or pruned.

DOCUMENT SHOULD INCLUDE A MORE ENVIRONMENTALLY PROTECTIVE ALTERNATIVES

I-8 The document mentions that the brush management required by the previous brush management regulations was not adequately implemented throughout the City. Those ordinances were carefully thought out to maximize protection and minimize environmental impacts. The EIS should have identified and analyzed an alternative in which education and enforcement would be adequately applied to fully implement the previous ordinances vs. establish new orders. The analysis of such an alternative would help determine whether investing in better enforcement would be more effective and more achievable, with a limited budget, than trying to implement larger brush management areas.

A LESS DAMAGING ALTERNATIVE

I-9 An alternative that includes a more comprehensive approach to brush management should be identified and evaluated. In the past Development Services has identified many native plants that are reasonably low in fuel value. It also identified some natives and non-natives that were not. We urge that the SEIR define and analyze an alternative in which thinning and pruning would begin with removing the most flammable and most invasive species of plants. Next would be the more flammable natives. The less flammable and more environmentally sensitive native plants would only be reduced if necessary to get below a defined protective fuel load that considers the actual species distribution.

I-5 Brush Management Zone Two requires 50% of the vegetation to be thinned and is not necessarily performed on an annual basis. New plantings are allowed in order to maintain 50% coverage. This is an existing provision that is not proposed to be changed with the revised ordinance. In general, thinning of Zone Two occurs every two to three years. However, vegetation types vary and the Fire Marshall has the authority to require thinning as needed.

I-6 Refer to comment I-4 and I-5.

I-7 Refer to comment I-5.

I-8 Refer to comment D-36.

I-9 This identification of plant types has been added as an alternative to the SEIR/EA. Refer to Section VIII, under Alternatives considered but rejected, alternative number three, page 7.

Conceptually an area that has 50% coverage of vegetation that is more resistant to fire like lemonade berry, sugar bush, cholla, etc. with no annual weeds would probably provide much more fire protection than one covered with acacia, amudo, and Pampas grass, that has been cleared to a level of 40%. The 60% area would also have a great deal more habitat, water quality, and erosion prevention value, and would have a better chance of resisting invasion by future flammable annual weeds. This more electrolytic management would require that the people doing the clearing would have to know what they are doing. But, as with most tasks performed in the City, if we are going to do an effective job of providing effective defensive space the people doing it will have to know what they are doing. We strongly urge that a more discriminate clearing and thinning alternative be defined and analyzed.

I-10

Refer to comment D-36.

ASSUMPTION THAT BRUSH MANAGEMENT WILL OCCUR CONSISTENT WITH THE REGULATIONS

The above assumption was mentioned a few times in the SEIR including on page 11-6. It is not a reasonable assumption. The impacts of the project should be assessed using a more realistic assumption of some over-implementation. And the project should include adequate enforcement to minimize the damage of inappropriate thinning and pruning.

I-11

Refer to comment D-9.

It should be remembered that at least one of the most popular local television news programs reported on the Council hearings on this issue several times. Based on those hearings they repeatedly reported that residents are required to "clear" brush out to at least 100 feet and that penalties would be applied if they did not. They also reported that such clearance was required in a few other stories in subsequent weeks. When contacted they claimed that any discussion of thinning was too complicated for a news broadcast. When challenged, they claimed that City authorities corroborated their interpretation. Faced with this sort of mass misinformation it is very likely that management that is done is very likely not to be consistent with the regulations.

I-12

This comment does not address the adequacy of the SEIR/EA. Therefore, no comment is required.

Also there are many so-called experts trying to sell their brush clearing services to residents. They tend to follow a pattern of scaring the potential customer by overstating the risk of the nearby vegetation, doing some cheap and draconian clearing, explaining how much "safer" the customer is after the clearance, and telling that customer's perception of safety to get other customers.

I-13

Comment noted.

This project needs a major effort at public education, media education, and enforcement to try to get brush management to be done in an appropriate way, to manage fire risks and to protect the environment and water quality. This should be identified as a required mitigation measure, with monitoring of its effectiveness, in the SEIR. Otherwise it should not be assumed that brush management will occur consistent with the regulations and the SEIR should evaluate and offer mitigation for the impacts that will result from the reasonably foreseen excesses.

I-14

Refer to comment D-36.

GOATS FOR CLEARING

The document asserts that having goats graze in a Zone Two area for two or three days is equivalent to Zone Two thinning. However, the document provides no information to support that assertion. There are serious risks involved with thinning using goats. When goats forage in a weedy area, the seeds of those weeds will be distributed wherever they graze next. This is likely to exacerbate the weed problem. Goats are reputed to disturb the soil leaving it vulnerable to erosion. Goats tend to browse on leaves, which are typically the least flammable portion of a plant. Reducing fuel load depends on removing dead wood. Removing the wood would tend to cause healthy broadleaf evergreen shrubs to weak, dying, or dead shrubs which are more fire prone. The reduction in healthy shrubs is likely to accelerate the take-over of weeds. Goats also eat small animals when they find them. The project does not address what sensitive reptiles, rodents, insect larvae, etc. will be devoured by the goats.

I-15

Whether brush management activities are performed by humans or goats, weed invasion in thinned zone two brush managed areas will still occur.

We do agree that goats might be quite useful for helping to maintain areas that are covered with exotic weedy annuals and grasses.

During the scoping phase of this project we were assured by relevant City employees that well monitored tests would be performed to answer any questions about the value, and the problems with the use of goats for a range of vegetation types, slopes, and soil types. We were told that, in spite of common perceptions, that the tests would demonstrate the safety and effectiveness of their use. This only result that we could find in the SEIR was that clearances with goats costs about half what it cost for human workers. We did not find any of the information needed to assess the environmental impacts of using goats.

For a test to be conclusive, it would have to be run over more than one year to determine the actual environmental impact occurred - what level of weeds result, which species of desirable plants survived well, which barely survived, which were eliminated by the goats, what fuel load and flammability resulted, and how much erosion occurred or did not occur during the subsequent winter(s).

Due to the lack of real information on the environmental impact of pruning and thinning with goats, we urge that it be deleted from the SEIR. If goats are to be used later, a separate CEQA review including the results of the needed tests should be provided. The optimistic assertions of the current SEIR are totally unsupported, and are not acceptable for a CEQA document.

EXPANSION OF WEEDY SPECIES

In several places, the SEIR mentions that thinning of native vegetation will result in an increase in non-native annual weeds. The periodic cutting back will tend to reduce the population of native perennials and enhance invasive annual weeds. The SEIR mentions this issue but does not provide any estimate of the rates of invasion that can be expected and how they would affect the environment and public safety.

While many weeds do not have the high heat of combustion of some of the woody natives, they ignite far more easily. Native scrub vegetation grows slowly, so that fuel management could probably be done every five or so years. Annual weeds can grow within a few weeks to a dangerous level in some circumstances. So, it may well be that excessive thinning and pruning of native scrub vegetation could turn a manageable problem into one that would require clearance five or six times a year - which would be totally unaffordable and even less likely to be accomplished than our historical insufficient level of weed maintenance.

One potential measure to mitigate this problem is to include a weed control element and adequate enforcement of it in this project. There are a number of possibilities. None are identified.

The SEIR should provide analysis telling what degree the expansion of weeds in the Zone Two areas, and beyond, will result from the project. It should be based on existing models and on local vegetation of the modeling. Further, it should provide analysis of the potential increase in vulnerability to fire that could result from a poorly managed thinning and pruning policy. The potential that this policy might result in a higher fire safety risk under some circumstances should be identified, analyzed, and measures to offset it fully implemented.

EROSION

On page V.C-13, the SEIR states that 25 brush management sites were analyzed for erosion impacts and only two showed erosion. While not stated, it sounds as though these sites were all cleared by human workers. But, it is not clear when the brush management had

I-16 Further studies will be conducted by The City of San Diego to determine the effectiveness of utilizing goats for brush management activities.

I-17 Refer to comment I-16.

I-18 Refer to comment I-16.

I-19 Invasive species are analyzed on page V.B-31 of the SEIR/EA.

I-20 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

I-21 Refer to comment I-20.

I-22 Expansion of weed within Zone Two on a citywide basis is speculative at best. Refer to Appendix B of the final SEIR/EA regarding the amount of weeds found within areas that are currently brush managed.

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been done and how much rain had occurred since the brush management. Also the clearing had been done under the current ordinance which required 50% fuel reduction. This does not appear to be relevant as a predictor of performance for the new ordinance in that it requires 50% thinning and then considerable pruning which is far more reduction in vegetation, as mentioned in a previous paragraph.

The worst erosion occurs when we get a heavy rain event after the soils are already saturated. Considering the minimal rain in the last few years, a test depending on natural rainfall would not provide any information about what would occur when there is a serious rain and a serious risk of erosion. An adequate simulation could probably be made using a carefully designed artificial rain system, but the document does not indicate that this was done.

There are real public safety risks from erosion, flooding, and mudslides. The document needs to seriously evaluate the impacts of this project on these risks as well as the impacts to water quality, waterways, and wetlands.

As such, the document does not provide information to support the assertion that impacts to erosion would be less than significant. We urge that the erosion risk of the proposed policy be more fully evaluated, using more representative rainfall levels, and that measures to mitigate that risk be implemented in the project.

WHAT IS A STRUCTURE?

The document discusses clearing a zone around structures. What structures require clearance? Is the estimate of project impact based on a management zone around occupied homes and businesses? Or is a buffer to be required for patios, gazebos, sheds, fences, outbuildings, stables, etc.? If it is the latter, could the environmental impact of the project be reduced by requiring management only around the former? The definition of "structure" in the context of this project should be included in the SEIR to allow decision makers and reviewers to make this sort of assessment.

IMPACTS TO BIOLOGICAL RESOURCES

The document mentions that there will be 188 acres of gnatcatcher habitat effected by this project. This is very significant. However it does not quantify the acres of habitat of other species or the number of individual plants or animals of each sensitive species that will be taken by this project. A well supported estimate of each of these numbers must be included in this SEIR.

MITIGATION DEFICIENCIES

The measures currently included in the project clearly do not reduce the impact to below a level of significance. This might be done if many of the measures mentioned above were implemented effectively. If not, a large amount of mitigation will be required. There would be absolutely no justification for the City to attempt to over-ride these impacts.

On the fourth (unnumbered) page of the document it was pointed out that impacts to nesting gnatcatchers will occur since there is no limit on the time of year that thinning may occur. This impact, and the impact on other threatened and endangered species should be identified and mitigated, but the applicant has not agreed to such mitigation. The document mentions mitigation for gnatcatchers about would be 198 acres. We urge that mitigation be implemented for the potential loss of gnatcatchers. We also urge the mitigation needed to offset the loss of other sensitive species that will be effected and the loss of each habitat type and tier of MHPA be identified and that sufficient mitigation be provided for each.

Refer to comment I-3.

Comment noted. Erosion gullies are viable long after rain events and would have been identified within Appendix B of the draft SEIR/RA.

Existing brush management activities have not created these types of problems. The proposed project would expand zones one and zone two to total no more than 100 feet. The proposed project would not change any other practices. Therefore, existing erosion from brush managed areas is considered to accurately reflect future conditions.

Refer to comment I-25.

Refer to 142.0412(b)(2) in the draft brush management ordinance.

"Structure" is defined by the Land Development Code as "an edifice or building of any kind or any construction built up or composed of parts joined together in some definite manner including a wall, fence, pier, post, sign or shelter".

Refer to comment A-12. A city-wide survey was not conducted.

Estimates were completed using 1995 Multiple Species Conservation Plan (MSSCP) CES data. Estimates of impacts from future development would be speculative. Staff disagrees that more definitive data is required.

Refer to comment D-4.

Comment noted.

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On the same page the document mentions that the project will result in the establishment of invasive plant species in brush management Zone Two and possibly down slope and that mitigation should occur. Apparently the applicant did not propose such mitigation. Unless measures are included in the project that will fully offset the invasion of the weedy species that will result from the project, we strongly urge that such mitigation be provided.

For follow-up, the undersigned can be reached at 619-224-4561 or poughn@cox.net.

Respectfully,



James A. Pough
Conservation Committee Chair

I-31

Comment noted. Findings and Statement of Overriding Considerations are proposed to address the significant unmitigated impacts associated with invasive species in Zone Two.



Comment Letter J

San Diego County Archaeological Society, Inc.

Environmental Review Committee

10 July 2004

To: Mr. Chris Zirkle
Assistant Deputy Director
Development Services Department
City of San Diego
1222 First Avenue, Mail Station 501
San Diego, California 92101

Subject: Draft Subsequent Environmental Impact Report/Environmental Assessment
Brush Management Revisions to the Land Development Code and Federal
Grant from the Office of Emergency Services (OES), Federal Emergency
Management Agency (FEMA)
Project No. 31245

Dear Mr. Zirkle:

I have reviewed the subject DSEIR/EA on behalf of this committee of the San Diego County Archaeological Society.

We pointed out in our letter of 14 March 2004, in response to the Notice of Preparation for this project, that brush management activities could damage archaeological resources if the clearing operations is done mechanically, or outside the brush clearance zone, where vehicles and equipment travel to access the worksite. The DSEIR/EA fails to address this potential direct impact. Several means of doing so exist, including:

- J-1 • Prohibiting use of vehicles and mechanical equipment in brush clearing operations except over existing roads.
- Survey of project areas by a qualified archaeologist prior to clearing operations, with appropriate actions taken in sensitive areas.
- Monitoring of the operation by a qualified archaeological monitor.

J-2 Similarly, we noted that indirect impacts to archaeological sites could result from exposure of sites to illegal collecting. The DSEIR/EA also fails to address this impact.

J-3 The DSEIR/EA, in Section IX, takes the position that even no-grubbing or grading would be required; there would be no potential for impacts to archaeological resources. Archaeological sites can be fragile and damaged by wheel loadings. Imagine a truck wheel going over pieces of

The ordinance proposes "thinning" not "clearing" as the comment letter indicates. In Section IX of the SEIR/EA, the proposed brush management activities do not include any surface or subsurface disturbance. Pruning and thinning activities would all take place above ground and no grubbing or grading would be required. The amount of thinning would not increase the visibility of potential surface resources. Vehicular traffic to perform brush management activities could not occur off of existing roads without a separate permit. Therefore, no impacts to archaeological resources would result from the proposed project.

Refer to comment J-1.

Refer to comment J-3.

policy, for example. The current document does not recognize this impact or provide the necessary impact analysis and appropriate mitigation.

Thank you for providing this environmental document to SDCAS for our review and comment.

Sincerely,



James W. Boyle, Jr., Chairman
Environmental Review Committee

cc: SDCAS President
File

Serra Mesa Planning Group

Post Office Box 23315 San Diego, CA 92118

July 7, 2004

Allison Raup
Environmental Planner
City of San Diego Development Services Center
1722 First Avenue, MS #501
San Diego, CA 92101

RE: Draft Supplemental EIR/EIS (JD: 1193) for Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA)

Dear Ms. Raup:

On June 18, 2004 the Serra Mesa Planning Group passed a motion (8-0) to respond to the EIR/EIS with these comments:

- There's information in the EIR document that is not factual.
- More scientific research is needed.
- Better public education is needed.

Listed below is a more detailed analysis of the EIR/EIS and explanation for our comments.

The justification for these regulations is stated as: "Brush Management Zones were established in the City of San Diego Land Development Code to protect habitable structures from potential fire damage and provide thinning of native vegetation to reduce the amount of fuel for a potential fire and allow for access to vegetation for fire personnel." (City of San Diego Brush Management Evaluation Biological Technical Report)

Nowhere in this EIR/EIS does any scientific or anecdotal evidence to support this increase in the unmitigated destruction of our native habitat, including in the "Reference" section. What evidence is there that this proposal will really produce an "effective fire break", as it espouses? Many of the homes that burned in the catastrophic fires of 2003 either had shrubbery next to the homes that did not burn or had areas cleared in excess of these regulations. Neither factor appeared to be key to a house burning. The flammability of the shrubbery seemed to be the critical element. These destructive proposals would not have made a difference. What would have made a difference would have been structures that were much less inflammable. Yet the city does not take that approach. This could lead residences into a false sense of security.

K-1

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

K-1

K-2

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

K-2

In general, A simple comparison showing the performance of areas burnt that had recently burnt brush burned compared with those that did not would have either proved or disproved the effectiveness of the proposed changes to the ordinance.

The fact is that large wind-blown fires are primarily affected by the implementation of brush management thinning. Small fires are very defensible given the 30' Zone 1 approach and do not require Zone 2 thinning. Only a small number of mid-range slower moving fires would receive a positive affect from thinning in Zone 2. We are not convinced that the positive benefits outweigh the negative impacts. However, if the ordinance is to be implemented, then all possible alternatives and impact mitigations must be considered by the EIR.

The 32nd Street Canyon Task Force is concerned that the emphasis on a "one size fits all" brush management policy that is not clearly defined and without scientific basis will result in excessive clearing of native vegetation and tree removals. Some slopes would not require a 50% reduction in fuel while others are likely to need more than 50%. We are especially concerned about the negative publicity that trees (native or non-native) are receiving from the press and city representatives. This is despite the well-known principle that effectively thinned trees represent a very low fire hazard. Photo after photo of large trees still standing around residences, often staged on the inside from the house fire but unaffected on the other side, were common after the Cedar fire. It appears that these changes to the brush management plan are motivated more by political expediency and vanity than science or research.

Specific Comments for Alternatives in the Draft Environmental Impact Report for the revised "Brush Management Plan"

8). An alternative allowing the replacement of highly flammable natives with low flammable natives was considered to have significant impacts based on the assumption that supplemental irrigation would create significant impacts. This is inconsistent with the language of the brush management ordinance, which allows for a supplemental temporary irrigation. To assume that all supplemental irrigation will result in trees that will create impacts to biology, erosion, and water quality is not supportable. An effectively established native zone of low flammable vegetation is the best solution for fuel management and would result in fewer impacts to biology, erosion and water quality. Most native vegetation is not negatively affected by additional moisture, though direct aerial spray of some natives can create problems. However, this alternative should assume that non-aerial spray irrigation techniques would be used (hubbler, low flow flood and drip). Moisture in the environment is a solution to fire spread, not a contributor. The conclusions of this alternative are not appropriate and should be reconsidered.

Any property owner that chooses an alternative fuels management approach should be allowed to apply for alternative conformance under a ministerial permit if the application meets important conditions and findings. Approaches allowed under this alternative conformance should include:

- 1). The phased replacement of highly flammable native vegetation with other sustainable native vegetation that has a significantly lower fuel index, utilizing accepted standards such as the immediately list of natives provided by the California Native Plants Society.
- 2). For those existing properties (prior to 1980) that do not have a full 35' around the structures because some or most of this distance is on slopes, the property owner should be allowed to plant and irrigate non-native or native low-fuel species. Invasive species would not be allowed

M-3

Refer to comment F-2.

M-4

Refer to comment F-3.

M-5

Refer to comment F-4.

M-6

Refer to comment F-5.

M-7

Refer to comment F-6.

M-8

Refer to comment F-7.

need to native areas on these slopes. Irrigation would be recommended to be temporary, but allowed under certain conditions, the irrigation should be allowed, by permit, to be permanent.

3). Allow for the use of irrigation systems (temporary or permanent) during Santa Ana conditions or other official fire hazard warning conditions to help reduce the risk of fire. Restrictions on irrigation practices and types of irrigation would need to be put in place to discourage excessive brush growth, runoff, or the support of non-native invasives that might increase flash fuels. Accommodation in the ordinance (by right or permit) should be made to include the use of special purpose irrigation systems designed for fire protection of the structure or grounds.

M-9

Refer to comment F-8.

6). The inclusion of a public education program was an alternative considered, but rejected (VII-4). It is stated that these educational materials are already available. However, many of the materials are contradictory and do not provide enough specifics related to the City of San Diego Brush Management Ordinance. Since the Fire Chief has the ability and responsibility to define which properties will have the brush management ordinance apply to them and since notification is required to let the public know of their responsibilities, a specific brochure addressing the issues brought up in this letter should be considered. The intent was not to have public education as a stand-alone alternative, but rather to have it serve as a possible mitigation to several impacts listed in the EIR.

M-10

Refer to comment F-9.

A public education and training program is needed as part of the ordinance. This would include definitions of pruning, thinning, clearing, grubbing, plant removal without root removal, tree fuel management, and other terms that may not be understood by the general public. Without the commitment of a training program with materials to be given to the public, it is difficult to see how the project could be impact neutral. The ordinance should require an education program that would train city crews and supervisors in correct thinning methods. The ordinance should set up a certification process for contractors offering this service. The ordinance should require inspections and allow for the denial of payment for services that do not follow guidelines. Some of this education should include the following concepts:

M-11

Refer to comment F-10.

- Removal of non-native plants first to count towards developing 50% covered soil area with fuel reduction within that remaining vegetation that provides 50% coverage.
- Recognition that there are native plants and naturalized plants that are naturally low-bud, or that can be easily managed to be low in fuel and invasive plants that are both high in fuel and damaging to native habitats.
- Pruning should always be done from the bottom up, removing dead wood with no "hedging" of the top of the plant, which causes extremely exposed woody branches to the drying effects of the sun and increased growth of small diameter brush of growth which increases the plants' susceptibility to ignition.
- Removal of annual plants over 18" high should be done prior to the fire season but after the rainy season to avoid erosion and runoff.
- An appropriately pruned shrub will need to be pruned every four to six years to remove deadwood that has accumulated, or to reduce the crown again. Avoid annually shearing off new bud growth that may result in proliferation of combustible twigs. If done in the growth season, or may fall the shrub if done in the dry season.

M-12

Refer to comment F-11.

M-13

Refer to comment F-12.

M-14

Refer to comment F-13.

M-15

Refer to comment F-14.

M-16

Refer to comment F-15.

- Avoid definition of healthy pruned broadleaf evergreen native shrubs in Zone 2, which could lead to type conversion to exotic grasses and annuals, which extend the fire season and ignite more readily than healthy pruned native shrubs.

U-17

Refer to comment F-16.

M-17

Specific Comments for Impact Analysis in the Draft Environmental Impact Report for the removal of Brush Management Plan

1). The 32nd Street Canyon Task Force recommends a change to the title of ordinance and the text to "Vegetative Fuel Management" to alter the public's perception that all brush (vegetation) is categorically flammable. The emphasis should be on managing fuel, not brush, since fuel is in all different forms of vegetation, whether natural or planted intentionally, as well as furnishings and building materials.

M-18

Refer to comment F-17.

M-18

2). The 32nd Street Canyon Task Force believes that the review of potential neighborhood character / aesthetics is totally inadequate. The lack of public education and the excessive requirement to remove branches up to three times the height of adjacent understorey, will result in the complete removal of everything except the trunk of many trees. Most native brush is often five to seven feet in height, thereby requiring up to 21 feet of branch clearance, which is more than the total height of most of our native or indigenous trees.

M-19

Refer to comment F-18.

M-19

The 32nd Street Canyon Task Force is concerned that without public education and clarification in the brush management ordinances, trees or large tree-like shrubs are likely to be removed, resulting in a significant visual / neighborhood / aesthetic impact. Native, naturalized or non-native trees should not be removed as part of other zone. Pruning of ladder fuels assuring a 10' clearance around a structure should be encouraged. For trees on slopes with understory native vegetation, fallen branches, leaf buildup or lower branches, the ordinance should provide a policy and guidelines on tree (fuel) management.

M-20

Refer to comment P-19.

M-20

To make matters worse, the ordinance language is not clear. It states that only trees that are considered to be fire-resistant natives can remain. Most plants, except for young succulents are not fire-resistant. Only those that are in riparian areas are even potentially fire-resistant. This would mean that most native and all non-native and indigenous trees would be subject to removal. In addition, it appears that groves are to be eliminated since the ordinance only allows for single stem-stored specimens and / or species that are situated so as not to transfer fire to the structure. Based on these definitions, many trees are likely to be removed, creating an energy, erosion and aesthetic impact.

M-21

Refer to comment F-20.

M-21

3). The 32nd Street Canyon Task Force is also concerned about tree removals in Zone 1. The ordinance states that trees shall be at least 10 feet away from a structure, measured at the drip line based on the mature size of the tree. If the tree were trimmed regularly, it would never expand to the mature size of the species, so this guideline is confusing and excessive. We believe the existing code is adequate, because no real data suggests otherwise. The fire code says trees should not hang over the house more than 10' from chimneys. This standard seems sensible but the fact is there is no real data to support it. Throwing numbers at the public via ordinances based on guesswork is not justifiable. The post-fire damage assessment found that over 60% of the homes in the Cedar fire had a burned tree within 10' of the house. The data gathering was very haphazard, so we don't know if the tree trunk

M-22

Refer to comment F-21.

M-22

or tree canopy was within 10', nor do we know if there were other trees further away, and if they burned also. In many cases, the tree may have been burned by the house, not vice versa.

This requirement also takes away the ability of a homeowner to shade their house. Many homes do not have awnings or backyards capable of supporting a tree of its full mature size drip-line with an additional 10' buffer. The inability to shade inhabited structures would have an energy use impact associated with it as well as related air quality impacts. The Cedar Fire does not support the requirement of 10 feet from the drip line. A more effective method would be to be sure that tree trenches are prepared to allow for a 10 separation between the structure and the tree. This separation can either be horizontal or vertical, thereby allowing for shade on the structure. Also, certain trees are considered to be fire resistant, and could actually help to filter out airborne chemicals and radiant heat from igniting adjacent structures. The shade from trees, whether over a structure or other landscaped areas, often helps to keep the area from drying out, which is the primary reason for ignition.

4). Under previous analyses of the existing brush management ordinance and as listed on page V.B-27, brush management in Zone 2 is considered to be "impact neutral". This is contradicted by a statement on page V.B-30 that reads: "The proposed brush management revisions would result in potentially significant impacts to sensitive species". These impacts are considered to be reduced to below a level of significance through acquiring other habitat. Impacts resulting from invasives colonizing thinned habitat are summarily dismissed, even though the document has provided scientific background showing overwhelming proof that this has occurred in the majority of areas thinned for brush. Under CEQA requirements and guidelines, avoidance of impacts should always be a priority. However, this plan automatically assumes the best mitigation is to offset the impact with purchased habitat, which results in a net loss of habitat in the region and the mitigation is often at a great distance from the impact. Alternatives should be looked at much closer, including methods that allow for replacement of native vegetation with large amounts of fuel with native or non-native (non-invasive) species that produce less fuel.

5). Impacts associated with hydrology and erosion specify that since the soil is not being disturbed, impacts are not anticipated (V.C-11). This assumes that all individuals involved in brush management will understand that roots should not be removed and that low impact thinning techniques and equipment are to be used to limit soil disturbance. Without a public education campaign, brochures or inspections, soil disturbance is very likely to occur. It would be better to let the impact as potentially significant and show that it can be mitigated through a public education campaign.

Under the condition on Erosion (V.C-13), data supports the claim that erosion does occur on steep slopes or erodible soils where brush management has occurred. The MUI listed in Appendix D, indicates that under Section II, paragraph a, a property owner is allowed to do more than thinning. For example, clearing is allowed which exposes mineral soil to erosion.

This study does not attempt to quantify the amount of the city's brush management zones that are located on steep slopes or erodible soils, even though the same GIS tools used to determine many of the impacts (or lack of impacts) can easily be used to quantify the total acres of steep slopes and erodible slopes. Again, it would be better to recognize the worst-case scenario that brush removal, thinning and the burning of soil will result in erosion. This erosion impact can be reduced to below a level of significance by public education to prevent full plant removal, tree removal and the use of soil-

M-23 Refer to comment V-22.

M-23

M-24 Refer to comment F-23.

M-24

M-25 Refer to comment F-24.

M-25

M-26 Refer to comment F-25.

M-26

M-27 Refer to comment F-26.

M-27

M-28 Refer to comment F-27.

M-28

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M-25

M-26

M-27

M-28

damaging equipment and techniques. New actions such as requiring clipped vegetation to be placed over all slopes is effective in reducing erosion and preventing invasive proliferation. Studies show that clipped vegetation is much less flammable than standing vegetation, due to the packing of the matter which prevents air (oxygen) from being available for ignition.

6). A determination needs to be made as to the cycle of thinning that may be required, as well as advantages to the time of year that this thinning should be done. Fire management data would indicate that many highly flammable materials would grow back in 2-3 years. This is probably unrealistic and may negatively impact the habitat. Some guidance is needed, perhaps a minimum of 5-year maintenance cycle. The public needs to understand that the desired "50%" refers to area of soil covered by the remaining plant canopy after thinning and pruning not a requirement to take away half of the existing vegetation. This is critical: if the vegetation is already sparse, it may not be necessary to remove very much to achieve 50% coverage.

7). Given the realities of limited budgets, areas with steep slopes and heavy fuel loads adjacent to residential structures should receive a higher priority for fuel management compared to areas with lower fuel loads. A "one size fits all" management zone, with all city-owned lands being held to the same standard of maintenance, will expose the city to liability, since it will not be able to give all areas the same level of care, due to the limitations of maintenance cycles, budgets and differences in growth rates on different sites.

However, if the ordinance provides a definition for high priority fuel management, then liability would be reduced even when all areas are not treated in a given year. Vegetation with high levels of fuel should receive different priorities for fuel management. Areas that contain small diameter fuel and deadwood should receive a higher priority than areas that are already open in character, or riparian areas with year-round succulents in all plants. Grasslands that support vigorous stands of fast-growing annual exotics such as mustard or fennel should be considered as a high priority due to high flash fuel fire movement, while low native grasslands may pose a very low fuel risk.

8). The city should research and make recommendations for the use of controlled burns or use of goats or other livestock to reduce fuel. Controlled burns may be risky and increase liability. Goats, which might be useful to reduce fast-growing invasive annual exotic vegetation on weedy yards, or after shrubs have been thinned and pruned, are not well suited for methodical thinning or eliminating deadwood in shrub stands, and so should not be used indiscriminately.

9). Though the ordinance is based on vegetation fuel management, all information from the City needs to continue to emphasize the need to modify building codes for properties bordering on open spaces. The real solution to limiting property damage from fires is not brush management in Zone 2. It is the proper use of fire-safe construction materials (including roofing, windows, screens, vents, soves, siding, decking, soffit enclosures and leveling), the prohibition of small-diameter wood construction (such as trellises, gazebos, fencing, animal enclosures, telecables, ornamental tin and decks) and the proper guidance for new development that provides adequate and defensible buffers such as perimeter parks, parking lots, large roads, etc., designed into the community layout to reduce exposure of homes to flying embers during high-wind wildfires and to create defensible spaces for firefighters to stage back attacks.

ME-29

Refer to comment F-28.

ME-30

Refer to comment F-29.

ME-31

Refer to comment F-30.

ME-32

Refer to comment F-31.

ME-33

Refer to comment F-32.

ME-34

Refer to comment F-33.

ME-29

ME-30

ME-31

ME-32

ME-33

ME-34

Thank you for considering our input.

Sincerely,



Terisha d'Eligh
Project Manager, Thirty-Second Street Canyon Task Force
Telephone: 619/239-6130
Email: terishad@aol.com



UPTOWN PLANNERS

The Uptown Community Planning Committee
1010 University Avenue, Box 1701 - San Diego, CA 92103 619.553.9611

June 10, 2004

Allison Nease, Environmental Planner
City of San Diego Development Services Center
1222 First Ave., MS #501
San Diego, CA 92101

Reference: Draft EIR/EIS (JC: 11193) for Brush Management Revisions to the Land Development Code

Dear Ms. Nease:

On June 1, 2004, the Board of the Uptown Planners (Uptown) made a motion to support comments submitted by Miss Singleton (a member of our board) in regards to the above referenced project. The Uptown Community Plan Area has significant native and re-introduced canyons that would be affected by this ordinance, the board expressed great concern over possible impacts. The board voted 13 to 0 authorizing the following comments on behalf of the board, based on the issues and comments discussed and read into the meeting minutes of June 1, 2004.

N-1

Comment noted.

Alternatives to the Draft Environmental Impact Report

Uptown would like to make sure that all alternatives to the proposed brush management plan be considered prior to adopting the preferred option. The alternatives should be realistic options. A property owner should have the ability to provide a more sustainable solution for long term land management, assuming that costs would be born by the property owner and that a review process of some kind is in place to make sure that this alternative is environmentally sensitive while at the same time, effective for creating defensible space.

N-2

The SEIR/EIS Section VII addresses a range of alternatives to the proposed project.

We also feel that a public education program is critical in making sure that residents are not overzealous in their brush management efforts. Actions by the public (that may not be warranted) are likely to happen which may result in significant impacts to the biology, hydrology and neighborhood character of our urban canyons. One of the alternatives should include the brush management requirements in addition to a public education component. The public education component could be implemented as part of the basic project or be listed as a required mitigation to offset potential impacts associated with the brush management program.

N-3

Refer to comment D-36.

Uptown is concerned that no attention has been given to brush management along corridors in high fire hazard areas with high fuel amounts. Our cities that this is where arsons and accidental fires commonly occur. There should be a section that discusses fuel management in the zone. Fresh fuels are particularly problematic in these roadside locations. The same discussion needs to occur on other open space areas can often start. This city's responsibility for proper fuel management goes well beyond the 100' zone around residential parcels. Open space, habitat preserves and parkland should all consider the proximity of fuels to highly accessible public rights of way and complete fuel modifications to lessen the amount of fuel with special attention given to fresh fuels.

N-4

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIS. No response is required.

N-5

Refer to comment N-4.

Specific Comments for Impact Analysis in the Draft Environmental Impact Report

Uptown is concerned that without public education and clarification in the brush management ordinance, trees or large tree-like shrubs are likely to be removed, resulting in a significant visual / neighborhood / aesthetic impact. Native, naturalized or non-native trees should not be removed as part of either zone. Pruning of healthier trees assuming a 10' clearance around a structure should be encouraged. For trees on slopes with undesirable native vegetation, fallen branches, leaf litter or lower branches, the ordinance should provide a policy and guidelines on tree fuel management. Uptown is also concerned about tree removals in Zone 1.

N-6

Refer to comment D-36 and comment F-18.

Impacts associated with hydrology and erosion specify that since the soil is not being disturbed, impacts are not anticipated (N.C-11). This assumes that all individuals will understand that roots should not be removed and that low impact thinning techniques and equipment are to be used to limit soil disturbance. Without a public education campaign, brochures or inspections, soil disturbance is very likely to occur. It would be better to list the impact as potentially significant and show that it can be mitigated through a public education campaign.

N-7

Refer to comment D-36.

A determination needs to be made as to the cycle of thinning that may be required as well as advantages of the time of year that this thinning should be done. Fire management would indicate that many highly flammable materials would grow back in 2-3 years. This is probably unnecessary and may be too impactive to the habitat.

N-8

The frequency of thinning would be dependant upon the rate of re-growth and the need to remain in compliance with the ordinance. Impacts to habitat are considered significant in the SEIR/EA.

Some thought needs to be given to the definition of the Urban / Wildland interface. With the realities of limited budgets, areas with steep slopes and heavy fuel loads adjacent to inhabited structures should receive a higher priority for brush management and ongoing maintenance compared to areas with lower densities of structures next to level wildland and low fuel areas. A one size fits all management zone, with all city owned lands being a high priority for maintenance will set the city up for liability, since it will not be able to give all areas the same priority. If the ordinance provides a definition for high priority, then the liability would be lowered when all areas are not managed.

N-9

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

The only real solution to property damage is not brush management in Zone 2. It is the proper use of fire safe construction materials (including roofing), the prohibition of small ornamentation (such as trellises, gazebos, fencing, animal enclosures, balconies, ornamental tin and decks) and the proper guidance for new development that provides adequate and defensible buffers.

N-10

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

Thank you for considering the concerns of Uptown. Planners and our efforts at protecting the natural resources that make San Diego and Uptown a unique place to live.

Sincerely,


David Gayling
Chair



Buckner Environmental Consulting

8709 Bacon Drive • San Diego, CA 92116 • Phone: 619.521.0305 • Fax: 619.521.0333 • Email: t.buckner@bak.net

July 4, 2004

Allison Reap
Environmental Planner
City of San Diego, Development Services Center
1222 First Ave. MS #301
San Diego, CA 92101

Reference: Draft EIR/EIS (FOI#33) for Brush Management Revisions

Dear Ms. Reap:

As a professional vegetation design consultant for almost two decades in the San Diego area and a native plant landscape architect at three local community colleges over a seven year period, I would like to offer several comments on the recent proposed changes to the Brush Management Provision of City Code. These comments and questions are designed to reinforce and expand upon earlier comments you received from the Community Forest Advisory Board as well as several other local groups communicating on the EIR/EIS.

O-1

O-1 Comment noted.

General Comments:

Failure to Provide Adequate Justification of Need for Changes

This document fails to make a case for fire need for changes to the existing brush management ordinances. The only rationale presented is that the Fire Marshall recommends them. In fact, several of the changes do not appear to have been recommended by the Fire Marshall but instead added at the time this document was written (I am thinking particularly of the provision to eliminate all but new landscaping irrigation from Zone 2 management areas and the use of goats for brush management). In my opinion it is questionable whether the Fire Marshall would approve of these changes.

O-2

O-2 The Fire-Rescue Department is the applicant for this project and is requesting the revisions to the brush management regulations.

It is implied, without evidence, at several points in the document that the impacts of the recent Cedar Fire would have been reduced had these changes been in place. It should be fairly easy to determine whether the Cedar Fire got more or less out of control in areas where brush management had taken place. The City must certainly have records of where vegetation thinning has been conducted on public properties over the last ten years and fire records should be able to show if fires subsequently burned such areas. In fact, it seems to be the consensus of fire experts I have spoken with since the fire that large wind-driven fires such as the Cedar Fire are only minimally affected by brush thinning. Neither the No Project nor No Action Alternatives present any research to substantiate the need for changes to

O-3

O-3 The comment addressed the needs of the project, not the accuracy or relevancy of the SEIR/EIS. No response is required.

assume that all vegetation could be cleared from both Zone 1 and Zone 2 and make an analysis of these impacts.

Lack of Clarity

Page 11: "Zone One shall contain no habitable structure... that provides a means for transmitting fire to the habitable structures."

Does this mean all wooden frame buildings will need to be torn down immediately?
What constitutes a flammable structure? Does this include plastic fences, burnt rebarbed treated wood fencing, new laminate deck and railing?
Are ornate dwellers with wood fences around their small patios adjacent to their dwellings inside Zone One to tear them down?
Since decks and fences are often used for outdoor living activities how does the private property owner determine where the highest part of his structure begins?

Page 11-12: "Plants within Zone One shall be... less than 4 feet high except for trees"

How are vines to be treated in Zone One?
Why 4 feet?

Page 13: "50% of the plants over 18 inches in height shall be thinned to a height of 6 inches"

Does this mean that an trimming is required so long as all existing vegetation is below 18 inches?
Does this mean that if I have two shrubs over 18 inches in height and 100 feet apart on my property that I am required to cut one back to 18 inches?
Does this mean that if my Zone two area is bare with only three plants 20 feet apart that I have to prune back 2.5 shrubs to under 18 inches?

It appears the intent here is to have no more than 50% of Zone 2 cover by vegetation over 18 inches in height, but this is not stated clearly.

Page 13: "Within Zone Two, 50 % of the plants over 18 inches in height shall be thinned to a height of 6 inches."

Why does a property owner need to prune back "thinned" plants to 6 inches when 18 inches is the height at which control is required?

Lack of Clarity, Limits to Measure and Assessment of Clearance

The ordinance does not indicate whether native or non-native vegetation should be cleared first

The ordinance does not obligate the private property owner to any degree of due diligence to familiarize himself with existing sources of endangered species present on his property (e.g. simply abiding with the City's GIS mapping of resources).

The ordinance does not forbid 100% clearance of vegetation from all fire zones.

The ordinance does not forbid leaving chipper mulch or brush piles in areas of thinning.

O-17 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-18 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-19 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-20 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-21 Proposed brush management regulations require 50% of existing plants over 18 inches in height shall be thinned to a height of six inches. The remaining 50% of plants are pruned and thinned.

O-22 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-23 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

O-24 Refer to comment O-16.

O-25 The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EIA. No response is required.

The lack of any proposed public education program, even as simple as a small written pamphlet or notice on a website, suggests that these rules will be unadopted and that larger impacts than anticipated by this analysis will occur.

Q-26

Refer to comment D-36.

Specific Comments & Recommendations:

Comments

At the very least the following inconsistencies and clarifications should be corrected in the text:

Q-27 The document is inconsistent in regard to the acreages impacted by the proposed changes. In Tables V.A.1 & A-2 2480 acres are mentioned as impacted but on page V.C-12 2474 acres are stated as impacted.

Refer to comment A-65.

Q-28 Page 11: Change the word required to prohibited in the line "No brush management is required in areas containing wetlands".

Proposed ordinance has been revised to incorporate this change.

Q-29 Page 13: (3) should read "Within Zone Two no more than 50% of the area shall have plants over 18" (suggest 24" to be consistent with new landscape provisions.

This comment addressed the merits of this project, not the necessity or adequacy of the SER/JEA. No response is required.

Recommendations

1. The first recommendation I would make is that this change not be put into effect until at least some initial research is done on the effectiveness of the present policy that was only recently approved. It is not wise public policy to rush into the creation of new laws after a catastrophic situation occurs, particularly without at least some research to substantiate the need for such changes.

Q-30

Comment noted.

2. The second recommendation I would make is that the City place a lot more focus on building codes and planning systems for new developments to assure they are fire defensible. Many of the buildings that resulted in the Cedar Fire were allowed to be built on indefensible ridges jutting out into natural open space where an degree of vegetation management would have protected them. In addition, neither the City or property owners should be allowed to build structures on their properties which require fire management on property not owned by the property owner. If such structures are permitted the code should spell out that the property owner is required to pay the adjacent property owner for any additional fire financing required.

Q-31

Comment noted.

3. The most important recommendation I would make is that permanent supplemental irrigation designed to produce as little runoff as possible not be eliminated from Zone Two areas. This is probably even more important than vegetation thinning as a means to reduce vegetation flammability and allows for the possibility of turning on overhead systems during a fire if desirable to further lower the fire potential of a border area. If implemented properly there is no reason to believe irrigating vegetation would have a negative impact on biological resources (e.g. no more than twice a month irrigation over the summer months without substantial runoff).

Q-33

Correct Zone Two Brush Management allows temporary irrigation. This regulation is not proposed to be changed with the proposed revisions to the brush management regulations.

4. At a minimum an allowance should be made for less than 50% of cover to be below 18 inches in Zone Two when part or all of the cover is high water content succulents like cactus, yucca, and/or aloes.

Q-34

Comment noted.

5. I strongly recommend modifying the ordinance to allow for Zone Two irrigated landscapes with trees and low groundcovers. Many of the old development slopes in Tierra Santa were developed in this manner and have proved very effective as fire barriers during several recent canyon fires. Groundcover should be below 12 inches in height in such areas and trees should be pruned to have no branches for the first 15 feet off the ground. It does not appear to be necessary to clear 50% of cover in such areas.

Q-35

Comment noted.

6. Develop some definite guidelines and a clear set of standards for fire limits and methods that can be used in Zone Two areas for vegetation management. These at a minimum should include:

- Non-native vegetation should be cleared first and the crowns of deep-rooted native shrubs such as lemonadeberry or laurel sumac or olmanias should be left in place to protect slopes against mudslides.
- Vegetation thinning for fire management should preferably be done outside of the highest fire season months to prevent accidental ignition by gasoline or electric powered thinning/pruning equipment.
- Private property owners should be notified by the City of instances in which endangered species are shown to occur on their property based on City mapping and/or they should be required to check with the City as to the existence of these resources on their properties prior to standing vegetation management activities. The ordinance should require these species to be protected whenever possible by clearing them last, avoiding trampling them during other thinning work, and for endangered bird species, doing work outside their nesting season. On the other hand, requiring expensive biological surveys before brush management takes place should be optional except in the case of new developments where surveys are already required.
- The ordinance should forbid 100% clearance of vegetation from all fire zones and dicing as a means for vegetation thinning.
- Thinning of vegetation should be to a height between 24 inches and 6 inches to be consistent with the planting parts of the code.
- The ordinance should forbid leaving chipper mulch or brush piles in areas of thinning.
- Simple public education programs such as a pamphlet or notes on a website should educate private property owners and City crews about the ways and means of vegetation clearing. An annual fire public workshop open to property owners should be conducted in each neighborhood in the spring just prior to fire season.
- Trees in Zone Two should not be required to be pruned up off the ground so long as the 50% thinning requirement is met; however, all dead trees and branches should be required to be pruned off and/or removed annually.

Q-36

Under the Alternatives considered but rejected, a third alternative has been added regarding thinning by plant type when performing zone two brush management activities.

Q-37

Comment noted. The revised brush management ordinance will prohibit brush management activities within coastal sage scrub during California gnatcatcher breeding season (March 1 - August 15).

Q-38

Refer to comment Q-37.

Q-39

Comment noted.

Q-40

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

Q-41

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

Q-42

The comment addressed the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

Q-43

Refer to comment D-36.

Q-44

Comment noted.

6. Grass area should not be included until a better determination can be made of its effects and the situations when it may be appropriate. At the very least, grass use should not be permitted on areas where endangered species are known to overflight to occur.

O-45 Comment noted.

7. The distance of trees from Zone One structures rule should be refined further. A few highly flammable species of trees such as pines should not be allowed to be planted within Zone One areas at all and/or should be removed if they do occur. The distance of tree trunks or branches should be 10 feet from buildings and the drip line of most mature landscape trees reach canopy sizes which would preclude them from being planted at all within the 35 foot wide Zone One if the drip line rule applies.

O-46 Refer to comment F-22.

8. Private home sites, because they are usually the most vulnerable by current building standards to fire, should be given a higher priority than either City or commercial structures for fire inspections & penalties for non-compliance. For similar reasons, high fuel load sites should be given inspection priority.

O-47 The comment addressed the merits of the project, not the accuracy or adequacy of the SIRM/EA. No response is required.

9. Certain types of low growing succulent groundcovers like carpetgrass (which is invasive and creates erosion problems) and invasive exotic species such as pampas grass should be excluded from Zone Two planting whether they are considered fire resistant or not.

O-48 Invasive plant species are not permitted within brush management zones here.

In conclusion, neither the proposed ordinance changes nor the analysis of their potential impacts appear to be well thought out and I would recommend against approving them at this time. I hope these comments and recommendations are helpful in producing a final version of any changes which are approved. I also hope you will share these comments with council persons and staff before they make their final decision on these proposed revisions.

O-49 Comment noted.

Brad Burdick

Brad Burdick, Principal
Burdick Environmental Consulting

Comment Letter P

ANNES. FEGE, PH.D., M.B.A.

12934 TEXANA STREET, SAN DIEGO, CA 92129-3920 AFEGE@AOL.COM

July 9, 2004

Ms. Allison Rapp, Environmental Planner
City of San Diego Development Services Center
1222 First Ave., MS #501
San Diego, CA 92101

Reference: Draft HIR/EA (IO-1193) for Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emer. Services (OES), Fed. Emergency Mgmt. Agency (FEMA)

Dear Ms. Rapp:

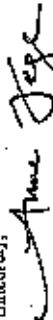
The establishment of 100-foot zones of vegetation reduction by both the City and County of San Diego will contribute to greater public understanding and compliance, and that is greatly appreciated by many of us in the community. Please consider the following, in developing a recommendation to the City Council regarding this ordinance:

Proactive public education campaigns and compliance programs will be necessary for entire community, neighborhoods, and streets to benefit from the defensible spaces. My house is at risk; if all my neighbors do not reduce their vegetation. Public education programs need to include the reasons for the vegetation reduction; degree of flammability of various plants, the suggested plant lists; trade-offs with fire-wise, water-wise, energy-wise, and native plants; irrigation systems; maintenance requirements; and timing and extent of pruning and thinning.

The directions for percent vegetation reduction are confusing, complex, and may be counter-productive. They are likely to result in some homeowners removing far more than 30% vegetation, and others omitting run-off and erosion on steep slopes (perhaps to their downhill neighbors). Grasses and other flammable vegetation are likely to invade bare ground, and a higher-risk situation created for homeowners than retaining the natural chaparral and coastal sage vegetation. If trees are properly trimmed and their leaves raked, they are not highly flammable, and should be retained for aesthetics, habitat, and energy reduction. Implications of additional clearing on preserves and easements, particularly those set aside under the Multiple Species Habitat Conservation Plan, should be stated more clearly in this document; result in no habitat loss; have adequate mitigation, and be adequately funded for maintenance. Goats are unlikely to be effective except in grassy areas.

Strong building codes for fire-resistant materials, application to both new and existing structures, and enforcement of these codes will save far more structures in the next firestorm than cleared vegetation will. Evidence from the Cedar Fire showed that most homes ignited from fire carried on wooden fences and decks, from embers landing on cedar roofs or wood siding, or from embers entering the house through unprotected ventilation elements.

Sincerely,



ANNE S. FEGE, PH.D.
Botany Research Associate, San Diego Natural History Museum
And Retired Forest Supervisor, Cleveland National Forest

P-1 Refer to comment D-36

P-2 Refer to comment D-36.

P-3 Refer to comment A-12.

P-4 Goats are known to graze on other plant types besides grass and have been effective for thinning activities in other jurisdictions.

P-5 This comment does not address the adequacy of the HIR/EA. Therefore, no comment is required.

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July 9, 2004

Ms. Allison Reap
Environmental Planner
City of San Diego Development
Services Center
1222 First Avenue, MS 501
San Diego, California 92101

VIA HAND DELIVERY

RE: Brush Management Revisions to Land Development Code
Project No. 31245, SCH No. 2004031041

Dear Ms. Reap:

Our firm represents Paredes Homes ("Paredes") in connection with its ownership of several properties located in the City of San Diego. We have reviewed the May 2004 Draft Subsequent Environmental Impact Report/Environmental Assessment ("Draft SEIR") which has been prepared by the City of San Diego ("City") for the proposed brush management revisions to the City's Land Development Code. Our client has the following comments:

Page S-2, VI-1: The Draft SEIR only analyzes impacts from the application of the proposed brush management revisions to existing development, with no explanation why impacts from the applications of the revisions on future development are not assessed. Future development, however, will indisputably occur. To fairly and accurately assess the impact of the proposed brush management provisions, the impacts of the application of the revisions to future development must be considered.

Q-1

Environmental review for future individual projects will cover potential impacts. Future development could not be analyzed at the time this SEIR/EA was written.

In addition, the impact of the application of the proposed revisions to ongoing development must be reviewed. Certainly the specific location of development projects either under construction or in the application/planning/permitting/development phase could easily be incorporated into the analysis. Moreover, neither the proposed brush management revisions themselves nor the Draft SEIR explain how the proposed changes in Zone One and Zone Two will be applied to development projects in the approved but not yet developed or partially developed phase, the planning phase or the permitting phase. If such ongoing development projects are expected to incorporate the expanded buffer contained in the revised Zone One and Zone Two, the physical impact of such a requirement on the ongoing development projects should be assessed and included in the SEIR.

Q-2

Comment noted. Projects within the permitting phase may need to revise plans, once ordinance is approved, prior to project approval to meet the brush management requirements.

Finally, Section 142-0412(c) of the proposed brush management revisions provides that "[a]ll existing and new structures subject to this division shall comply with all requirements of Chapter 14, Article 5, Division 5 - Additional Building Standards for Buildings Located Adjacent to Hazardous Areas of Native or Naturalized Vegetation." As we have determined after discussions with your office and that of the city clerk, a new Division 5 in Chapter 14, Article 5, although considered by the City Council along with other changes to Chapter 14, Article 5, ultimately was not enacted. Nevertheless, the proposed ordinance containing the new Division 5 provided that it was "not intended to apply where the property owner has acquired a vested right." It would appear, therefore, that by referring to and incorporating the proposed Division 5, the proposed brush management revisions similarly intended to exclude property where an owner has acquired vested rights. Consistent with this interpretation, related amendments to Division 2 of Chapter 14, Article 5, which were considered by the City Council as a part of the same proposed ordinance containing a new Division 5, were enacted and contain similar language excluding property subject to vested rights. (See San Diego Ordinance No. O-19258, amending § 145.0202 to San Diego Mun. Code, Section 2 (Feb. 2, 2004).) In short, the City has apparently -- and properly -- elected not to abrogate property owners' vested rights as it responds to the recent fire emergency."

Q-3 The comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

Q-3

Q-4 It is intended that the proposed brush management revisions exclude property where an owner has acquired vested rights, we recommended making such an exclusion explicit and overruling the reference to Chapter 14, Article 5, Division 5, which was never enacted. However, if property subject to vested rights is not included from the proposed revisions, the Draft SEIR should consider the physical impact such an expansive application of the revisions would have on parcels in which an owner has acquired vested rights.

Q-4 The comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required. Once the regulations are in effect, properties would be required to comply with the new regulations.

Q-4

Q-5 Page 12: The Draft SEIR explains that the City of San Diego Park and Recreation Department is responsible for brush management on City property and that the City's compliance with the proposed brush management provisions would be partially funded via a Federal Emergency Management Agency (FEMA) grant for which the City is currently applying. Will the City have the funding to implement the proposed brush management revisions on City-owned property if this grant is not approved and allocated to the City?

Q-5 The SEIR/EA analysis assumes that the City will implement the brush management regulations on its own property.

Q-5

Q-6 Pages 14, III-1 - III-2, III-6: The Draft SEIR assumes property owners will thin the correct amount of vegetation in Zone Two even though it exceeds that some property owners are not currently weeding Zone Two as required. The assumption regarding thinning appears unreasonable in light of the proposed noncompliance with the weeding requirements. As a result, the Draft SEIR should incorporate a discussion of the possibility that the proposed revisions will be ineffective. In any event, some property owners do maintain Zone Two areas in compliance with the existing requirements, such as in Posen View Hills, Pacific Highlands Ranch, and Camel Valley.

Q-6 The assumptions within the draft SEIR/EA were based on field observations by City Staff.

Q-6

Ms. Allison Ramp
July 9, 2004
Page 3

Pages VA-11 - VA-22: The Draft SRIR concludes that the proposed brush management revisions would have no significant land use effect, including on the MHPA. We agree and recommend that the Draft SRIR clarify that the revisions would be implemented in a manner that ensures that they would have an insignificant land use effect or that any significant effect would be mitigated.

Q-7

Page VD-2: The Draft SRIR concludes that impacts to Neighborhood Character/Aesthetics would be insignificant because "[t]o mature trees would be removed with the proposed brush management zones." The Draft SRIR fails to explain the basis for its assertion that no mature trees would be removed and that fact is not apparent from the proposed revisions themselves. The Draft SRIR should provide further discussion on this issue.

Q-8

It is fair to conclude that the increased depth of brush management levels could have a significant effect upon neighborhood character/aesthetics due to the additional depth of the zones and clearing requirements.

Q-9

Section 142.0412(f): The proposed revisions in this section reduce the extent to which Zone Two width may be decreased upon an increase in Zone One width. The Draft SRIR does not address the physical impact such a change would have on the environment. Such a discussion should be incorporated in the document.

Q-10

We thank you for the opportunity to comment on the Draft SRIR and request that you please place my name on your mailing list of persons seeking notices for future versions of the SRIR.

Please call me at (619) 685-9038 if you have any questions or concerns regarding the information contained in this letter.

Very truly yours,

Thomas F. Stankle

Thomas F. Stankle, Esq.
Seltzer Caplan McManus Vitek
A Law Corporation

TFS/kmv
cc: Purdue Homes

Refer to comment Q-7. All potential significant impacts to land use and biological resources are mitigated to a level below significance.

Q-7

Current proposed brush management regulations do not require removal of mature trees. Proposed brush management revisions do not affect this [lack of] provision.

Q-8

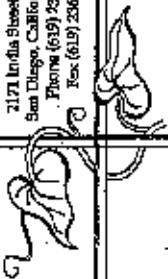
Brush management zone two revisions require "thinning" not "clearing" as stated by the author of this letter.

Q-9

The proposed revised brush management ordinance section 142.0412(f) states *The Zone Two width may be decreased by 1 1/2 feet for each 1 foot of increase in Zone One width up to a maximum reduction of 30 feet of Zone Two width.* If this method was selected, zone one brush management could be increased from the proposed 35 feet to 55 feet and zone two would be decreased from the proposed 65 feet to 35 feet, resulting in a total brush management width of 90 feet instead of the proposed 100 feet. All of zone one would be within the development footprint and would require appropriate mitigation per the City's Biology Guidelines. Please see Appendix E for a discussion on the methodology used for the biological impact assessment. Under this option, impacts to zone two would be reduced by 30 feet. The SRIR/EA utilized a worst-case analysis and did not reduce potential impacts based on this option since there is no way to determine how often this option would be implemented.

Q-10

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KAY STEWART
Landscape Architect

June 30, 2004

Allison Reap, Environmental Planner
City of San Diego Development Services Center
1222 West Avenue MS 501
San Diego CA 92101
Email: DSIDEA@sanidialogy

Re: Project no. 31245, SCF No. 2004031041

Dear Ms. Reap and City of San Diego,

My comments are addressed both to the wording of the proposed revisions to the ordinance and to the content of the Draft Subsequent PERSEA JO:1193.

A. Comments on the proposed revisions to Ordinance 142.0412 of Article 2, Division 4, of the City Ordinances (letter & numbers refer to those same subsections):

(a) As stated, the purpose of the ordinance is revising a word; add [CAFS].
"...environmentally sensitive lands [TEAT] are within..."

However, I think this part of the City Ordinances should not be called "Brush Management" but should be titled something like "FUEL MANAGEMENT TO REDUCE FIRE RISK" or "FUEL MANAGEMENT TO REDUCE STRUCTURE AND SITE COMBUSTIBILITY". "Brush" is not, nor should it be, the sole focus of a policy intended to reduce fuels and therefore, combustion of homes. Using the term "brush" is not a clear way to define the needed work, but instead confuses the issue. Further, I suggest this whole Ordinance does not belong in Division 4, Landscape Regulations, because in these revisions it very rationally includes built as well as living elements. I don't know what part of the Ordinances it fits in any more. The following sections could be "vegetation fuel or combustion management" and others could be "built element fuel or combustion management".

(b) (1) (delete (shown as strikethru) as follows: "...property that received...")

Distance to tree canopies in Zone 1, and heights of tree pruning, is not sensible. Please refer to the letter from the CRAB. I agree with their findings 100%.

(b)(1)(g) I want to thank the City for this section. How will it be implemented on existing properties, is my question? Further, in the section (h)(2) on Zone 2, I see no reason why structures should be forbidden in Zone 2. Rather, the wording should be just as in Zone One, that no combustible materials should be used. If a person has a lot of

R-1 The comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/FEA. No response is required.

R-2 Refer to comment R-1.

R-3 Refer to comment R-1.

R-4 Refer to comment R-1.

R-5 Refer to comment R-1.

space, they may want to use it and the City has no right to forbid their use of it, but does have the authority to regulate the safe use of it.

(b)(1)(M)(3) The term "thinned" is not used correctly in this statement, nor is the intent not precisely clearly described. I question that 6" is required (or desirable) height. The EIR/EIS and the State Fire Code refer to 18" high. I suggest wording as follows: "Within Zone 2, 50% of the soil area shall have plants not over 18" in height reduced in height to 18" if viable, or cut off at the ground if not, standing with invasive exotic plants, trees, native plant species that produce abundant fuel by annual growth, and last native species that have succulent leaves and large diameter branches."

R-6

R-6 Refer to comment R-1.

(b)(1)(M)(4) See notes above, which apply to this section also.

R-7

R-7 Refer to comment R-1.

(b)(1)(M)(5) Strikeout the word "...cleaning..." and substitute the words (e.g.) "...THINNING AND PRUNING..."

R-8

R-8 Refer to comment R-1.

(b)(1)(M)(5)(A) I think the prohibition against permanent irrigation is contrary to good practices and desired outcomes. Confirmed observations on native and non-native drought tolerant lightly pruned plants that were very lightly irrigated with overhead sprays every 7-10 days June through November did not ignite when the fire front of the Cedar Fire passed over. Therefore, permanent all-weather irrigation could be a valuable ally against combustion in a fire by reducing plant combustibility.

R-9

R-9 Refer to comment R-1.

In addition, the prohibition against overhead sprays in particular is contrary to being able to spread clipped cuttings between thinned plants on the soil, and lightly irrigating to speed up decomposition and compaction (prevents ignition greatly) while protecting the soil from erosion and from heating and killing the remaining plants.

R-10

R-10 Refer to comment R-1.

I am aware that abuses of irrigation systems resulting in water waste are rampant in ornamental landscapes, including public landscapes. However, that must be dealt with whatever it occurs. If Zone 2 was only permitted to be irrigated 3X/month, this might keep waste down. To say this is enough of an erosion risk to warrant prescriptions is outrageous. Dune earth (per Holly Chomig) on thousands of existing "brush management zones" is a far greater source than occasional sprinkler fills.

R-11

R-11 Refer to comment R-1.

(b)(1)(M)(5)(B) In developed landscapes, why is the desired end configuration different from the thinned landscape? This would mean 50% of the area as 18" maximum high, and 50% in pruned shrubs and trees. The pruned height as stated is seriously flawed: 3 X 18"=54", which is taller than many useful shrubs with wide root systems. Even if that is desired, thereby limiting the plant selection significantly, the wording should state (in caps) "...vertical distance AT MATURITY between the lowest..." so plants are permitted to grow and then be pruned.

R-12

R-12 Refer to comment R-1.

(b)(1)(M)(6) removal may be counter-productive to reducing fire risk, because of rapid regrowth of aggressive weeds that create masses of annual flash fuel.

R-13

R-13 Refer to comment R-1.

(6)(1)(b)(7) I want to thank the City for allowing this leeway. However, I must press: why not require all new houses to be built this way? Then there would be a much greater likelihood of structural survival in the next high-wind event. San Diego County just passed ordinances requiring all these and more in new structures. The City should follow suit.

R-14

Refer to comment R-1.

As a small aside, City staff member Keith Ghier described "Zone 1" as "irrigated turf" in a presentation he gave at the Burn Institute last week. This is highly inaccurate and misleading. I ask that staff people present city laws much more accurately.

R-15

Per the Landscape Regulations, Section 142.0412(b)(1), *Brush management Zone One in the area adjacent to the structure, shall be least flammable, and shall consist of pavement and permanently irrigated ornamental planting.*

B. Comments to Draft Subsequent EIR/EA:

Appendix B, the field survey conducted by City employee Holly Cheung observed existing "brush management zones". This brief survey confirms just how little native vegetation and how much bare earth is covered under existing practices, contrary to guidelines that have been in place for almost 15 years. It illustrates how development of these zones leads to invasion of designated conservation areas by non-native species. This, combined with the fact that the Codomo Fire crossed 100' zones with very little fuel leads me to wonder about the utility of changing the ordinance and going through all these hoops. It makes me feel a bit stupid to be responding to it. However, I think that focusing on this issue may make us all do the right thing eventually, both for protecting homes and for protecting natural resources, at least I hope so.

R-16

Comment noted.

Re: Goats: I didn't see any mention of goats in the revised ordinance, yet the EIR/EA introduces wording to end the prohibition in the City ordinances against using goats. I think that careful studies should be performed to see if annual flash fuels can be controlled effectively by goats in already established fuel management zones. I do not think this EIR/EA has persuaded me that the impact of goats would be neutral. In particular, I do not think goats are useful for creating low fuel zones, for the following reasons:

R-17

Comment noted. Additional language has been added throughout the final SEIR/EA regarding utilizing goats for zone two brush management.

1. Goats eat leaves and twigs, not dead wood (which needs to be removed to create low-fuel management zones.) Their dining on live shrubs will just create more dead wood.
2. Their choice of foods may eliminate useful shrubbery that could be pruned into "little trees" and leave other species that are summer dormant or pesky (invasive weeds, or fast rate or uncommon plant species that contribute little to fuel loading).

R-18

Refer to comment R-17.

It is hard enough to teach people to do it right. It would be impossible to train goats.

R-19

Refer to comment R-17.

Re: Alternatives (all of which were rejected): I think the EIR/EA deprives all of the people of San Diego by rejecting an alternative that would use education (S-6.) to improve fuel management. If the City taught "fuel reduction" contractors how to do it, desirable vs. undesirable species (especially invasive exotics) and how to thin, prune, and maintain this area to reduce risk of a fire that may occur once in a lifetime, in the meantime the area could work better as a watershed, a green lung for the city, serve wildlife and perhaps even be pretty, most of which are missing in existing "brush management zones."

R-20

Refer to comment R-17.

Refer to comment R-17.

R-21

Alternatives, Section VIII of the Draft SEIR/EA, includes feasible as well as rejected alternatives to the proposed project. Refer to comment D-36.

Re: Significant Impacts and Mitigation: Unfortunately, as stated in the several sections of the EIR/EA dealing with the conservation of critical habitat for endangered species, the proposed revisions will aggravate current patterns of significant losses. Most sadly, 1.3% of City of San Diego MSCP gnatcatcher nest sites will be destroyed. In addition, exotic invasive species will invade more readily into dedicated conservation lands, and hundreds more acres of MSCP land will be "managed as Zone 2" and, as Holly Chong noted, that probably means they will be destroyed, eroding our valued solition to the loss of endangered species. The City "has not agreed to" any of the suggested mitigation measures on methodously termed the MMRP. What a shame.

R-22 Refer to comment A-26. The known species locations are known sightings of the species; these locations may be individuals, pairs or nesting pairs. The locations are not necessarily all known nesting locations.

I think the Cumulative Effects are underestimated. I worry that 1.3% loss of gnatcatchers is significant when the population is reduced to only 377 known nesting pairs. If the human race were that few, the loss of 6 pairs would be a tragedy.

R-23 Refer to comment A-22. The total known locations of California Gnatcatcher within the regional MHPA preserve of the MSCP is approximately 1,819. As such, there are 1,819 or more known individuals within the regional population. Therefore, the potential brush management in five known locations within the regional population is 0.27% or less of the population.

Re: Contradictions: In section VA-13, Analysis of impacts: the proposed regulations say to cut plants to 6" high in the 50% cleared area, while this argument that says there would be little impact on plant species says that 18" high is the objective. Clearly the EIR/EA did not apply the proposed standard in assessing impact. A 6" high cut on even the most petite plant might remove anything that matured, e.g., the flowers.

R-24 Refer to comment A-12.

How big is the MHPA? As I read it, p. VA-9 says the City of San Diego subarea MHPA is 52,012 acres, while IV-2 says 47,919 acres. Did I miss something?

R-25 The total MHPA is 56,831 acres, approximately 90 percent (52,012) of which is anticipated to be preserved for biological purposes. This is stated on page VA-9, page IV-2 has been corrected to reflect this fact.

Re: Executive Summary Findings: it states "the project will not have a significant effect on the environment" which contradicts statements within the EIR/EA which conclude there would be significant land use effects and biological effects. Since the MMRP's were not accepted, the Summary Findings should say that the project WILL have a significant effect on the environment. The summary (which is all most people will read) is therefore a lie. How can that stand?

R-26 Comment unclear. The draft SEIR/EA does not have an Executive Summary Findings section.

Conclusion: The high-wind Cedars Fire showed that even 100'-plus wide fuel management zones (the east edge of Scripps, edge of Miramar Air Station, and the north edge of Thera Santa) did not prevent structural fires and losses. Homes with 100' vegetation fuel management may be highly-combustible and may have highly combustible plants and structures right around the home, meaning the conversion of native shrubs to soil and less plant won't stop structure loss, though it helps by providing a usable space for fire suppression during low-wind fires. After taking time to assess this ordinance further, perhaps along lines I have suggested, as well as the many other suggestions you may receive, then San Diego needs to really reduce risk in high wind fires by upgrading building standards to reduce combustibility, at least as strict as the County of San Diego's new regulations.

R-27 The plant is an invasive plant and it is not permitted within brush management zone two.

Sincerely,
Kathy Stewart
Kathy Stewart

Comment Letter S

To Whom it Concerns:

In the Brush Management Ordinance under consideration, owners shall be required to provide a 100 foot clearance about their residences. This bulks seems if the building of residences is not carried out within a distance of 100 feet of their property if brush exists on the other side of the property line. There is no point in adopting the 100 foot brush management zone and then permit the building of houses or other structures that could not comply with the 100 foot region. Being only 20 feet from brush, even if the brush managed, will not provide the same safety level.

Let us consider the owner of property that is adjacent to property on which brush is growing up to the property line. That owner should not be permitted, and the ordinance should so state, to build within the 100 foot distance from the property line. Otherwise the intent of the entire ordinance is subverted. The same requirement should be imposed on building trails. Thus a new tract in open brush or sheding open land, would have to have, as a minimum, a 100 foot brush management zone about its edges.

As a result of this, the ordinance would have direct impact on the planning of all residences, individual or in tract or not, that are adjacent to areas of brush. Plans for residences, individual or in developments, should also be reviewed to see whether they would comply. The plans should be made to conform with the brush management ordinance so that consistency of the planning process is realized.

Sincerely,

Andrew Wilson

13631 Old El Camino Road
San Diego
CA 92130

(9 July 2004)

Tel. 658 735 0352

S-1 This comment addresses the merits of the project, not the accuracy or adequacy of the SEIR/EA. No response is required.

S-2 Refer to comment S-1.

S-3 Comment noted.

S-1

S-2

S-3

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



For Rod
Aiding Director

August 3, 2004

Allison Vean
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

Subject: British Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA)
SCRF: 2004031041

Dear Allison Vean:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. On the enclosed Document Detail Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 2, 2004, and the comments from the reviewing agency (as) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21100(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the coordinating agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for final environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,
Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3144
TEL (916) 445-0613 FAX (916) 333-3015 www.opw.ca.gov

This letter was received after the close of the public review period, but is included in the Final SEIR/EA. No responses are required. Refer to comment Letter A.

F-1

T-1

SC# 2004031041
 Project Title: Brush Management Revisions to the Land Development Code and Federal Grant from the Office of
 Lead Agency: Emergency Services (CES), Federal Emergency Management Agency (FEMA)
 San Diego, City of

Type: BIR Supplemental EIR
 Description: Brush Management Revisions to the Land Development Code and Federal Grant from the Office of
 Emergency Services (CES), Federal Emergency Management Agency (FEMA) Council Approval to
 allow for revisions to the Municipal Code Chapter 12, Article 2, Division 4 to modify the requirements of
 brush management pursuant to the recommendations of the Fire Chief as a result of the 2003 Cedar
 Fire. The project proposes a City-wide 100-foot brush management zone consisting of 915 of Zone One
 and 89 of Zone Two. Project implementation on City property is proposed to be funded by a
 grant from the Office of Emergency Services (CES), Federal Emergency Management Agency
 (FEMA). The project is located within the City of San Diego, public and private lands and includes the
 City of San Diego Multi-Habitat Planning Area (MHPA).

Lead Agency Contact
 Agency: Mission Beach
 City of San Diego
 Phone: 619 448-5378
 Fax:
 Address: 1222 First Avenue, MS-501
 City: San Diego State: CA Zip: 92101

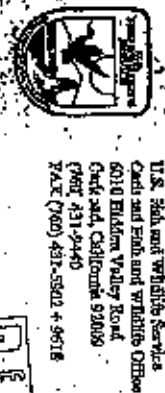
Project Location
 County: San Diego
 City: San Diego
 Regional:
 Grass Streets:
 Parcel No:
 Township:
 Range:
 Section:
 Base:
 Proximity to:
 Highways:
 Airports:
 Railways:
 Waterways:
 Schools:
 Land Use: City-wide

Project Features: Aesthetics/Visual Landuse; Cumulative Effects; Wildlife; Water Quality; Vegetation; Soil
 Emission/Conduction/Chemical
 Reviewing Agency: Regional Water Quality Control Board, Region 9, Department of Parks and
 Recreation, Harbor Branch Heritage Commission, Integrated Waste Management Board, Office of
 Emergency Services, Department of Forestry and Fire Protection, Department of Fish and Game,
 Region 9, Department of Water Resources, California Coastal Commission, California Highway Patrol,
 Chatsara, District 11

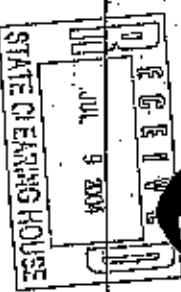
Date Received: 08/18/2004 Start of Review: 08/19/2004 End of Review: 08/20/2004

Note: Blanks in this table result from insufficient information provided by lead agency.

8/11/04 1:52 PM



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 6010 Building Voley Road
 Oakland, California 94608
 (907) 431-9440
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CA Dept of Fish and Game
 South Coast Region, O Box
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Mr. Allison Ross
 Environmental Planner
 City of San Diego Development Services Department
 1222 First Avenue, D18 501
 San Diego, California 92101

JUL 9 2004

Re: Draft Subsequent Environmental Impact Report/Environmental Assessment for the
 Management Revisions to the Land Development Code and Federal Grant from the
 Office of Emergency Services, Federal Emergency Management Agency (FEMA)
 2004031041

Dear Mr. Ross:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department) collectively the "Wildlife Agencies," have reviewed the above-referenced Draft Subsequent Environmental Impact Report/Environmental Assessment (SEIR/EA), which is an off-site EIR that was prepared for the City's Land Development Code. Final adoption of the proposed revisions would require approval by the California Coastal Commission for modifications of the City's Local Coastal Plan necessitated by the revisions. We have also reviewed the January 21, 2004, City Manager's Report regarding the proposed revisions, as of March 9, 2004, letter from the City of San Diego's (City) Development Services' Department to the City's Planning Department regarding the scope of work for the SEIR/EA, and listened to the January 20, 2004 recording of the staff report, public testimony, and City Council deliberations on the proposed building code revisions for buildings adjacent to high fire hazard areas. In addition, we met with Ms. Ann Ehr and Mr. Keith Green of the City on January 9, 2004, to learn about the proposed brush management revisions, and the Department wrote a comment letter (April 8, 2004) on the Notice of Preparation (NOP) of this SEIR/EA.

The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act, Sections 15386 and 15381, respectively. The Department is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning program. The primary concern of the

1. The City prepared the Land Development Code EIR in 1998 in response to the Land Development Code Act, placing the brush management revisions, that were made in consultation with the Wildlife

mandate of the Service is the protection of public fish and wildlife resources and their habitat. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531, et seq.).

Existing Conditions

The current brush management regulations were developed in conjunction with the City's Multiple Species Conservation Program (MSCP). Under current regulations of the MSCP, brush management Zone One is the area adjacent to structures and consists of pavement and immediately adjacent, unimproved plantings. Brush management Zone Two is an area of native plant material (up to 50 percent plant cover) to reduce fuel load. The width of Zone One varies from 20 to 40 feet west of Interstate 805 and El Camino Real, and 30 to 45 feet east of this intersection. Zone Two varies from 20 to 30 feet west of the intersection, and 40 to 50 feet east of it. Put another way, Zones One and Two have a combined range of 40 to 70 feet west of Interstate 805 and El Camino Real, and 70 to 95 feet east of this intersection.

Current brush management in Zone Two occurs on 3,759 acres within the City. Of that, 1,222 acres are on private land, and 531 acres are on public land. Of the 3,753 acres, 526 are within the City's Multiple Species Conservation Program (MSCP) Multiple Habitat Preservation Area (MHPA) (Per. cons., Chad Kane, City MSCP, June 25, 2004).

The City's Park and Recreation Department (PRD) manages approximately 22,600 acres of open space, much of which is in the MHPA. This open space includes 220 linear miles of urban wildlife interface. The PRD is responsible for conducting brush management in city-owned open space areas within the City, including Zone Two.

Proposed Project

The City's Fire-Rescue Department is proposing revisions to the brush management regulations in response to the fires in the City and the County of San Diego in October of 2003, and pursuant to the recommendations of the Fire Chief. Their purpose is to allow for a greater defensible space against incoming fires. The proposed revisions would entail establishing a 100-foot wide brush management area consisting of 35 feet in Zone One and 65 feet in Zone Two throughout the City. This would result in 15 - 45 foot expansion of Zone Two, depending on the existing width per the current requirements. In addition, Zone Two would be expanded by 1 foot in every foot by which Zone One falls short of 55 feet. Existing requirements allow for the decrease of Zone Two by 1 1/2 feet per 1 foot of increase in Zone One. The proposed revision would limit this to a maximum reduction of 30 feet of Zone Two. Brush management activities by the City would likely occur every one to three years.

2. The City's portion of the MSCP's MHPA is approximately 68,834 acres and includes approximately 47,811 acres within the City's park district and adjacent City-owned lands. Approximately 30 percent (15,012 acres) of the MHPA lands within the City's jurisdiction is included in the preservation for biological purposes, including 77 percent of the core biological resources areas and 77 percent of the habitat linkages within the subarea.

Project Objectives

The three objectives of the proposed revisions, as provided in the SEIR/EA are to:

- a. complete in a timely and comprehensive manner the revisions to current brush management regulations;
- b. identify and implement efficient, effective, and environmentally sensitive means to accomplish the revised brush management Zones One and Two; and
- c. provide for a flexible and environmentally sensitive long-term maintenance of brush management zones in open space, private lands, and other environmentally sensitive lands.

Alternatives

In addition to the proposed action and the no-project alternative, the SEIR/EA described the following alternative: (a) the no action alternative which assumes that there would be no funding available to the City for brush management within the open space it manages, thereby reducing the amount of brush management the City would be able to conduct; (b) the clear to resilient Zone Two alternative which assumes complete clearing of Zone Two and replanting with low-growing native plants; and (c) an alternative involving strengthening the building code regulations as they pertain to fire protection in high fire hazard areas. Alternatives that the City considered but rejected are (a) education / training, and (b) prescribed burning.

Impacts / Mitigation

The SEIR/EA indicates that the proposed brush management revisions would result in an additional City-wide impact of approximately 2,880 acres within Zone Two. Of this total, an estimated 715 acres would be within the MHPA, which represents an approximately 13.6 percent increase over the current total acreage of Zone Two within the MHPA. The 715 acres of impacts includes 46 acres of Tier I habitat, 312 acres of Tier II habitat, 222 of Tier III habitat, and 135 of Tier IV habitat. Of the 715 acres, 242 are within the core biological resource area and habitat linkages, and of which 198 acres are California graminoid (Polypogon californicus graminoid) habitat in Tier II. In addition, the SEIR/EA indicates that the proposed project would result in the loss of five out of 377 occurrences of grasslands in the MHPA within the City.

The SEIR/EA indicates that the impact analysis in the MSCP RIR/Environmental Impact Statement (EIS) had not accounted for any potential project-related impacts on preserve configuration, species and diversity, and habitat linkages of the MHPA. The SEIR/EA notes that conservation of preserved species would be maintained and there would not be a significant increase in the likelihood that an unconserved species will meet the criteria for listing under either the federal or state Endangered Species Act. However, the SEIR/EA concludes that implementation of the proposed brush management revisions would result in significant impacts on

Ms. Raop (FWS-SDX-4072.1)

- a. land uses;
- b. biological resources;
- c. graminifers, when the brush management activities are conducted within the MHPA, during the grasshatcher breeding season;
- d. Tier 1, II, and III, and IIB habitats within Zones One and Zone Two; and
- e. sensitive species.

In addition, cumulative impacts related to biological resources are considered to be significant and unmitigated. Through the SERR/BA identifies measures to mitigate for some of these significant impacts, the City does not propose to implement any of the mitigation measures.

Because the SERR/BA concludes that the proposed action would result in significant environmental effects, the Federal Emergency Management Agency (FEMA) should prepare an EIS as required by the National Environmental Policy Act. In addition, the action as proposed may affect listed species. Therefore, FEMA should include section 7 consultation to fulfill its obligations under the ESA.

Of particular concern to the Wildlife Agencies are the effects of the proposed brush management activities on the MHP and MEPA. The proposed revisions conflict with specific requirements of the MHP and MEPA regarding clearing during the avian breeding season and loss of habitat within the MHPA in the City's take permit for the MSCP. Further, suspending this conflict is the lack of mitigation for these impacts. While we recognize the need to provide an adequate defense area against impending fire, it needs to be done in a manner consistent with the City's permit. Clearing should occur only outside the breeding season as indicated in Table 3-5 of the MSCP Take and Condition 3 of the permit, and any unavoidable loss of habitat in the MHPA should be fully mitigated. If these two measures are not included for implementation in the restricted area MHP MSCP. Because of the severity of the project-related impacts and the difficulty of mitigating such impacts, we strongly urge the City to consider strengthening the building code to prohibit structures in high fire hazard areas sufficiently to avoid and/or minimize the need for additional brush management.

We realize that CEQA allows CEQA lead agencies to make statements of overriding considerations that adverse environmental effects may be considered "acceptable" in situations where the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects (CEQA Guidelines, section 15097(a)). The City may develop a statement of overriding considerations for this SERR/BA that satisfies CEQA. However, for the reasons given above, it would be difficult to provide adequate substantiation for such a statement to demonstrate that the project-related impacts on the MHP and MEPA would be "acceptable." Furthermore, it would be inappropriate for the City to list a project as "acceptable" if the project-related impacts are not fully mitigated or if the project-related impacts are not fully mitigated and the project-related impacts are not fully mitigated.

Ms. Raop (FWS-SDX-4072.1)

brush management regulations, particularly without trying first to establish a reliable source of funding to underwrite its costs of enforcement. In addition, given our concerns regarding the project-related impacts, negative biological impacts, we question how the above project objectives "a" and "c" would be realized.

Our detailed comments on the proposed brush management revisions are attached. The Wildlife Agencies appreciate the opportunity to comment on this SERR/BA. The Department finds that the implementation of the revised brush management regulations would not be as minimal in its effects on fish and wildlife per section 711.4 of the California Fish and Game Code. Please contact Libby Lucas of the Department at (658) 467-4230 or Ben Yeater of the Service at (760) 431-9440; or if you have any questions or comments concerning this letter.

Sincerely,


 Donald Christwick
 Habitat Conservation Planning Supervisor
 California Department of Fish and Game
 Assistant Field Supervisor
 U.S. Fish and Wildlife Service

Wildlife Agencies and the Federal Emergency Management Agency, Office of Emergency Services

- All Faiths, City of San Diego Development Services Department
- Kahn Drees, City of San Diego Planning Department
- Ann He, City of San Diego Park and Recreation Department
- Sara Oates, City of San Diego Fire-Rescue Department
- Sherrilyn Stutz, California Coastal Commission
- State Clearinghouse

WILDLIFE AGENCY COMMENTS AND RECOMMENDATIONS ON THE SEIR/EA FOR BRUSH MANAGEMENT REVISIONS TO THE LAND DEVELOPMENT CODE.

1. The SEIR/EA should be rescinded.

Several of our comments identify where the SEIR/EA lacks information which we believe is necessary to determine whether the proposed brush management revisions would affect (a) the assumptions that were made (during the MSCP negotiations) regarding the habitat that is to be preserved under the MSCP, and/or (b) the covered status of any of the species covered by the MSCP. Absent this additional information, it is infeasible for us to make these determinations, and the SEIR/EA is inadequate and contrary relative to impacts on biological resources and the MHPA [CEQA Section 15088.5(a)(4)]. In addition, we believe there are feasible mitigation measures, considerably different from the options previously analyzed, that will lessen the project-related significant biological impacts (e.g., comment 4). The City's determination to adopt these measures would warrant the rescindment of the SEIR/EA [CEQA Section 15088.5(a)(7)].

The Department's NOP letter emphasized that the SEIR/EA must ensure and verify that all requirements and conditions of the MSCP Subarea Plan and associated Implementing Agreement would be met if the proposed brush management revisions were approved and implemented. The NOP letter also indicated that the discussion in the SEIR/EA about the project-related loss of habitat within the MHPA should (a) thoroughly address the assumptions that were made regarding the protection of MSCP-covered species, (b) include full consideration of a reduction of impacts from brush management afforded by revision to the building code, and (c) describe how the City would compensate for the loss of sensitive habitats within the MHPA, the net loss of habitat within the MHPA, and the potential impacts on MSCP covered species. The SEIR/EA lacks adequate information regarding the above-identified issues, information that is needed to determine the validity of several of its conclusions regarding biological impacts in the SEIR/EA.

We appreciate the efforts of City staff in preparing the SEIR/EA under the pressure of emergency conditions. However, because the Uniform Fire Code gives the Fire Marshal the authority to implement the recommended changes administratively, there is no emergency relative to a need to adopt the proposed revisions or some version thereof. Rather, the emergency is in the need to enforce (a) the proper implementation of the existing brush management requirements by the City (in City-owned open space) and by private parties, and (b) the recent building code revisions (e.g., requirement of Class "A" roofing assemblies, prohibition on wood shakes and wood shingles). The January 21, 2004, City Manager's

3. The conclusions that are not adequately substantiated are that (a) the conservation of covered species is not feasible, (b) that there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the Federal or state Endangered Species Act, (c) that the configuration of the MHPA would not be impacted, (d) that the project-related potential impacts would be unlikely to affect the riparian diversity within the MHPA, and (e) that the habitat functions of the MHPA would remain unaffected.

Report regarding the proposed brush management revisions documents the serious staff inquiry that the FRL has to meet its obligations for brush management.

We note that the January 21, 2004, City Manager's Report regarding the proposed revision of the SEIR/EA, the State and Federal Wildlife Agencies appear amenable to the changes in the brush management regulations in preliminary discussions. As the meeting on January 9, 2004, the inquiry about how the proposed revisions would affect the assumptions regarding the habitat that is to be conserved under the MSCP. Because the estimates of the potential impacts on the species within the MHPA and on covered species were not yet available, it was not possible for the Wildlife Agencies to evaluate the proposed revisions at that meeting. Therefore, while we understand the need for the 100-foot wide brush management area, we made no conclusions regarding the proposed revisions' implications for the MSCP. Upon review of the SEIR/EA, we are concerned about the adoption of the proposed wildlife for Zones One and Two without adequate analysis of the their biological implications, and without mitigation.

Recommendation:

The Wildlife Agencies recommend that the City revise the SEIR/EA to provide the information requested in our comments below, and re-evaluate it for additional public review. The additional information should be included in a re-submitted SEIR/EA (CEQA Section 15088.5) or in a re-circulated and/or final SEIR/EA that is made available for review by the public and commenting agencies prior to approving the project (CEQA Section 15089). The SEIR/EA reviewer period should be a minimum of 30 days.

2. Proposed Wildlife for Zones One and Two Requires Justification.

The Wildlife Agencies acknowledge the need to provide an adequate defensible space against impending fire, and that the proposed 100-foot wide brush management area is consistent with the Manual of Urban Building, dated February 26, 1997, among the Wildlife Agencies, the California Department of Forestry, the San Diego County Fire Chief's Association, and the Fire District's Association of San Diego County. However, it is not clear how the proposed widths of Zones One and Two were determined. Specifically, the reasons for the disparity between the proposed widths of the two zones are not apparent, and it is unclear why Zone One, which is outside of the MHPA, is proposed to be the narrower of the two zones.

Recommendation:

We recommend that the re-circulated and/or final SEIR/EA explain the reasoning behind the proposed zone widths.

4. The current staffing level, the FRL fills an average of 70 acres per year. The estimated acreage needed for brush management in the urban-wildland interface at least once annually is 1,750 acres.

b. Existing regulations allow for the decrease of Zone Two by 1/4 foot per 1 foot of increase in Zone One. The proposed revisions would limit this to a maximum width of 30 feet of Zone Two. We recommend that the revisions be modified to require that Zone One be as wide as possible (i.e., not be limited to a 20 foot increase -- 30' --) where parcels meet all of the following three parameters: (a) Zone One would be entirely outside the MHPA, as is currently required; (b) Zone Two does not encroach into the MHPA; and (c) there is room for more than 35 feet in Zone One. This should be applied both retroactively and to future developments, and to residential, business, and institutional developments alike. This approach would reduce the City-wide need for ongoing brush management in Zone Two, thereby reducing the on-going biological impacts (e.g. edge effects and disturbance of avian breeding activity), the need for ongoing enforcement, and the on-going costs associated with brush management City-wide.

c. The proposed revisions require that Zone Two would be expanded by 1 foot for every 1 foot by which Zone One falls short. However, unlike the proposed revisions for the grasslands described in the preceding comment, the revisions do not establish a limit for how far beyond Zone II. We are concerned about the related potential implications for the MHPA, and recommend that the revisions be modified to establish a limit for Zone Two areas within the MHPA.

d. Please see comment 8 for additional suggested modifications to the proposed revision.

Methodology for Analyzing Impacts on Native and MSCP-Covered and Non-Covered Sensitive Species is Inadequate
Discussion

a. Based on the SEIR/EA, it seems that very little consideration was given to the potential project-related impacts on MSCP-covered or non-covered sensitive species, with the exception of the gnatcatcher. For example, regarding narrow endemic plant species, the SEIR/EA, etc as only "no impacts to narrow endemic species are expected to occur because these species are generally less than eighteen inches in height and would not be subject to tillaging per the brush management regulations. The exception is *Erucaria* (*Erucaria versicolor*), which has an average height of eighty inches; however, its known locations of this species are within the proposed brush management area. In addition to *Erucaria* (*Erucaria versicolor*), other narrow endemic species that grow to exceed 18 inches in height and that might occur within the expanded Zone Two areas, include *Gray's Lupine* (*Lupinus confertus*), *Audleya* sp. (in their flower stalks), and *woolly Chrysothamnus* (*Chrysothamnus leucophyllus*). In addition, willow *monardella* (*Monardella lutea* ssp. *williamsii*), a state and federally listed MSCP covered species (though not a narrow endemic species), grows to exceed 18 inches in height and might occur within the

5. The brush management regulations require that "within Zone Two, all plants remaining after 80 percent of the plants over 18 inches in height in height are removed shall be planted to include field planting in accordance with the standards established in the Land Development Manual" (Section 14.2.041 2004), "however" in the proposed

expanded Zone Two areas. As to animals, contact occurs when is just one of several species that warrant more thorough analysis than was apparently conducted.

Page 49 of MSCP Subarea Plan states, Zone Two "may" be located in the MHPA, "if" it is located where narrow wildlife corridors require it to be located outside of the MHPA. This discussion at our wildlife corridors requires it to be located outside of the MHPA. This already takes us, special management measures are required, including implementation measures to control runoff, noise, lighting, exotic predators and invasive plants. However, the SEIR/EA does not provide any analysis of whether, or where, the proposed revisions would expand existing Zone Two areas, or locate future Zone Two areas. It appears likely to conflict within the MHPA, and how this would be addressed.

e. We believe that the project-related impacts on the MHPA and the species it supports is a under-statement. The impact analysis conducted for the SEIR/EA encompassed only brush management zones for already developed properties, lands that are graded, and lands for which the City has issued grading permits (Permit, Council, Jeanne Krosch, City MSCP, June 24, 2004). Because this analysis did not include future projects' brush management areas, the estimates in the SEIR/EA of the aerial extent of the impacts do not reflect the full project-related impacts on habitats within the MHPA and the species it supports (e.g., Emperorchick).

Recommendation

a. The recommended and/or final SEIR/EA should identify the MSCP-covered species, and uncovered sensitive species that are likely to occur within the expanded Zone Two area, and provide a thorough analysis of the potential project-related impacts on these species.

b. We assume that implementation of the proposed revisions would continue to restrict Zone One in areas outside of the MHPA to be consistent with the MSCP Subarea Plan (p. 49-49 of the Subarea Plan). The recommended and/or final SEIR/EA should identify whether it is in the case, and if it is not, the impact analysis should be revised to include the impacts from Zone One encroaching into the MHPA.

c. The recommended and/or final SEIR/EA should provide an analysis of locations where proposed revisions would expand existing Zone Two areas, or locate future Zone Two areas, in narrow wildlife corridors within the MHPA and how this would be addressed. Preferably, if a proposed revision should be modified to reflect that Zone Two areas are not to occur within narrow wildlife corridors and the recommended and/or final SEIR/EA should evaluate the this restriction.

d. We appreciate that it is infeasible to quantify potential future impacts. However, the recommended and/or final SEIR/EA should discuss the fact that the project-related impacts would extend beyond the expansion of the existing brush management areas, and, if possible, provide an estimate of the additional coverage and species that would be affected. This discussion should include the potential expansion of invasive species beyond the proposed brush management footprint (comment 6). Preferably, brush

management zones should be incorporated into the footprint of all future projects. It is recommended that final SER/REA should evaluate this requirement.

The recommended and/or final SER/REA should also discuss the potential for additional impact areas within the MHPA that would arise from the expansion of Zone Two areas within the MHPA by 1 foot for every 1 foot by which Zone One falls short, as proposed. Again, we understand that this impact cannot be quantified, but it should at least be qualitatively identified.

The recommended and/or final SER/REA should clarify whether the estimates include the potential impacts from the construction of staging areas, and access roads or paths, (any) that might be necessary to reach the expanded areas of Zone Two. If they do not, it is recommended that final SER/REA should also address this and any ongoing maintenance of the roads/paths that would be necessary.

If the additional analyses recommended in the foregoing comments reveal significant impacts that the current SER/REA has not addressed, we recommend that the recommended and/or final SER/REA propose mitigation to bring the impacts to a level less than significant.

4. Project Related impacts on the MHPA and the Species it Supports Would Likely be Significant

Regarding the project-related impacts on the MHPA and the species it supports, the SER/REA states: "Since potential impacts would be within the 200-foot buffer analyzed in the MHPA SER/REA for edge effects, no additional impacts to the preserve configuration, structural diversity and habitat interfaces of the MHPA would occur. Impacts would generally be limited to areas outside the core biological areas and would not impact major habitat, riparian or wildlife corridors, therefore the conservation of covered species would be maintained and there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act."

Background

For the MSCP SER/REA, several assumptions were used to evaluate whether the proposed MHPA preserve scenario would result in adequate coverage of species and habitats. A significant edge effect of 200 feet along the inside boundary of the preserve was one of the assumptions. (City of San Diego 1990). The BISTIR for the MSCP includes the following pertinent statements:

"Direct impacts to covered species would result from edge effects within and adjacent to the preserve and increased development pressure outside the preserve. Assuming a 200-

foot buffer, the MSCP SER/REA states that the impact analysis includes the impacts from areas adjacent to the

foot wide strip of preserve boundary, it is estimated that approximately 20% (34,000 acres) of the MHPA area could be subject to edge effects depending on how well the local jurisdictional implementation of the preserve management guidelines and land use planning tools. Because these edge effects could adversely impact covered species, this indirect impact is regarded as significant" (City of San Diego, 1996; page 4.3.151 -- the analysis of significance is for the MHPA scenario (i.e., the proposed project for the MSCP BISTIR).

"Direct impacts to covered species, uncovered species, and sensitive vegetation communities habitats would result from permitted uses within the preserve, edge effects from uses adjacent to the preserve, and increased development pressure outside the preserve. These impacts are considered significant" (City of San Diego, 1996; page 4.3.159 -- the analysis of significance for the MHPA scenario, in the section for the City's MSCP Subarea Plan).

"These impacts would be mitigated through implementation of the guidelines and guidelines established in the City of San Diego Subarea Plan and the City's RPO (Resource Protection Ordinance) to a level below significant" (City of San Diego, 1996; pages 4.3.153 -- the discussion of mitigation for the MHPA scenario, in the section for the City's MSCP Subarea Plan).

The MSCP BISTIR then cites the RPO and identifies sections in the City's Subarea Plan regarding relevant requirements, two of which address brush management and invasive species -- Sections 1.4.3 and 1.5.2 (City of San Diego, 1996; page 4.3.193 and 194).

Discussion

The 200-foot buffer for edge effects was based on the understanding of the impacts on the MHPA at the urban-wildland interface at the time the BISTIR for the MSCP was prepared. Implementation of the proposed revisions would result in an approximately 136 percent increase of Zone Two within the MHPA at the urban-wildland interface, plus the acreage not accounted for (comment 3). This would significantly expand the areas both directly and indirectly (i.e., edge effects) affected by brush management in this already biologically vulnerable area, relative to what was contemplated during the preparation of the MSCP. The Wildlife Agency believes that the 200-foot buffer for edge effects that was assumed in the analyses for the BISTIR for the MSCP is misapplied in the impact analysis for this MHPA, and that the conclusions drawn from the current analysis are therefore not supported by substantial evidence in the record.

Based on the above statements in the BISTIR for the MSCP, it is evident that (a) the 200-foot wide strip around the preserve boundary was intended for analysis of edge effects in (b) and (c) adequate mitigation for the impacts within the buffer is to be achieved by implementation of the mandatory requirements cited in the MSCP BISTIR.

We consider the impacts resulting from activities associated with brush management within Zone Two as direct impacts because they result in direct disturbance/loss of the

habitat within the brush management footprint and the access route to the area, and impact disturbance of wildlife within these areas. As such, the 200-foot wide buffer used in the MSCP EIR/IS for the impact analysis of edge effects is not applicable to the direct impacts of brush management, though it may be applicable to the indirect impacts of brush management (e.g., establishment of invasive plant species; comment 5) in that area of Zone Two proposed to be widened. It is unreasonable to call the 200-foot wide buffer a buffer from edge effects if it expects direct impacts from on-going activities.

Even if the application of the 200-foot wide buffer was acceptable in this context, it is clear that brush management-related impacts on biological resources within the buffer are not being mitigated per the City's requirements. The prevalence of invasive exotic plant species at the urban-wildland interface throughout the City, including brush management areas within the MHPA, confirms lack of compliance with the City's requirements, including the brush management regulations (comment 6), by both the City on public lands and private parties (i.e., lack of enforcement by the City). Absent enforcement with these regulations, the City cannot demonstrate that the extent impacts within the 200-foot wide area, much less future impacts, will be mitigated to a level less than significant. The existing unmitigated conditions render the application of the 200-foot wide buffer unjustified.

Brush management in Zone Two is currently considered impact neutral for the purpose of determining habitat mitigation needed for projects for which the City issues discretionary permits. However, just as with the 200-foot buffer for edge effects, the impact neutral status for Zone Two was based on the understanding of the related impacts on the MHPA at the urban-wildland interface at the time the EIR/IS for the MSCP was prepared. It was also based on a commitment to the preservation of a specified number of acres. In addition, the impact-neutral status cannot be applied to brush management areas in or adjacent to gnatcatcher habitat within the MHPA if the brush management occurs during the gnatcatcher breeding season, nor can it applied to areas that do not undergo weed control as required by the brush management regulations. One biologically defensible approach to allow a continuation of the impact neutral status would be to, minimally, (i) demonstrate that there is no net loss of habitat within the MHPA, (ii) apply the seasonal prohibition required by the MSCP, and (iii) enforce the weed control within Zone Two already required.

Conclusions and Recommendations

The SEIR/EA currently lacks sufficient information for the Wildlife Agencies to concur with the City's conclusions that: (a) the conservation of covered species would be maintained; (b) there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act; and (c) the configuration of the MHPA would remain unaffected, particularly considering that the implementation of the proposed revision would significantly increase Zone Two within the MHPA at the urban-wildland interface, which would result in a net loss of habitat within the MHPA. We therefore recommend that the recommendations and/or final SEIR/EA substantiate these conclusions.

b. We do not concur with the City's conclusions that the project-related potential impacts would be unlikely to affect the structural diversity within the MHPA, and that the indirect impacts of the MHPA would remain unaffected. The reclassified and/or final SEIR/EA should better substantiate these conclusions, considering that both the structural diversity and the habitat interfaces within the area of direct and indirect project-related impact would expect some significant negative impacts.

c. The reclassified and/or final SEIR/EA should elaborate on the condition of the 135 acres within Tier 1 habitat. If they are considered disturbed, the SEIR/EA should discuss the potential causes of their disturbed condition, particularly for those Tier IV areas where findings result from invasive species whose establishment was caused or facilitated by brush management activities.

d. Based on the recommendations above (a, b, c), we recommend avoidance measures for MSCP cover all species, and mitigation for the identified impacts to the MHPA through preservation of additional in-kind habitat in a manner that maintains the design and ecological integrity of the preserve. If unmitigated, the loss of habitat within the MHPA would significantly degrade the preserve, and may warrant reconsideration of the City's coverage for some species under the MSCP. We recommend that the re-classified and/or final SEIR/EA clearly explain what mitigation measures will be taken.

5. Impacts on the Gnatcatcher Should be Avoided or Mitigated
Applicable to the SEIR/EA

According to the SEIR/EA, implementation of the proposed revisions would affect 191 acres of gnatcatcher habitat, and 5 out of 377 occurrences of gnatcatcher in the MHPA within the City. However, the SEIR/EA also indicates that the database used to estimate the impact on the gnatcatcher occurrences does not contain a comprehensive survey of all lands in the City of San Diego, that occupation of habitat varies annually, and that the true impacts on individual birds cannot be assessed.

The SEIR/EA in places that brush management in Zone Two is currently allowed year-round within the MHPA. However, private properties within the MHPA are normally required to restrict brush management activities within Zone Two to outside the breeding season for the gnatcatcher. The SEIR/EA states, "If the brush management activities [within the MHPA] cannot be carried out during the gnatcatcher breeding season, then the impact is considered significant." Nevertheless, the City proposes to allow brush management within the MHPA during the breeding season.

7 The 377 occurrences of gnatcatcher are the City's share of the total 1,488 known locations (in 1987) of gnatcatchers that are to be conserved by the MSCP. "Occurrences" is synonymous with "habitat" (see, e.g., Marjorie Johnson, July 7, 2004).

8 We understand that the City's current regulations do not specifically state this, but that it is implied based on the regulations do not impose seasonal restrictions (see, e.g., Usama Koceti, City MSCP, June 24, 2004).

Brush management activities would likely occur every one to three years and last for one to two days. Hand tools and small mechanical tools, such as weed whackers would be utilized. Best management practices for brush management during the winter breeding season is the use of active nests. In addition, indirect noise and activity impacts can disturb nesting that could result in nest abandonment for periods long enough to affect eggs or young through old bird predation or starvation. The SEIR/EA does not address the direct destruction of nests or management zone two, it is not anticipated that a significant noise impact would occur during the breeding season of sensitive species.

The SEIR/EA identifies the following measures to mitigate the potentially significant noise related impacts to the gnatcatcher:

Impacts associated with the California gnatcatcher would be reduced to below a level of significance by acquiring an amount of acreage, approximately 198 acres, of good quality gnatcatcher habitat over a time period to be determined by the City of Inyo.

Mitigation is also available in the form of requiring a qualified biologist prior to commencing brush management activities to survey the project area for gnatcatcher nests.

However, the City does not propose to carry out these, nor any other measures, to mitigate for potential project related impacts on the gnatcatcher, nor does the SEIR/EA provide an explanation as to why, other than that the applicant, the Fire Reserve Department, has not applied to such litigation.

Discussion

In addition to the uncertainty of the project-related impacts on gnatcatcher reflected by the SEIR/EA, and the already-discussed problems with the methodology used to estimate the impacts (Appendix B), it appears that the estimates of impacts on gnatcatcher occurrence does not account for the potential loss of or effects on gnatcatchers in habitat adjacent to Zone Two. This habitat would be subject to negative indirect effects of brush management conducted during the breeding season.

Regarding brush management within the MHPA during the gnatcatcher breeding season, it is inappropriate for brush management activities not to comply with the requirements which all other projects must comply. The MSCF states, "no clearing of occupied [gnatcatcher] habitat within the other MHPAs and within the County's Biological Reserve Corps Area may occur between March 1 and August 15" (entry for the gnatcatcher in Table 3-5 of the MSCF Plan).

Regarding disturbances from noise and visual impacts (the latter is not addressed by the SEIR/EA) associated with brush management activities during the gnatcatcher breeding season, we assure that the description in SEIR/EA of brush management practices reflected

the City's project area. This does not necessarily reflect the methods used by others who conduct brush management. They may take longer and generate louder noise than does the City. The SEIR/EA does not state they may not keep their work area so localized as does the City. The SEIR/EA does not address direct loss of nests and provides insufficient information to support the conclusion that indirect effects from conducting brush management would not negatively affect gnatcatcher breeding behavior or success, particularly relative to other brush management activities. Therefore, we do not agree with the conclusion in the SEIR/EA about potential indirect impacts on the gnatcatcher during the breeding season.

Recommendations

In comment 4, we recommended mitigation for any identified impacts to the MHPA through preservation of additional in-lieu habitat in a manner that maintains the design and structural integrity of the preserve. Therefore, we concur with the conclusion in the SEIR/EA that the impacts on 198 acres of gnatcatcher habitat would be significant and should be mitigated.

The recommended and/or final SEIR/EA should prohibit brush management within the MHPA during the breeding season (again, see Table 3-5 of the MSCF Plan), and should require the proposed revisions to reflect this prohibition (i.e., assume occupancy by gnatcatcher). The recommended and/or final SEIR/EA should explain how the City will inform managers of the public who conduct brush management of the location of the MHPA (i.e., whether it is within their Zone Two), and how PRD staff/contractors will also be so informed about the lands they brush manage.

The entry for the gnatcatcher in Table 3-5 of the MSCF Plan, states, "Area specific management directives (ASMDs) must include measures to reduce edge effects and minimize the disturbance during the nesting period, fire prevention measures to reduce the potential for habitat degradation, and management measures to maintain or improve habitat quality including vegetation structure." The final SEIR/EA should address the requirements as it relates to the areas that the proposed revisions would affect (e.g., San Clemente Canyon), and should establish a schedule for the development of the ASMDs. These ASMDs should be reviewed by the Wildlife Agencies prior to implementation, their development should be complete prior to the date that the proposed revisions become effective, and they should be implemented concurrently with the activity they are intended to address.

6. Invasive Exotic Plant Species / Lack of Adequate Enforcement

Previous comments have alluded to the indirect impacts from brush management. The results of the City's Brush Management Evaluation (City's Evaluation) conducted for the SEIR/EA indicate that eight of the 25 sites observed had 50 percent or more cover of exotic plant species (Brush Management Evaluation / Biological Technical Report - Appendix B). This bears out the common knowledge that brush management areas are highly susceptible to being invaded by exotic plant species, even if the surrounding

habitat is solely or predominantly occupied by native species. Based on the City's Evaluation, staff concluded that invasion of exotic species into brush management areas appears to be the greatest impact associated with biological resources and brush management. We classify the invasion of exotic plant species as the most biologically damaging impact of brush management, for brush management itself results in direct impacts on sensitive habitats and species.

The prevalence of invasive exotic species in brush managed areas poses several biological problems. These include: alteration of ecosystem functions such as nutrient cycles, hydrology, and wildfire frequency; outcompeting and extinction of native plants (i.e., habitat type change) and animals, which results in reduced biological diversity; hybridization with native plants; and supporting non-native animals, fungi, and other species. Rare species seem to be particularly vulnerable to the changes wrought by non-native invaders. For example, the California National Diversity Database indicates that 181 of the state's rare plant species are experiencing threats from invasive weeds (Bossard et al. 2000). Establishment of invasive species also increases the potential for progression of invasion into adjacent native habitats, and an increase in the availability of propagules to travel and to establish in more distant habitats. We are concerned that the proposed increase in the Zone Two width would expand invasive exotic species both within the added Zone Two area and surrounding habitats. This would effectively increase the edge effect of brush management activities and the affected area within the MHPA, above the current equities which now include only direct impacts.

b. Many exotic species that establish in the brush management areas, including several observed by City staff, are as or more flammable than the native species they displace (City of Laguna Hills). Fire-prone exotic plant species include pampas grass (*Cortaderia sp.*), star thistle (*Centaurea maculosa*), castor bean (*Nicotiana glauca*), black nuttall (*Prostris nifera*), Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), wild oats (*Avena barbata*) all of which were observed during the City's evaluation. Pampas grass, star thistle, castor bean, and black nuttall are also invasive species on the California Exotic Pest Plant Council's Lists A or B. The presence of fire-prone exotics is clearly counter-productive to brush management efforts.

c. A report by the San Diego County Wildland Fire Task Force states, "Unfortunately, as my homeowners ignore the need for defensible space, because they misunderstand the 'defensible' concept. They believe it to mean the complete removal of any vegetation on the land around their homes. Other homeowners do not want to touch any native vegetation for environmental or aesthetic reasons. Other homeowners do not have the time or money to remove and dispose of vegetation, which could involve costly tree felling and landfill charges" (San Diego County, 2003). The City's Evaluation substantiates this statement.

In the discussion of the rejected education/training alternative, the SER/EA states, "It is assumed that not everyone who requires brush management... would conduct brush management per the required procedures in the regulations or as required in development permit conditions". The SER/EA goes on to state, "based on the assumption... the

would be a significant impact to sensitive biological resources as a result of the establishment of non-native plant species in zone two and downslope of zone two."

Based on the observations and the City's Evaluation, it is apparent that, for the most part, brush management is currently not conducted or not conducted properly. Therefore, it is difficult to understand how 'managing a wilder brush management area in Zone Two will achieve its intended purpose of providing more defensible space, without any City-wide enforcement.

One of the assumptions used in the preparation of the SER/EA was that weeding is performed by the City's current brush management regulations, does not occur. This assumption is invalid because it correctly reflects existing conditions. However, because the existing conditions are unlawful, they should not serve as a frame of reference for evaluating impacts from the proposed project.

An additional need for enforcement of the brush management regulations is evidenced by the opportunity for a requirement that was proposed in the building code revisions - that all structures or portions (e.g., fences, patios, play structures), on a lot adjacent to or containing a high fire hazard area or anywhere within 300 feet of such a lot, be non-combustible. The City's current brush management regulations for Zone One already prohibit non-combustible construction that provides a means for transmitting fire to other structures, and state, "structures such as fences, walls, and noncombustible garages that are located within brush management Zone One shall be of noncombustible construction" (Chapter 14, Article 2, Division 4, page 24 of the Municipal Code). No structures are allowed in Zone Two. That even, the Building Industry Association (which was one of those opposed to this proposed revision) apparently did not know about the existing requirement, again underscores the lack of enforcement of the brush management regulations despite the intentions in 1997 (BIA, 2004). According to the SER/EA, when the City modified the brush management regulations in 1997, one of the purposes of the modification was to make the regulations more enforceable. It appears that enforcement is largely lacking.

The SER/EA indicates that the project includes a proposed code amendment to allow Zone Two thinning by goats, and that the impacts analysis includes impacts attributed to the goats. The proposed revisions do not mention the use of goats, nor is it apparent that the impact analysis in the SER/EA includes impacts from the use of goats. Potential impacts from the use of goats for brush management include, but are not limited to, overgrazing which in turn would likely result in an increase in invasive plant species, and

The City's current brush management regulations require that Zone Two be maintained on a regular basis by mowing and handweeding, stumps, controlling weeds, and maintaining any temporary irrigation system (Section 14.01.0100), and that in addition, Sections 14.03 and 14.02 of the MSCP Subarea Plan prohibit the introduction of new tree species into the MHPA and areas adjacent to the MHPA, and calls for monitoring and removal of invasive exotic plant species within the MHPA, as well as other assistance been been available.

This version of the proposed revisions to the building code for high fire hazard areas, the City Council considered adoption of the revisions on January 20, 2004.

possibly erosion, spread (e.g., by coat, fence) of invasive plant propagules from one brush management enclosure to the next (and areas between), degradation of water quality, fire bacteria in the ground, fires, and impacts on narrow endemic plant species.

The SERR/EA proposes no mitigation for impacts from invasive species, standing. It does not mitigate significant impacts to biological resources as a result of the establishment of invasive species in brush management zone two possibly downstream, the Land Development Code EIR identified that mitigation would be required to the same extent as brush management zone 1; based on mitigation ratios per habitat type identified in the City of San Diego Biology Guidelines. This mitigation however, is not proposed. We agree with this mitigation measure, even though brush management in Zone Two is currently considered impact neutral for the purposes of determining habitat mitigation needed for projects for which the City issues discretionary permits. As discussed previously, the impact neutral status is not currently defensible (comment 4).

Recommendations

We recommend the City come into compliance with its regulations regarding brush management by amending the invasive species in the current brush management area within the MHPA, and provide ongoing City-wide enforcement (including invasive species control) of the brush management regulations on both private and City-owned land. This is not to be considered as mitigation because weed control within Zones Two is an assumed condition of the MSCP. However, not only would it provide a significant improvement overall for the MHPA, it is also essential to resetting the purpose of its intended new focus - to provide an effective defensible space for firefighters.

To achieve what is shown above, we recommend that the City take immediate action to establish a reliable source of funding. Until the City has sufficient funding for enforcement, it is difficult to justify formally widening Zone Two. We urge the City to defer making decisions on the proposed brush management revisions until there is adequate funding to enforce the existing and proposed regulations, and until there has been further consideration of the funding code revisions for high fire hazard areas (comment 7).

11. The City's General Fund has supported the brush management program since 1988, but clearly does not provide sufficient funding for enforcement of the brush management regulations. The one-time grant for which the City has applied for to the Office of Emergency Services is only for the initial implementation of the project. The City is not a funding source for brush management. The City's current funding for brush management is provided in the City's 2017-2018 Budget. The City's budget report would be for the City to assess a brush management and invasive species control fee (e.g., establish a permit or management assessment activity of existing fire-prone and multi-family residential, apartment managers, business owners and institutions (e.g., utility of San Diego, University of California at San Diego) who have structures that require brush management whose structures are within 100 feet, in any direction, of any lot containing structures that require brush management. There should be increased even of mitigation of Right-of-Way permits from the PRU, to ensure enforcement of it by the City is well needed for City-owned open spaces that brush management by other agencies that have a responsibility to do so. The City's current funding for brush management is provided by the City of San Diego County Wildlife and Fish Task Force report (San Diego County, 2003). It may be possible to add the City's cost of brush management and associated weed control to property tax bill.

c. The final SERR/EA should address the fact that many exotic species that establish in 10 brush management areas are as or more flammable than the native species they displace. The proposed revisions include the following (edit/inserts are proposed deletions and identified text is proposed additions): "Zone Two shall be not managed on a regular basis by pruning and thinning plants, controlling weeds, and maintaining any temporary irrigation system until all plants are established, and by removing temporary irrigation systems after establishment."

We recommend that (f) this revision be avoided in such a way that it is clear that the weed control strategy is ongoing and not only "until plantings are established," and (ii) the revisions better reflect the requirements in Sections 1.4.3 and 1.5.2 of the MSCP. Several items regarding invasive species:

- a. The re-proposed and/or final SERR/EA should include proposed language for the code amendment pertaining to the use of goats for brush management, and specify the section of the municipal code to be amended. The re-proposed and/or final SERR/EA should provide a description of the impacts from using goats for brush management. Perhaps they if goats would be allowed for use within or adjacent to the MHPA, the discussion should specifically address how goats would be controlled to ensure that they:
 - i. don't clear the vegetation, per the code;
 - ii. don't trim beyond the required 50 percent of vegetation, per the code;
 - iii. result in grazing to plants over 18 inches in height, per the code;
 - iv. don't damage narrow endemic species; and
 - v. don't spread invasive species from one site to other sites.

7. Alternatives Analysis

a. The SERR/EA indicates that the alternative involving clearing and re-planting Zone Two with low height native plant species would not result in significant biological impacts. However, it also identifies potential significant impacts on habitats downstream from Zone Two from increased runoff from the temporary irrigation lines, potential type change of habitat down slope, and significant impacts on the watershed as a result of the loss of the habitat. The re-proposed and/or final SERR/EA should reflect that the permanent type change of the cleared and planted area itself would be a significant impact, as would potential loss of sensitive plant species, both of which would require mitigation.

b. Regarding the alternative involving strengthening the building code requirements as it pertains to fire protection in high fire hazard areas, the SERR/EA indicates that such revisions would eliminate the need for increased brush management zones. Consistent with the Department's NOP letter, we support this alternative, particularly for structures that would require brush management within or adjacent to the MHPA. For such structures, we recommend that structural and material alternatives be the first line of defense against fire, rather than expanded brush management. That is, structural design and materials that reduce the need for brush management, should be employed first and then brush management requirements determined. For new construction, structures, and

material alteratives should be required, and not considered optional. As to existing structures, the building code should be revised to require that certain features of structures at the urban-wildland interface be upgraded to meet the revised building codes. We applaud the City Council for adopting building code revisions that require Class "A" roofing materials and prohibit the use of wood shakes and wood shingles. We urge the City Council to further strengthen the building code revisions to optimize the protection of structures in high hazard fire areas. We understand that, in many cases, such results would not eliminate current brush management needs. However, they could greatly mitigate the need for, and the serious biological impacts associated with, current brush management activities, and particularly the proposed widening of Zones One and Two.

As discussed previously, the serious lack of enforcement of the brush management regulations presents the need for action that would reduce the need for enforcement. The already approved revisions to the building code and the further strengthening of the building code would reduce the City's brush management operational costs in Zone Two. The re-allocated and or final SHIR/BA should thoroughly address the issue of enforcement at commensurate levels of effort to revise the City's brush management regulations and building code to achieve protection from fire at the urban-wildland interface.

8. Suggested Modifications to Proposed Brush Management Revisions

We add the following suggested modifications of the proposed revisions to those already recommended. Suggested deletions are struck out, and suggested additions are underlined.

a. One of the assumptions used in the preparation of the SHIR/BA is that no impacts to wetlands would occur. The proposed revisions state, "No brush management is required in areas containing wetland vegetation." This language is under the section entitled Zone Two Revisions. We recommend that the statement be placed instead at the end of the section 142.0412(b), so that it is clear that the statement applies to both Zones One and Two. In addition, we recommend that the revisions provide a brief explanation regarding consistency with wetlands (i.e., refer to Table 2 in the Biology Guidelines), and that we be allowed to contact to find out whether habitat is within wetlands. This is an important issue as the City is currently proposing brush management that may impact wetland (e.g., Canal Channel development in the Tijuana River Valley).

b. Section 142.0412(f) allows the Fire Chief to modify the brush management requirements under certain conditions which are identified. The language should be modified to clarify whether this section allows for the widening of Zones One and Two beyond the respective 35 and 65 feet. In addition, the SHIR/BA states, "The LDC [Land Development Code] allows for alternative compliance to brush management in the form of aesthetic features which can be included as permit conditions for projects requiring a development permit". If section 142.0412(f) is intended to mirror this provision in the LDC, the language should be modified to make it more apparent.

c. To be consistent with the City's MSCP Subarea Plan, the proposed revisions should be modified to clarify that Zone One must be outside of the MHPA.

The City of Laguna Hills requires property owners to remove all dead, overgrown, or piled out vegetation, plants, and trees within 100 feet of any structures including wood sheds (City of Laguna Hills). The San Diego County Wildland Fire Task Force recommendations that ordinances include language that "declares dead or substantially dead ornamentals, grasses, vines, and trees as fire hazards" (San Diego County, 2003). We recommend that the City's landscape/brush management regulations be amended to include similar requirements, while remaining consistent with the prohibition on the removal of trees with Zone One and a maximum embankment width of 100 feet for Zone One.

d. Section 142.0402, Table 142.04.A, new B9. "All existing or proposed lots where any open space, park areas, and undeveloped public or private lands containing native or naturalized vegetation, and/or areas containing environmentally sensitive lands are within 100 feet of an existing or proposed flammable structure."

Section 142.0412(c). This section states, "Both Zone One and Zone Two shall be provided on the subject property unless a recorded easement is granted by an adjacent property owner or the owner of the subject property to establish and maintain the natural brush management zone(s) on the adjacent property to perpetuity." While this provision followed law, our understanding is that for future development, if a new structure is built that would reduce Zone Two to extend into adjacent private property, the Fire Marshal would not allow this, and would require alternative measures (e.g., structural) to meet the brush management requirements (per. comm., Jeanne Krosch, June 30, 2004). We agree with the fire approach for new development, and recommend that it also apply to adjacent public property (e.g., City open space), and that the proposed revisions be modified to reflect it.

e. Section 142.0412(d). "All existing and new structures subject to this division shall comply with all requirements of Chapter 14, Article 5, Division 3 - Additional Built Standards for Buildings Located Adjacent to Hazardous Areas of Nature or Natural Vegetation." While the City Council adopted regulations requiring Class "A" roofing materials, and prohibiting wood shakes and wood shingles, they have not yet adopted additional building standards for buildings located adjacent to hazardous areas of native or naturalized vegetation. As previously stated, we support the adoption of such building standards.

f. Section 142.0412(e). Where Zone One width is required adjacent to the MHPA or within the Coastal Overlay Zone, any of the following modifications to development regulations of the Land Development Code or standards in the Land Development Manual are permitted to accommodate the increase in width 35 feet (or smaller LDCs Zone One width is making up for a shortcoming in Zone Two):

i. The references to the MHPA should be spelled out, and a footnote added that briefly explains the use of the MHPA and when to consult to find out whether their land is within or adjacent to it.

j. The technician that proposed section 142.0412(b)(7) be placed instead immediately after section 142.0412(d).

k. Just as the proposed brush management revisions cite and require compliance with the proposed brush code revisions, we recommend that the later cite and require compliance with the former.

9. Discrepancies in the Resource Description

Please reconcile the following apparent discrepancies in the SBIR/EA.

a. Please clarify correct the acreages on page IV-2, section D. Our understanding is that currently, brush management in Zone Two occurs on 3,753 acres within the City. Of this, 3,222 acres are on private land, and 531 acres are on public land. Of the 3,753 acres, 226 acres within the City's Multiple Species Conservation Program (MSCP) Multiple Habitat Preservation Area (MHPA) (press comm., Chad Kays, City MSCP, June 25, 2004).

b. Page V.C-12 indicates that currently brush management affects 3,813 acres of vegetation, with no distinction between Zones One and Two, whereas our understanding is that current brush management in Zone Two affects 3,753 acres within the City (press comm., Chad Kays, City MSCP, June 25, 2004).

c. Page V.C-12 indicates that the proposed revisions would affect an additional 2,474 acres, whereas Table V.A-1 on page V.A-13, indicates that additional acres would be 2,680.

d. The January 11, 2004, City Manager's Report indicates that the City hopes to thin the central area within Zone Two on an average of every two years, whereas the SBIR/EA indicates that brush management activities would likely occur every one to three years.

References

BIA. 2004. Letter from the Building Industry Association to Mayor Dick Murphy regarding the proposed building and fire code changes. January 20, 2004.

Bossard, Carl C., Joan M. Randall, and Marc C. Hoshovsky (eds). 2000. Invasive Plants of California's Wildlands.

City of Laguna Hills. City of Laguna Hills West Abatement Supplemental Guidelines & fact sheet entitled Fire From Plant Species. http://www.cityoflaganhills.ca.us/users/west_abatement_Childs/jrns.pdf

City of San Diego, 1996. City of San Diego, Development Services Department, Environment and Analysis Section Public Projects and United States Fish and Wildlife Service. Research for a Draft Joint FWS/USFWS Memorandum of Understanding for Threatened and Endangered Species Due to Urban Growth Within the MSCP Planning Area. LDR, No. 93-0287, SCH No. 93121073. Aug 98.

San Diego County. 2003. Mitigation Strategies for Reducing Wildland Fire Risk. San Diego County Wildland Fire Task Force Findings and Recommendations. Report to the Board of Supervisors. August 13, 2003.

DRAFT FINAL
**SUBSEQUENT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL ASSESSMENT**

**BRUSH MANAGEMENT REVISIONS TO THE LAND DEVELOPMENT CODE
AND FEDERAL GRANT FROM THE OFFICE OF EMERGENCY SERVICES
(OES), FEDERAL EMERGENCY MANGEMENT AGENCY (FEMA)**

**PROJECT No. 31245
SCH # 2004031041**

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G	Draft goat amendments to Municipal Code

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LIST OF ACRONYMS

The following list of acronyms used within this SEIR/EA is provided for the reader's reference.

APE	Area of Potential Effect
BMPs	Best Management Practices
CDFG	California Department of Fish and Game
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
DSD	City of San Diego Development Services Department
EAS	Environmental Analysis Section
EIR	Environmental Impact Report
ESL	Environmentally Sensitive Lands
GIS	Geographic Information System
LCP	Local Coastal Program
LDC	Land Development Code
LDR	Land Development Review
LUP	Land Use Plan
MSCP	Multiple Species Conservation Program
MHPA	Multi-Habitat Planning Area

MMRP	Mitigation, Monitoring, and Reporting Program
NOP	Notice of Preparation
RWQCB	Regional Water Quality Control Board
SDP	Site Development Permit
SFE	Strategic Framework Element
SUSMP	Standard Urban Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
URMP	Urban Runoff Management Program (and Plan)
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

EXECUTIVE SUMMARY

A. BACKGROUND AND PROJECT DESCRIPTION

The current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code Update on January 3, 2000.

Currently, Brush Management Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Brush Management Zone Two is an area of native or naturalized plant material thinned to 50% to reduce fuel load. The width of Zone One currently varies from 20 feet to 40 feet west of Interstate 805 and El Camino Real, and 30 feet to 45 feet east. Zone Two currently varies from 20 feet to 30 feet west of Interstate 805 and El Camino Real, and 40 feet to 50 feet further east. Under the current Land Development Code Section 142.0412(h)(6), property owners are responsible for maintaining brush management zones to include weeding within brush management zone two.

Since the adoption of the MSCP in 1997, brush management zone one associated with new development has been located within the development footprint and is not allowed within the MHPA. With the proposed revisions to the LDC, zone one would be increased to thirty-five feet. For some existing structures, zone one may not be able to expand to thirty-five feet without impacting native habitat. In lieu of expanding zone one into native habitat, the proposed code amendments would increase the width zone two one foot for every one foot of zone one that could not be provided, unless the Fire Chief approved a modification on a case-by-case basis.

The proposed activities would be accomplished in accordance with the San Diego Municipal Code Chapter 14, Article 2, Division 4 and also proposed revisions to Chapter 4, Article 4, Division 3, Section 44.0307, et seq. These revisions to the regulations are proposed to address ministerial actions. Brush management thinning activities in zone two Could be done by

livestock (goats). This would involve using goats as a supplement to existing crews to carry out brush management zone two thinning. Thinning of vegetation would include fencing the area to be thinned, bringing in a herd of goats, which would then feed on the vegetation, thereby reducing the fuel load and creating the defensible space for fire protection. The goat herd would remain in the fenced area for two to three days then be moved to another area. This rotational grazing is referred to as controlled grazing, compared to continuous grazing which allows grazing to occur over the same plot of land without rotation. Thinning would occur as the goats feed on the vegetation. Goats do not have a specific diet and will feed on most any type of shrubby or vegetation. Studies have shown that they will eat plants almost to ground level but leave the roots and graze on the lower branches of large trees and shrubs.

The SEIR/EA is for public (including Right-Of-Entry Permits) and private activities on already developed properties; not for future brush management to facilitate future development. Zone two brush management would continue to be exempt from ESL; therefore, private brush management activities do not normally require a permit.

It is currently prohibited to use goats to thin vegetation in Brush Management Zone 2. However, the "project" for purposes of this SEIR/EA includes a proposed code amendment to allow Zone 2 thinning with goats; therefore, the impacts analysis includes impacts attributable to using goats.

B. ENVIRONMENTAL ANALYSIS

Implementation of the proposed Project would result in significant impacts to the following issue areas:

- Land Use
- Biological Resources

Land Use

~~The proposed revisions to the brush management regulations would be consistent with all of the applicable planning documents, land use plans and regulations with the exception of the Environmentally Sensitive Lands regulations of the Land Development Code. As discussed in~~

~~Section V.B. Biological Resources, the proposed revisions could result in impacts to the California gnatcatcher breeding season. This would not be consistent with the ESL regulations, therefore resulting in a significant land use impact. Measures are available to mitigate these impacts, however the applicant has not agreed to them. Therefore, significant impacts associated with land use would remain unmitigated.~~

Biological Resources

The proposed project would impact biological resources as a result of the establishment of invasive plant types once brush management activities have been conducted. Thinning in zone two would allow for the invasive plants to establish in zone two. City staff conducted site visits on a number of parcels and concluded that routine weeding as required by the code is not being implemented. The introduction of invasive plants in zone two would result in a significant impact to native habitat and sensitive biological resources. Invasive plant types would be introduced into zone two as a result of the thinning, creating a significant impact. Further, as goats digest certain plant types containing seeds, the goat feces could also spread invasive plants within zone two as the seeds could take hold in the soil and sprout. Measures are available to mitigate impacts to native habitat, however the applicant has not agreed to them.

The EIR/EIS for the MSCP concluded that impacts to covered species and their habitats from brush management were significant but mitigated to below a level of significance with the implementation of preserve management and planning guidelines identified in each City's MSCP Subarea Plan and associated implementing regulations. As documented in this SEIR/EA, impacts to biological resources that could result from implementation of the proposed brush management revisions would be significant in that the project would expand the area within which invasive weeds establish. In that the increase impacts would occur within the 200-foot edge affected area located within the MHPA. This SEIR/EA concludes, like the EIR for the Land Development Code, that the impacts are rendered less than significant by implementation of the MSCP except for impacts occurring outside the MHPA for significant impacts to non-covered species. Therefore, significant impacts associated with biological resources would remain significant and unmitigated.

~~The proposed project would also result in significant impacts to sensitive species, specifically the California gnatcatcher. Brush management thinning in zone two could impact the gnatcatchers due to incidental impacts to nesting birds and reduction of suitable habitat by brush thinning within the breeding season on lands within the MHPA. Mitigation in the form of acquiring approximately 198 acres of equal value gnatcatcher habitat would mitigate impacts to the gnatcatcher to below a level of significance; however the applicant has not agreed to it. Impacts to sensitive vegetation associated with the goat grazing would be significant as identified in the proposed project. This would also result in a significant impact to biological resources. Sensitive species impacts would also be significant as identified in the proposed project. The California gnatcatcher would also be impacted by vegetation thinning by goats or humans that could physically impact a nest. The Mitigation outlined in Section V.B. would reduce impacts to biological resources to below a level of significance; however the applicant has not agreed to it. Impacts associated with the establishment of invasive plants would remain significant and unmitigated. Impacts to non-covered species outside the MHPA would remain significant and unmitigated.~~

Hydrology/Water Quality/Erosion

Implementation of the proposed brush management revisions would not change the course of surface water flow or result in the long-term change to hydrology/water quality. The minimal erosion and sedimentation associated with surface disturbance would not be significant. Further, any hand held landscaping equipment (i.e. weed whacker) that would operate within open space, private lands or other environmentally sensitive lands could release fluid or other substances. Due to the limited quantities of substances and typical distances for water quality, no impacts to water quality are anticipated.

According to the Biological resources report prepared for the project, two out of 25 sites that were observed show evidence of erosion. The erosion within the brush management areas can be attributed to the sandy soils on the slope and, in one case, the way the slope was constructed. In both cases, there is not clear association between brush management and the erosion on the site. Based on the nature of the proposed brush management revisions, impacts to erosion are not expected to occur.

Neighborhood Character/Aesthetics

Implementation of the proposed Brush Management revisions would serve to improve the amount of defensible space from structures to vegetation. The brush management revisions would help avoid large brush fires, like the recent Cedar Fire of October 2003, thereby avoiding impacts to neighborhood character/aesthetics.

There is the potential that private land owners could impact mature trees with the proposed brush management revisions. However, the current brush management regulations require that trees be thinned, not removed from brush management zones one and two. Therefore, the proposed brush management revisions would not result in a significant impact to neighborhood character/aesthetics.

C. ALTERNATIVES ANALYSIS SUMMARY

Based on the results of the environmental analysis contained in Section V, implementation of the proposed project would have significant impacts related to ~~land use~~ and biological resources. The discussion of alternatives is intended to "substantially reduce significant impacts."

No Project Alternative

Under the No Project Alternative, the existing brush management zones would remain in effect. Current brush management regulation state that the width of zone one varies from twenty feet to thirty-five feet west of Interstate 805 and El Camino Real, and thirty feet to forty-five feet on the east. Zone two currently varies for twenty feet to thirty feet west of Interstate 805 and El Camino Real, and forty feet to fifty feet on the east.

In the absence of implementing any of the activities associated with the proposed brush management revisions, none of the environmental impacts described in Section V would directly occur. However, the Fire Marshall could still require thinning beyond the present Zone Two.

No Action Alternative

NEPA requires that the No Action Alternative be described. The No Action Alternative assumes that there would be no federal funding available for the implementation of the brush management revisions within City owned open space areas and as a result, no federal action to approve. The proposed brush management revisions could still be implemented by the City; however, funding would need to be acquired from different sources. This alternative would not achieve the objectives of the project of providing additional defensible space from structures to vegetation because the City does not have alternative sources of funding for the project.

Increasing Building Regulations

Under this alternative, proposed changes to the building regulations would occur thereby reducing the need for increased brush management zones. Revisions to the building regulations could include fire walls which would be constructed at the boundary between zone two and open space. Additional building regulations could include alternative architectural features for structures where brush management would normally be required. This revision to the Land Development Code regulations is included in the proposed ordinance which is attached to this SEIR/EA as Appendix C.

While the proposed project allows development features as an alternative to or in addition to reduced brush management zones, under this alternative there would be no impacts to biological resources or sensitive species because brush management would not occur. The building regulations would reduce the fire hazard to structures and the habitat on site would remain undisturbed.

No impacts associated with hydrology/water quality/erosion, land use or neighborhood character/aesthetics would occur with this alternative.

D. ALTERNATIVES CONSIDERED BUT REJECTED

Education/Training Alternative

The Education/training alternative would rely on existing or expanded information which is available to the public for the purposes of brush management and creating defensible space around structures. Much of this educational information is readily available to the public via the City of San Diego website, brochures and flyers which are available through the Fire-Rescue and Park and Recreation Departments. There has been a substantial amount of public outreach on the subject of brush management. This alternative is unreasonable due to the fact it is assumed that not everyone who requires brush management on their site would necessarily partake in any of the educational materials and/or conduct brush management per the required procedures in the regulations or as required in any development permit conditions.

Under this alternative, based on the assumptions mentioned above, there would be a significant impact to non-covered species located outside the MHPA sensitive biological resources as a result of the establishment of non-native plant species in zone two and down slope of zone two. ~~In addition, impacts to the California gnatcatcher would occur as the assumption is that brush management could likely occur during the breeding season. Impacts associated with invasive plant species would remain significant and unmitigated; therefore, this alternative is rejected.~~

Prescribed Burn Alternative

Under this alternative, prescribed burning of vegetation would be allowed within or beyond brush management zone two to allow fuel load reduction. Prescribed burns can be used to create a mosaic of age-classes of shrublands; reducing fuel load adjacent to structures; protecting oak and conifer woodlands through understory burning; and removal of unwanted or exotic species. The effectiveness of prescribed burns is questionable. Research indicates that this type of fuel management may be effective at controlling fires that burn under moderate weather conditions, but ineffective at controlling fires that ignite under severe weather conditions (i.e., Santa Ana). It has been suggested that multiple prescribed burns to create a mosaic of fuel loads in the shrublands is not practical and focus should be on the interface between developments and native habitat areas.

Prescribed burns creates a significant liability issue, and can only be conducted at certain times of the year based on humidity, wind, fuel load and availability of response crews to suppress unwanted burns. An incomplete assessment of any factor for a prescribed burn can lead to loss of property and life with serious liability questions to both the landowner and the one responsible for the burn. This alternative is rejected because it is not supported by the City of San Diego Fire-Rescue Department.

Clear and Re-plant Zone Two

Under this alternative complete clearing would occur in zone two and would be re-planted with low height native plant types. Proper planting protocol would be to lightly scarify the soil surface before planting for better seed/soil contact. Temporary irrigation would be installed for a period of up to two years for plant establishment. The assumptions associated with this alternative are that the irrigation would not be installed or monitored properly thereby allowing runoff to occur down slope of zone two. This can be substantiated by evidence that irrigation runoff is the primary source of water in our drainages within the City during the summer. The newly planted vegetation would be successful in reducing impacts to weed invasion. This alternative would have a significant impact on sensitive habitats; therefore, this alternative is rejected.

Thinning by Plant Type

Under this alternative, thinning of vegetation would occur based on the plant types located within brush management zone two for fuel load reduction. The first plant types to be thinned would be the most flammable and the most invasive within the specific brush management zone two area. Next, the more flammable native or naturalized plants would be thinned. Finally, the least flammable and more sensitive native or naturalized plants would be thinned for a total reduction in ground cover to 50%. The effectiveness of thinning by plant type is questionable. Thinning the most flammable and the most invasive plant types first would address the most harmful plant types, but these plant types could establish themselves rather quickly after the initial brush management occurs. This alternative is rejected because it is not potentially feasible to assume that everyone who requires brush management on their property would be able to identify all

plant types located in zone two brush managed areas.

E. CUMULATIVE IMPACTS

Land Use

As discussed in Section V.A, implementation of the proposed brush management revisions is not expected to result in land use impacts, ~~with the exception of consistency with the Environmentally Sensitive Lands regulations as it relates to the gnatcatcher breeding season.~~ These impacts when considered with other reasonably foreseeable projects are not considered to be cumulatively considerable.

Biological Resources

~~Weed invasion in conjunction with past, present and reasonably foreseeable projects is together considered to be cumulatively significant and the contribution of the revised brush management regulations is considerable and therefore significant. Since the project is mitigated by the implementation of the MSCP, there are no cumulative impacts to biological resources with the proposed project.~~

Hydrology/Water Quality

As discussed in Section V.C, implementation of the proposed brush management revisions is not expected to require any groundwater dewatering. Based on the nature of the proposed brush management revisions, impacts to groundwater quality are not expected to occur. Based on the nature of the proposed brush management revisions, impacts to erosion are not expected to occur. Therefore, it is anticipated that the proposed brush management revisions would not contribute to the cumulatively significant hydrology/water quality/erosion impacts.

Neighborhood Character/Aesthetics

As discussed in Section V.D, implementation of the proposed brush management revisions would serve to minimize any potential impacts to mature trees, and any individual thinning projects on private lands, open space or other environmentally sensitive lands are not anticipated to result in changes to neighborhood characteristics or aesthetics during thinning activities. No mature trees will be removed with the proposed brush management zones. As such, the proposed brush management revisions would not contribute to any cumulatively significant neighborhood character/aesthetics impacts.

F. GROWTH INDUCEMENT

The proposed brush management revisions involves ongoing thinning activities located on private lands, open space and other environmentally sensitive lands that would serve to maintain the proposed 100 foot wide defensible space between structures and vegetation. The proposed brush management revisions would not have the potential to directly or indirectly induce growth or otherwise foster the potential for growth. Further, this SEIR/EA does not address brush management impacts that might result from future development. Therefore, no growth inducing impacts, direct or indirect, are anticipated to occur as a result of the implementation of the revised brush management regulations.

SECTION I INTRODUCTION

Subsequent EIR/EA

This document is a Joint Subsequent Environmental Impact Report/Environmental Assessment (SEIR/EA) for Brush Management Revisions to the City of San Diego Land Development Code.

The SEIR/EA must comply with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C., §4325 et seq.) and the California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, §21000, et seq.) and tiers off of the *San Diego Municipal Code Land Development/Zone Code Update, LDR No. 96-0333, SCH No. 96081056*.

Pursuant to CEQA Guidelines, the NEPA format is used in preference to the City of San Diego CEQA Guidelines and City of San Diego Environmental Impact Report Guidelines (Revised September 2002). However, all mandatory CEQA sections are included and, where in addition to NEPA sections, follow the City of San Diego preferred format. Pursuant to CEQA Guidelines Section 15162, a Subsequent EIR may be prepared when substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

The advantages of a Subsequent EIR for this project include, but are not limited to, consideration of cumulative impacts that may not have been considered in the previous EIR; reduction in paperwork; avoidance of duplicative reconsideration of basic policy considerations; and use of the subsequent and previously approved EIR documents in evaluating subsequent activities.

The proposed project involves increasing the width of the current Brush Management Zones. Current Brush Management Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. The width of Zone One currently varies from 20 feet to 40 feet west of Interstate 805 and El Camino Real, and 30 feet to 45 feet east of I-805 and El Camino Real. Brush Management Zone Two is an area of native or naturalized plant material

thinned to 50% to reduce fuel load. Zone Two currently varies from 20 feet to 30 feet west of Interstate 805 and El Camino Real, and 40 feet to 50 feet further east.

In light of the size and severity of the Cedar fire, and other wildfires in October of 2003, the Fire Chief is recommending a City wide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. A standard 100 foot brush management zone would allow for a greater defensible space against impending fire. The project is located within the limits of City of San Diego, and includes the City of San Diego Multi-Habitat Planning Area (MHPA) of the Multiple Species Conservation Program (MSCP), City of San Diego Open Space Lands, private property, and lands within the California Coastal Commission jurisdiction.

Since the adoption of the MSCP in 1997, brush management zone one associated with new development has been located within the development footprint and is not allowed within the MHPA. With the proposed revisions to the LDC, zone one would be increased to thirty-five feet. For some existing structures, zone one may not be able to expand to thirty-five feet without impacting native habitat. In lieu of expanding zone one into native habitat, the proposed code amendments would increase the width zone two one foot for every one foot of zone one that could not be provided, unless the Fire Chief approved a modification on a case-by-case basis.

The City of San Diego Park and Recreation Department is currently responsible for maintaining brush management in city-owned open space areas within the City of San Diego. Project implementation on City property would initially be partially funded by the Office of Emergency Services (OES), via a Federal Emergency Management Agency (FEMA) grant that is currently being applied for by the City of San Diego Park and Recreation Department, which is the basis for including NEPA analysis in this SEIR/EA.

Based on a review of the proposed project by the Lead Agency [City of San Diego Development Services Department (DSD)], and pursuant to CEQA Sections 15063(a) and 15081, as amended,

it has been determined that the proposed revisions to brush management zones may have a significant effect on the environment. The preparation of a draft Subsequent Environmental Impact Report (SEIR)/Environmental Assessment (EA), therefore, are required.

A. CEQA REQUIREMENTS

This SEIR/EA has been prepared in accordance with the requirements of CEQA (California Public Resources Code Section 21000 et seq.), the CEQA Guidelines, as amended March 29, 1999 (California Code of Regulations Section 15000 et seq.), City of San Diego Land Development Code (Sections 69.0201 – 69.0218) and the City of San Diego EIR Guidelines (Revised September 2002).

In accordance with the requirements of CEQA, the City of San Diego DSD has circulated a Notice of Preparation (NOP), dated March 9, 2004, to all interested agencies, groups, and individuals. All comments received were considered during preparation of this SEIR/EA. The NOP and comments received are attached in Appendix A to this SEIR/EA. Through the SEIR/EA scoping process, four environmental issue areas were identified and are addressed in this SEIR/EA. They include: (1) land use; (2) biological resources; (3) hydrology/water quality; and (4) neighborhood character/aesthetics. Other CEQA-required sections, such as Summary; Environmental Setting; Background and Description of Programs; Growth Inducement; Cumulative Impacts; Alternatives; Effects Found Not to be Significant; Significant Irreversible Environmental Changes That Would be Involved in the Proposed Action, Should it be Implemented; Significant Unavoidable Adverse Impacts; and Individuals and Agencies Consulted, are also included.

Issues that were determined not to be significant and reasons for the non-significance conclusions are identified in Section VIII of this SEIR/EA and include: Agriculture Resources/Natural Resources/Mineral Resources, Air Quality, Energy, Historical Resources (Archaeology), Human Health/Public Safety, Light/Glare/Shading, Noise, Odor/Nuisance, Recreational Resources ,

Paleontology, Population and Housing, Public Services and Utilities, Transportation/Circulation, and Water Conservation.

Subsequent EIR Assessment Method

The proposed revisions to Brush Management Zones that are addressed in this SEIR/EA were identified through the application of a Geographic Information System (GIS) by overlaying a data layer that specified structures within the City of San Diego with a data layer that delineated areas adjacent to but outside of existing urban development (i.e., areas outside of development that would be open space, MHPA and other environmentally sensitive areas). Aerial photographs (digital orthophotos) were then carefully reviewed to confirm or refine the GIS mapping. All structures within the City of San Diego were reviewed to determine an average amount of defensible space for properties within the City of San Diego. Due to the nature of the data used to identify the average width of defensible space between structures and vegetation, the potential exists for structures to have more or less defensible space than of those identified in this SEIR/EA to be identified within environmentally sensitive lands.

Given the large number of open space, private lands, and other environmentally sensitive lands, impact analysis in the Subsequent EIR/EA is based on existing data such as Geographic Information System (GIS) data developed in 1995 for the Multiple Species Conservation Program (MSCP) and GIS data developed by the City of San Diego relative to land use plans.

For the review and analysis of the SEIR/EA an assumption has been made regarding future implementation of the proposed brush management revisions. City staff has assumed that all property owners who will perform brush management on their property will perform the correct amount of thinning, ~~but it is not likely that the timing of the brush management will be in accordance with the breeding season of the California gnatcatcher~~ and that brush management activities will be performed outside of the California gnatcatcher breeding season (March 1 - August 15) as outlined in the proposed revised ordinance.

C. APPLICABLE LAND USE PLANS

The following planning documents are applicable to the proposed Brush Management revisions:

City of San Diego Progress Guide and General Plan

Community, Park/Preserve, and Other City Area Plans (See Section IV.A Land Use for complete list)

City of San Diego Local Coastal Program Land Use Plan

City of San Diego Environmentally Sensitive Lands Regulations

City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

SECTION III

BACKGROUND AND PROJECT DESCRIPTION

A. BACKGROUND OF BRUSH MANAGEMENT

Historical Development of Brush Management

The current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code Update on January 3, 2000.

The primary focus of the 1997 changes was to simplify regulations, to improve predictability, to make them more enforceable, and to coordinate brush management requirements with the City's goal to preserve environmentally sensitive habitat. Changes to the regulations included replacement of the complex three zone system of brush management of varying widths (50' to 110') based upon classifications of fire severity with a two zone system based upon the location of the property's location west or east of Interstate 805 and El Camino Real (Figure 2). The dividing line of Interstate 805 and El Camino Real was selected based upon analysis of historical fire data in and outside areas of climatic coastal influence. The recent Cedar Fire has prompted the Fire-Rescue Department to re-evaluate the current distinction and propose a single citywide brush management system.

Currently, Brush Management Zone One is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Brush Management Zone Two is an area of native or naturalized plant material thinned to 50% to reduce fuel load. The width of Zone One currently varies from 20 feet to 40 feet west of Interstate 805 and El Camino Real, and 30 feet to 45 feet east. Zone Two currently varies from 20 feet to 30 feet west of Interstate 805 and El Camino Real, and 40 feet to 50 feet further east. Under the current Land Development Code Section 142.0412(h)(6), property owners are responsible for maintaining brush management zones to include weeding within brush management zone two. Site visits

City Brush Management Regions

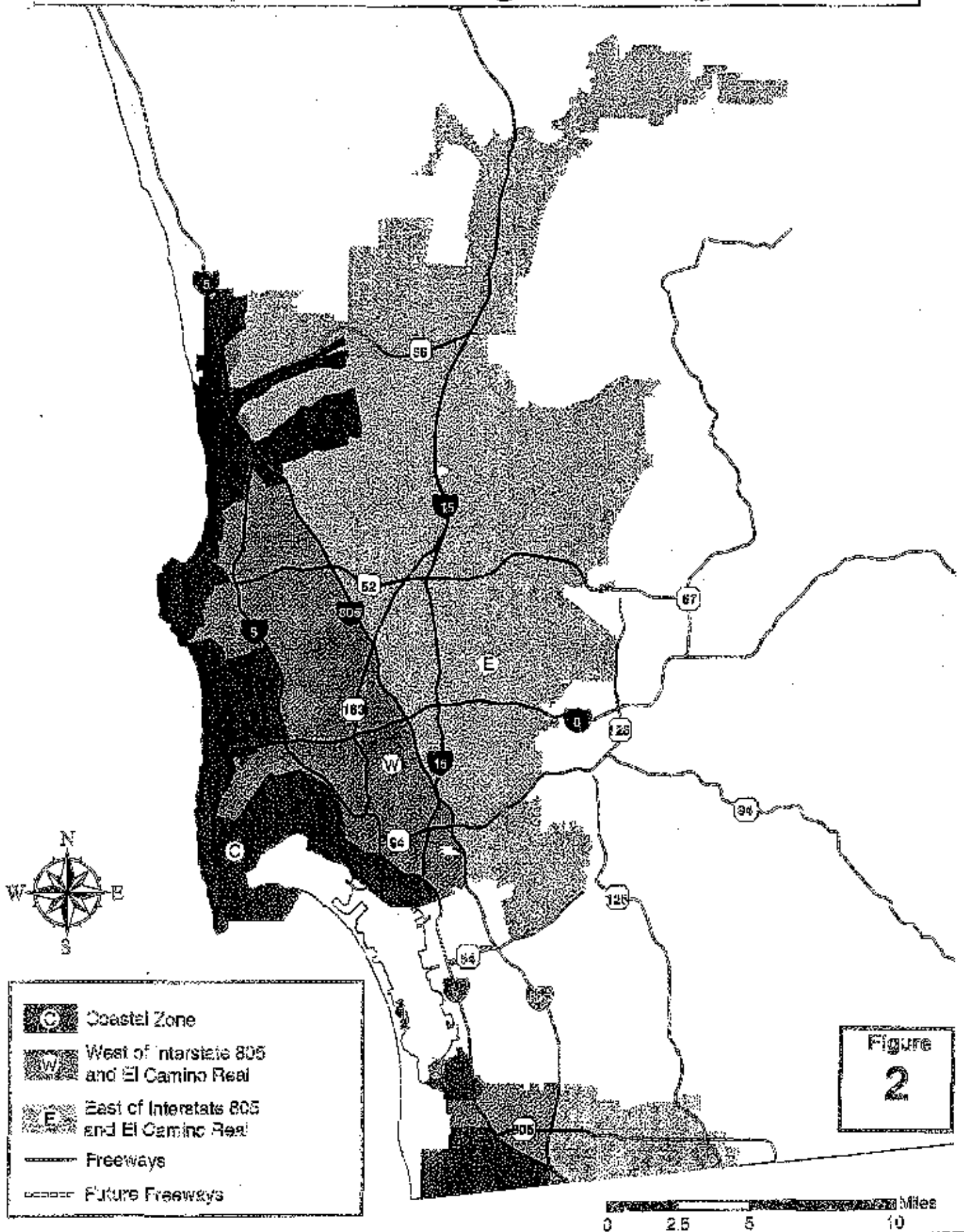


Figure
2

performed by City Staff indicate that this current regulation has not been adhered to and that invasive plant species are able to grow within thinning brush management zone two areas. Additionally, the LDC allows for alternative compliance to brush management in the form of architectural features which can be included as permit conditions for projects requiring a development permit.

Development of the Brush Management revisions

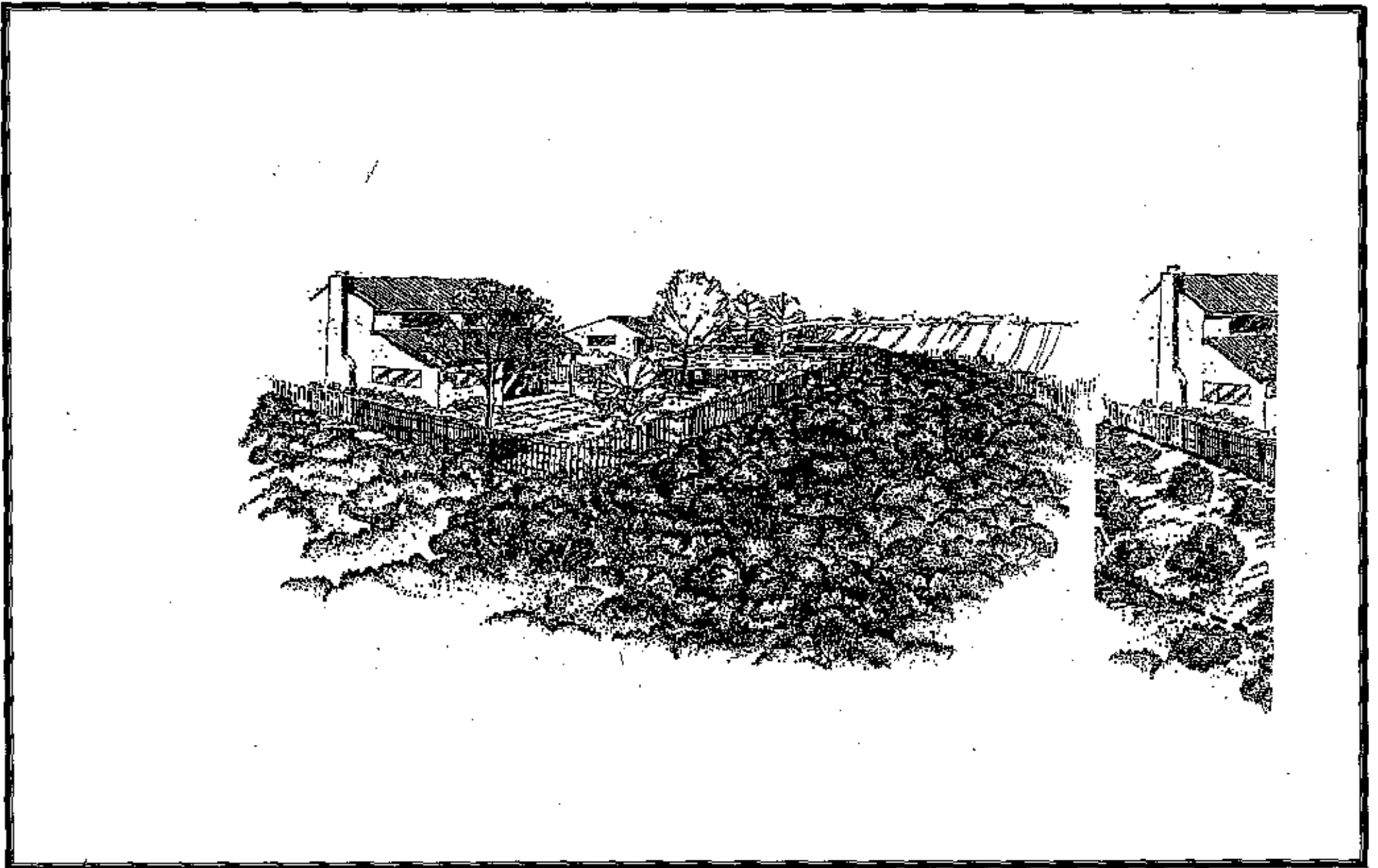
In light of the size and severity of the Cedar fire, and other wildfires in October of 2003, the Fire Chief is recommending a City wide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. A standard 100 foot brush management zone would allow for a greater defensible space against impending fire (Figures 3 and 4).

Under the existing Municipal Code § 142.0412(i), the Fire Chief has the ability to enforce modification to the brush management regulations for purposes of fire protection on a case-by-case basis. As a result of the Cedar Fire, the Fire Chief is recommending implementation of the 100 foot citywide brush management regulations on a volunteer basis, until the proposed revisions to the brush management regulations can be considered for adoption by City Council. In the Coastal Zone, final adoption of the proposed revisions would require approval by the California Coastal Commission to modify the City's Local Coastal Program.

B. PROJECT DESCRIPTION

Brush Management Revisions

Brush Management Revisions consist of a City wide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. Brush management activities would occur outside of the California gnatcatcher breeding season (March 1 – August 15). The proposed activities would be accomplished in accordance with the San Diego Municipal Code Chapter 14, Article 2, Division



Before Brush Management
Environmental Analysis Section - Project No. 31245
CITY OF SAN DIEGO - DEVELOPMENT SERVICES

Figure
3

Fire Department Recommends 100 ft
Zone 1
Zone 2
Undisturbed
Vegetation

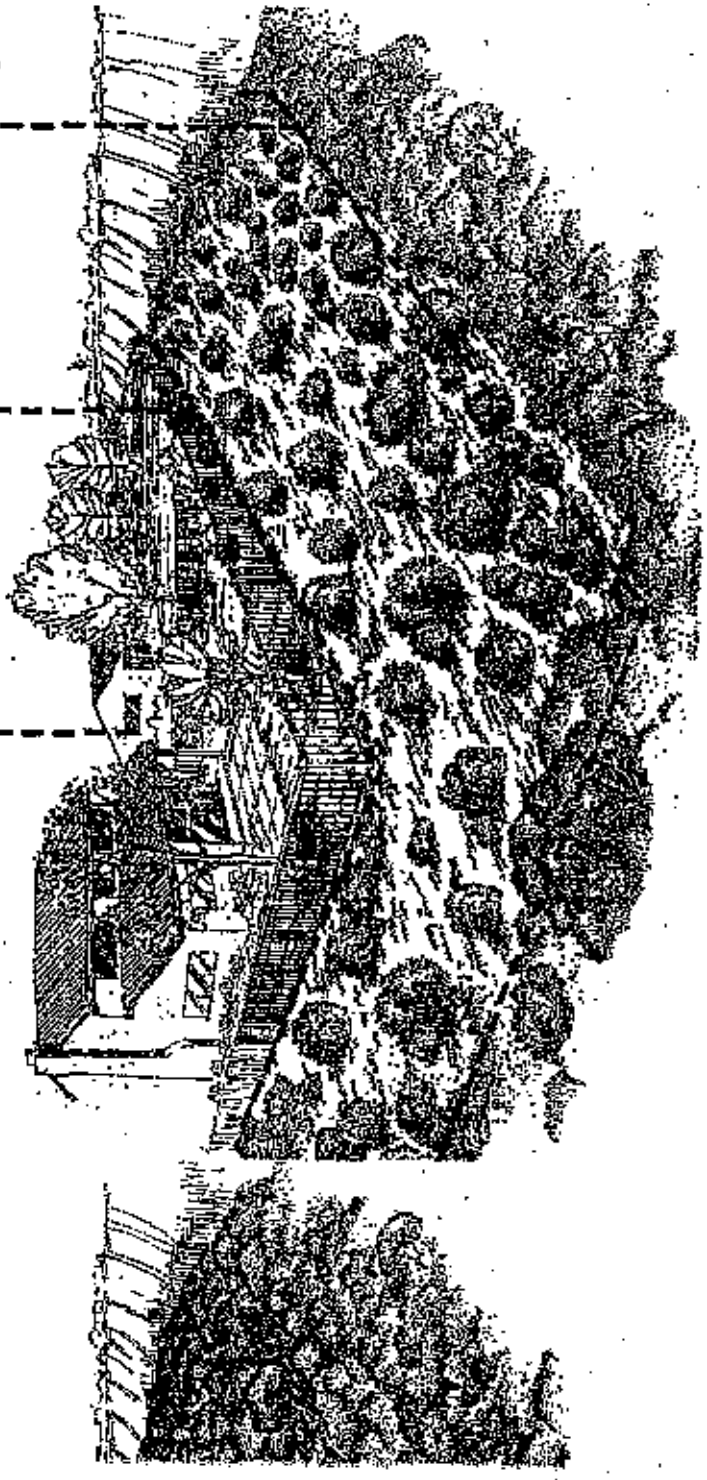


Figure
4

After Pruning and Thinning
Environmental Analysis Section - Project No. 31245
CITY OF SAN DIEGO - DEVELOPMENT SERVICES



4. These revisions to the regulations are proposed to address ministerial actions. The issuance of a Right-of-Entry permit by the Park and Recreation Department would be required for property owners to perform brush management in accordance with the regulations on City property. Since the adoption of the MSCP in 1997, brush management zone one associated with new development has been located within the development footprint and is not allowed within the MHPA. With the proposed revisions to the LDC, zone one would be increased to thirty-five feet. For some existing structures, zone one may not be able to expand to thirty-five feet without impacting native habitat. In lieu of expanding zone one into native habitat, the proposed code amendments would increase the width zone two one foot for every one foot of zone one that could not be provided, unless the Fire Chief approved a modification on a case-by-case basis. Per the revised brush management ordinance, the Fire Marshall could expand the total width of brush management zone one and two to exceed 100 feet. However, the SEIR/EA assumes a 100 foot average impact.

For any new discretionary projects, impacts will be assessed and mitigation required in accordance with the City of San Diego Biological resources guidelines.

Procedures

For any of the brush management methods described above, there are a number of steps that occur before, during, and after brush management activity. The following describes the typical sequence of steps in the implementing the proposed brush management revisions. Variations to these steps may sometimes occur based on site-specific characteristics. Further, the regulations are silent on methods for pruning and thinning. Pruning and thinning can be done by using hand held power tools, basic non-powered garden tools or goats.

Preliminary Site Evaluation: Before beginning brush management, verify where the property boundaries are to insure that the improvements you make are on the property. If brush management recommendations cannot be accomplished completely on the property and the adjacent property is City-owned open space or park land, contact the Park and Recreation Department Brush Management Section to review options to accomplish brush management requirements.

Brush Management Implementation: Based on the information collected through the preliminary site evaluation, a brush management plan is prepared. The plan identifies: locations of zone one and zone two; the thinning/pruning method(s) to be used; equipment type; proposed measures to avoid or minimize impacts to sensitive resources; and clearances and approvals required.

Permits and Clearances: Based on the nature, location, and extent of activities in open space and other environmentally sensitive lands that need to be completed, the necessary permits and clearances are obtained, including those from any appropriate regulatory agencies (specifically the Park and Recreation Department Right of Entry permit). A Right of Entry Permit from the Park and Recreation Department is required for any work taking place on Park and Recreation Department property.

Controlled Grazing

Brush management pruning and thinning activities in zone two could be done by goats. This would involve using goats as a supplement to existing crews to carry out brush management zone two thinning. Thinning of vegetation would include fencing the area to be thinned, bringing in a herd of goats, which would then feed on the vegetation, thereby reducing the fuel load and creating the defensible space for fire protection. The goat herd would remain in the fenced area for two to three days then be moved to another area. This rotational grazing is referred to as controlled grazing, compared to continuous grazing which allows grazing to occur over the same plot of land without rotation as referenced in Appendix G.

It is currently prohibited to use goats to thin vegetation in Brush Management Zone 2. However, the "project" for purposes of this SEIR/EA includes a proposed code amendment (Appendix G) to allow Zone 2 thinning with goats; therefore, the impacts analysis includes impacts attributable to using goats.

A pilot project within the City of San Diego has recently occurred on a site near the

Mission Trails Regional Park, which includes approximately 40 goats on one-third of an acre of land. Two additional sites have been added to the pilot program. It has been estimated that the goats can clear as much land as a human crew at less than half the cost. There have been cases in California, in Alameda and Contra Costa counties that have been effectively using goats as a tool for fire prevention since 1983. Additional cities in California which use this methodology include Laguna Beach, Malibu and Glendale.

Goats brought in temporarily for brush management purposes will be regulated through the San Diego Municipal Code, Chapter 4, Article 4, Division 3, Section 44.0307, et seq, which addresses the use of livestock within the City of San Diego. This section is in the process of being amended to permit the use of goats for brush management in non-agricultural areas, if certain very specific criteria are met.

Goats will be permitted to browse during the day, and will be moved along as the amount of vegetation thinned reaches the 50% level. They will be fenced with electric fencing, and will be at a density of no more than 75 goats per acre. At night, goats will be penned in a small staging area, which is required to be cleaned daily, and the goats droppings disposed of properly. Goats may not be used in coastal sage scrub habitat during quailcatcher nesting season, between March 1 and August 15.

C. OBJECTIVES OF BRUSH MANAGEMENT REVISIONS

The objectives of the brush management revisions can be summarized as follows:

- To complete in a timely and comprehensive manner the revisions to current brush management regulations.
- To identify and implement efficient, effective, and environmentally sensitive means to accomplish the revised brush management zones one and two.

- To provide for effective and environmentally sensitive long-term maintenance of brush management zones in open space, private lands and other environmentally sensitive lands.
- To refine the regulations that provides an acceptable risk to structures and fire personnel from wildfires.

D. DISCRETIONARY ACTIONS

City Permits

City Council approval of the proposed brush management revisions to the City's Land Development Code is required to implement the proposed brush management revisions city wide. Other applicable regulations of the City's Land Development Code include Best Management Practices (Sections 142.0101 & 142.0201) and erosion control in the Landscape Regulations. With approval of the proposed revisions and certification of this SEIR, an amendment to Chapter 14, Article 2, Division 4, of the San Diego Municipal Code by amending section 142.0402; 142.0403; and 142.0412 would be implemented and also amendments to Chapter 4, Article 4, Division 3, sections 44.0307.1, 44.0307.2 and 44.0307.3 and 44.0307.4. The SEIR/EA is for public (including Right-Of-Entry Permits) and private activities on already developed properties; not for future brush management to facilitate future development. Zone two brush management would continue to be exempt from ESL; therefore, private brush management activities do not normally require a permit.

E. HISTORY OF PROJECT CHANGES

Since the ordinance was originally drafted by City Staff, the SEIR/EA has been modified as follows: ~~There have been project changes for the proposed brush management revisions.~~ 1.) Added to this Draft SEIR/EA the project was the assumption that no impacts to wetlands would occur. 2.) Deleted from this Draft SEIR/EA the project is the ability of the Fire Marshall to expand the width of zone two brush management. 3.) The text of the proposed revisions was

changed to delete the word "cleared" and replaced with "thinned". 4.) Time of year restrictions are included in the revised ordinance which prohibits brush management activities within coastal sage scrub during California gnatcatcher breeding season (March 1 – August 15).

F. PROJECT ASSUMPTIONS

For purposes of this SEIR/EA the following assumptions have been made with respect to the proposed revisions to the brush management regulations:

- ~~Brush management will be conducted any time of the year. This is based on the fact that Park and Recreation Department needs to conduct brush management any time of the year. Additionally, as temperatures get warmer people tend to think about the threat of fire and conduct brush management.~~
- The site visits conducted by City staff revealed that weeding consistent with the regulations is not occurring in brush management zone two.
- Brush management will occur consistent with the regulations in terms of thinning and time of year restrictions within coastal sage scrub habitat.

SECTION IV

AFFECTED ENVIRONMENT

This section includes the NEPA-required brief description of the affected environment, including the population, social, and economic characteristics providing enough detail to understand the effects of the Proposed Action and other alternatives. The location and environmental setting for the proposed action is required by CEQA is also provided.

A. LOCATION

The San Diego region covers over 4,200 square miles in the southwest corner of the continental United States, bordered by Mexico and the Pacific Ocean. The region includes 18 incorporated cities and many unincorporated communities. The 18 cities and over 90 percent of the population are located in the western half of the region. The City of San Diego covers nearly 330 square miles and is located in the southwestern corner of California.

B. BACKGROUND

The current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code Update on January 3, 2000.

The primary focus of the 1997 changes was to simplify regulations, to improve predictability, to make them more enforceable, and to coordinate brush management requirements with the City's goal to preserve environmentally sensitive habitat. Changes to the regulations included replacement of the complex three zone system of brush management of varying widths (50' to 110') based upon classifications of fire severity with a two zone system based upon the location of the property's location west or east of Interstate 805 and El Camino Real. The dividing line of Interstate 805 and El Camino Real was selected based upon analysis of historical fire data in and outside areas of climatic coastal influence.

SECTION V ENVIRONMENTAL ANALYSIS

This section of the SEIR/EA provides a detailed discussion of subject areas that would be significantly impacted by the proposed action as well as a description of the proposed mitigation measures. This includes information developed during the Initial Study process and the response period for the Notice of Preparation. It includes a discussion of impacts as they relate to all Specific Impact Categories as a requirement of NEPA and discussion of any additional considerations necessary to satisfy CEQA guidelines.

A. LAND USE

EXISTING CONDITIONS

Existing Land Use Setting

The San Diego region has one of the most biologically diverse environments in the continental United States, supporting a variety of species and habitat types. This is partially due to the region's varied topography, climate, and soils. The region supports many types of environmental areas such as deserts, coasts, mountains, and maritime communities. The various topography affects all types of development on canyon rims and adjacent to other natural open spaces. Older developments have lots that run to the bottom of the adjacent canyons. More recent developments require easements in the canyons. For the most part, larger canyon areas found throughout the City are city owned. Each of these areas supports a unique assemblage of plant and animal species. There are approximately 1,700 species of plants, 80 of mammals, over 400 of birds, 75 of reptiles and amphibians, 125 of butterflies, and over 10,000 terrestrial and aquatic invertebrates known to occur within the region.

Relevant Planning Documents

City of San Diego General, Community, Park/Preserve and Other Plans

Land use regulations are guided by the City of San Diego Progress Guide and General Plan (City of San Diego 1979). The Progress Guide and General Plan provide overall land use goals, objectives, and recommendations for the entire City.

On October 22, 2002, the City Council adopted the City of Villages – Strategic Framework Element (SFE), a new long-term growth strategy that would replace the existing chapter "Guidelines for Future Development" within the City of San Diego Progress Guide and General Plan. The SFE provides policies to direct future growth as San Diego shifts from an era of building upon abundant open land to one of reinvesting in existing communities.

In addition to the Progress Guide and General Plan, there are 38 community plans in San Diego, as well as a number of adopted area planning documents for parks, special resource areas, and specific plan areas.

Community and Other City Area Plans

Carmel Valley (North City West) Community Plan
Clairmont Mesa Community Plan
Del Mar Mesa Specific Plan
East Mesa Precise Plan, Balboa Park
Elliot Community Plan
Fairbanks Ranch Country Club Specific Plan
Golden Hill Community Plan
Greater North Park Community Plan
Kearny Mesa Community Plan
La Jolla Community Plan and Local Coastal Program (LCP) Land Use Plan (Draft)
Linda Vista Community Plan and LCP Land Use Plan
Mid-City Communities Plan
Mid-City Design Plan
Midway Pacific Highway Corridor Community Plan
Mira Mesa Community Plan
Miramar Ranch North Community Plan
Mission Valley Community Plan
Navajo Community Plan
Ocean Beach Precise Plan and LCP Addendum

Old Town San Diego Community Plan
Olay Mesa Community Plan
Olay Mesa-Nestor Community Plan
Pacific Beach Community Plan and LCP Land Use Plan
Pacific Highlands Ranch Subarea Plan
Peninsula Community Plan and LCP Land Use Plan
Rancho Bernardo Community Plan
Rancho Penasquitos Community Plan
Sabre Springs Community Plan
San Pasqual Valley Plan
San Ysidro Community Plan
Scripps Miramar Ranch Community Plan
Serra Mesa Community Plan
Skyline-Paradise Hills Community Plan
Southeastern San Diego Community Plan
Tierrasanta Community Plan
Tijuana River Valley LCP Land Use Plan
Torrey Highlands Subarea Plan
Torrey Pines Community Plan
University Community Plan
Uptown Community Plan
Via de la Valle Specific Plan

Park/Preserve and Other Plans

Balboa Park Master Plan
Balboa Park Master Plan Amendment
Chollas Creek Enhancement Program
Famosa Slough Enhancement Plan
First San Diego River Improvement Project Natural Resource Management Plan (Draft)
Los Penasquitos Canyon Preserve Master Plan
Los Penasquitos Canyon Preserve Natural Resource Management Plan
Marian Bear Memorial Park Natural Resource Management Plan
Mission Bay Park Master Plan Update
Mission Bay Park Natural Resource Management Plan
Mission Trails Regional Park Master Development Plan
Olay Valley Regional Park Concept Plan
San Dieguito River Park Concept Plan
Tecolote Canyon Natural Park Master Plan
Western Olay Valley Regional Park Natural Resource Management Plan (Draft)

City of San Diego Local Coastal Program

The City's Local Coastal Program (LCP) governs the decisions that determine the short- and long-term conservation and use of the City's coastal resources. The LCP consists of two components: the land use plan (LUP) and the implementing ordinances found in the zoning and land development sections of the Land Development Code. The City of San Diego has elected to divide their coastal zone jurisdictions into twelve segments. Thus, there are twelve LUPs that make up the City's overall LUP. Policies and recommendations that make up the various LUPs are included and incorporated into the community plans and/or other planning documents for the segment areas. The following LUPs and associated community and other planning documents may be affected by, or relevant to, the implementation of the Brush Management Revisions:

- North City LUP – (Carmel Valley (North City West) Community Plan, Los Penasquitos Canyon Preserve Natural Resource Management Plan, Mira Mesa Community Plan, Pacific Highlands Ranch Subarea Plan, Torrey Pines Community Plan, University Community Plan and Via de la Valle Specific Plan)
- La Jolla/La Jolla Shores LUP (La Jolla Community Plan and LCP Land Use Plan)
- Pacific Beach LUP (Pacific Beach Community Plan and LCP Land Use Plan)
- Mission Bay LUP (Mission Bay Park Master Plan Update and Linda Vista Community Plan and LCP Land Use Plan)
- Peninsula LUP (Peninsula Community Plan and LCP Land Use Plan)
- Otay Mesa/Nestor LUP (Otay Mesa/Nestor Community Plan)
- Tijuana River Valley LCP Land Use Plan

All twelve of the City's LUPs have been certified by the California Coastal Commission; thus, the City is the governing agency for issuance of Coastal Development Permits. However, there are some "areas of suspended certification" within various coastal zone segments that await resolution by the Commission. Within these suspended certification areas, the California Coastal Commission is the governing agency for the issuance of Coastal Development Permits.

City of San Diego Environmentally Sensitive Lands Regulations

The purpose of the Environmentally Sensitive Lands (ESL) Regulations (San Diego Land Development Code, Chapter 14, Article 3, Division 1) is to protect, preserve, and, where damaged, restore the environmentally sensitive lands of San Diego and the viability of the species supported by those lands. The ESL regulations serve to implement the MSCP by placing priority on the preservation of biological resources within the MHPA.

ESL regulations apply to all proposed development when any of the following environmentally sensitive lands are present on the project area: sensitive biological resources; steep hillsides (defined generally as all lands that have a slope with a natural gradient of 25 percent or greater); coastal beaches; sensitive coastal bluffs; and 100-year floodplains.

All proposed developments that encroach into environmentally sensitive lands must obtain either a Neighborhood Development Permit or a Site Development Permit. If development is proposed in the Coastal Overlay Zone, a Coastal Development Permit is also required. Limited exceptions to ESL regulations, including Zone Two brush management, apply in certain circumstances.

The ESL regulations contain development regulations for each type of sensitive land (sensitive biological resources, steep hillsides, coastal beaches etc.). Within the Coastal Overlay Zone (Figure 5), the ESL regulations generally establish a 25 percent allowable development area in steep hillside areas, although development of up to 40 percent is permitted under certain circumstances for certain types of development, including public utility systems. Additionally, the ESL regulations for projects occurring within the Coastal Overlay Zone require a 100-foot buffer to be maintained around all wetlands, as appropriate, to protect the functions and values of the wetland. A lesser or greater buffer may be warranted based on consultation with the resources agencies (i.e., USACE, USFWS, and CDFG).

effective on July 16, 1997, and allows the City to issue Incidental Take Authorizations for listed species under the provisions of the MSCP without having to obtain separate permits from the state or federal governments. Applicable state and federal permits are still required for wetlands and listed species that are not covered by the MSCP.

The MSCP also provides protection for narrow endemic species. Narrow endemics are species with restricted geographic distribution, soil affinities, and/or habitats and are considered sensitive biological resources. Narrow endemic plant species have been identified in the City of San Diego's MSCP Subarea Plan (p.106) and include *Acanthomintha ilicifolia* (San Diego thornmint), *Agave shawii* (Shaw's agave), *Ambrosia pumila* (San Diego ambrosia), *Aphanisma blitoides* (aphanisma), *Astragalus tener* var. *titi* (coastal dunes milk vetch), *Deinandra conjugens* (Otay tarplant), *Dudleya blochmaniae* ssp. *brevifolia* (short-leaved dudleya), *Dudleya variegata* (variegated dudleya), *Navarretia fossalis* (prostrate navarretia), *Opuntia parryi* var. *serpentine* (snake cholla), *Orcuttia californica* (California orcutt grass), *Pogogyne abramsii* (San Diego mesa mint), *Pogogyne nudiuscula* (Otay mesa mint), *Baccharis vanessae* (Encinitas baccharis) and *Eryngium aristulatum* var. *parishii* (San Diego button celery).

The latter two species were added during the final MSCP plan (p. 3-27) or identified in Table 3-5 of the City of San Diego's MSCP Subarea Plan. Table V.A-1 provides information on the various narrow endemics, their lifeforms, flowering periods, and habitat associations.

Table V.A-1 Biological characteristics of City of San Diego MSCP narrow endemics.

<u>Species</u>	<u>Lifeform</u>	<u>Flowering Period</u>	<u>Habitat</u>
<u>Aphanisma</u>	<u>Annual herb</u>	<u>Apr-May</u>	<u>Southern foredunes</u>
<u>San Diego thornmint</u>	<u>Annual herb</u>	<u>Apr-May</u>	<u>CSS, Chaparral, Native grassland</u>
<u>San Diego ambrosia</u>	<u>Perennial herb</u>	<u>May-Oct</u>	<u>CSS</u>
<u>Shaw's agave</u>	<u>Leaf succulent</u>	<u>Sep-May</u>	<u>Southern Maritime, CSS</u>
<u>Coastal dunes milk vetch</u>	<u>Annual herb</u>	<u>Mar-May</u>	<u>Southern foredunes</u>

<u>Species</u>	<u>Lifeform</u>	<u>Flowering Period</u>	<u>Habitat</u>
<u>Encinitas baccharis</u>	<u>Deciduous shrub</u>	<u>Sep-Nov</u>	<u>Chaparral</u>
<u>Short-leaved dudleya</u>	<u>Perennial herb</u>	<u>Apr-Jun</u>	<u>Open areas within chaparral</u>
<u>Variiegated dudleya</u>	<u>Perennial herb</u>	<u>May-Jun</u>	<u>Open areas within chaparral or CSS</u>
<u>Otay tarplant</u>	<u>Annual herb</u>	<u>May-Jun</u>	<u>CSS, Grassland</u>
<u>Prostrate navarctia</u>	<u>Annual herb</u>	<u>Apr-Jun</u>	<u>Vernal Pools</u>
<u>California oreutt grass</u>	<u>Annual herb</u>	<u>May-Jul</u>	<u>Vernal Pools</u>
<u>Snake cholla</u>	<u>Stem succulent</u>	<u>Apr-May</u>	<u>Chaparral, CSS</u>
<u>San Diego mesa mint</u>	<u>Annual herb</u>	<u>Apr-Jun</u>	<u>Vernal Pools</u>
<u>Otay mesa mint</u>	<u>Annual herb</u>	<u>May-Jun</u>	<u>Vernal Pools</u>
<u>San Diego button celery</u>	<u>Annual/perennial herb</u>	<u>Mar-July</u>	<u>Vernal Pools, Grassland</u>

CSS – Coastal Sage Scrub

Sources: Beauchamp, 1986; California Native Plant Society, 2004.

Inside the Multi-Habitat Planning Area (MHPA) of the MSCP, narrow endemic species require avoidance; outside the MHPA they must be avoided, managed, enhanced, or transplanted as appropriate (p. 105 of City of San Diego Subarea Plan).

The subregional MSCP Plan (August 1998) specifically addresses fire management (section 6.3.4) and acknowledges that brush management is necessary for human safety, protection of property, and hazard reduction. The Subregional MSCP Plan allows the fuel management zone between development and the preserve to vary in width and to be within the preserve. Fire management for human safety was to be implemented in a manner that is compatible with the conservation of biological resources. To accomplish this objective, a Wildland/Urban Interface Task Force was assembled to draft countywide planning and construction standards and fuel modification standards. The Task Force consisted of the San Diego County Fire Chiefs' Association, USFWS, CDFG, California Department of Forestry and Fire Protection (CDF), U.S. Forest Services, and staff from various jurisdictions. The City of San Diego is a member of the San Diego County Fire Chiefs' Association. A Memorandum of Understanding (MOU) among

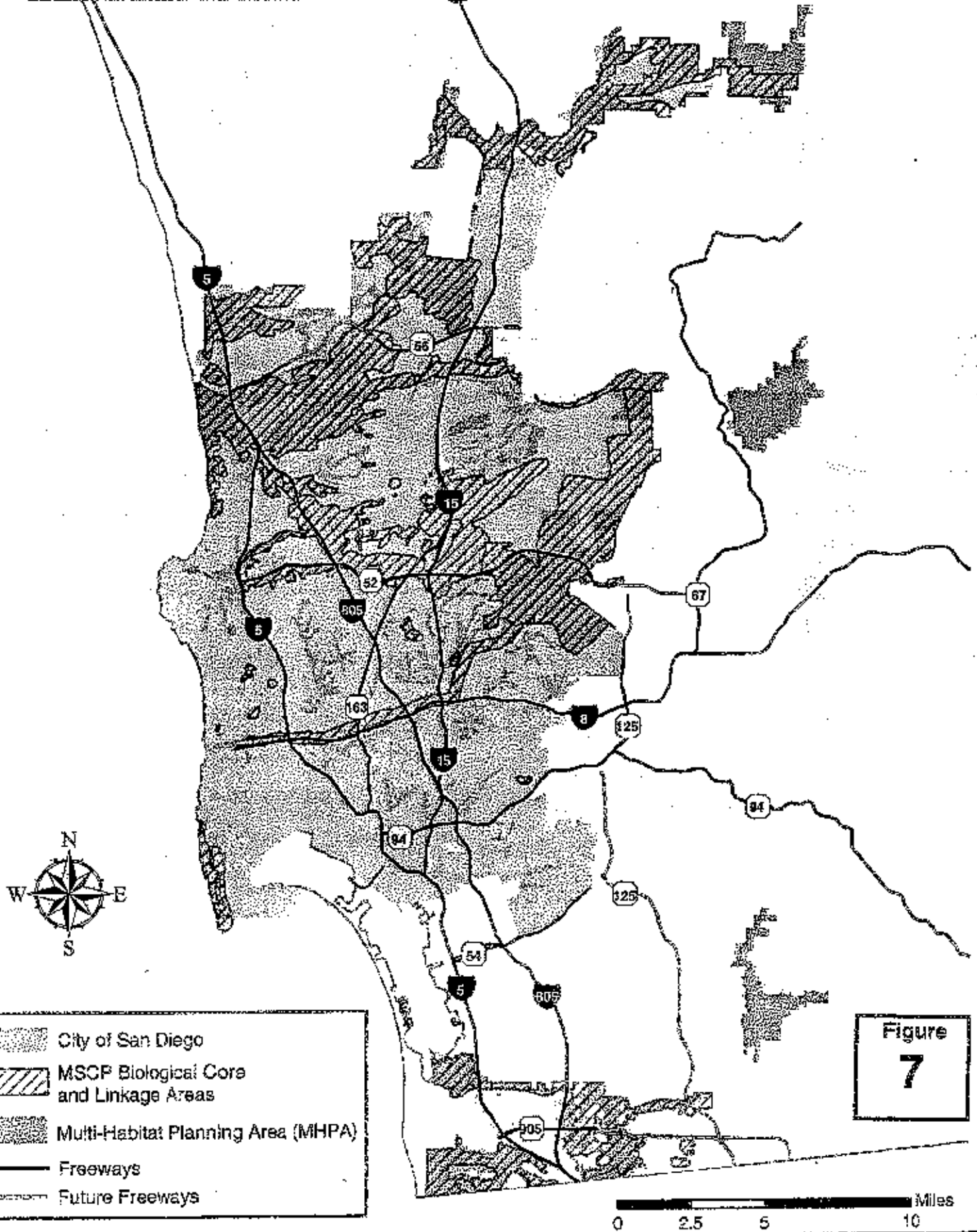
these parties was developed with the purpose to manage fire hazards in concert with habitat protection. The MOU was signed by all parties in February 1997.

The purpose of the MOU was to establish guidelines so that CDF, Fire Chiefs and the Districts could continue to protect lives and property from the threat of fire through the abatement of flammable vegetation pursuant to State Law, County and District ordinances and Cities' municipal codes. Also, it was to establish a cooperative mechanism whereby the USFS and CDFG could assess, minimize, and help account for potential adverse impacts to sensitive species and habitats resulting from vegetation abatement activities. Through the MOU, the USFWS (under Chapter 1.5 Division 3 of the Fish and Game Code) authorized take of species listed as threatened or endangered, or candidate species (under Chapter 1.5 of Division 3 of the Fish and Game Code) for management purposes necessitated by or incidental to those measures necessary to implement minimum fire safety standards related to defensible space.

The MOU allows property owners, their lessees, CDF, fire districts, and cities to thin all flammable vegetation within a one hundred (100) foot radius of all structures using methods, such as mowing and trimming that would leave the plant root structure intact to stabilize the soil. The MOU requires that the fire agencies develop guidelines for the public which include directions as to the limits for brush management and acceptable thinning methods. Additionally, the MOU states that wetlands should be avoided, unless vegetation abatement is deemed necessary by the Fire Chief. If deemed necessary, then consultation with the USFWS and CDFG shall be required ten days prior to any wetland abatement activities. No wetlands impacts are anticipated to occur with implementation of the proposed changes to the LDC, brush management regulations.

On June 6, 1997 the USFWS issued a Biological and Conference Opinion (Biological Opinion) on Issuance of an Incidental Take Permit to the City of San Diego pursuant to the MSCP (1-6-97-FW-47). The Biological Opinion anticipated that impacts from development could include direct take such as killing or injuring individuals, or damaging plants, harm resulting from habitat loss, and/or harassment due to edge effects. The Biological Opinion determined that the biological integrity of habitats adjoining development could be diminished by adverse edge

MSCP Biological Core and Linkage Areas



within the MHPA. The Subarea Plan, section 1.4.3, addresses the adjacency of existing and planned land uses to the MHPA. The Land Use Adjacency Guidelines include drainage, toxics, lighting, noise, barriers, invasives, brush management, and grading/land development. The adjacency guidelines are addressed during the approval process for proposed public and private projects.

In accordance with the City's current regulations and policies brush management zone two is allowed year-round within the MHPA and elsewhere and is considered impact neutral (not considered an impact and not considered acceptable as a mitigation area). Per Section 143.0110 of the Land Development Code (LDC), a Neighborhood Development Permit or Site Development Permit is not required for Zone Two brush management activities if the brush management complies with Section 142.0412 of the Land Development Code (Brush Management) and the City of San Diego, Biology Guidelines. The following are the current requirements for brush management zone two; the only revision proposed to these requirements in changing the word "cleared" to "thinned":

- 50 percent of the plants over 18 inches in height shall be cut and cleared to a height of 6 inches
- all plants remaining after 50 percent are cut and cleared shall be pruned to reduce fuel loading
- no non-native plant material may be planted inside the MHPA or adjacent to areas containing sensitive biological resources
- no permanent irrigation is allowed
- Zone Two shall be maintained on a regular basis by pruning and thinning plants, controlling weeds, and maintaining any temporary irrigation system

A three zone system of brush management, consistent with Uniform Fire Code Appendix IIA, with widths varying from fifty to one hundred and ten feet was in effect when the MSCP was adopted in 1997. The current brush management regulations (Land Development Code, Section 142.0412) were developed in conjunction the MSCP. The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. The current code is a two zone system based upon the property's location west or east of

Interstate 805 and El Camino Real. The width of Zone One currently varies from twenty feet to thirty-five feet west of Interstate 805 and El Camino Real, and thirty feet to forty-five feet on the east. Zone two currently varies for twenty feet to thirty feet west of Interstate 805 and El Camino Real, and forty feet to fifty feet on the east. Under the current LDC regulations, there are no restrictions on the timing of brush management activities ~~and no changes are proposed with this project~~ and the proposed brush management revisions do not allow brush management activities to occur during California gnatcatcher breeding season (March 1 – August 15).

As a result of the Cedar Fire and other wildfires in October of 2003, the Fire Chief is proposing a city-wide one hundred foot brush management area consisting of a thirty-five foot brush management zone one and a sixty-five foot brush management zone two.

Water Quality Regulatory Framework

The regulatory framework for water quality includes the 1972 Clean Water Act, which established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from industrial, commercial, and institutional processes, and point sources to waters of the United States, and the Porter-Cologne Water Quality Act and the Federal Water Pollution Control Act Amendments of 1972 which require that Water Quality Control Plans (Basin Plans) be prepared for the nine state-designated hydrologic basins in California, including the San Diego Region basin. The water quality regulatory framework is more fully described in Section V.E, Hydrology and Water Quality. As Indicated in Section V.E, the City of San Diego has prepared an Urban Runoff Management Plan (URMP- adopted by the City Council on January 28, 2002) as part of the City of San Diego's Stormwater Pollution Prevention Plan (SWPPP), and the Standard Urban Stormwater Mitigation Plan (SUSMP – completed by the San Diego co-permittees on February 7, 2002), in accordance with requirements of the State Water Resources Control Board NPDES permit procedure. These documents address the process that the City will undertake to improve water quality. In addition to the URMP and SUSMP, protection of surface water quality is also provided through the NPDES General Construction Permit for the State of California.

ISSUE STATEMENTS

1. *Would the project result in a conflict with the purpose and intent of any current planning process or adopted environmental plans or policies in the City of San Diego, including lands within the California Coastal Commission jurisdiction?*
2. *Would the proposed project result in a conflict with the purpose and intent of the Environmentally Sensitive Lands (ESL) regulations of the Land Development Code (LDC)?*
3. *How is the project consistent with the region's Multiple Species Conservation Program (MSCP) and the City of San Diego - MSCP Subarea Plan?*

IMPACT

Criteria for Significance Determination

The following criteria were used to assist in making determinations of significant land use impacts (City of San Diego, 2001).

1. Inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan.
2. Inconsistency/conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts occur (for example, development of a designated school or park site with a more intensive land use could result in traffic impacts).
3. Substantial or extreme use incompatibility, for example, a rock crusher in a residential area; Conditional Use Permits sometimes create impacts because conflicting uses are proposed.
4. Development or conversion of general plan or community plan designated open space to a more intensive land use.
5. Inconsistency/conflict with adopted environmental plans for an area. For example, development of a non-designated use within the boundaries of a park master plan would fall into this category.

Analysis of Impacts

The proposed revisions to the Land Development Code related to brush management, zone two would result in an estimated City-wide impact of 2,880 acres. Of this total, 715 acres would be within the MHPA, of which 242 acres would be within the core biological areas and habitat linkages. The MHPA will preserve 52,012 acres, which includes 35,648 acres within the core biological and habitat linkages areas. Therefore, impacts from the thinning and pruning activities associated with zone two brush management would potentially impact 1.4 percent of the MHPA and 0.7 percent of the core/linkages areas. The following Table V.A.-42 further identifies the anticipated impacts that would occur habitats by Tier (see Biological Resources Section V.B. for a full discussion of biological impacts). No impacts to wetlands are expected to occur with implementation of the proposed LDC code revisions, because no brush management is required within wetland areas.

Table V.A-42

Habitat Impacts from Proposed Revisions to Brush Management Regulations			
Habitat Type	Citywide Impacts	MHPA Impacts	Core/Linkage Impacts
I	75	46	30
II	708	312	81
III	465	222	81
IV	1632	135	50
Totals	2880	715	242

A majority of the impacts from the proposed revisions to brush management zone two would occur within smaller urban canyons and would not be part of the larger core biological areas and linkages. Impacts to the core biological and linkages areas would be limited to 0.7 percent (242 acres). Additionally, all impacts would be within the 200-foot buffer identified in the MSCP EIR/EIS for edge effects. No impacts to narrow endemic species are expected to occur because these species are generally less than eighteen inches in height and would not be subject to

thinning per the brush management regulations. The exception would be *Encinitas baccharis*, which has an average height of eighty inches; however no known locations of this species are within the proposed brush management zone two areas. Where brush management conducted by humans could avoid impacts to narrow endemics, it is conceivable that goats could indiscriminately graze on narrow endemics.

The areas identified for expanded brush management activities are not located within any of the narrow endemic species' major population areas discussed in the MSCP Plan Table 3.5 'details for the rationale for identifying species as covered.' Additionally, the MSCP database identifies no narrow endemic species locations within the areas identified for expanded brush management. As discussed above, impacts to narrow endemics within the MHPA must be avoided, and outside the MHPA they must be avoided, managed, enhanced, or transplanted as appropriate.

As proposed, brush management would be prohibited from (March 1 – August 15) in gnatcatcher habitat (i.e., coastal sage scrub and southern maritime scrub). This period coincides with the flowering periods of many narrow endemic species. The prohibition on brush management activities during the gnatcatcher breeding season would eliminate impacts on narrow endemics in coastal sage scrub and southern maritime scrub during this time.

Vernal pools were extensively mapped by the City in 2002-2003; no vernal pools are located in the proposed brush management area. As such, no impacts on vernal pool narrow endemic species would result from the proposed project. Potential impacts on narrow endemics from the proposed project would be less than significant.

Since potential project impacts would be within the 200-foot buffer analyzed in the MSCP EIR/EIS for edge effects, no additional impacts to the preserve configuration, structural diversity and habitat interfaces of the MHPA would occur. Impacts would generally be limited to areas outside the core biological areas and would not impact major habitat linkages or wildlife corridors, therefore, the conservation of covered species would be maintained and there would not be a significant increase in the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Act. The proposed 100-foot brush

management zones would be consistent with the MOU between the USFWS, CDFG, and various Fire agencies as well as the MSCP Subregional Plan and MSCP Subarea Plan.

The MSCP Subarea Plan (Table 3-5) and City of San Diego Biology Guidelines places restrictions on grading, thinning, and grubbing during the breeding season of seven sensitive species. Six of these species would not be affected by the proposed change to the brush management regulations because either they occur outside of the areas proposed for brush management (e.g. beach areas) or the habitats they occur in will not be impacted (e.g. wetlands). These species include western snowy plover, southwestern flycatcher, least tern, cactus wren, least bell's vireo, and the tricolored black bird. For the remaining species, the California gnatcatcher, no timing restrictions apply outside the MHPA. Within the MHPA, restrictions on grading, thinning, and grubbing activities apply during the breeding season (March 1 – August 15).

Under the current LDC regulations, there are no restrictions on the timing of brush management activities, ~~and no changes are proposed with this project~~ however, this project proposes to restrict brush management activities during the California gnatcatcher breeding season (March 1 – August 15). The MOU (page 2) between the USFWS, CDFG, and various Fire agencies allows for take of species (under Chapter 1.5 of Division 3 of Fish and Game Code) listed as threatened or endangered, or candidate species for management purposes necessitated by or incidental to fire protection measures, including fire safety standards related to defensible space and does not limit the timing of the brush management activities. The MOU is referenced in the subregional MSCP Plan (section 6.3.4) and Biological Opinion (page 68) for the City's MSCP Subarea Plan. Additionally, as addressed above in the MSCP land use adjacency guidelines discussion, potential noise impacts from the additional brush management activities would be less than significant.

Compatibility with Surrounding Land Uses

Land uses within the City of San Diego are currently guided by the individual community plans; the plans for areas along the coast also serve as local coastal plans. The Strategic Framework Element (SFE) of the City's General Plan and Progress Guide, a new city wide

growth/development strategy, was adopted by the City Council on October 22, 2002. The SFE also known as the City of Villages, is a vision for the continuing growth in the City through urban infill and redevelopment, and it attempts to focus future mixed use development along established, major transit corridors and combines intensified urban land uses with walkability, public open spaces, and enhanced urban design. The adoption of the SFE and its accompanying Action Plan also starts the process of updating the various elements of the City's General Plan and Progress Guide. As part of this elements update process in addition to the community-specific land use policies and designations in the individual community plans, a new Land Use Element will be written. This proposed Land Use Element would provide city wide guidance for the implementation of the City of Villages strategy.

Consistency with City Planning Documents

The following discussion includes proposed revisions consistency with relevant planning documents.

The consistency of the proposed city wide, expanded brush management zones to city wide land use policies/regulations was analyzed with a survey of the adopted, individual community plans and a few appropriate precise or specific plans for planning areas either containing or adjoining large naturally-vegetated open space areas. These areas include slopes of the San Dieguito River, Gonzales Canyon, Torrey Pines Preserve, Mission Trails Regional Park, Black Mountain Park, eastern MCAS Miramar, southern slopes and side canyons of Mission Valley, Chollas Creek drainages, Tecolote Canyon, San Clemente Canyon, Penasquitos Canyon, Deer Canyon, Rose Canyon, Beeler Canyon, Murphy Canyon, Dennery Canyon, Spring Canyon, Crest Canyon, Switzer Canyon, Kate Sessions Park, canyons of Mt. Soledad, Otay River, canyons of Balboa Park, slopes along Martin Luther King Freeway (SR 94), and the watersheds of Chollas Lake, Lake Murray, and Miramar Lake.

City of San Diego Local Coastal Program

As indicated previously, the policies and recommendations that make up the various LUPs of the City's overall LCP are included and incorporated into the goals, objectives, and recommendations of the community plans and/or other area planning documents.

City of San Diego Environmentally Sensitive Lands Regulations

Although the proposed revisions to brush management zones would be designed to avoid or minimize impacts to environmental sensitive lands, some brush management zones are expected to encroach upon sensitive lands, including those that contain sensitive biological resources, steep hillsides, and 100-year floodplains (please refer to Section V.B, Biological Resources, for a discussion of potential impacts to sensitive biological resources). Some of the brush management zones may also encroach onto coastal beaches and/or sensitive coastal bluffs. ~~As discussed in Section V.B, Biological Resources, the proposed revisions could result in impacts to the California Gnatcatcher during the breeding season. This would not be consistent with the ESL regulations.~~ Additionally, there is the potential that some individual projects within the City of San Diego would not be consistent with the allowed encroachment percentages into steep hillside if brush management zone one would be located within open space or other sensitive lands described in the ESL regulations.

City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan

The proposed project would be located within the limits of the City of San Diego, and would include locations within the MHPA, City of San Diego Open Space Lands, private property, and lands within the Coastal Commission jurisdiction. Current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the MSCP. Since the adoption of the MSCP in 1997, brush management zone one associated with new development has been located within the development footprint and is not allowed within the MHPA. With the proposed revisions to the LDC, zone one would be increased to thirty-five feet. However,

For some existing structures, zone one may not be able to expand to thirty-five feet without impacting native habitat. In lieu of expanding zone one into native habitat, the proposed code amendments would increase the width zone two one foot for every one foot of zone one that could not be provided, unless the Fire Chief approved a modification on a case-by-case basis.

According to the Subregional MSCP Plan, Section 6.3.4 and the City of San Diego Biology Guidelines, brush management zone two is allowed within the MHPA and is considered impact neutral. The current regulations were approved by the City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire LDC on January 3, 2000. The Table V. A-23 below depicts impacts from the proposed additional brush management zone two requirements. The proposed project would increase brush management requirements zone two within the MHPA by 715 acres. Of that acreage, impacts to core habitat and linkage areas would be limited to 242 acres.

TABLE V.A-23

Impacts from Proposed Revisions to Brush Management Regulations			
Region	Citywide Impacts	MHPA Impacts	Core/Linkage Impacts
Coastal Zone	413 acres	102 acres	70 acres
West of I-805 (outside of Coastal zone)	1148 acres	223 acres	50 acres
East of I-805	1319 acres	390 acres	122 acres
Totals	2880 acres	715 acres	242 acres

In the EIR/EIS, a number of assumptions were used to evaluate whether the proposed MHPA preserve would result in adequate coverage of species and habitats. The assumptions included factors such as proposed habitat conservation (amount and spatial configuration) management actions, and existing, local, state, and federal regulations and policies that would continue to be applied both within and outside the preserve. A minimum edge effect of 200 feet along the

inside boundary of the preserve was assumed for indirect impacts. The EIR/EIS evaluated indirect impacts that could potentially occur within and adjacent to the preserve. Indirect impacts could include, but are not limited to, human intrusion, toxic chemicals (fertilizers, pesticides, herbicides, and other hazardous materials), noise dust, lighting, soil erosion, exotic plants and animals, fire management, and hydrologic and drainage changes. The EIR/EIS assumed a 200-foot wide strip along the inside edge of the regional preserve boundary, as much as 20% (34,000 acres) or greater, could be subject to existing or future edge effects. The 200-foot buffer area for the City of San Diego MHPA would total 17,634 acres.

The EIR/EIS determined that indirect impacts to covered species, uncovered species, and sensitive vegetation communities/habitats would result from permitted uses within the preserve, edge effects from uses adjacent to the preserve, and increased development pressure outside the preserve. These impacts were considered significant. The City's MSCP covers eighty-five targeted animal and plant species and their habitat including fifteen narrow endemic species. The EIR/EIS determined indirect impacts to covered species and uncovered non-wetland sensitive species/habitats would be mitigated to below a level of significance with implementation of preserve management/planning guidelines identified in the MSCP Subarea Plan and the City's associated ordinances (i.e. Resource Protection Ordinance, Environmental Sensitive Lands). The MSCP Subarea Plan specifically addresses brush management in section 1.4.3, Land Use Adjacency Guidelines.

The City Council directives related to brush management were incorporated into the MSCP Subarea Plan, Land Use Adjacency Guidelines (section 1.4.3). A three zone system of brush management with total widths varying from fifty to one hundred and ten feet was in effect when the MSCP was adopted in 1997. The Policy direction regarding brush management was incorporated into the Land Development Code under section 142.0412 brush management regulations and became effective on January 1, 2000. Other issues addressed in the MSCP Land Use Adjacency Guidelines are addressed below:

Drainage: The current regulations state no permanent irrigation is allowed within zone two. If new plantings occur within zone two, the plantings shall be temporarily irrigated until

established. The overspray and runoff from the irrigation shall not drift or flow into adjacent areas of native or naturalized vegetation. There are no changes proposed to these requirements, therefore no impacts due to drainage would occur from the project proposal.

Toxics: Brush management zone two involves the thinning and pruning of vegetation and would not introduce toxics into the MHPA.

Lighting: All work would occur within daylight hours; therefore no impacts related to lighting would occur.

Noise: The proposal would include an incremental increase in zone two brush management activities. The increased width in zone two would range from twenty-five to forty-five feet within or adjacent the MHPA. Currently, there are no timing restrictions on brush management activities and no changes are proposed with this project. Brush management, zone two would involve thinning and pruning of vegetation. Hand tools and small mechanical tools, such as weed whackers or goats would be utilized. Brush management activities would likely occur every one to three years and last for one to two days. The principal concern relating to indirect noise and activity impacts is the potential for disturbance of nesting that would result in nest site abandonment for periods long enough to effect eggs or young through chilling, predation, or starvation. Due to the short duration of the work and localized activities associated with brush management zone two, it is not anticipated that a significant noise impact would occur during the breeding season of sensitive species.

Barriers: The adjacency guidelines require that all new development provide barriers along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation. Implementation of zone two brush management activities would not conflict with these requirements or provide additional public access to the MHPA.

Invasives: Current regulations require that no non-native plant material may be planted in zone two either inside the MHPA or adjacent to areas containing sensitive biological resources. The current regulations are consistent with the MSCP adjacency guidelines and there are no changes

proposed to these requirements. Furthermore, the proposed city-wide one hundred foot brush management area would be well within the two hundred foot buffer identified in the MSCP EIR/EIS for edge effects. Edge effects include indirect impacts from thinning and pruning activities associated with fire management activities.

Grading/Land Development: No grading would occur with the implementation of the additional zone two brush management activities.

Water Quality Regulatory Framework

As discussed in Section V.C, Hydrology/Water Quality, implementation of the proposed brush management revisions would not result in the potential for significant impacts to erosion in open space, private lands and other environmentally sensitive lands. The proposed revisions would support the intent, goals, objectives, and policies of the San Diego Basin Plan, as well as the URMP and SUSMP, in protecting surface water quality within the region.

SIGNIFICANCE OF IMPACT

The surveyed plans showed that while all plans called for preservation of naturally vegetated, open spaces within their planning area, there is a wide range of treatment of brush management; it varies from tacit reference to the City's Land Development Code (the municipal code) to stated reference to the code to statements regarding brush thinning and/or transition to open space, and to specific reference to brush management. These references were found in various places within the plan texts including sections dealing with open space, landscaping, fire protection, or a few specific brush management sections. Specific references to brush management were referenced in the plans for Clairemont Mesa, Miramar Ranch North, Black Mountain Ranch, Torrey Pines, Sorrento Hills, Rancho Penasquitos, and Pacific Highlands (Subarea III). Written or silent in the individual plan text, brush management is an important consideration in city wide land use and in development adjoining portions of the City which has been designated for natural open space.

The areas identified for potential villages by the recently adopted citywide development and growth strategy, the SFE, are mostly urban infill/redevelopment located along established major

transit corridors. Potential villages were identified and limited to those which avoid naturally vegetated open space and/or the MHPA. Therefore, brush management should not be an issue with this citywide strategy.

Land use regulation such as brush management is one of the police powers which has been long upheld as legitimate use by municipalities in protecting public health and safety. There is a need to balance protection of structures from wildfires and the preservation of natural open space. This balance has been addressed by the City of San Diego (as well as the subregion) evidenced by its adoption of the Multiple Species Conservation Program (MSCP) and by its continuing implementation of the Multi-Habitat Planning Area (MHPA), the planned habitat preserve. (See following discussion of the MSCP-MHPA and the related separate biological impact analysis.) In a more practical view, the proposed sufficient brush management expansion as determined for this project, is a necessity for public safety as well as a tool to not only balance land uses by buffering open space and development but also to allow these seemingly divergent land uses to coexist side-by-side in our semi-arid climate. Brush management is a demonstrated need in a populated region with prolonged dry, hot summers.

The proposed brush management expansion would not pose a significant land use effect because it is generally consistent with the goals and policies of community and specific plans of the City, it would not impact the regional planned land use balance of development and open space-habitat preservation within a urbanized area, and it is a demonstrated, needed public safety measure.

The Biological Opinion acknowledged that edge effects from fire management could occur (page 67) and that direct and indirect effects to the gnatcatcher will be minimized through preservation of large, connected blocks of habitat (page 70). The proposed increase in the brush management zone two would have minimal impacts to the core/linkages areas(0.7 percent) and the 12,176 acres of associated coastal sage scrub habitat (81 acres/0.5 percent). Per the regional vegetation database developed for the MSCP, only 5 sites out 377 of known gnatcatcher locations would be potentially impacted by the additional thinning and pruning activities associated with the increased width of brush management zone two. The proposed project would be in compliance

with the MOU between the USFWS, CDFG, and various Fire agencies and would have a low potential to impact gnatcatchers during the breeding season within the MHPA.

MITIGATION, MONITORING, AND REPORTING PROGRAM

Impacts to land use would be less than significant; therefore, no mitigation measures are required.

B. BIOLOGICAL RESOURCES

The following discussion is based on a biological resources study completed for the Canyon Sewer Cleaning Program and Long-Term Sewer Maintenance Program EIR (LDR No. 6020, SCH No. 2002041129) by Merkel & Associates in December 2002 and a biological technical report written by Holly Cheong, City of San Diego, MSCP-Planning staff. A copy of the biological technical report written by Holly Cheong is included as Appendix B.

EXISTING CONDITIONS

The existing biological resources documented in this section were determined through an extensive review of the most current biological literature and Geographical Information Systems (GIS) data available for the City of San Diego. Vegetation communities and the distribution of the proposed brush management regulations relative to the MHPA and sensitive plant and animal species were identified based on the regional vegetation map, prepared by the City of San Diego, which is incorporated into the MSCP database (SANGIS 1995).

General flora and fauna species were determined based on the identified vegetation communities and the species that typically occur in these habitats. The presence or potential for presence of sensitive biological resources was assessed based on the California Natural Diversity Database (CNDDDB 2002) records and general knowledge of species-specific habitat requirements.

Biological Habitats and Communities

A host of upland and wetland vegetation communities, defined according to the current Holland Code (HC) classification system (Holland 1986) and San Diego County terrestrial vegetation community descriptions (Oberbauer 1996), occur within the City of San Diego. Only those communities which could potentially be impacted by the proposed brush management revisions within the project area are discussed. For ease of discussion, some of the habitats have been grouped under broader habitat categories that are specifically addressed within the City Land Development Manual – Biology Guidelines (as amended May 19, 2001). These categories are organized by habitat tiers, as specified in the City's Biology Guidelines, rather than natural habitat groupings (Table V.B-1).

Table V.B-1 - Habitat Types within the City of San Diego

UPLAND HABITATS	
	Habitat Type
Tier I: (rare uplands)	Southern Foredunes Torrey Pines Forest Coastal Bluff Scrub Maritime Succulent Scrub Maritime Chaparral Scrub Oak Chaparral Native Grassland Oak Woodland
Tier II: (uncommon uplands)	Coastal Sage Scrub (CSS) CSS/Chaparral
Tier III A: (common uplands)	Chaparral Mixed Chaparral Chamise Chaparral
Tier III B: (common uplands)	Valley and Foothill Grasslands Non-native Grasslands
Tier IV: (other uplands)	Urban/Developed Disturbed Agriculture Eucalyptus Woodland
WETLAND HABITATS	
Coastal	Salt Marsh Salt Pannes/Mudflat
Riparian	Oak Riparian Forest Riparian Forest Riparian Woodland Riparian Scrub/Riparian Scrub in the Coastal Overlay Zone Riparian and Bottomland Habitat
Freshwater Marsh	Freshwater Seep Freshwater Marsh/Freshwater Marsh in the Coastal Overlay Zone
Disturbed Wetland	Disturbed Wetland
Unvegetated Freshwater	Non-vegetated Channel, Floodway, Lakeshore Fringe Unvegetated Habitat Freshwater
Marine Habitats	Unvegetated Habitat Estuarine Unvegetated Habitat Beach Unvegetated Habitat Marine Intertidal Unvegetated Habitat Marine Subtidal Unvegetated Habitat Shallow Bay Unvegetated Habitat Intermediate Bay

Source: Merkel & Associates, 2003

Upland Habitats

Tier I Habitats – Rare Uplands

Tier I habitats include the upland habitats that are considered to be rare within the City of San Diego. These habitats have suffered substantial historic losses on top of naturally narrow distribution patterns, such as in the case of southern foredunes and Torrey pine woodlands. Alternatively, the habitats were once common, as was the case for native grasslands, but historic land conversion has resulted in precipitous declines that threaten the continued persistence of the habitats in the region.

Southern Foredunes

Southern foredunes (HC 21230) are a relatively uncommon constituent of today's City beaches, but two hundred years ago were widely dispersed at the upper edge of the region's oceanic high tides where they occupied hummocky areas of sand and the interstitial swales. The most common components of this vestigial vegetation are two species of abronia (*Abronia maritima*, *A. umbellata*), beach evening primrose (*Camissonia cheiranthifolia*), and beach ambrosia (*Ambrosia bipinnatisecta*).

Torrey Pines Forest

This remnant coniferous forest habitat (HC 83140) is now restricted in mainland United States to several stands of Torrey pines at Torrey Pines State Park and around the City of Del Mar. It appears to rely on moisture supplied by frequent fogs and is strongly correlated with marine sandstone substrate.

Coastal Bluff Scrub

Few native plants can survive on the erosive slopes of San Diego's coastal bluffs. Typically, this scrub (HC 31000) is comprised of plants that are adapted to a regime of fogs, and a generally wetter environment that is found a short distance inland, including some succulent-leaved plants such as *Coreopsis* spp. and coast pincushion flower (*Chaenactis glabriuscula* var. *orecuttiana*). Other plants are adapted to salt tolerant conditions and include species of saltbush (*Atriplex* spp.)

and pineapple weed (*Chamomilla suaveolens*). This vegetation community is declining as the bluffs erode, where very disturbed weedy mesa vegetation is replacing the existing coastal bluff scrub.

Maritime Succulent Scrub

This scrub (HC 32400) is largely associated with the flora in northern Baja California. It occurs in the United States primarily in the extreme southwestern portions of San Diego County near the Mexican border. Dominant shrubs here typically include jojoba (*Simmondsia chinensis*) and flat-top buckwheat (*Eriogonum fasciculatum*). This phase of sage scrub also includes several desert elements such as four-wing saltbush (*Atriplex canescens*), waterjacket (*Lycium andersonii*), and sometimes very unusual species for western San Diego County such as smooth-stemmed fagonia (*Fagonia laevis*) and desert filaree (*Erodium texanum*).

Maritime Chaparral

This phase of coastal chaparral, southern maritime chaparral (HC 37C30) is a vestigial remnant of the wetter and cooler Pleistocene. It generally is restricted to sandstone substrates and usually includes at least one of the following shrub species: Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*), Nuttall's scrub oak (*Quercus dumosa*), and/or coast white lilac (*Ceanothus verrucosus*).

Scrub Oak Chaparral

Scrub oak chaparral (HC 37900) is a dense, evergreen chaparral reaching up to 20 feet tall. The vegetation is dominated by Nuttall's scrub oak (*Quercus dumosa*), with inclusions of interior mountain-mahogany (*Cercocarpus betuloides* var. *betuloides*) and a substantial accumulation of leaf litter. This chaparral type typically occurs in more mesic locations, and often at a slightly higher elevation, than other chaparral types, thus enabling the vegetation to recover more quickly from fire.

Native Grassland

Valley needlegrass grassland (HC 42110) typically supports extensive stands of purple needlegrass (*Nasella pulchra*) as the indicator species for its presence. A limited association of

herbaceous perennials and annuals are often found growing among the clumps of needlegrass – including several rare species.

Oak Woodland

Oak woodlands within the City of San Diego are dominated by coast live oak woodlands (HC 71160). These habitats are evergreen woodlands primarily dominated by coast live oak (*Quercus agrifolia*), with a relatively open and low-growing understory that supports perennial grasslands, annuals, and herbaceous perennials, as well as a mix of shrubs and sometimes-dense thickets of western poison oak. Additional characteristic flora species include California blackberry, San Diego sedge (*Carex spissa*), California coffeeberry (*Rhamnus californica*), California rose (*Rosa californica*), nodding needlegrass (*Nassella cernua*) and large clarkia (*Clarkia purpurea*).

Dense coast live oak woodland (HC 71162) is a dense phase of oak woodland characterized by a contiguous canopy of coast live oak with few additional tree or shrub components. Understory may be less diverse than one associated with a less mature phase of oak woodland.

Tier II Habitats – Uncommon Uplands

Coastal Sage Scrub

The most common native vegetation type remaining within the boundaries of the City of San Diego (MSCP Table of Vegetation Communities 1998) is Diegan coastal sage scrub (HC 32500). This phase of sage scrub is a low-lying, relatively open scrub with desert affinities, and is comprised of soft-woody, drought deciduous species that provide the majority of the vegetative cover. Characteristic flora species include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), California encelia (*Encelia californica*), goldenbush (*Isocoma menziesii*), laurel sumac (*Malosma laurina*), foothill needlegrass (*Nassella lepida*), lemonadeberry (*Rhus integrifolia*), black sage (*Salvia mellifera*), San Diego monkeyflower (*Mimulus aurantiacus*), and California brickellbush (*Brickellia californica*).

A disturbed form of coastal sage scrub is broom baccharis scrub. This habitat supports many of the same species as Diegan sage scrub, but is typically found as a disturbance following

community that is generally best developed along alluvial floodplains and within areas of sandy soils. The habitat is dominated by broom baccharis (*Baccharis sarothroides*).

Coastal Sage Scrub/Chaparral

This "hybrid" of two common vegetation types (HC 37G00) usually indicates either an area of seral sage scrub growing on disturbed substrates, converting into a mature chaparral vegetation; or a mature ecotone in which ecological conditions for each of these two vegetation types does not allow one habitat type to out-compete the other.

Tier IIIA Habitats - Common Uplands

Chaparral

Chaparral (HC 37200), generally including mixed chaparral and chamise chaparral as described below, typically occupies dry, rocky, and often steep north-facing slopes, and is dominated by relatively tall (between 1.5-3 meters), broad-leaved, deep rooted woody shrubs. Chaparral vegetation located on south facing slopes is typically more open and can form a mosaic with sage scrub vegetation. Identification of shrub dominants usually allows for a more specific phase of chaparral to be identified.

Mixed Chaparral - Southern mixed chaparral (HC 37120) is a mid-sized to tall chaparral, with limited shrub diversity in drier areas, but a floristically varied understory with numerous species of subshrubs, herbaceous perennials, bulbs and annuals in shaded and wetter areas. Characteristic flora species include mission manzanita (*Xylococcus bicolor*), Ramona ceanothus (*Ceanothus tomentosus*), San Diego mountain-mahogany (*Cercocarpus minutiflorus*), holly-leaf redberry (*Rhamnus ilicifolia*), sugar bush (*Rhus ovata*) and fuchsia-flowered gooseberry (*Ribes speciosum*).

Chamise Chaparral - Chamise chaparral (HC 37200) is locally common on poorly developed soils throughout the City, and is a lower growing chaparral community dominated by chamise (*Adenostoma fasciculatum*), with comparatively limited shrub diversity and arid understory conditions.

Tier IIIB Habitats – Common Uplands

Valley and Foothill Grassland

This general vegetation category indicates there is insufficient information to more accurately identify the grassland components present (HC 42000). Included here may be areas of scattered native perennial grasses interspersed with larger stands of introduced non-native grasses. This habitat is classified as a Tier IIIB habitat for this analysis since it is highly probable that the majority of this habitat will ultimately be determined to be non-native grasslands rather than native grasslands when reviewed at the project-specific level.

Non-native Grassland

Non-native grasslands (HC 42200) are widely dispersed throughout the San Diego region. This "introduced" grassland consists of a dense to open cover of predominantly Eurasian grasses that have become widespread on disturbed or heavily grazed lands. Local grasslands are dominated by non-native grasses such as bromes (*Bromus madritensis* ssp. *rubens*, *B. hordeaceus* and *B. diandrus*) and slender wild oat (*Avena barbata*), as well as non-native forbs, such as mustard (*Hirschfeldia incana* and *Brassica nigra*), and filarees (*Erodium brachycarpum*, *E. cicutarium*, and *E. moschatum*). The quality of these grasslands is expected to coincide with the quality of the surrounding vegetation communities and land uses.

Tier IV Habitats -- Other Uplands

Urban/Developed

Much of the peripheral study area (OC 12000) is comprised of residential and commercial development dominated by non-native/exotic vegetation, eucalyptus woodland, and disturbed habitats. Urban and semi-urban areas contain numerous and varied horticultural plantings

located within residential yards, active-use parklands, and golf courses. In the older, urbanized portions of the City, tall exotic plantings, such as eucalyptus trees (*Eucalyptus* sp.) with allelopathic toxins that tend to inhibit understory growth, form well developed, dense woodlands. Occasionally, other planted woodlands such as introduced pines, ash, and elm are present. Disturbed areas are typically located adjacent to urbanization and contain a mix of primarily weedy species, including non-native forbs, annuals, and grasses, usually found pioneering on recently disturbed soils. Characteristic weedy species include prickly sow thistle (*Sonchus asper*), common sow thistle (*Sonchus oleraceus*), bristly ox-tongue (*Picris echioides*), Russian thistle (*Salsola tragus*), giant reed, hottentot-fig (*Carpobrotus edulis*), wild lettuce (*Lactuca serriola*), tree tobacco (*Nicotiana glauca*), castor-bean (*Ricinus communis*), pampas grass, smooth cat's-ear (*Hypochoeris glabra*), red-stem filaree (*Erodium cicutarium*), short-beak filaree (*Erodium brachycarpum*) and white-stem filaree (*Erodium moschatum*). These urban lands do not typically contain native vegetation or provide essential habitat connectivity; and therefore, tend to have reduced biological value.

Disturbed Habitat

Disturbed habitat is another broad category of disturbed lands (OC 11300) that usually supports no vegetation, or retains only pioneering weedy species, but does not include a disproportionately strong component of non-native grasses. Such disturbed habitats may establish on recently graded or severely brushed lands.

Agriculture

Agricultural practices throughout the City are quite varied. They include orchards and vineyards, intensive agriculture such as dairies, and extensive field crop and livestock grazing agriculture.

While once a distinctive characteristic of the region in the late 1800s and early 1900s, today only small portions of the City of San Diego are still comprised of groves/orchards (OC 18100), consisting primarily of woody crops such as citrus fruits and avocados. The majority of these crops are located to the east of the City infrastructure -- within the foothills and along the San Pasqual Valley. Herbaceous understory growth may be planted or provide natural cover, and is

typically open in density to facilitate with crop harvesting. Although groves and orchards also tend to have reduced biological value, they do provide cover for wildlife movement, as well as perch and nest sites for raptorial and passerine species.

Few such areas under the general agricultural heading (OC 18200) remain within the City. Where present, such as in portions of the San Pasqual Valley, habitat within the active footprint areas is usually extremely degraded and devoid of any significant biological resources.

Truck crops (OC 18300) are still occasionally planted in the extreme northern and southern portions of the City of San Diego. Typically all areas historically used for agriculture (controlled by the owner/renter) that can be deeply disked and planted for harvest are employed for that purpose. Fallow areas of agricultural fields overwhelmingly consist of non-native weedy species. Occasionally, rare bulbs may survive in lightly disked fields that have not been regularly planted.

Eucalyptus Woodland

Eucalyptus woodland (OC 11100) is a prominent component of the City's canyon lands, but is a relatively late introduction into the region. Quite a few eucalyptus species were intentionally introduced from arid portions of Australia to provide a readily grown tree. The understory within eucalyptus woodland is often devoid of all but the most ubiquitous non-native weeds.

Botanical Resources-Flora

San Diego County has the highest floristic diversity of any county in the continental United States and the City of San Diego hosts the highest floristic diversity of any City in the county. The diversity of the City of San Diego is attributable both to the size of the City as well as the diverse array of habitats that it includes. Among the most floristically diverse regions of the City are coastal canyons that support remnants of once more common scrub communities. In a general sense, the diversity of the City's flora decreases away from the coast and to the north, such that the highest floristic diversity in the City is observed in the southwestern regions while the lowest floristic diversity is found in the northeastern portions of the City. Over the past

century, the native flora of the City has been increasingly impacted. This has occurred as a result of rapidly changing land-uses that have lead to the loss of much of the regions native habitat, particularly on the immediate coast and over the flat coastal plains. In addition there has been a continued degradation of the remaining natural areas by intensifying recreational pressures, alteration of fire conditions, and perhaps most importantly, the expansion of invasive exotic plant species. As a result of these historic impacts, the flora with the highest affinity for coastal environments has been tremendously diminished within the City and only remnant representatives of the original floral diversity remain along the coastal fringe and within urban canyons. Conversely, the data are too coarse to include smaller drainages that may be found via field surveys.

Zoological Resources-Fauna

The City of San Diego is located within a coastal plain largely developed with urban and agricultural uses, but still retains a network of undeveloped canyonlands. Such development now limits the extent and connectivity of the wildlife habitat; however, the identified native vegetation communities, and to some extent the non-native categories, support a number of locally common, as well as sensitive species. The following text discusses many of the faunal groups occurring within the City limits. Faunal species are discussed in a regional context; therefore, existing site-specific conditions may differ from this more generic coverage. Sensitive species are not specifically discussed in these summary sections since they are addressed in more detail later in this document.

Invertebrates

Limited cohesive information is available to provide a thorough description of the many invertebrate fauna found within the City of San Diego region; however, the range of butterfly species and vernal pool branchiopods have been fairly well documented within the City. Butterfly species occur in a wide range of habitats; including sage scrub and chaparral, open areas devoid of substantial shrub cover such as non-native grasslands and agricultural/disturbed land, as well as more densely vegetated areas such as riparian habitat and oak woodlands. These habitats provide various host-specific plants suitable for larval development, adult nectar

resources; as well as topographical features, such as hilltops or open ground that aid in courtship and mating. In contrast, vernal pool branchiopods are strongly restricted to vernal pool habitat, and consequently, many of these species are considered to be sensitive. According to City MWWD staff, no vernal pools are expected to occur in close proximity to canyon/other environmentally sensitive land pipeline projects. As a result, vernal pools are not addressed in this analysis (i.e., impacts to vernal pools are not anticipated to occur).

Fishes

Insufficient information exists to provide a complete description of the freshwater fish associations found within the City of San Diego. While fish species within the various reservoirs are fairly well known, fish occurring along the City's streams are not well documented. The only native freshwater fish species potentially present within the study area is an almost extinct race of steelhead trout (*Oncorhynchus mykiss*) that once spawned in some of the larger stream systems of Southern California. Within the City of San Diego, this species once occurred in such drainages as the San Diego River and Rose Creek; however, it was extirpated in the middle of the last century. The freshwater fish community occurring in the area's reservoirs and streams are presently believed to consist exclusively of exotic species that have been introduced at various times over the past two centuries to provide game fish and a forage base. Fish species found in the City include largemouth bass, a number of centrarchid sunfish, bluegill, black crappie, threadfin shad, several catfish, rainbow trout, carp and goldfish, several minnows, and the ubiquitous mosquitofish (*Gambusia affinis*). While most of the established fish populations are found in association with the major reservoirs and deeper ponds along perennial streams and rivers in the City, mosquitofish have been introduced in nearly every freshwater body as a biotic control to mosquitos.

Amphibians

Amphibians typically occur in riparian habitats with peripheral upland vegetation. Riparian ecosystems often provide temporary ponding water used as breeding habitat by various amphibious species, as well as abundant vegetation for cover and foraging. Amphibians will also create burrows in adjacent upland habitats, such as sage scrub and non-native grasslands, where they will aestivate (or spend time in a dormant state, similar to hibernation). Amphibian

species known or with a potential to occur in the San Diego region include the garden slender salamander (*Batrachoseps major*), arboreal salamander (*Aneides lugubris*), western toad (*Bufo boreas*), California chorus frog (*Pseudacris cadaverina*), Pacific chorus frog (*Pseudacris regilla*), and the bullfrog (*Rana catesbeiana*), a non-native species. Two sensitive species, the western spadefoot toad (*Scaphiopus hammondi*) and arroyo toad (*Bufo californicus*) also occur within the City at a few locations.

Reptiles

Relatively uncommon in coastal canyons and other environmentally sensitive lands is the western whiptail lizard (*Cnemidophorus tigris*); a species more typically seen in the inland arid foothill region. In contrast, the sensitive orangethroat whiptail (*Cnemidophorus hyperythrus*), which has a sporadic but widespread range in coastal San Diego County, is locally common within areas of native vegetation, including peripheral wetlands habitat. Western fence lizards (*Sceloporus occidentalis*) and side-blotched lizards (*Uta stansburiana*) are common to abundant in open areas throughout the City's canyons. Southern alligator lizards (*Elgaria multicarinata*) are regularly found in ecotonal habitat on the periphery of residential areas. Expected to occur occasionally in open, sandy habitat in areas of sage scrub is the coast horned lizard (*Phrynosoma coronatum blainvilliei*). This lizard needs an abundant supply of ants as a food source, and is heavily predated upon by feral cats and pet collecting children.

Western pond turtle (*Clemmys marmorata*) are known to occur in many stock ponds and riverine pools within the City's canyon, but are now extirpated from most of their natural habitats. The pond slider (*Chrysemys scripta*) is an introduced species that is also found regionally. This large aquatic turtle is native to the eastern United States and various areas of Mexico.

The western rattlesnake (*Crotalus viridis helleri*) is commonly found within the canyons of the City and is most often encountered along the riparian fringe of urban canyons. During the summer months, this species often moves up to irrigated yards along canyon crests where it is often killed. While regionally common, this snake is being depleted in more urbanized areas. The larger ponds and marsh areas along the major rivers are particularly suitable to the requirements of the two-striped aquatic garter snake (*Thamnophis hammondi*). This species has

been historically observed in many of these wetlands regionally. Common reptiles such as the gopher snake (*Pituophis melanoleucus*), the coachwhip (*Masticophis flagellum*), the California striped racer (*Masticophis lateralis*), and common kingsnake (*Lampropeltis getulus*) occur within many of the region's canyons. Herpetologist Lawrence Klauber's field notes (unpublished/undated) from the first half of the 20th century include a variety of canyon sightings for now locally uncommon or infrequently observed species such as the glossy snake (*Arizona elegans*), the ringneck snake (*Diadophis punctatus*), the night snake (*Hypsiglena torquata*), and the long-nosed snake (*Rhinocheilus lecontei*). These species are likely depleted from the levels noted by Klauber.

Numerous species of lizards and snakes use rock crevices for cover within sage scrub and open chaparral habitat, and feed on small insects and insect larvae among the leaf litter. Other species are found in grasslands and agricultural/disturbed land, or in riparian areas and hunt small rodents. Quality reptilian habitat, primarily consisting of sage scrub, rocky outcrops, chaparral and oak woodland, is still located at many canyon sites; however, the small patch size available for various species makes local population extirpations increasingly more difficult to deter.

Birds

Over four hundred species of birds have been reported within the environs of the City of San Diego, supporting some of the highest avian diversity in the United States. Both yellow-breasted chats (*Icteria virens*) and yellow warbler (*Dendroica petechia*) also nest locally in this habitat. Also noteworthy due to its sensitive status is the California gnatcatcher (*Poliophtila californica*). There are many historical sightings of this gnatcatcher in open space, privately owned lands and on other sensitive lands.

A number of common birds, which nest in riparian woodland or adjacent sage scrub uplands in San Diego County are known to nest in the City's canyons and other environmentally sensitive lands. These include the Anna's hummingbird (*Calypte anna*), black-chinned hummingbird (*Archilochus alexandri*), mourning dove (*Zenaida macroura*), great horned owl (*Bubo virginianus*), burrowing owl (*Athene cunicularia*), black phoebe (*Sayornis saya*), cliff swallow (*Hirundo pyrrhonota*), common raven (*Corvus corax*), bushtit (*Psaltriparus minimus*), house finch (*Carpodacus mexicana*), black-headed grosbeak (*Pheucticus melanocephalus*), spotted

towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), red-winged blackbird (*Agelaius phoeniceus*), tricolored blackbird (*Agelaius tricolor*), phainopepla (*Phainopepla nitens*), ash-throated flycatcher (*Myiarchus cinerascens*), orange-crowned warbler (*Vermivora celata*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), hooded oriole (*Icterus cucullatus*), northern oriole (*Icterus galbula*), lesser goldfinch (*Carduelis psaltria*), and American goldfinch (*Carduelis tristis*). Many other birds, primarily migrants and winter visitors, use the riparian trees as they pass through the coastal lowlands to and from their breeding grounds to the north and south. Migrant songbirds from the Emberizidac family found in spring include Nashville warbler (*Vermivora ruficapilla*), black-throated gray warbler (*Dendroica nigrescens*), hermit warbler (*Dendroica occidentalis*), Townsend's warbler (*Dendroica townsendi*), MacGillivray's warbler (*Oporornis tolmiei*), and Wilson's warbler (*Wilsonia pusilla*).

Some species of waterfowl more typically found in large bays and ponds occur seasonally and sporadically in coastal canyon wetlands and on the City's reservoirs. These include lesser scaup (*Aythya affinis*), bufflehead (*Bucephala albeola*), northern pintail (*Anas acuta*), ruddy duck (*Oxyura jamaicensis*), eared grebe (*Podiceps nigricollis*), Clark's grebe (*Aechmophorus clarki*), western grebe (*Aechmophorus occidentalis*), northern shoveler (*Anas chrypeata*), canvasback (*Aythya valisineria*), and redhead (*Aythya americana*). Other species detected that are often associated with freshwater marshes and ponds include pied-billed grebe (*Podilymbus podiceps*), green-winged teal (*Anas crecca*), cinnamon teal (*Anas cyanoptera*), sora rail (*Porzana carolina*), common moorhen (*Gallinula chloropus*), and American coot (*Fulica americana*).

Some avian species such as the greater roadrunner (*Geococcyx californianus*) are now rarely observed in the City open space. These large ground-dwelling cuckoos are becoming less and less common in coastal Southern California as their open scrubland habitat is developed.

Numerous birds of prey still regularly use open space for hunting. These include white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawks (*Accipiter striatus*) and merlin (*Falco columbarius*) in the winter, golden eagle (*Aquila chrysaetos*), peregrine falcon (*Falco peregrinus*), Cooper's hawk (*Accipiter cooperii*), American kestrel (*Falco sparverius*), and red-shouldered hawk (*Buteo lineatus*).

Native and non-native vegetation communities provide habitat for numerous species of resident and migratory birds. A number of common avian species breed within sage scrub and chaparral habitats, and forage among the leaf litter in the vegetative understory. Rocky outcrops, particularly on undisturbed slopes or peaks can provide significant perching or roosting sites for raptors; and grasslands and agricultural lands located adjacent to woodland areas provide significant foraging habitat for resident, wintering and migrant raptors. Avian diversity and abundance is substantial within riparian and oak woodland habitats. These habitats are comprised of several horizontal niches including canopy, shrub, herb, and ground, which provide a network of valuable roosting, foraging and breeding areas for birds. Quality avian habitat within the City of San Diego is concentrated where the vegetation is less disturbed and provides habitat connectivity; however, the various creeks and tributaries within the City of San Diego, also provide some measure of habitat connectivity, and potential avian breeding and foraging areas.

Mammals

Without trapping, the presence of mammal species must be discerned through habitat suitability, species range and biological records. Many mammals are nocturnal and secretive, and indirect signs for a number of species, particularly rodents, can be similar. Small mammal species typically occur in sage scrub, chaparral, grasslands and agricultural/disturbed areas, and several of these species will intermittently use riparian and woodland habitats for foraging and cover. Various species of bats will also forage in grasslands and woodland habitats. Larger mammals often require greater blocks of connected habitat for hunting and travel within their range. Quality habitat for small mammal species is generally located throughout the study area, but as with reptiles, small remaining patch size can undercut the ability of some species populations to survive in open space.

Despite the extensive urban development within the City core, a number of regionally common mammals still reside within City open space and other now often isolated pockets of remaining native vegetation. Included are coyote, desert cottontail, California ground squirrel, Virginia opossum, and striped skunk.

Wildlife Corridors

A wildlife corridor is considered herein to represent linear landscape features that allow animal movement between two patches of more substantial habitat. A corridor is not expected to provide sufficient space and resources to meet all of the life history needs of its target species.

Depending upon the species considered, corridors function in a variety of ways and may function differently over the course of a year. For the purposes of general discussion, wildlife corridors can be broken down into three categories: regional corridors, local corridors, and short corridors.

Regional corridors accommodate the needs of a broad suite of animals. Such corridors are especially important to dispersing individuals (i.e., juveniles) that use these corridors to find unoccupied ranges and mates. This effectively links otherwise distinct populations of animals and serves to maintain genetic diversity. Because of the high degree of habitat fragmentation in coastal southern California, particularly to Diegan coastal sage scrub vegetation, regional wildlife corridors have received considerable attention by resource agencies and conservation groups, and have been a focus of regional conservation planning. In regional planning, attention often focuses on large, wide-ranging "umbrella" species. Under this concept, if a preserve plan can accommodate the needs of wide-ranging species, it will allow sufficient connectivity to meet the lesser needs of other species. A typical width of greater than 1,000 feet is recommended for regional corridors serving large mammals (Ogden 1992). Constricted sections of the corridor should have maximum lengths of less than 500 feet and a minimum width of 400 feet. Where possible, canyon corridors should extend from rim to rim (Ogden 1992, 1998). For planning purposes, widths of a 2:1 proportion (length to width) are generally considered to be necessary for wildlife corridors on an average basis to provide essential buffering of wildlife activities. Narrower or wider corridors may also function depending upon the particular physiography, adjacent land uses, and corridor lengths. Spencer and Mock (1997) noted the value of transmission easements as potential contributors to meeting corridor needs in urbanized environments. Where corridors are narrow and already tenuous, special management measures are required including implementing measures to control runoff, noise, lighting, exotic predators and invasive plants. Such measures have been adopted as the MHPA Land Use Adjacency Guidelines (see Section V.A, Land Use).

Local corridors are much shorter than regional corridors and permit movement between discrete vegetation patches, thereby forming "habitat linkages." These corridors allow two or more small connected patches of habitat to function as a larger block of habitat. The larger interconnected block enables viability and promotes population stability through regular genetic interchange, even though each individual habitat patch may be too small for the long-term survival of a wildlife population. To serve effectively as wildlife corridors, habitat linkages must permit unobstructed movement of the species. This becomes an important consideration with respect to connectivity between preserve areas, particularly where additional urban development is to occur on a limited basis. Depending upon the particular parameters of the linkage, connectivity may also be made by utility corridors, emergency access routes, and recreational trail facilities. Local corridors are generally considered to require widths of 400 to 600 feet to function for wildlife movement, depending upon the corridor lengths, species using the corridor, cover, topography, as well as adjacent land uses (Ogden 1998).

Short corridors function like their larger counterparts, but typically serve the daily needs of individuals. These corridors allow animals to move through unsuitable habitat to access bedding sites, watering sites, and foraging areas. Because of their frequent and regular use, such areas of concentrated wildlife movement are often referred to as "travel routes."

Threatened, Endangered, Endemic and Sensitive or MSCP Covered Species

Sensitive Flora

Table V.B-2 summarizes the sensitive plant species that could be affected by the proposed Programs. Sensitive plants include those listed by USFWS (1999), CDFG (2002), the California Native Plant Society (CNPS) (Smith and Berg 1988), and Narrow Endemic Species (City of San Diego 2001). The following abbreviations are used in the table: FE = Federally Endangered, FT = Federally Threatened, FSC = Federal Species of Special Concern, SE = State Endangered, SR=State Rare, NE = Narrow Endemic Species; habitat codes are synonymous to those used in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994), including CCPrs = closed-cone conifer forest, Chprl = chaparral, CoSer = coastal scrub, CmWld = cismontane woodland, MshSw = marshes and

swamps, Medws = meadows and seeps, RpWld = riparian woodland, VFGrs = valley and foothill grassland.

Table V.B-2 - Local Special Status Plant Species Potential Presence and Status

Scientific Name	Common Name	Habitat	Federal Status	California Status	CNPS List	MSCP Status	Status On-site
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	Chprl, CoSer, VFGrs, clay	FT	SE	1B	Covered NE	Potentially Present
<i>Adolphia californica</i>	California adolphia	Chprl, CoSer	None	None	2	Not Covered	Potentially Present
<i>Agave shawii</i>	Shaw's agave	CoSer	None	None	2	Covered NE	Potentially Present
<i>Ambrosia pumila</i>	San Diego ambrosia	CoSer, RpWld	FE	None	1B	Covered NE	Potentially Present
<i>Aphanisma blizoides</i>	aphanisma	CoSer	None	None	1B	Covered NE	Not Expected
<i>Arctostaphylos glandulosa ssp. crassifolia</i>	Del Mar manzanita	Chprl	FE	None	1B	Covered	Potentially Present
<i>Arctostaphylos oregonis</i>	Oreg manzanita	Chprl	FE	None	1B	Covered	Potentially Present
<i>Astragalus deanii</i>	Dean's milk-vetch	CoSer, Chprl	None	None	1B	Covered	Potentially Present
<i>Astragalus tener var. tili</i>	coastal dunes milk-vetch	Dunes	FE	SE	1B	Covered NE	Not Expected
<i>Baccharis vauessae</i>	Encinitas baccharis	Cftpd (sandstone)	FT	SE	1B	Covered NE	Potentially Present
<i>Bergrosvinctus emeryi</i>	goldenspined cereus	CoSer, Chprl	None	None	2	Not Covered	Potentially Present
<i>Brodiaea oreutti</i>	Oreutt's brodiaea	CCFRs, Chprl, CanWld, Medws, VFGrs, clay	None	None	1B	Covered	Potentially Present
<i>Calamagrostis koelerioides</i>	dense reed grass	Chprl	None	None	None	Covered	Potentially Present
<i>Calochortus dunnii</i>	Dunn's mariposa lily	Chprl	None	SR	1B	Covered	Potentially Present
<i>Caulanthus stenocarpus</i>	slender pod jewelflower	Chprl, CoSer	None	SR	None	Covered	Potentially Present
<i>Ceanothus cyaneus</i>	lakeside ceanothus	Chprl	None	None	1B	Covered	Potentially Present
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus	Chprl	FSC	None	2	Covered	Potentially Present
<i>Centromadia pungens ssp. laevis</i>	smooth tarplant	VFGrs	None	None	1B	Not covered	Not Expected

Scientific Name	Common Name	Habitat	Federal Status	California Status	CNPS List	MSCP Status	Status On-site
<i>Chamaebatia australis</i>	southern mountain misery	Chprl	None	None	4	Not covered	Potentially Present
<i>Charizanthus orcuttiana</i>	Orcutt's spineflower	CoSer	FF	SE	1B	Covered	Potentially Present
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer-holly	Chprl	None	None	1B	Not Covered	Potentially Present
<i>Convolvulus stans</i>	small-flowered morning glory	Chprl (openings)	None	None	4	Not covered	Potentially Present
<i>Cordylanthus orcuttianus</i>	Orcutt's bird's-beak	CoSer	None	None	2	Covered	Potentially Present
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	Point Loma sand aster	Chprl	None	None	1B	Not Covered	Potentially Present
<i>Corethrogyne filaginifolia</i> var. <i>littoralis</i>	Del Mar sand aster	CoSer, Chprl, VFGs	None	None	1B	Covered	Potentially Present
<i>Deinandra conjugens</i>	Otay tarplant	VFGs	FT	SE	1B	Covered NE	Potentially Present
<i>Dichondra occidentalis</i>	western dichondra	Chprl, CoSer	None	None	4	Not covered	Potentially Present
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	CoSer	FSC	SE	1B	Covered NE	Potentially Present
<i>Dudleya variegata</i>	variegated dudleya	CoSer	None	None	1B	Covered NE	Potentially Present
<i>Dudleya viscida</i>	sticky dudleya	Chprl, CoSer (steep north facing slopes)	None	None	4	Covered	Potentially Present
<i>Euphorbia misera</i>	cliff spurge	CoSer	None	None	2	Not covered	Potentially Present
<i>Perocactus viridescens</i>	San Diego barrel cactus	Chprl, CoSer	None/FSC	None	2	Covered	Potentially Present
<i>Fritillaria biflora</i> var. <i>biflora</i>	chocolate lily	Chprl, CoSer, VFGs/clay	None	None	Unlisted	Not covered	Potentially Present
<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>	mission canyon blue-cup	Chprl (openings)	None	None	3	Not covered	Potentially Present
<i>Harpagonella palmeri</i>	Palmer's grappling hook	Chprl, CoSer, VFGs/clay	None	None	4	Not covered	Potentially Present
<i>Hazardia orcuttii</i>	Orcutt's hazardia	Chprl	None	Candidate	1B	Not covered	Not Expected
<i>Holocarpus virgatus</i>	graceful tarplant	VFGs	None	None	4	Not covered	Potentially Present
<i>Horkelia truncata</i>	Ramona horkelia	Chprl, CmWls/ clay	None	None	1B	Not covered	Potentially Present
<i>Isocoma menzeisii</i> var. <i>decumbens</i>	decumbent goldenbush	CoSers	None	None	1b	Not covered	Potentially Present
<i>Lepechinia cardiophylla</i>	Gardner's pitcher sage	Chprl	None	None	1B	Covered	Potentially Present
<i>Machaeranthera juncea</i>	rush-like bristleweed	Chprl, CoSer	None	None	4	Not covered	Potentially Present

Scientific Name	Common Name	Habitat	Federal Status	California Status	CNPS List	MSCP Status	Status On-site
<i>Microseris douglasi</i>	small-flowered microseris	VFGrs (clay)	None	None	4	Not Covered	Potentially Present
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	felt-leaved monardella	Chprl	None	None	1B	Covered	Potentially Present
<i>Mulla clevelandii</i>	San Diego goldenstar	Chprl, CoScr (openings)	None	None	1B	Covered	Potentially Present
<i>Nolina interrata</i>	Dehesa bear-grass	Chprl	None	SE	1B	Covered	Not Expected
<i>Opuntia californica</i> var. <i>californica</i>	snake cholla	CoScr	None	None	1B	Covered NE	Potentially Present
<i>Phacelia stellaris</i>	Brand's phacelia	CoScr, Dunes	None	None	1B	Not Covered	Potentially Present
<i>Pinus torreyana</i>	Torrey pine	Coniferous Forest	None	None	1B	Covered	Potentially Present
<i>Polygala cornuta</i> ssp. <i>fishiae</i>	Fish's milkwort	Chprl, CmWld, RpWld	None	None	4	Not covered	Potentially Present
<i>Quercus dumosa</i>	Nuttall's scrub oak	Chprl	None	None	1B	Not covered	Potentially Present
<i>Quercus engelmannii</i>	Engelmann oak	Chprl, CmWld, RpWld, VFGrs	None	None	4	Not covered	Potentially Present
<i>Rosa minutiflora</i>	small-leaved rose	CoScr, Chprl	None	SE	2	Covered	Potentially Present
<i>Satureja chandleri</i>	San Miguel savory	Chprl	None	None	1B	Covered	Potentially Present
<i>Senecio ganderi</i>	Gander's butterweed	Chprl	None	SR	1B	Covered	Potentially Present
<i>Solanum tenuilobatum</i>	narrow-leaved nightshade	Chprl	None	None	None	Covered	Potentially Present
<i>Viguiera laetivata</i>	San Diego County viguiera	CoScr	None	None	4	Not covered	Potentially Present

NI=Narrow Endemic Source: Merkel & Associates, 2002

Sensitive Fauna

Table V.B-3 summarizes the sensitive fauna species that could be affected by the proposed work. Sensitive animals include those listed by USFWS (1999) and CDFG (2002). The following abbreviations are used in the table: FE = Federally Endangered, FT = Federally Threatened, FSC = Federal Species of Special Concern, SE = State Endangered, SR=State Rare, ; habitat codes are synonymous to those used in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994), including CCFrs = closed-cone conifer forest, Chprl = chaparral, CoScr = coastal scrub, CmWld = cismontane woodland, MshSw = marshes and swamps, Modws = meadows and seeps, RpWld = riparian woodland, and VFGrs = valley and foothill grassland.

Table V.B-3 - Local Special Status Animal Species Potential Presence and Status

Scientific Name	Common Name	Habitat	Federal Status	California Status	MSCP Status	Status On-site
<i>Glyptodryas editha quino</i>	Quino checkerspot butterfly	Open grassland and openings within shrub habitats that support Dwarf Plantain (<i>Plantago erecta</i>)	FE	SA	None	Potentially Present
<i>Lycæna hermes</i>	Hermes copper	Openings in chaparral, associated with the larval host plant Spiny Redberry (<i>Rhamnus crocea</i>), adults feed on nectar from Flat-top Buckwheat	FSC	SA	None	Potentially Present
<i>Danaus plexippus</i>	monarch butterfly	Migratory concentrations found on trees	None	None	None	Potentially Present
<i>Bufo californicus</i>	southwestern arroyo toad	Shallow pools, open sand, and gravel flood terraces of intermittent to perennial streams; may also occupy adjacent upland communities within 1.2 km	FE	CSC, Protected	Covered	Potentially Present
<i>Scaphiopus hammondi</i>	western spadefoot toad	Prefers sandy or gravelly soil in grasslands, sage scrub, open chaparral, and pine-oak woodlands; grasslands with shallow temporary pools are optimal	FSC	CSC, Protected	None	Potentially Present
<i>Phrynosoma coronatum blainvillii</i>	San Diego horned lizard	Chaparral, sage scrub, oak woodlands, and grasslands; sometimes occurs along seldom used dirt paths where native ant species are prevalent	FSC	CSC, Protected	Covered	Expected
<i>Eumeces skiltonianus interparietalis</i>	Coronado skink	Variety of habitats including grasslands, sage scrub, and various woodlands including oak, pine, juniper, and riparian	FSC	CSC	None	Expected
<i>Cnemidophorus hyperythrus</i>	orangethroat whiptail	Sage scrub (and chaparral), prefers sandy areas with patches of brush and rocks; may be associated with buckwheat and Black Sage	FSC	CSC, Protected	Covered	Expected
<i>Arnica pulchra pulchra</i>	silvery legless lizard	Shows a preference for leaf litter and sandy substrates	FSC	CSC	Not covered	Expected
<i>Cnemidophorus tigris multiscutatus</i>	coastal western whiptail	Coastal sage scrub, chaparral, and grasslands	FSC	SA	None	Expected
<i>Salvadora hexalepis virgulata</i>	east patch-nosed snake	Chaparral and sage scrub; may require mammal burrows or woudral nests for overwintering	FSC	CSC, Protected	None	Expected

Scientific Name	Common Name	Habitat	Federal Status	California Status	MSCP Status	Status On-site
<i>Diadophis punctatus similis</i>	San Diego ringneck snake	Chaparral, forest, and grasslands	None	SA	None	Expected
<i>Lichameteo trivirgata roseofusca</i>	coastal rosy boa	Rocky outcrop areas within chaparral and sage scrub	FSC	SA	None	Potentially Present
<i>Crotalus ruber ruber</i>	northern red diamond rattlesnake	Occupies rocky outcrops and areas of heavy brush or rugged terrain in chaparral, sage scrub, or desert scrub on both coastal and desert slopes, usually below 4000 feet	FSC	CSC	None	Expected
<i>Cathartes aura</i>	turkey vulture	Open habitats with protected large trees and snags	FSC	CSC	None	Expected
<i>Elanus leucurus</i>	white-tailed kite	Grasslands, agricultural fields, and open habitats with areas of dense deciduous trees for nesting	None	SA, Fully Protected	None	Expected
<i>Aquila chrysaetos</i>	golden eagle	Nests in cliffs (or trees), found in generally mountainous or hilly terrain	None	CSC, Fully Protected	Covered	Expected (to forage on occasion)
<i>Falco peregrinus anatum</i>	American peregrine falcon	Forages near coast	FE	CE	Covered	Expected (to forage on occasion)
<i>Accipiter striatus</i>	sharp-shinned hawk	Mixed woodlands near open areas, prefers but not restricted to riparian habitats	None	CSC	None	Expected (seasonally)
<i>Circus cyaneus</i>	northern harrier	Forages over marsh and open terrain	None	CSC	Covered	Expected
<i>Buteo regalis</i>	rusty-winged hawk	Dry, open terrain	FSC	CSC	Covered	Expected (seasonally)
<i>Lanius ludovicianus</i>	loggetheal shrike	Found within grassland or open habitats with bare ground and sparse shrub and/or tree cover for nesting and perching	FSC	CSC	None	Potentially Present
<i>Fremophila alpestris actia</i>	California horned lark	Grasslands, disturbed areas and open habitats with sparse, low vegetation	None	CSC	None	Potentially present

Scientific Name	Common Name	Habitat	Federal Status	California Status	MSCP Status	Status On-site
<i>Speotyto cunicularia hypugaea</i>	burrowing owl	Hunts open terrain generally with burrow at a slight elevational rise	None	CSC	Covered	Potentially present
<i>Polioptila californica californica</i>	California gnatcatcher	Various successional stages of sage scrub	FT	CSC	Covered	Expected
<i>Sialia mexicana</i>	western bluebird	Open woodlands, farmlands, and orchards	None	None	Covered	Potentially present in appropriate season)
<i>Campylorhynchus brunnicapillus couesi</i>	coastal cactus wren	Areas of sage scrub with robust stands of prickly pear and cholla	None	CSC	Covered	Potentially Present
<i>Amphispiza ruficeps canescens</i>	Southern California rufous-crowned sparrow	Rocky hillsides supporting sparse, low scrub or chaparral, sometimes mixed with grasses	FSC	CSC	Covered	Expected
<i>Amphispiza belli belli</i>	Bell's sage sparrow	Chaparral and dense sage scrub	FSC	CSC	None	Expected
<i>Ammodramus saviannarum</i>	grasshopper sparrow	Grasslands and pastures	None	SA	None	Expected
<i>Felis concolor</i>	mountain lion	Found in areas of extensive dense native vegetation	None	Calif. Regulated	Covered	Potentially Present
<i>Odocoileus hemionus fuliginata</i>	southern mule deer	Found in areas of extensive dense native vegetation	None	Calif. Regulated	Covered	Expected
<i>Taxidea taxus</i>	American badger	Found in open grasslands on periphery of native vegetation	None	None	Covered	Expected
<i>Lepus californicus heanetti</i>	San Diego black-tailed jackrabbit	Relatively open chaparral and sage scrub and grasslands	FSC	CSC	None	Expected
<i>Perognathus longimembris pacificus</i>	Dulzura California pocket mouse	Found in areas of fine sandy ground, (Coastal sage scrub)	FSC	CSC	None	Potentially Present

Scientific Name	Common Name	Habitat	Federal Status	California Status	MSCP Status	Status On-site
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	Found in Coastal sage scrub	FSC	CSC	None	Expected
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	Chaparral, particularly abundant in areas of rock outcrops	FSC	CSC	None	Expected
<i>Myotis yumanensis</i>	Yuma myotis	Uses multiple habitats (primarily woodlands and forests) but forages over water	FSC	CSC	None	Potentially Present
<i>Myotis evotis</i>	long-eared myotis	Uses multiple habitats for roosting (mainly crevices), forages in oak/coniferous forests, may require water. As with many bat species in the region, little information is available on microhabitat use	FSC	None	None	Potentially Present
<i>Myotis thysanodes</i>	fringed myotis	Uses multiple habitats for roosting (mainly crevices), feeds in coniferous forests	FSC	None	None	Potentially Present
<i>Myotis volans</i>	long-legged myotis	Uses multiple habitats for roosting (mainly crevices), feeds in coniferous forests	FSC	None	None	Potentially Present
<i>Myotis ciliolabrum</i>	small-footed myotis	Uses a variety of habitats, prefers open stands in forests/woodlands, brushy habitats, and riparian areas	FSC	None	None	Potentially Present
<i>Eudernia maculatum</i>	spotted bat	Roosts in high rocky cliffs, forages in riparian and edge habitats	FSC	CSC	None	Potentially Present
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Cave rooster, feeds in forest/woodland habitats or along habitat edges within 15 km of roost site	FSC	CSC	None	Potentially Present
<i>Antrozous pallidus</i>	pallid bat	Uses open forest and grassland habitats for feeding and multiple habitats for roosting	None	CSC	None	Potentially Present

Scientific Name	Common Name	Habitat	Federal Status	California Status	MSCP Status	Status On-site
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	Cliff rooster, feeds in multiple habitats	None	CSC	None	Potentially Present
<i>Nyctinomops macrotis</i>	big free-tailed bat	Cliff rooster, prefers rugged, rocky canyons, feeds in multiple habitats including over water	None	CSC	None	Potentially Present
<i>Eumops perotis</i>	western mastiff bat (see California mastiff bat in text)	Extensive open areas with abundant roost locations in rock outcrops, (found where oaks and chaparral occur)	FSC	CSC	None	Potentially Present

Source: Merkcl & Associates, 2002

ISSUE STATEMENTS

1. *Would the project reduce the number of any unique, rare, endangered, sensitive, fully protected species of plants or animals?*
2. *Would the project interfere with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors?*
3. *Would the project impact any sensitive habitat, including, but not limited to oak woodland, coastal sage scrub or chaparral?*
4. *Would the proposal result in any conflict with the provisions of the City's Multiple Species Conservation Program Subarea Plan or other approved local, regional or state habitat conservation plan?*

IMPACT

Criteria for Significance Determination

Impacts must be identified and quantified whenever possible to evaluate the potential environmental damages that could result from a proposed project. Impacts must be further

evaluated for significance. CEQA defines a "significant effect on the environment" as a "substantial or potentially substantial adverse change in the environment." According to CEQA, a mandatory finding of significance is appropriate for a project that has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory; the project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals; or the project has possible environmental effects which are individually limited but cumulatively considerable. The City of San Diego has developed the CEQA Significance Determination Guidelines (rev. July 2002) for evaluating biological impacts. Habitat impacts are anticipated to occur where there is vegetation removal. Pruning of limbs within brush management zone two are not considered to result in impacts and are currently considered impact neutral within the San Diego LDC.

The Guidelines follow a stepwise progression in evaluating the potential for biological effects to be considered significant under CEQA. The determinations contained herein are based on those Guidelines. Impacts would be considered significant under the following circumstances:

- Project encroachments into the MHPA are considered significant.
 - Impacts to Tier I, II, IIIA and IIIB are considered significant based on site-specific circumstances. However, lacking the capacity to analyze project level information at the SEIR/EA level, these impacts are categorically significant.
 - Any impacts to federal or state-listed threatened or endangered species, or impacts to narrow endemic species as specified in the City's Biology Guidelines (July 2002).
 - Impacts to individual sensitive species may also be considered significant, based on the species rarity and extent of the impacts.

Analysis of Impacts

For the purpose of this analysis, the biological evaluation included brush management conducted by the City of San Diego, homeowner's associations, and private property owners. A total of 25

brush management areas were evaluated as part of this project. Of all the brush management areas evaluated, 13 were thinned by the City of San Diego Park and Recreation Department, 11 were thinned by private landowners, and one brush management area was thinned by a homeowner's association.

For purpose of comparison, adjacent areas that were not brush managed were also evaluated, if available. These areas are referred to as controls. However, it was difficult to find comparable control areas. Most brush management is conducted in a comprehensive manner so it was difficult to find comparable areas that had not been brush managed. Only two control areas have been evaluated as part of this effort.

A variety of brush management areas throughout the City were selected. Park and Recreation staff, David Monroe and Josh Woods, selected 13 areas where brush management was conducted by Park and Recreation staff. Areas selected by Park and Recreation varied in size and date of brush management conducted. For example, some of the brush management areas had been thinned as recently as February 2004 whereas others selected areas have not been thinned for over five years. This variety in brush management areas helped provide information on both the long term effects of brush management as well as the immediate impacts.

Planning Department staff, Khalil Martinez, selected an additional 12 areas where brush management was conducted by either the homeowner or the homeowner's association. Since there was no information available on the date of brush management for these sites, Mr. Martinez selected four brush management areas within three different canyons: Peñasquitos Canyon, San Clemente Canyon, and Tecolote Canyon. Areas were selected throughout the canyons to give a good evaluation of the different kinds of private brush management conducted.

Each site was visited during the daylight hours by Holly Cheong, Environmental Biologist for the MSCP. Sites were each visited once on either March 1, 2004, March 4, 2004, or March 9, 2004. The surrounding vegetation communities were surveyed to determine habitat type. Habitat type was considered disturbed if 50% or more of species cover within the habitat were exotic plant species. Undisturbed native habitat contained less than 50% exotic cover. Native

habitats observed included coastal sage scrub, mixed chaparral, chamise chaparral and oak woodland. Areas were considered ornamental if over 90% cover was attributed to exotic plant species. Eucalyptus woodland, which could also be considered an ornamental area, is identified specifically where observed. The percent cover of exotic and native species was estimated within each brush management area. Any dominant exotic and native species were noted. Plant regrowth within the brush management areas was evaluated and the height of vegetation within the brush management areas was estimated. Slope gradient and aspect were noted as well as any on-site irrigation. Soil type was also determined by visual observation. If it could be determined, it was noted whether the brush management area was on a manufactured or natural slope.

The date that brush management was first performed and the last date brush managed was performed was noted for each site if that information was available. The size of the brush management area was also noted. For Park and Recreation sites, this was based on the information provided by them for each site. For homeowner and homeowner's association sites, the size of the brush management area was estimated from the SANGIS parcel layer assuming that the brush management area would correspond to the area outside of the development area on the site. The date that brush management was conducted was not available for homeowner and homeowner's association brush management sites.

The conclusion from City staff evaluation is that invasion of exotic plant species into brush management areas appears to be the biggest impact associated with biological resources and performing brush management. Ninety-six percent (96%) of the twenty-five slopes evaluated contained some level of exotic plant invasion. Exotic invasion could not be directly attributed to the quality of the adjacent habitat. Thirteen of the 24 brush management areas (54%) with exotic plant invasion were adjacent to undisturbed native habitat. Exotic plant invasion may also be associated with what was planted within the brush management areas during the time of construction of the housing developments or what was installed by the owners or homeowner's association after construction. In many cases, this encroachment may be considered out of compliance with the City of San Diego Municipal Code and would not be included in the evaluation of impacts associated with the implementation of brush management as allowed by

the City of San Diego Municipal Code. Although the information from this report should be treated as purely anecdotal, evaluation of these 25 slopes can help the City of San Diego determine the general impacts associated with brush management. Please see Section V.A, Land Use/MSCP, Issue 3 for a full discussion on the project's consistency with the Multiple Species Conservation Program (MSCP) and other habitat conservation plans.

Direct Impacts

Direct impacts occur when biological resources are altered or destroyed during the course of work, or as a result of project implementation. According to the CEQA Guidelines (2001), direct impacts refer to a direct physical change in the environment that is caused by and immediately related to the project. Examples of such impacts include removal and grading of native vegetation. Other direct impacts may include substantial loss of foraging or nesting habitat, and loss of individuals of sensitive species as a result of brush management activities.

Habitat Loss

The aerial extent, or "footprint", of surface impacts associated with the development of revised brush management zones was determined by evaluating current brush management zone impacts and comparing the existing conditions to the proposed impacts due to the implementation of the revised brush management zones that are included within the proposed brush management revisions. Some areas may be increasing the width of zone one and zone two, but the increases depend on the location of the property relative to Interstate 5 and Interstate 805. While the revised brush management zones are proposed to be, 100 feet wide, the 100-foot-wide average that was assumed for this analysis includes additional areas to address needs for increasing or decreasing existing widths of zone one and zone two brush management. However, at no time will the combined two brush management zones be more than 100 feet. Table V.A-23 (Land Use Section), quantifies the impacts of the proposed Brush Management revisions using this approach.

Using the regionally-based evaluation methods, the proposed actions would result in impacts to sensitive habitats, including sensitive uplands located within the boundary of established MHPA lands. In accordance with City Significance Determination Guidelines (July 2002), any encroachment into the MHPA is considered to be significant. Encroachment into the MHPA for brush management zone two is allowed, since brush management in zone two is considered impact neutral.

Sensitive Species

For the purpose of the present assessment, impacts to sensitive species that are considered direct impacts would be those that result in a direct physical loss of individuals in the case of plants and animals, or the loss of necessary supporting habitat in the case of animals. While an argument may exist that direct effects may also include such impacts as construction noise, lighting, or dust, these impacts rely on intermediate behavioral or physiological changes to be manifested as measurable impacts. Because these impacts are less tangible and certain to result in measurable adverse effects, they have been addressed as indirect effects rather than direct effects.

Impacts to California Gnatcatcher

The proposed changes to the brush management regulations would increase the width of the brush thinning zone (zone two) by approximately 20 to 60 feet. The proposed changes could result in potential direct impacts to the California gnatcatcher (*Polioptila californica californica*) due to incidental impacts to nesting birds, within the MHPA, and reduction of suitable habitat by brush thinning or controlled goat grazing. The California gnatcatcher is a federally threatened species under the Endangered Species Act.

A review of the regional sensitive species database, established for the Multiple Species Conservation Program, resulted in only five out of 377 occurrences proposed to be impacted within the MHPA by the new width of brush management zone two. This database however does not contain a comprehensive survey of all lands in the City of San Diego, and occupation of

habitat by gnatcatcher will vary from year-to-year. As such, the true impacts to individual birds cannot be assessed.

To address impacts to the California gnatcatcher resulting from changes in the brush management regulations, an analysis was conducted using the coastal California gnatcatcher habitat evaluation model (2002) constructed for the U.S. Fish and Wildlife Service. The gnatcatcher habitat evaluation model classified potential gnatcatcher habitat into one of four categories: low/none, moderate, high and very high. The areas of potential impacts from brush management changes previously generated by City staff, were compared to the results of the gnatcatcher habitat model using a geographic information system. The results were divided into potential impacts Citywide and impacts to the Multi-Habitat Planning Area (MHPA) of the Multiple Species Conservation Program. The results are shown in Table V.B.-4.

TABLE V.B.-4

Potential Impacts to California Gnatcatcher Habitat based upon the 2002 coastal California gnatcatcher habitat evaluation model.

	Total Acres in City	Potential Impacts Citywide from proposed brush management changes (% of Total Acres in the City)	Total Acres In MHPA	Total Potential Impacts in MHPA from proposed brush management changes (% of Total Acres in MHPA)
Low-None	78	0 (0%)	63	0 (0%)
Moderate	1566	33 (2.1%)	1037	14 (1.3%)
High	11617	257 (2.2%)	6182	106 (1.72%)
Very High	15545	139 (0.9%)	10317	78 (0.8%)
Total	28806	430 (1.5%)	17599	198 (1.1%)

The overall impacts to suitable gnatcatcher habitat citywide and within the MHPA are 1.5% and 1.1% of the total habitat area, respectively. While the coastal California gnatcatcher habitat evaluation model is not 100% accurate, it is useful in regional habitat impact assessment.

Sensitive Habitat

The proposed revisions to the Land Development Code related to brush management, zone two would result in an estimated City-wide impact of 2,880 acres. Of this total, 715 acres would be within the MHPA which includes 242 acres within the core biological areas and habitat linkages. The MHPA will preserve 52,012 acres, which includes 35,648 acres within the core biological and habitat linkages areas. Therefore, impacts from the thinning and pruning activities associated with zone two brush management would potentially impact 1.4 percent of the MHPA and 0.7 percent of the core/linkages areas.

Table V. A-42, (Land Use section) further identifies the anticipated impacts that would occur by Habitats Tier. A majority of the city-wide impacts are to Tier IV which includes lands (i.e. disturbed land, agriculture, eucalyptus woodland, and ornamental plantings) that are not considered to be sensitive. No brush management is required within wetland areas; therefore, no impacts to wetlands are expected to occur with implementation of the proposed LDC code revisions.

A majority of the impacts from the proposed brush management revisions would occur within smaller urban canyons and would not be part of the larger core biological areas and linkages. Impacts to core biological and linkage areas would be limited to 0.7 percent (242 acres). Fifty of these acres would be Tier IV (lands that are not considered sensitive). Additionally, all impacts would be within the 200-foot buffer identified in the MSCP EIR/EIS for edge effects. No impacts to narrow endemic species are expected to occur because these species are generally less than eighteen inches in height and would not be subject to thinning or clearing per the brush management regulations. The exception would be *Encinitas baccharis*, which has an average height of eighty inches; however no known locations of this species are within the proposed brush management zone two areas.

Where brush management conducted by humans could avoid impacts to narrow endemics, it is conceivable that goats could indiscriminately graze on narrow endemics. The areas identified for expanded brush management activities are not located within any of the narrow endemic species' major population areas discussed in the MSCP Plan Table 3.5 'details for the rationale for

identifying species as covered. Additionally, the MSCP database identifies no narrow endemic species locations within the areas identified for expanded brush management. Any future projects located within or adjacent the MHPA would be reviewed by MSCP staff, and all brush management areas would be included in the review and impact analysis. As discussed above, impacts to narrow endemics within the MHPA must be avoided, and outside the MHPA they must be avoided, managed, enhanced, or transplanted as appropriate.

As proposed, brush management would be prohibited from (March 1 – August 15) in gnatcatcher habitat (i.e., coastal sage scrub and southern maritime scrub). This period coincides with the flowering periods of many narrow endemic species. The prohibition on brush management activities during the gnatcatcher breeding season would eliminate impacts on narrow endemics in coastal sage scrub and southern maritime scrub during this time.

Vernal pools were extensively mapped by the City in 2002-2003; no vernal pools are located in the proposed brush management area. No impacts on vernal pool narrow endemic species would result from the proposed project. Potential impacts on narrow endemics from the proposed project would be less than significant.

The MSCP Subarea Plan (Table 3-5) and City of San Diego Biology Guidelines places restrictions on grading, clearing, and grubbing during the breeding season of seven sensitive species. Six of these species would not be affected by the proposed change to the brush management regulations because either they occur outside of the areas proposed for brush management (e.g. beach areas) or the habitats they occur in will not be impacted (e.g. wetlands). These species include western snowy plover, southwestern flycatcher, least tern, cactus wren, least bell's vireo, and the tricolored black bird. For the remaining species, the California gnatcatcher, no timing restrictions apply outside the MHPA. Within the MHPA, restrictions on grading, clearing, and grubbing activities apply during the breeding season (March 1 – August 15). This limitation is proposed in brush management activities performed within zone two.

SIGNIFICANCE OF IMPACT

The impacts to biological resources that could result from implementation of the proposed brush management revisions would be significant. While the impacts to biological resources that could result from implementation of the proposed brush management revisions would be significant, they are rendered less than significant by existing City regulations and implementation of the MSCP. These impacts are summarized as follows:

- The proposed brush management revisions would result in significant impacts to Direct and immediate impacts to Tier I, II, IIIA, and IIIB habitats within zone one and zone two (invasives) brush management implementation result in the loss of habitat value and invasion of non-native plants. These impacts could occur based on three types of scenarios: the first being where an existing home owner is doing brush management and zone one already exists; secondly, thinning activities performed by the City of San Diego Park and Recreation Department; and lastly, issuance of Right-Of-Entry permits to private citizens from the Park and Recreation Department to perform brush management activities. If the entire zone one requirement is not met then zone two would be included in these potential impacts.

The EIR/EIS for the MSCP concluded that impacts to covered species and their habitats from brush management were significant but mitigated to below a level of significance with the implementation of preserve management and planning guidelines identified in each City's MSCP Subarea Plan and associated implementing regulations. As documented in this SEIR/EA, impacts to biological resources that could result from implementation of the proposed brush management revisions would be significant in that the project would expand the area within which invasive weeds establish. In that the increase impacts would occur within the 200-foot edge effected area located within the MHPA. This SEIR/EA concludes, like the EIR for the Land Development Code, that the impacts are rendered less than significant by implementation of the MSCP except for impacts occurring outside the MHPA for significant impacts to non-covered species. The draft SEIR/EA erroneously

interpreted the LDC EIR to mean that biological resource impacts from implementation of Zone 2 was significant everywhere. Upon further review, it is clear that the conclusion of the LDC EIR that impacts are significant is limited to the situation described above.

New development would be required to comply with the City's Biology Guidelines and would be required to mitigate significant brush management impacts to non-covered species outside the MHPA in accordance with Mitigation Method "D", "Species Specific Mitigation". Significant impacts from brush management for existing development to non-covered species outside the MHPA would remain significant.

- Properties located within the MHPA lands are normally required to restrict brush management activities within zone two to occur outside of the breeding season of gnatcatchers (March 1st through August 15th). However, if the brush management activities cannot be conducted outside of the gnatcatcher breeding season, then the impact is considered significant. While limiting brush management activities within the MHPA, would mitigate impacts to gnatcatchers to below a level of significance, it is not and is proposed by the applicant. Brush management activities would be limited to occur outside of the California gnatcatcher breeding season (March 1 - August 15). Since brush management activities will be limited, direct impacts to gnatcatcher nests would not be significant; therefore, mitigation is not required. Mitigation is also available in the form of requiring a qualified biologist prior to commencing brush management activities to survey the project sites for gnatcatcher nests. This mitigation is not proposed as part of this SEIR/EA.
- Based on the results of City Staff's evaluation of 25 sites within the City of San Diego, thinning within brush management zone two allows for invasive species to grow into the areas that previously contained native vegetation. Controlled goat grazing could be used for thinning activities in zone two. Goats do not have a specific diet and will feed on most any type of shrubbery or vegetation. Studies have

~~shown that they will eat plants almost to ground level but leave the roots, graze on the lower branches of large trees and shrubs. Goats are browsers, and are not likely to eat the ground-cover vegetation down to the soil level, particularly when they are moved along and managed correctly. They are much more likely to eat portions of the taller vegetation, thus retaining vegetation cover for the soil. They don't tend to pull up the vegetation by the roots when they eat, and don't eat as close to the ground as do sheep and cattle. They will do little actual 'grazing', unless the weeds and brush run out.~~

Impacts to sensitive vegetation associated with this alternative would not be significant whether thinning is conducted by humans or by goats. ~~Invasive plant types would be introduced into zone two as a result of the thinning, creating a significant impact.~~ Further, as goats digest certain plant types containing seeds, the goat feces could also spread invasive plants within zone two as the seeds could take hold in the soil and sprout. This would also result in a significant impact to biological resources by distributing the seed of non-native species into previously undisturbed areas. ~~Impacts associated with the establishment of invasive plants are significant and unmitigated.~~ Impacts associated with the establishment of invasive plants are mitigated by the implementation of the MSCP; therefore, biological impacts related to invasive plants are mitigated to a level below significance.

- ~~The proposed brush management revisions would result in potentially significant impacts to sensitive species. [This has been deleted as a result of the discussion under the first two bullets above.]~~

Timing of Brush Management Activities

~~Properties located within the MHPA lands are normally required to restrict brush management activities within zone two to occur outside of the breeding season of gnatcatchers (March 1st through August 15th). However, if the brush management activities cannot be conducted outside of the gnatcatcher breeding season, then the impact is considered significant. While limiting brush management activities within the MHPA, would mitigate impacts to gnatcatchers~~

~~to below a level of significance, it is not proposed by the applicant. Mitigation is also available in the form of requiring a qualified biologist prior to commencing brush management activities to survey the project sites for gnatcatcher nests. This mitigation is not proposed as part of this SEIR/EIA.~~

Invasive Species

~~Based on the results of City Staff's evaluation of 25 sites within the City of San Diego, thinning within brush management zone two allows for invasive species to grow into the areas that previously contained native vegetation. Controlled goat grazing could be used for thinning activities in zone two. Goats do not have a specific diet and will feed on most any type of shrubbery or vegetation. Studies have shown that they will eat plants almost to ground level but leave the roots, graze on the lower branches of large trees and shrubs. Impacts to sensitive vegetation associated with this alternative would not be significant whether thinning is conducted by humans or by goats. Invasive plant types would be introduced into zone two as a result of the thinning, creating a significant impact. Further, as goats digest certain plant types containing seeds, the goat feces could also spread invasive plants within zone two as the seeds could take hold in the soil and sprout. This would also result in a significant impact to biological resources by distributing the seed of non-native species into previously undisturbed areas. Impacts associated with the establishment of invasive plants are significant and unmitigated.~~

MITIGATION, MONITORING, AND REPORTING PROGRAM

Mitigation is available to mitigate the potentially significant impacts to ~~the California Gnatcatcher~~ to biological resources associated with implementation of the brush management revisions.

Bio. 1- ~~Impacts associated with the California gnatcatcher would be reduced to below a level of significance by acquiring an amount of acreage, approximately 198 acres per table V.B-4 in the Biological Resources Section, of equal value gnatcatcher habitat over a time period to be determined by the City Manager. This mitigation however, has not been agreed to by the applicant. [This mitigation measure is no longer needed since the proposed revisions to the brush~~

management ordinance has been revised to prohibit brush thinning during the breeding season of the California gnatcatcher (March 1 – August 15)]

~~Bio. 2 In order to mitigate significant impacts to biological resources as a result of the establishment of invasive species in brush management zone two, the Land Development Code EIR identified that mitigation would be required to the same extent as brush management zone 1, based on the mitigation ratios per habitat type identified in the City of San Diego Biology Guidelines. This mitigation however, is not proposed.~~

Bio. 3 In order to mitigation significant impacts to non-covered species located outside the MHPA, a mitigation measure would be required to the same extent as brush management zone one, based on the mitigation ratios per habitat type identified in the City of San Diego Biology Guidelines. However, this mitigation is not agreed to by the applicant.

C. HYDROLOGY/WATER QUALITY/EROSION

EXISTING CONDITIONS

Hydrology, the study of water, encompasses the occurrence, distribution, movement, and chemistry of all waters of the Earth, including water in rivers, oceans, lakes, and subsurface. Hydrogeology is the field of hydrology that studies the interrelationships of geologic materials and processes with water, with an emphasis in groundwater. Groundwater is water that occurs below the ground surface and occupies open pore spaces, voids, and fractures in sediment and rock. Any rock or sediment that is water-bearing and that yields economical quantities of water to wells and springs is referred to as an aquifer. One or more aquifers composed primarily of unconsolidated deposits found in valleys of major rivers and streams are generally defined as groundwater basins. A hydrologic unit is the designation given by the State Water Resources Control Board (SWRCB) to define groundwater basins using surface drainage divides (highlands) to classify total watershed areas, including water-bearing and non-water-bearing formations. Each Hydrologic Unit is further divided into Hydrologic Areas (and Hydrologic Subareas) with unit boundaries generally based on surface drainage boundaries, although subsurface characteristics may also define a division of groundwater.

Surface and Groundwater Hydrology¹

Implementation of the proposed brush management revisions would occur within the City of San Diego. The City of San Diego region forms the southwest corner of California and occupies approximately 3,900 square miles of surface area. The western boundary of the region consists of the Pacific Ocean coastline, which extends approximately 85 miles north from the United States-Mexico border. The northern boundary of the region is formed by the hydrologic divide starting near Laguna Beach and extending inland through El Toro and easterly along the ridge of the Elsinore Mountains into the Cleveland National Forest. The eastern boundary of the region is formed by the Laguna Mountains and other lesser known mountains located in the Cleveland

¹ Surface and Groundwater Hydrological Data is from the California Regional Water Quality Control Board, San Diego Region. *Water Quality Control Plan for the San Diego Basin (9)*. September 8, 1994.

National Forest. The southern boundary of the region is formed by the United States-Mexico border.

The San Diego Region encompasses most of San Diego County, parts of southwestern Riverside County and southwestern Orange County. The region is divided into 11 major hydrologic units, 54 hydrologic areas, and 147 hydrologic subareas. The hydrologic units that are within the jurisdiction of, or could be affected by, the City of San Diego (i.e., the proposed brush management revisions) include the San Dieguito Hydrologic Unit, Penasquitos Hydrologic Unit, San Diego Hydrologic Unit, Pueblo San Diego Hydrologic Unit, Sweetwater Hydrologic Unit, Otay Hydrologic Unit, and the Tijuana Hydrologic Unit.

Water Quality - Point and Non-Point Sources

The 1972 Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from industrial, commercial, and institutional processes, and point sources to waters of the United States. Since then, considerable progress has been made in reducing conventional forms of pollution from known sources such as sewage treatment plants and industrial facilities, through the implementation of the NPDES program and other federal, state, and local programs. The adverse effects of some of the persistent toxic pollutants were addressed through manufacturing and land use restrictions and through cleanup of contaminated sites. On the other hand, pollution from land runoff (including atmospheric deposition, urban, suburban, and agricultural) was largely unabated until the 1987 Clean Water Act amendments, which established a framework for regulating urban storm water runoff and other non-point source pollutants. These sources, including urban storm water runoff, now contribute a larger portion of many kinds of pollutants than those from the more thoroughly regulated point sources.²

Non-point source pollution, which is the diffused, fugitive pollution not traceable to a specific source, poses public health risk and safety concerns. Urban runoff potentially contains a host of pollutants ranging from aesthetic nuisances such as trash and debris to materials harmful to the

² City of San Diego. *Urban Runoff Management Plan*. Adopted January 2002.

biological system such as oil and grease, sediments, nutrients, metals, and toxic chemicals to organisms that endanger human health such as bacteria and viruses. These contaminants can adversely affect receiving and coastal waters, associated biota, and public health. While the impact of urban runoff pollution may not be immediately realized, the eventual, cumulative effect can be dramatic. Urban runoff pollution is not only a problem during rainy seasons, but also year-round due to unconstrained use of imported water.³

Storm water pollution affects human life and plant and animal life. Potentially harmful viruses and bacteria are found in our coastal waters along with soil particles, solids/debris, litter, oil, and chemical compounds. Oil and grease from parking lots and roads, leaking petroleum storage tanks, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and this contamination can be transported into water bodies and receiving waters. Fertilizer constituents from lawns and golf courses can cause algal blooms and encourage microbial growth to create an increasing downward spiral of biological activity known as eutrophication. Disturbances of the soil from construction grading can allow silt to wash into storm channels and receiving waters making them muddy, turbid, and inhospitable to aquatic organisms. Many artificial surfaces of the urban environment such as galvanized metal, paint, or preserved wood containing metals, contribute to pollution by run off or leaching by storm water as the surfaces corrode, flake, dissolve, or decay. Heavy metals are toxic to organisms and may bio-accumulate to eventually affect animals high on the food chain including humans.

Impaired Water Bodies within the City

Section 303(d) of the federal Clean Water Act (CWA, 33 USC 1250, et seq., at 1313(d)), requires States to identify waters that do not meet water quality standards after applying certain required technology-based effluent limits ("impaired" water bodies). States are required to compile this information in a list and submit the list to U.S. EPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, States are required to prioritize waters/watersheds for future development of Total Maximum Daily Loads (TMDLs). The California SWRCB and local Regional Water Quality Control Boards

³ City of San Diego. *Urban Runoff Management Plan*. Adopted January 2002.

(Regional Boards) have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to subsequently develop TMDLs. The San Diego RWQCB (Region 9) most recent list, finalized in March 2002, includes 51 listed water bodies with 30 unique pollutants for the San Diego Region. The seven hydrologic units identified above (that are within, or could be affected by, the City of San Diego) contain some of the listed water bodies and pollutants/stressors.⁴ Many of the areas would be affected by the proposed brush management revisions, drain into listed impaired water bodies and has the potential to adversely affect water quality in listed water bodies, both directly and indirectly.

Regulatory Framework for Addressing Water Quality Within the City of San Diego⁵

The Porter-Cologne Water Quality Act and the Federal Water Pollution Control Act Amendments of 1972 require that Water Quality Control Plans (Basin Plans) be prepared for the nine state-designated hydrologic basins in California. Basin Plans guide conservation and enhancement of water resources and establish beneficial uses of inland surface waters, tidal prisms, harbors, and groundwater basins for each of the nine regions within the state. The San Diego Region Basin Plan (Basin Plan) was approved by the SWRCB on March 20, 1975 and updated in 1994. The San Diego Regional Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan: (1) designates beneficial uses for surface and ground waters; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy; (3) describes implementation programs to protect the beneficial uses of all waters in the Region; and (4) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan [California Water Code §13240 - 13244, and §13050(j)]. Additionally, the Basin Plan incorporates by reference all applicable State and Regional Board plans and policies.

⁴ San Diego Regional Water Quality Control Board. *Final Draft Clean Water Act Section 303(d) List of Impaired Waters 2002 Update*. March 8, 2002.

⁵ California Regional Water Quality Control Board, San Diego Region. *Water Quality Control Plan for the San Diego Basin (9)*. September 8, 1994.

The Basin Plan is the Regional Board's plan for achieving the balance between competing uses of surface and ground waters in the San Diego Region. Accordingly, this Basin Plan establishes or designates beneficial uses and water quality objectives for all the ground and surface waters of the Region. Beneficial uses are the uses of water necessary for the survival and well being of man, plants and wildlife. Water quality objectives are the levels of water quality constituents or characteristics which must be met to protect the beneficial uses. This Basin Plan also establishes an implementation program describing the actions by the Regional Board and others that are necessary to achieve and maintain the designated beneficial uses and water quality objectives of the Region's waters.

The Regional Board regulates waste discharge and reclaimed water use to minimize and control adverse effects on the quality and beneficial uses of the Region's ground and surface waters. The Regional Board issues permits, called "waste discharge requirements" and "master reclamation permits", which require that waste and reclaimed water not be discharged in a manner that would cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan. The Regional Boards enforce these permits through a variety of administrative means.

The City of San Diego has prepared an Urban Runoff Management Plan (URMP) as part of the City of San Diego's Stormwater Pollution Prevention Plan (SWPPP), and the Standard Urban Stormwater Mitigation Plan (SUSMP), in accordance with requirements of the State Water Resources Control Board NPDES permit procedure. These documents address the process that the City will undertake to improve water quality. The elements of the City program as described in the URMP and SUSMP documents are summarized below. In addition to the URMP and SUSMP, protection of surface water quality is also provided through the NPDES General Construction Permit for the State of California.

Urban Runoff Management Program

The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean

Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The Municipal Permit requires the implementation of a Jurisdictional URMP. The primary objectives of the Jurisdictional URMP requirements are to:

- Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;
- Effectively prohibit non-urban runoff discharges; and
- Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

Implementation activities for each program area listed above are contained in the URMP. Each City department is responsible for performing those tasks that are applicable and necessary to be in compliance with the City's Municipal Permit. This includes implementing the applicable procedures and policies to address the activities covered in the permit issued to the City of San Diego by the Regional Board, providing the appropriate staff training, keeping records of compliance activities, performing self-assessments, and preparing status reports for an annual report.

Standard Urban Storm Water Mitigation Plan

The Model SUSMP was developed to address post-construction urban runoff pollution from new development and redevelopment projects that fall under "priority project" categories. The goal of the Model SUSMP is to develop and implement practicable policies to ensure that urbanization does not increase the urban runoff flow rates, velocities or pollutant loads from a project site. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls. This Model SUSMP, collectively adopted by the Co-permittees (other governmental agencies in the County of San Diego), contains Best Management Practices (BMPs) that must be used for certain designated project types to achieve this goal. The Co-permittees are required to adopt the requirements set forth herein in their own Local SUSMP.

Under the Local SUSMP, the City of San Diego will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects. To allow flexibility in meeting SUSMP design standards, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met.

All new development and significant redevelopment projects that fall into one of the following "priority project" categories are subject to these SUSMP requirements. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project is subject to these SUSMP requirements. These categories are:

- Residential development of more than 100 units
- Residential development of 10 to 99 units
- Commercial development greater than 100,000 square feet
- Automotive repair shops
- Restaurants
- Hillside development greater than 5,000 square feet
- Projects discharging to receiving waters within Environmentally Sensitive Lands
- Parking Lots \geq 5,000 square feet or with \geq 15 parking spaces and potentially exposed to urban runoff
- Streets, roads, highways, and freeways
- Retail gasoline outlets

As indicated above, the majority of the categories pertains to urban development and would not apply to the types of activities anticipated under the currently proposed project. Of the two categories that could pertain to non-urban development, those categories being hillside development and projects that discharge to environmentally sensitive lands, the proposed project is not anticipated to require hillside development greater than 5,000 square feet and would not involve any discharges to environmentally sensitive lands.

In addition to the priority project categories indicated above, the City has established standard permanent stormwater requirements that apply to projects with any of the following:

- New impervious areas such as rooftops, roads, parking lots, driveways, paths and sidewalks;
- New pervious landscape areas and irrigation systems;
- Permanent structures within 100 feet of any natural water bodies;
- Trash storage areas;
- Liquid or solid material loading and unloading areas;
- Vehicle or equipment fueling, washing, or maintenance areas;
- Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (except construction);
- Commercial or industrial waste handling or storage, excluding typical office or household waste;
- Any grading or ground disturbance during construction; and
- Any new storm drains, or alterations to existing storm drains.

Projects involving one or more discretionary actions and include any of the above improvements or activities are subject to the City's Storm Water Standards as defined in the Land Development Manual (*Manual for Construction & Permanent Storm Water Best Management Practices Requirements, October 23, 2002*).

General Construction Permit

The State has issued a general permit for storm water associated with construction activities (State Board Order 99-08-DWQ, NPDES No. CAS000002), addressing both storm water and certain non-storm water discharges for construction-sites of five acres or more. The General Construction Permit requires development of a project-specific SWPPP that incorporates appropriate BMPs. Effective March 10, 2003, in conjunction with the State's most recent revisions to the General Construction Permit, Order 99-08-DWQ, the Permit extends to projects involving one or more acres of surface disturbance, providing that the applicant files a Notice of Intent (NOI) with the SWRCB and abides by the conditions and requirements of the Permit.

Watershed Management Plans

The City of San Diego is participating in a regional effort to develop plans to improve water quality on a larger watershed approach. The SWRCB set up requirements for improving water quality based on a watershed approach through passage of the Costa-Machado Water Act of 2000 (Proposition 13). Article 2 of the Costa-Machado Water Act established the Watershed Protection program to, "provide funds to assist in implementing watershed plans to reduce flooding, control erosion, improve water quality, and improve aquatic and terrestrial species habitats to restore natural systems of groundwater recharge, native vegetation, water flows, and riparian zones."

In accordance with the requirements of the SWRCB and the Costa-Machado Water Act, the City of San Diego, in conjunction with the City of Poway, City of Del Mar, and the County of San Diego, is in the process of developing a Watershed Management Plan, in accordance with the watershed urban runoff management plan requirements of the Municipal Permit, that will identify specific water quality issues and propose measures to improve water quality within the Los Peñasquitos watershed. The Los Peñasquitos Lagoon, the receiving body for the watershed, is considered impaired by the California Unified Watershed Assessment. Stressors such as sedimentation and encroachment of urban development are resulting in changes to velocity and volume of stream flow as well as increased pollutants in urban runoff. Based on an assessment of existing conditions within the watershed, the Watershed Management Plan will identify specific locations for wetland enhancement and restoration projects as well as measures to address hydrology, including adjustments to stream flows, velocity and volumes. The projects recommended in the Plan would provide for long-term solutions to water quality issues associated with the watershed.

The City of San Diego and the County of San Diego are also in the process of preparing watershed management plans for other watersheds in the region. Plans will be prepared based on the watershed approach adopted by the SWRCB and the Regional Board for the San Dieguito River, Mission Bay, and the San Diego River watersheds. Similar to the planning effort for the Los Peñasquitos watershed, these management plans will seek to identify solutions to specific issues affecting water quality. Each jurisdiction covered under the NPDES Municipal Permit is

required to prepare and submit a Jurisdictional Urban Runoff Management Plan (JURMP), which addresses water quality issues specific to each jurisdiction.

Information and measures identified in the individual watershed management plans will be integrated into a regional planning effort currently being completed. The SWRCB and the Regional Board have authorized the preparation of a Regional Wetlands and Watershed Management Plan for Coastal Southern California. It is anticipated that watershed plans completed in the next one to two years will be the basis for identifying any regional solutions available to improve water quality.

Storm Water Management through Multiple Species Conservation Program

The MSCP is a regional effort between local jurisdictions, as well as federal and state agencies to develop a comprehensive habitat conservation planning program that addresses multiple species habitat needs and the preservation of native vegetation communities in southwestern San Diego County. The City of San Diego MSCP Subarea Plan has been prepared pursuant to the overall MSCP guidelines to address habitat conservation goals within the City boundaries. The City Multi-Habitat Planning Area (MHPA), which is identified in the City MSCP Subarea Plan, delineates a 52,000-acre core biological resource area and corridors targeted for conservation. The City MSCP Subarea Plan also includes a Framework Management Plan and specific management policies and directives for management of resources within the MHPA.

In association with management of MHPA lands, the City MSCP Subarea Plan contains guidelines for minimizing impacts of urban development on upland and wetland ecosystems and water quality. All developments proposed adjacent to the MHPA must conform to the Land Use Adjacency Guidelines of the City MSCP Subarea Plan. The Land Use Adjacency Guidelines require that all new and proposed parking lots and developed areas in and adjacent to the MHPA must treat urban runoff prior to discharging into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials, and other elements that might degrade or harm the natural environment. Potential impacts can be minimized through the use of a variety of measures including natural detention basins, grass

swales or mechanical trapping devices. The MSCP also requires that these systems be maintained routinely throughout the life of a project.

The City MSCP Subarea Plan also requires that land uses such as recreation and agriculture, which use chemicals or generate potentially toxic byproducts, incorporate storm water best management practices to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Where applicable, the requirement to minimize impacts to water quality is also incorporated into leases on publicly owned property as leases come up for renewal.

The City MSCP Subarea Plan provides specific management directives requiring that restoration of native riparian habitat take place within many of the important drainage systems and watersheds within the City. For example, the portion of the Los Peñasquitos Watershed located within the City of San Diego is addressed in the City MSCP Subarea Plan. Major drainages within the Los Peñasquitos watershed including Los Peñasquitos Canyon, Lopez Canyon, Carmel Creek, and portions of Carroll Canyon are located within the MHPA. The guidelines and specific management policies of the City MSCP Subarea Plan require that enhancement of these drainages take place, where appropriate. The Subarea Plan also requires restoration and enhancement of native riparian lands within the Otay River Valley, Tijuana River Valley as well as several smaller "urban canyons" within the central and southern portions of the City. Many of these drainages are surrounded by urban development and restoration of native riparian areas is intended to minimize impacts from urban runoff to water quality as well as provide habitat for animal and plant species.

ISSUE STATEMENTS

1. *Would the proposal result in an increase in pollutant discharges, including downstream sedimentation to receiving waters during or following construction?*
2. *Would the proposal result in substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?*
3. *Would the proposed project affect slope stability and on or off-site soil erosion?*

IMPACT

Criteria for Significance Determination

The following criteria were used to assist in making determinations of significant hydrology/water quality/erosion impacts (City of San Diego, 2003).

1. Impacts on stream hydrology may be significant due to increased sedimentation and erosion (i.e., erosion and sediment transport leading to the potential for deposit buildup to substantially alter stream hydrology) if a project, in general, were located on slopes over a 25 percent grade, and would drain into a sensitive water body or stream; except in limited cases, projects which would disturb over five acres of land would have a significant hydrology impact.
2. Impacts on existing drainage patterns may be significant if the project would result in substantial changes to stream-flow velocities or if existing vegetation would decline because long- or short-term, soil-plant-water relationships would no longer meet habitat requirements.
3. Impacts on downstream properties may be significant if the project, when identified in a drainage study, would cause adverse impacts on downstream properties as a result of increased runoff.
4. Impacts on water quality from pollutants/contaminants may be significant if: (1) the project would generate or accidentally release any amount of highly noxious substance; (2) the project would generate large amounts of substances which in small amounts are insignificant, but are cumulatively hazardous; and (3) the project would result in the deterioration of the quality of a drinking water source.
5. Impacts on water quality may have significant impacts on biological communities if the project would generate, accidentally release, or result in the accumulation of substances which affect health or cause genetic defects of wildlife, either by direct physical contact with contaminated water, or by water quality changes which cause a decline in riparian or lacustrine vegetation which provides wildlife habitat.

Analysis of Impacts

Hydrology

Implementation of the proposed brush management revisions would include the creation of brush management zones located in open space, private lands and other environmentally sensitive lands. Creation of the proposed brush management zones could involve several activities/techniques, depending on the physical/biological conditions of the project site. The various types of potential activities/techniques are described below:

1. *Thinning* – utilizing a landscaping piece of equipment or goats to thin existing native vegetation to 50% within Brush Management Zone Two.
2. *Mowing* – mowing of brush and other vegetation on the surface to allow adequate Brush Management Zone One. This technique is not allowed within Brush Management Zone Two.
3. *Trimming/Pruning* – trimming 50 % of existing vegetation to 6 inches and then pruning remaining plants within Brush Management Zone Two.

Each of the techniques described above would not involve minimal surface disturbance and would not substantially affect existing hydrologic conditions. ~~Surface water transport of sediments to downstream receiving water bodies and possible buildup of sediment deposits could result in incremental impacts to stream hydrology including stream flow velocities. However, since the proposed brush management zones are not disturbing the existing soil conditions, impacts are limited to water creating new ruts in the soil where the soil erodes more quickly.~~ Implementation of the proposed brush management revisions would not require any groundwater dewatering.

Water Quality

Current brush management regulations, based on the current assumptions and existing GIS data, would impact approximately ~~3,815~~ 3,753 acres of vegetation. Implementation of the proposed brush management revisions would impact an additional ~~2,474~~ 2,880 acres, for a total impact to vegetation of ~~6,289~~ 6,663 acres. In addition to the potential for stream hydrology impacts, the

minimal erosion and sedimentation associated with surface disturbance would not pose the potential for water quality impacts to receiving water bodies and streams. The minimal amount of erosion and sedimentation would be filtered by existing vegetation and would not reach receiving water bodies and streams.

Further, any landscaping equipment (i.e. weed-whacker) that would operate within open space, private lands or other environmentally sensitive lands could affect water quality through unintentional releases of fluids or other substances. Any such releases from equipment are not expected to be substantial given that very limited quantities of hazardous substances would be present and that, should a spill or release occur, there would be trained personnel present that could respond immediately, when brush management is occurring on city owned property.

Based on the currently listed contaminants of potential concern (COPC) in the Section 303(d) list for the San Diego Region, the greatest potential for water quality impacts to affected impaired water bodies from implementation of the proposed brush management revisions would be related to the following constituents: siltation/sedimentation and total dissolved solids resulting from exposure of soils in open space areas; trash, either introduced from thinning activities in open space, private lands and other environmentally sensitive lands, or existing trash would be mobilized/released during thinning of vegetation; and trace toxics or other elements that could result from the operation of landscaping equipment in open space, private lands and other environmentally sensitive lands. Such potential for water quality impacts is considered minimal, given the relatively minor amounts of soil disturbance and the benign nature of the operation of landscaping equipment (as relates to release of toxic substances).

Currently, Municipal Code Section 44.0307.1 states that "Droppings from cattle, goats or sheep shall not be permitted to accumulate so as to create a health or sanitation problem, or the breeding of flies." This section has been amended to add "or the potential for discharge into the storm water system." Additionally, a new Section 44.0307.3 has been added that includes the following criteria for goats being brought in for brush management: "Goats shall be within a secure enclosure at all times. They may be moved to a separate holding pen at night, which shall

be located as far as possible from residences. In addition to the requirements of Section 44.0307.1, droppings in the holding pen shall be removed and properly disposed of daily."

According to the City of San Diego Metro Wastewater Stormwater Section, as long as goat droppings are not stockpiled or allowed to accumulate in pens, it would be consistent with the City's current Best Management Practices. Additionally, sun light kills bacteria in a short period of time. The goats will be browsing at the top of slopes, not at the bottom of canyons, thus the potential for water quality impacts will be further reduced. Only an intense rain event could wash some of the droppings downstream. Goat feces are hard pellets with low water content, and do not easily dissolve in water. Typically, goats do not like to enter water and will avoid direct water contact if possible.

Based on the nature of the proposed brush management revisions, impacts to groundwater quality are not expected to occur.

Erosion

Implementation of the proposed brush management revisions would include the creation of brush management zones located in open space, private lands and other environmentally sensitive lands. According to the Biological Technical Report prepared by Holly Cheong, Environmental Biologist City of San Diego Multiple Species Conservation Program, out of 25 sites that were analyzed, two brush management areas showed evidence of erosion on the site. The proposed techniques for thinning would not result in a significant impact to potential erosion and sedimentation. The potential for erosion and sedimentation would be greater in cases where creation of the proposed brush management zones requires a notable amount on steep slopes (i.e., more than one acre on slopes of greater than 25 percent grade).

Soil erosion was observed on two slopes that had been brush managed. These areas were brush managed by homeowners. The erosion within the brush management areas can be attributed to the sandy soils on the slope and, in the case of brush management area 24, the way the slope was constructed. Brush management area 24 was cut quite steep in order to accommodate a utility

access road. The sandy soils have moderate erosion due to this steep cut. In both cases, there is no clear association between brush management and the erosion on-site. Surface water transport of sediments to downstream receiving water bodies and possible buildup of sediment deposits could result in incremental impacts to water quality.

Potential erosion impacts associated with livestock stem from mismanagement--such as too high stocking rates of livestock per area, kept in one area too long, or animals having become feral--resulting in overgrazing and over-browsing. A common source of erosion and/or soil compaction stems from the animals using the same entry and exit from pens over a long period of time, or when they congregate around watering areas, feed troughs, supplement containers, salt/mineral blocks for long periods of time.

Per the proposed amendments to Section 44.0307, goats would be restricted to 75 per acre and would be moved along as soon as the 50% thinning goal is reached. Additionally, all feeding and most of the watering would occur in the holding pens, located in non-sensitive areas away from the slopes. Any water available on the slopes would be moved constantly as the goats are moved. These restrictions would minimize the opportunity for either erosion or soil compaction impacts.

Goats are cloven/split hooved, which means they have two toes on each hoof, not one large solid hoof like a horse. Less soil compaction results from a cloven hoof than a solid foot or hoof, or from a heavier animal. The toes act separately and grip the soil, and even though there are eight toes per animal, damage is minimal. Goats' smaller feet tend to not create sloughing-off of slopes and are less destructive on the underlying vegetation, even compared to a human adult.

Additionally, goats are browsers, and are not likely to eat the ground-cover vegetation down to the soil level, particularly when they are moved along and managed correctly. They are much more likely to eat portions of the taller vegetation, thus retaining vegetation cover for the soil. They don't tend to pull up the vegetation by the roots when they eat, and don't eat as close to the ground as do sheep and cattle. They will do little actual 'grazing', unless the weeds and brush run out. All of these characteristics reduce the soil erosion potential.

Goats also tend to spread out when browsing and not congregate in a group. They tend to not use the same trail, or follow one another, like cattle and people do, so path/trail making, bare areas and resulting compaction would not be as likely, therefore reducing the potential for soil erosion.

Based on the nature of the proposed brush management revisions, manner in which goats would feed and move, impacts to erosion are not expected to occur. Surveys of existing zone two brush managed areas indicate that human brush management activities do not cause erosion; therefore, humans nor goats would cause erosion in expanded zone two brush managed areas.

SIGNIFICANCE OF IMPACT

As described above, based on current assumptions and existing GIS data, proposed brush management revisions would not exceed the City's significance thresholds relative to hydrology, water quality and erosion, and are not considered to have significant impacts.

MITIGATION, MONITORING, AND REPORTING PROGRAM

Impacts to hydrology, water quality, and erosion would be less than significant; therefore, no mitigation measures are required.

D. NEIGHBORHOOD CHARACTER/AESTHETICS

The following analysis of potential impacts to neighborhood character and aesthetics focuses on impacts associated with proposed brush management revisions.

EXISTING CONDITIONS

The existing brush management regulations throughout the City of San Diego are intended and designed to protect structures of potential fire hazards while also being considerate of existing vegetation in open space, private lands and other environmentally sensitive lands. Current brush management regulations for zone one allows for pavement and permanently irrigated ornamental planting. Current brush management regulations within zone two require that 50% of the plants over eighteen inches in height shall be cut to six inches in height with the remaining plants to be pruned. Trees and shrubs within zone two are to be pruned to three times the height of the lower plants within the zone. Trees and shrubs are not removed from zone two. No permanent irrigation is allowed within brush management zone two.

ISSUE STATEMENT

1. *Does the proposed project impact mature trees which could have a significant effect on neighborhood character/aesthetics?*

IMPACT

Criteria for Significance Determination

The City of San Diego Development Services Department, Environmental Analysis Section's *Significance Determination Guidelines Under the California Environmental Quality Act* (April 2001) evaluates the significance of impacts to visual quality relating to public views, neighborhood character/architecture and aesthetics. CEQA Guidelines (Appendix G, I), states that a Lead Agency should evaluate the environmental effect of a project on aesthetics including visual quality using the following criteria: (a) substantial adverse effect on a scenic vista; (b) substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and

historic buildings within a state scenic highway; (c) substantially degrade the existing visual character or quality of the site or its surroundings; and (d) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Projects that severely contrast with the surrounding neighborhood character are considered significant if one or more of the following conditions apply: (a) project exceeds the allowed height or bulk regulations by a significant margin; (b) project would have an architectural style or use building materials in stark contrast to adjacent development where the adjacent development follows a single or common architectural theme; (c) project would result in the physical loss, isolation or degradation of a community identification symbol or landmark (ex. a stand of trees, coastal bluff, historic landmark) which is identified in the General Plan, applicable community plan or local coastal program; (d) project is located in a highly visible area (ex. on a canyon edge, hilltop or adjacent to an interstate highway) and would strongly contrast with the surrounding development or natural topography through excessive bulk, signage, or architectural projections; and (e) project would have a cumulative effect by opening up a new area for development or changing the overall character of the area.

Analysis of Impacts

Implementation of the proposed Brush Management revisions would serve to improve the amount of defensible space from structures to high fuel load vegetation. The brush management revisions would help avoid large brush fires, like the recent Cedar Fire of October 2003, thereby avoiding impacts to neighborhood character/aesthetics.

There is the potential that private land owners could impact mature trees with the proposed brush management revisions. However, the current brush management regulations require that trees be thinned, not removed from brush management zones one and two. Brush management zone two is thinned to 50% as shown in Figure 4 of Section III, Project Description. If controlled grazing is used to thin acreage it is likely that goats could be viewed for short periods of time from areas within the City. This would be a temporary situation. Therefore, the proposed brush management revisions would not result in a significant impact to neighborhood character/aesthetics.

SIGNIFICANCE OF IMPACT

The proposed brush management revisions would serve to minimize any potential impacts to mature trees, and any individual thinning projects on private lands, open space or other environmentally sensitive lands are not anticipated to result in changes to neighborhood characteristics or aesthetics. No mature trees will be removed with the proposed brush management zones. As such, no significant impacts are expected. The temporary situation of citizens being able to view goats in certain neighborhoods for a short period of time would not create a significant impact to neighborhood character/aesthetics.

MITIGATION, MONITORING, AND REPORTING PROGRAM

Impacts to neighborhood character/aesthetics would be less than significant; therefore, no mitigation measures are required.

SECTION VI GROWTH INDUCEMENT

The purpose of this section is to discuss the ways in which the proposed Brush Management revisions could foster economic or population growth, or construction of additional housing. The proposed brush management revisions involves ongoing thinning activities located on private lands, open space and other environmentally sensitive lands that would serve to maintain the proposed 100 foot wide defensible space between structures and vegetation. The proposed brush management revisions would not have the potential to directly or indirectly induce growth or otherwise foster the potential for growth. This SEIR/EA does not address future development and is focused on existing developed properties. Therefore, no growth inducing impacts, direct or indirect, are anticipated to occur as a result of the implementation of the revised brush management regulations.

SECTION VII CUMULATIVE IMPACTS

This section addresses the potential for impacts from the proposed Brush Management revisions to combine with impacts from other projects in the study area and result in cumulative impacts to the environment. Section 15355 of the CEQA Guidelines defines "cumulative impacts" as referring to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of a project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130(b) of the CEQA guidelines indicates that the discussion of cumulative impacts needs to include either of the following elements:

- (A) A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

A. PROJECTS CONSIDERED IN CUMULATIVE IMPACTS DISCUSSION

There are several categories of projects, regional or citywide in scope, which could result in incrementally significant impacts. For purposes of this SEIR/EA, the Canyon Sewer Cleaning Projects EIR was used when considering cumulative impacts.

B. PLANS CONSIDERED IN CUMULATIVE IMPACTS DISCUSSION

The proposed brush management revisions would be implemented throughout the City of San Diego. It is anticipated that the future environmental conditions will be influenced by several citywide regional planning programs. Such regional plans and programs include the San Diego Multiple Species Conservation Program (MSCP), the City of San Diego Land Development Code (LDC), the City of Villages Growth Strategy – Strategic Framework Element and all of the community plans within the City of San Diego.

1. MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP)

San Diego Regional Plan – MSCP was developed to provide a regional mitigation solution for impacts to multiple, rather than single, species and their habitats. The MSCP is a cooperative effort consisting of federal and state resource agencies, local jurisdictions, environmental groups, property owners, and experts in the fields of biology, environmental planning and conservation. The MSCP is part of the statewide Natural Community Conservation Plan (NCCP) program that was established under California law (Section 2800 et seq. of the California Fish and Game Code) “to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth”. The MSCP is one of several regional conservation planner efforts coordinated with the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS). In conjunction with the MSCP, a Multiple Habitat Planning Area (MHPA) focused planning area for the City of San Diego comprised of over 50,000 acres was identified for the purpose of preservation. The 1996 Recirculated EIR/EIS (LDR. No. 93-0287, SCH No. 93121073) related to the MSCP found that the proposed MHPA would result in significant unavoidable impacts for certain land use and community plans, including as related to population, housing, public services and utilities; however, cumulative impacts (with focus on biological resources, land use, and public facilities) would be less than significant.

2. LAND DEVELOPMENT CODE

In 1997, the San Diego City Council approved a comprehensive update and revision to various land development regulations in the form of the Land Development Code (LDC). Adoption of

the LDC included amendments to certain chapters of the Land Development Code, amendment of the Local Coastal Program, modification of existing zone regulations and of planning and zoning support documents, and readoption of the Uniform Building Code, the National Electrical Code, the Uniform Mechanical Code, and the Uniform Plumbing Code. In that the LDC applies Citywide to new development, the EIR (LDR. No 96-0333, SCII No. 96081056) completed for the LDC considered potential impacts on a citywide basis and included in the cumulative effects analysis numerous regional plans and programs, various community plan updates and amendments, rezones associated with the MSCP, and regulatory relief amendments to the Land Development Code. Given that the LDC EIR evaluates development impacts on a Citywide basis relative to implementation of the LDC and other regional plans and programs, the cumulative impacts discussion in the LDC EIR provides a reasonable and appropriate basis by which to consider the additional effects of the proposed brush management revisions. Various plans and programs of a citywide or regional nature that are considered in the LDC EIR include a variety of conservation planning efforts ranging from the MSCP to the San Dieguito River Valley Regional Open Space Park, numerous community plan updates, and the 1996 regulatory relief amendments to the Land Development Code. Cumulative impacts associated with these plans and programs that were addressed in the LDC EIR include soils/erosion hazards, air quality, hydrology/water quality, biological resources, land use, transportation/circulation, neighborhood character/aesthetics, cultural resources, paleontological resources, human health and public safety – all of which were found to be cumulatively significant.

3. CITY OF VILLAGES GROWTH STRATEGY – STRATEGIC FRAMEWORK ELEMENT

The City of Villages Growth Strategy – Strategic Framework Element (SFE) provides a long-term strategy to direct future growth as San Diego shifts from an era of building upon abundant open land to one of reinvesting in existing communities. The City of Villages concept builds upon what the City already has by creating a network of village centers served by transit systems. The Final EIR for the SFE (October 2002, LDR No. 40-1027) addressed the potential environmental impacts associated with such development, along with proposed increased density and housing units that were subsequently deleted from the SFE that was approved by the City

Council on October 22, 2002. The EIR found project-related impacts that could not be mitigated to a level less-than-significant would include traffic and solid waste disposal, and impacts that could be mitigated to a level less-than-significant would include paleontological resources, geology hazards, noise, historic resources, and human health and safety. The Final EIR also considered the cumulative effects of future development associated with the subject proposal along with numerous other private and public development proposals as addressed within the 128 environmental impact reports completed by the City of San Diego between 1991 and 2000. As in the case of the LDC EIR described above, the SFE EIR provides an analysis of potential impacts associated with the proposed citywide brush management revisions. The SFE EIR's discussion of cumulative impacts is reflected in the proposed brush management cumulative impacts analysis below.

C. IMPACTS ANALYSIS

LAND USE

As discussed in Section V.A, implementation of the proposed brush management revisions is not expected to result in land use impacts, ~~with the exception of consistency with the Environmentally Sensitive Lands regulations as it relates to the gnatcatcher breeding season. Of the 377 known gnatcatcher sites, five sites or 1.3 % would be impacted as a result of the project. These impacts when considered with other reasonably foreseeable projects are not considered to be cumulatively significant.~~

BIOLOGICAL RESOURCES

As a result of the project 2880 acres of habitat would be impacted, of which 715 acres are within the MHPA. The MHPA has preserved 52,012 acres. 1.4 % of the habitat within the MHPA would be impacted with implementation of the brush management revisions. ~~Weed invasion in conjunction with past, present and reasonably foreseeable projects is together considered to be cumulatively significant and the contribution of the revised brush management regulations is~~

~~considerable and therefore significant. Since the project is consistent with the MSCP, cumulative biology impacts are mitigated by the MSCP to a level below significant.~~

HYDROLOGY/WATER QUALITY/EROSION

As discussed in Section V.C, implementation of the proposed brush management revisions is not expected to require any groundwater dewatering. Based on the nature of the proposed brush management revisions, impacts to groundwater quality are not expected to occur. Based on the nature of the proposed brush management revisions, impacts to erosion are not expected to be significant. Therefore, it is anticipated that the proposed brush management revisions would not contribute to cumulatively significant hydrology/water quality/erosion impacts.

NEIGHBORHOOD CHARACTER/AESTHETICS

As discussed in Section V.D, implementation of the proposed brush management revisions would serve to minimize any potential impacts to mature trees, and any individual thinning projects on private lands, open space or other environmentally sensitive lands are not anticipated to result in changes to neighborhood characteristics or aesthetics during thinning activities. No mature trees will be removed with the proposed brush management zones. As such, the proposed brush management revisions would not contribute to the cumulatively significant neighborhood character/aesthetics impacts.

CONCLUSIONS REGARDING CUMULATIVE IMPACTS

Based on the above, cumulative impacts related to land use, hydrology/water quality/erosion and neighborhood character/aesthetics are anticipated to be less than significant. ~~Cumulative impacts related to biological resources are considered at this time to be significant and unmitigated.~~ Cumulative biological impacts for this project are mitigated by the implementation of the MSCP. Therefore, cumulative biological impacts are anticipated to be less than significant.

SECTION VIII ALTERNATIVES

The following describes all of the options that were considered as alternatives to the currently proposed brush management revisions.

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

DESCRIPTION

Pursuant to CEQA, the No Project Alternative, the existing brush management zones would remain in effect. Current brush management regulation state that the width of zone one varies from twenty feet to thirty-five feet west of Interstate 805 and El Camino Real, and thirty feet to forty-five feet on the east. Zone two currently varies for twenty feet to thirty feet west of Interstate 805 and El Camino Real, and forty feet to fifty feet on the east.

ANALYSIS

In the absence of implementing any of the activities associated with the proposed brush management revisions, none of the environmental impacts described in Section V would directly occur. The following describes, by environmental topic area, the proposed brush management revisions-related impacts that would be directly avoided under this Alternative.

Biological Resources

The No Project Alternative would avoid direct impacts to sensitive habitat.

Hydrology/Water Quality/Erosion

The No Project Alternative would avoid direct impacts to hydrology/water quality/erosion.

Land Use

The No Project Alternative would avoid direct impacts to land use.

Neighborhood Character/Aesthetics

The No Project Alternative would avoid direct impacts to neighborhood character/aesthetics.

ALTERNATIVE 2 – NO ACTION ALTERNATIVE

DESCRIPTION

NEPA requires that the No Action Alternative be described. The No Action Alternative assumes that there would be no federal funding available for the implementation of the brush management revisions within City owned open space areas and as a result, no federal action to approve. The proposed brush management revisions could still be implemented by the City; however, funding would need to be acquired from different sources. This alternative would not achieve the objectives of the project of providing additional defensible space from structures to vegetation because the City does not have alternative sources of funding for the project.

ALTERNATIVE 3 – CLEAR AND RE-PLANT ZONE TWO

DESCRIPTION

~~Under Alternative 4 this alternative complete clearing would occur in zone two and would be replanted with low height native plant types. Proper planting protocol would be to lightly scarify the soil surface before planting for better seed/soil contact. Temporary irrigation would be installed for a period of up to two years for plant establishment. The assumptions associated with this alternative are that the irrigation would not be installed or monitored properly thereby allowing runoff to occur down slope of zone two. This can be substantiated by evidence that irrigation runoff is the primary source of water in our drainages within the City during the summer. The newly planted vegetation would be successful in reducing impacts to weed invasion.~~

ANALYSIS

Biological Resources

~~Under this alternative, significant impacts to biological resources in zone two would not occur as the habitat being replaced would be native, non-invasive and low growing. Potentially~~

~~significant impacts to the habitat down slope of zone two could result from irrigation runoff from the temporary irrigation lines. This would include the establishment of plant types that thrive in wetter soil conditions as a result of the runoff. In addition, impacts to sensitive species, i.e. gnatcatcher would remain significant as the existing habitat would be completely removed.~~

Hydrology/Water Quality/Erosion

~~The clear and re-plant alternative would utilize temporary irrigation for a period of up to two years to allow plant establishment in zone two. Based on the assumption noted above, monitoring of irrigation is not anticipated and would therefore create a significant impact to soil erosion down slope of zone two due to runoff from the temporary irrigation lines at least during the time period that it would take for plant establishment. Potentially significant impacts associated with water quality would also occur from the runoff which carries silt and sediment down slope and could potentially impact any off-site water body. Impacts associated with erosion and water quality would be considered significant and unmitigated.~~

Land Use

~~No impacts associated with land use would occur under the clear and re-plant alternative.~~

Neighborhood Character/Aesthetics

~~No impacts associated with neighborhood character/aesthetics would occur with this alternative.~~

ALTERNATIVE 4.3 – INCREASING BUILDING REGULATIONS

DESCRIPTION

Under this alternative, proposed changes to the building regulations would occur thereby eliminating the need for increased brush management zones. Revisions to the building regulations could include fire walls which would be constructed at the boundary between zone two and open space. Additional building regulations could include alternative architectural features for structures where brush management would normally be required. The revision to include fire walls has been added to the Land Development Code regulations is included in the proposed ordinance which is attached to this SEIR/EA as Appendix C. Additionally, as a result of the 2003 fires the City Council passed an ordinance which identifies the requirement for roof

materials on structures to be replaced by a certain date in the future. For this alternative a similar ordinance would be passed to make buildings "fire-proof".

ANALYSIS

Biological Resources

Under this alternative there would be no impacts to biological resources or sensitive species because brush management would not occur. The building regulations would reduce the fire hazard to structures and the habitat on site would remain undisturbed. This alternative would require that increased building regulations be implemented and would not give citizens the choice of either providing zone two brush management or providing alternative architectural features to structures as is the case with the current regulations.

Hydrology/Water Quality/Erosion

No impacts associated with hydrology/water quality/erosion would occur with this alternative.

Land Use

No land use impacts would result from this alternative.

Neighborhood Character/Aesthetics

Under this alternative there may be situations where fire walls would be constructed in areas where only vegetated open space could previously be viewed. If necessary, construction of fire walls at the boundary of zone two and the open space area would normally be six feet in height and generally be constructed of a solid masonry type. This could create a change to the visual quality of a community if viewed from public rights-of-way, however on a city wide basis this would not create a significant impact to neighborhood character/aesthetics.

SECTION IX – ALTERNATIVES CONSIDERED BUT REJECTED

I – EDUCATION/TRAINING

DESCRIPTION

The Education/training alternative would rely on existing information which is available to the public for the purposes of brush management and creating defensible space around structures. Much of this educational information is readily available to the public via the City of San Diego website, brochures and flyers which are available through the Fire-Rescue and Park and Recreation Departments. There has been a substantial amount of public outreach on the subject of brush management. With respect to training, the city staff from the Park and Recreation Department that is responsible for conducting brush management on City lands has received training on how brush management is done in the field. There are currently no training classes available, nor is a training program on brush management for the public. This alternative is unreasonable due to the fact it is assumed that not everyone who requires brush management on their site would necessarily partake in any of the educational materials and/or conduct brush management per the required procedures in the regulations or as required in any development permit conditions.

ANALYSIS

Biological Resources

Under this alternative, based on the assumptions mentioned above, there would be a significant impact to sensitive biological resources as a result of the establishment of non-native plant species in zone two and down slope of zone two. In addition, impacts to the California gnatcatcher would occur as the assumption is that brush management could likely occur during the breeding season. Mitigation identified in section V.B. Biological Resources would partially reduce impacts to below a level of significance. Impacts associated with invasive plant species would remain significant and unmitigated.

Hydrology/Water Quality/Erosion

No impacts associated with hydrology/water quality/erosion would occur with this alternative.

Land Use

No land use impacts would result from this alternative.

Neighborhood Character/Aesthetics

No impacts associated with neighborhood character/aesthetics would occur with this alternative.

2 - PRESCRIBED BURN ALTERNATIVE

DESCRIPTION

Under this alternative, prescribed burning of vegetation would be allowed within or beyond brush management zone two to allow fuel load reduction. Prescribed burns can be used to create a mosaic of age-classes of shrublands; reducing fuel load adjacent to structures; protecting oak and conifer woodlands through understory burning; and removal of unwanted or exotic species. The effectiveness of prescribed burns is questionable. Research indicates that this type of fuel management may be effective at controlling fires that burn under moderate weather conditions, but ineffective at controlling fires that ignite under severe weather conditions (i.e., Santa Ana). It has been suggested that multiple prescribed burns to create a mosaic of fuel loads in the shrublands is not practical and focus should be on the interface between developments and native habitat areas.

Prescribed burns creates a significant liability issue, and can only be conducted at certain times of the year based on humidity, wind, fuel load and availability of response crews to suppress unwanted burns. An incomplete assessment of any factor for a prescribed burn can lead to loss of property and life with serious liability questions to both the landowner and the one responsible for the burn. This alternative is not supported by the City of San Diego Fire-Rescue Department.

ANALYSIS

Biological Resources

This alternative would result in significant impacts to biological resources as a result of habitat being destroyed by the controlled burn. Although native habitat can regenerate following the effects of a fire, the initial result is a significant impact. This impact would occur inside and

outside of the MHPA, and would remain significant and unmitigated. The benefits of exotic species removal by prescribed burns requires continued burning to remove the exotic species from the seed bank. Exotic species will return if the interval between prescribed burns is too long. Conversely, prescribed burns that occur too frequently can result in a type conversion of habitat; chaparral and coastal sage scrub can be converted to grasslands. Sensitive species would also be significantly impacted by this alternative. Fire could substantially reduce the number of rare and endangered species. This impact would be significant and unmitigated.

Hydrology/Water Quality/Erosion

Fire results in a greater than 50% reduction of vegetative cover, thus exposing a soil surface that is highly erodible. While habitat does re-establish post fire it does take years to regenerate to viable habitat. Significant impacts to erosion and water quality would result from this alternative. These impacts would remain significant and unmitigated for a number of years until such time that the habitat became re-established.

Land Use

This alternative would result in significant land use impacts as it would not be in conformance with the community plans that identify preservation of open space as a controlled burn would denude open space areas. In addition, controlled burn would not be in conformance with the Environmentally Sensitive Lands ordinance (ESL) as the sensitive habitat regulated by ESL would be destroyed by fire. This would be considered a significant and unmitigated impact.

Neighborhood Character/Aesthetics

This alternative would potentially create a significant impact to the character of a neighborhood. As can be referenced from the numerous photos that were shown by the media as a result of the Cedar and other fires in October 2003, fire can have a devastating affect on a neighborhood from not only a character perspective but also an aesthetic/visual perspective. This impact would be considered significant and unmitigated.

Air Quality

Prescribed burning produces smoke, which is a mixture of toxic particles and gases. If not carefully managed, smoke can be a nuisance to residents and businesses, and it can adversely impact community health. Smoke can contribute levels of pollution that exceed health protective air quality standards. However, to minimize smoke impacts and protect public health, burners and air regulators work together to match burning with appropriate atmospheric conditions.

For the reasons identified above, the Prescribed Burn alternative is unreasonable.

ALTERNATIVE 3 – CLEAR AND RE-PLANT ZONE TWO

DESCRIPTION

Under Alternative 4 this alternative complete clearing would occur in zone two and would be replanted with low height native plant types. Proper planting protocol would be to lightly scarify the soil surface before planting for better seed/soil contact. Temporary irrigation would be installed for a period of up to two years for plant establishment. The assumptions associated with this alternative are that the irrigation would not be installed or monitored properly thereby allowing runoff to occur down slope of zone two. This can be substantiated by evidence that irrigation runoff is the primary source of water in our drainages within the City during the summer. The newly planted vegetation would be successful in reducing impacts to weed invasion.

ANALYSIS

Biological Resources

Under this alternative, significant impacts to biological resources in zone two would not occur as the habitat being replaced would be native, non-invasive and low-growing. Potentially significant impacts to the habitat down slope of zone two could result from irrigation runoff from the temporary irrigation lines. This would include the establishment of plant types that thrive in wetter soil conditions as a result of the runoff. In addition, impacts to sensitive species, i.e. gnatcatcher would remain significant as the existing habitat would be completely removed.

Hydrology/Water Quality/Erosion

The clear and re-plant alternative would utilize temporary irrigation for a period of up to two years to allow plant establishment in zone two. Based on the assumption noted above, monitoring of irrigation is not anticipated and would therefore create a significant impact to soil erosion down slope of zone two due to runoff from the temporary irrigation lines at least during the time period that it would take for plant establishment. Potentially significant impacts associated with water quality would also occur from the runoff which carries silt and sediment down slope and could potentially impact any off-site water body. Impacts associated with erosion and water quality would be considered significant and unmitigated.

Land Use

No impacts associated with land use would occur under the clear and re-plant alternative.

Neighborhood Character/Aesthetics

No impacts associated with neighborhood character/aesthetics would occur with this alternative.

4 – THINNING BY PLANT TYPE

DESCRIPTION

Under this alternative, thinning of vegetation would occur based on the plant types located within brush management zone two for fuel load reduction. The first plant types to be thinned would be the most flammable and the most invasive within the specific brush management zone two area. Next, the more flammable native or naturalized plants would be thinned. Finally, the least flammable and more sensitive native or naturalized plants would be thinned for a total reduction in ground cover to 50%. The effectiveness of thinning by plant type is questionable. Thinning the most flammable and the most invasive plant types first would address the most harmful plant types, but these plant types could establish themselves rather quickly after the initial brush management occurs. This alternative is rejected because it is not potentially feasible to assume that everyone who requires brush management on their property would be able to identify all plant types located in zone two brush managed areas.

ANALYSIS

Biological Resources

This alternative would result in significant impacts to biological resources as a result of habitat being thinned by plant type. Although native habitat can regenerate following the effects thinning, the initial result is a significant impact. This impact would occur inside and outside of the MHPA, and would remain significant and unmitigated. The benefit of exotic species removal of thinning by plant type requires continued thinning to remove the exotic species from the seed bank. Exotic species will return if the interval between thinning activities is too long. Conversely, thinning by plant type that occurs too frequently can result in a type conversion of habitat; chaparral and coastal sage scrub can be converted to grasslands. Sensitive species would also be significantly impacted by this alternative. This impact would be significant and unmitigated.

Hydrology/Water Quality/Erosion

No impacts associated with hydrology/water quality/erosion would occur with this alternative.

Land Use

No land use impacts would result from this alternative.

Neighborhood Character/Aesthetics

No impacts associated with neighborhood character/aesthetics would occur with this alternative.

SECTION IX

EFFECTS FOUND NOT TO BE SIGNIFICANT

During the initial environmental assessment process, the Development Services Department determined that the Revisions to the Brush Management regulations project would not entail significant environmental impacts with respect to Air Quality, Agriculture, Archaeological Resources, Energy, Hazards and Hazardous Materials, Mineral Resources, Noise, Paleontological Resources, Public Services, Recreation, and Utilities/Services Systems. Accordingly, these issues are not included in Chapter V of this SEIR/EA. A brief discussion regarding each of these issues is provided below.

A. AIR QUALITY

The proposed brush management revisions would not have a substantial affect on the Air Quality within the City. While citizens and Park and Recreation department staff may use gas powered tools to conduct brush management the emissions would be temporary and would not significantly contribute to regional air quality degradation. The project would not conflict with or obstruct implementation of applicable Air Quality Attainment Plans or a Congestion Management Plan, violate a stationary source air quality standard, contribute to an existing or projected air quality violation, result in a net increase of any criteria pollutants, create or contribute to a non-stationary source "hot spot", nor expose sensitive receptors to substantial pollutant concentrations.

B. AGRICULTURE

The proposed brush management revisions would not affect agricultural areas. As such, there would be no impact to Prime Farmland, Unique Farmlands, or Farmland of Statewide Importance.

C. ARCHAEOLOGICAL RESOURCES

The proposed brush management revisions do not include any surface or subsurface disturbance. Pruning and thinning activities would all take place above ground and no grubbing or grading would be required. Areas that are

brush managed would initially have some areas of visibility related to existing surface archaeological sites. However, as invasive species establish in brush managed areas, these surface archaeological sites would not be visible. Pruning and thinning activities would be performed with hand tools or utilizing goats. No heavy machinery is allowed in performing brush management activities. Therefore, no impacts to archaeological resources would result from the proposed project.

D. ENERGY

The proposed project would not require excessive amounts of fuel or energy, and would not significantly affect attainment of regional energy conservation goals. Therefore, no significant impacts with respect to energy are anticipated with implementation of the proposed brush management revisions.

E. HAZARDS AND HAZARDOUS MATERIALS

The projects would not entail the permanent transport, use, disposal, or emission of hazardous materials. All brush management activities occur above ground in public and privately owned parcels and would therefore not impede any roadways or entail the closure of any streets or emergency access routes.

F. MINERAL RESOURCES

The proposed project would not result in any subsurface activity as grading and grubbing are not a part of brush management. Therefore, the project would not result in the loss of availability of a known mineral resource either regionally or locally.

G. NOISE

Brush management activities may include the use of power tools such as weed whackers or saws. These tools can generate nuisance noise which is of intermittent duration (lasting a few hours for a few days) based on the brush management area being thinned. Construction noise from these tools is difficult to quantify because of the many variables

involved, including the size of the equipment being used, and the percentage of time and number of pieces of equipment that would actually operate on the site. Due to the fact that brush management occurs sporadically on any given site, impacts associated with noise would not be significant.

H. ODOR

Controlled grazing would utilize a herd of goats for a certain number of days to be closely monitored on a specific parcel of land. The number of goats would vary depending on the acreage to be thinned. Livestock can often emanate an odor which humans find offensive. The goats are only placed for a very limited amount of days to graze and then removed or re-located to another site, at which time the odor would terminate. Therefore, impacts associated with odor would not be significant.

I. PALEONTOLOGICAL RESOURCES

Brush management activities are limited to pruning and thinning and no grading or grubbing would occur. Therefore, no subsurface activity is anticipated and there would not be any loss of Paleontological resources.

J. POPULATION/HOUSING

The proposed brush management revisions would provide a greater defensible space from the threat of fire. The project would not impact population growth or displace existing housing or population.

K. PUBLIC SERVICES

The project would not significantly affect public services with the exception of the Fire-Rescue department. Increasing brush management zone two would have a positive effect on the Fire-Rescue Department by providing an increased defensible space when the threat of fire is imminent.

L. RECREATION

The proposed brush management revisions would not significantly affect the usage of any recreational facilities. Park and Recreation Department is responsible for brush management on City owned property including public park facilities. However, brush management activities occur for very limited amounts of time on a property and would not create any significant impact to recreational facilities.

M. UTILITIES/SERVICE SYSTEMS

The project is intended to create a greater defensible space from fire for the citizens of San Diego. There would not be any significant impacts associated with implementation of the project as it relates to utilities/service systems.

SECTION X

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION, SHOULD IT BE IMPLEMENTED

Implementation of the proposed brush management revisions would result in significant irreversible environmental changes. The proposed revisions consist of a City wide 100 foot brush management area consisting of 35 feet of zone one and 65 feet of zone two. In addition, zone two would be expanded accordingly to achieve 100 feet of brush management where zone one is less than 35 feet from existing structures. ~~These revisions could result in an impact to land use as they would not be consistent with the Environmentally Sensitive Lands Regulations as further described in Section V.A - Land use. These impacts would remain significant and unmitigated.~~

The brush management revisions would ~~also~~ result in significant irreversible changes to biological resources. ~~The thinning activities in zone two allows for the establishment of invasive species to grow within zone two and potentially down slope of zone two. Impacts to non-covered species located outside the MHPA would be significant and unmitigated. These impacts would remain significant and unmitigated and are further described in Section V.B- Biological Resources.~~

SECTION XI
SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 15126(b) of the CEQA guidelines requires an EIR to “describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”

~~Land Use impacts would remain significant and unmitigated as a result of the potential inconsistency with the revisions to the brush management regulations as they relate to the Environmentally Sensitive Lands Regulations.~~

~~Impacts to biological resources would result from the brush management revisions as it has been verified through field inspections that invasive plant types establish within zone two once thinning has occurred. These impacts would remain significant and unmitigated. The Land Development Code EIR determined that a potentially significant impact on biological resources related to brush management outside the bounds of the Multi-Habitat Planning Area (MHPA) where non-covered species are affected could occur. The current project has made the same determination; therefore, the potential impacts to non-covered species outside the MHPA would remain significant and unmitigated.~~

SECTION XII
REFERENCES

Beauchamp, R.M. 1986. A Flora of San Diego County. Sweetwater River Press, National City, CA.

California Native Plant Society. 2004. Inventory of Rare and Endangered Plants. <http://www.northcoast.com/~cnps/cgi-bin/cnps/sensiny.cgi>. Accessed 8/04.

California Regional Water Quality Control Board, San Diego Region 1994. Water Quality Control Plan for the San Diego Basin. September.

City of San Diego, 1979. Progress Guide and General Plan.

City of San Diego, 1996. City of San Diego, Development Services Department, Environmental Analysis Section/Public Projects and United States Fish and Wildlife Service. Recirculated Draft Joint EIR/EIS Issuance of Take Authorizations for Threatened and Endangered Species Due to Urban Growth Within the Multiple Species Conservation Program (MSCP) Planning Area. LDR No. 93-0287, SCH No. 93121073. August.

City of San Diego, 1997. Land Development Code EIR, LDR No. 96-0333, SCH No. 96081056

City of San Diego, 2003. Canyon Sewer Cleaning Program and Long Term Sewer Maintenance Program, Project No. 6020, SCH No. 2002041129.

City of San Diego, 1997. Biological and Conference Opinions on Issuance of an Incidental Take Permit to the City of San Diego pursuant to the Multiple Species Conservation Program (1-6-97-FW-47). June 1997.

City of San Diego, 1997. City of San Diego MSCP Subarea Plan. March 1997.

City of San Diego, 1996. Council-Approved MSCP Policy Positions. July 2, 1996

City of San Diego, 1998. Final Multiple Species Conservation Program/MSCP Plan. August 1998.

City of San Diego, 1997. Implementing Agreement by and between United States Fish and Wildlife Service, California Department of Fish and Game, City of San Diego. July 1997.

City of San Diego, 1996. City of San Diego Councilmember Judy McCarthy District Seven Memorandum: MSCP Policy Direction – Council Meeting of April 23, 1996. April 1996.

City of San Diego, 1996. Recirculated Draft Joint EIR/EIS Issuance of Take Authorizations for Threatened and Endangered Species Due to Urban Growth within the Multiple Species Conservation Program (MSCP). August 1996.

City of San Diego – Community Plans and Precise & Specific Plans with (MHPA acreages), initial plan text adoption date and annotated page citations

Black Mountain Ranch, July, 2002 – Pages 3.2 and 3.7 brush management and reference city requirements

NCFUA Framework Plan, Feb., 1995 – Page 75; transition treatment; Page 85: brush management

Carmel Valley (1152.3 acres)

Pacific Highlands (1436.5 acres); July, 1999 – Pages 19 & 21: brush management reference to city requirements

Del Mar Mesa (1161.5 acres); June, 2000 – page 34: LTM reference;

Subarea II (544.3 acres)

Torrey Highlands (491.0 acres); Aug., 1996: Page 14 – brush management, Zone 1 and Zone 2

Sorrento Hills (83.9 acres), July, 1997 – Page 100: brush management, reduce fire risk

Carmel Mountain Ranch, Jan., 1995 – Page 75: brush management section, Figures 25 & 29 transition

City Heights (Mid City) (104.6 acres); August, 1998 – Page 41: setbacks, landscaping requirements

Clairemont Mesa (797.8 acres); Sept., 1989 – Pages 110-111: brush clearing and thinning; fire retardant roofing

College Area (213.9 acres); Oct., 1993 – Page 104: thinning, fire retardant plants

Greater North Park (117.2 acres); Nov., 1986 – thinning, fire retardant plants

Golden Hill (26.3 acres); April, 1988 – Page 88: fuel management, thinning

Kearny Mesa (365.6 acres); Oct., 1992 (none)

La Jolla (541.9 acres); March, 1975 (none)

Linda Vista (370.2 acres); Dec., 1998 – Page 59: preserve CSS, setback from top of slope

Mira Mesa (2,240.2 acres); Oct., 1992 – Page 113: reference to ordinance

Miramar Ranch North (285.5 acres)

Mission Valley (342.2 acres); June, 1985 – preserve southern slopes

Navajo (3,091.7 acres); DEC., 1982 – preserve open space

Old Town; July, 1987 – Page 62: firebreaks

Otay Mesa (2,447.5 acres); April, 1981 – Page 98: transition areas

Otay Mesa-Nestor (1,411.6 acres); May, 1997 – Page 98: transition areas

Pacific Beach (83.9 acres); Feb., 1995 – Page 55: reference LTM

Peninsula (142.3 acres); July 1987

Ranch Bernardo (533.9 acres); March, 1978 – Page 5: reference to zoning and ordinance to resolve problem

Rancho Encantada, (NA); August, 2001- Page 60 reference to muni code, brush management

Rancho Penasquitos (1,828.1 acres); June, 1993 – Page 94: fire management zone

Sabre Springs (743.6 acres); Sept., 1987 – Page 115: fire prevention, Page 119: 50% natives, transition

San Pasqual (6447.4 acres); June, 1995

Scripps Ranch (1,071.4 acres); July 1978 – Page 23: eucalyptus trees

Serra Mesa (242.5 acres); June, 1977

Skyline-Paradise Hills (105.4 acres); June, 1987 – preserve drainages

Tierrasanta (3,893.6 acres); July, 1982 – Page 55: landscaped transition

Torrey Pines (1,147.3 acres); Jan., 1996 – Page 87: brush management section, fire code

University (1,801.9 acres); July, 1987 – Page 238: fire buffers

Uptown, (NA); Feb., 1988 – preserve open space

Via de la Valle (NA); April, 1984 – Page 44: transition, Page 47: LTM

County of San Diego, 1997. Memorandum of Understanding between The Fish and Wildlife Service of the United States Department of Interior, The California Department of Fish and Game, The California Department of Forestry, The San Diego County Fire Chief's Association and the Fire District's Association of San Diego County. February.

Escobar, E. Nelson. Internet, July 2004. Langston University — Sustainable Use of Goats as a Vegetation Management Tool.

Goats and Soil Erosion: The Evidence by Kris Dixon . SDC World Animal Production, 1996-1999-2000.

Goldman, William I., Principles and Practice of Urban Planning, 1968

Hart, SP. 2001 Recent Perspectives in Using Goats for Vegetation Management in the USA, prepared from E de la Graza Institute for Goat Research Langston University, Langston, OK.

University of California/ California Agriculture Magazine issue for July/September 2004, Volume 58 Number 3. Livestock/Cattle grazing impacts.

**SECTION XIII
CERTIFICATION PAGE**

INDIVIDUALS AND AGENCIES CONSULTED

This Joint Subsequent Environmental Impact Report/Environmental Assessment was prepared for the City of San Diego, Fire-Rescue Department. The following professional staff were either consulted with or contributed to its preparation:

City of San Diego Planning Department

Keith Greer, Deputy Director
Jeanne Krosch, Senior Planner
John Kovac, Senior Planner
Holly Cheong, Biologist
Chad Kane, Associate Planner
Michael Klejn, Information Systems Analyst II
Melanie Johnson, Associate Planner

City of San Diego Fire-Rescue Department

Samuel Oates, Fire Marshal
Eddie Villavicencio, Deputy Fire Marshal

City of San Diego, Park and Recreation Department

Ann Hix, Deputy Director
David Monroe, District Manger – Open Space
Josh Woods, Brush Management Utility Supervisor
Jan Eby, Grounds Maintenance Manager

City of San Diego, Development Services Department

Kelly Broughton, Deputy Director
Chris Zirkle, Assistant Deputy Director
Allison Raap, Senior Planner
Laura Black, Associate Planner

City of San Diego, Information Technology and Communications Department

Sean Bohac, GIS Intern
Teri Gerhart, GIS Intern

TECHNICAL APPENDICES

**DRAFT FINAL
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL ASSESSMENT**

**BRUSH MANAGEMENT REVISIONS TO THE LAND DEVELOPMENT CODE
AND FEDERAL GRANT FROM THE OFFICE OF EMERGENCY SERVICES
(OES), FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)**

**PROJECT No. 31245
SCH # 2004031041**

Prepared for:

City of San Diego, Fire-Rescue Department
Executive Complex, 1010 Second Avenue, M.S. 603
San Diego, CA 92101
Contact: Samuel Oates, Fire Marshal
619-533-4406

Prepared by:

City of San Diego, Development Services Department
Development Services Center, 1222 First Avenue, M.S. 501
San Diego, CA 92101
Contact: Allison Raap, Senior Planner
619-446-5379

May September, 2004

TABLE OF CONTENTS

APPENDICES

- A. Notice of Preparation and Responses
- B. Biological Resources Report
- C. Draft ordinance amending the Brush management Regulations
- D. MOU between USFWS, CDFG, CDF, SD County Fire Chief's Association and the Fire District's Association of SD County
- E. Methodology for Biological Impact Assessment
- F. Mitigation Monitoring and Reporting Program
- G. Draft goat amendments to the Municipal Code

APPENDIX A

NOTICE OF PREPARATION AND RESPONSES

City of San Diego
Development Services Department
LAND DEVELOPMENT REVIEW DIVISION
1222 First Avenue
Mail Station 501
San Diego, CA 92101
(619) 446-5460

Date: March 9, 2004

**NOTICE OF PREPARATION OF A DRAFT
JOINT SUBSEQUENT ENVIRONMENTAL IMPACT
REPORT/ENVIRONMENTAL ASSESSMENT
AND OF AN SEIR/EA PUBLIC SCOPING MEETING**

THE CITY OF SAN DIEGO will be the Lead Agency and will prepare a draft Subsequent Environmental Impact Report/Environmental Assessment (SEIR/EA) in accordance with the California Environmental Quality Act (CEQA - SEIR) and the National Environmental Policy Act (NEPA - EA) for the project described below. A Public SEIR/EA Scoping Meeting will be held on Friday, March 19, 2004, from 6:00 p.m. to 8:00 p.m. at: Balboa Park War Memorial Building, 3325 Zoo Drive, San Diego, CA 92101. Verbal and written comments regarding the scope of the proposed SEIR/EA will be accepted at the meeting.

PROJECT: Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA) COUNCIL APPROVAL to allow for revisions to the Municipal Code Chapter 12, Article 2, Division 4 to modify the requirements of brush management pursuant to the recommendations of the Fire Chief as a result of the 2003 Cedar fire. The project proposes a City wide 100 foot brush management zone consisting of 35' of Zone One and 65' of Zone Two. Project implementation on City property is proposed to be initially funded by a grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA), which is being applied for by the City of San Diego Park and Recreation Department. The project is located within the City of San Diego, public and private lands and includes the City of San Diego Multi-Habitat Planning Area (MHPA). Applicant: City of San Diego, Fire-Rescue Department.

Project NO.: 31245
SCH NO.: pending

Based on an Initial Study, it appears that the project may result in significant environmental impacts in the following areas: Land Use, Biology, Water Quality, and Neighborhood Character/Aesthetics.

For more information, contact Laura Krebs, Associate Planner at (619) 446-5346. To provide comments on the scope and content of the scope of work, please send written comments to Chris Zirkle, Assistant Deputy Director, at the above address. Written comments on the scope and content of the scope of work must be sent to the above address by no later than 30 days after receipt of this notice. Responsible agencies are requested to indicate their statutory responsibilities in connection with this project when responding.

Attachments: Draft SEIR/EA Scoping Letter
Proposed Brush Management Regulations

Distribution:

Federal Government

U.S. Naval Facilities Engineering Command, Environmental Planning Division (12)
Marine Corps Air Station, Miramar (13)
U.S. Environmental Protection Agency (19)
U.S. Fish and Wildlife Service (23)
U.S. Department of Agriculture (25)
U.S. Army Corps of Engineers (26)
Federal Emergency Management Agency, Office of Emergency Services

Native Americans

Ron Christman (215)
Louie Guassac (215A)
Kumeyaay Cultural Repatriation Committee (225)
Native American Distribution (225 A-R)*

State of California

California Department of Transportation (31)
California Department of Fish and Game (32)
California Integrated Waste Management Board (35)
California Environmental Protection Agency (37)
California Department of Parks and Recreation (40)
Resources Agency (43)
California Regional Water Quality Control Board (44)
State Clearinghouse (46)
California Coastal Commission (47)
Native American Heritage Commission (222)

County of San Diego

Department of Planning and Land Use (68)
County Water Authority (73)
Hazardous Materials Management Division (75)

City Government

City of San Diego:
Mayor Murphy
Councilmember Peters, District 1
Councilmember Zucchet, District 2
Councilmember Atkins, District 3
Councilmember Lewis, District 4
Councilmember Maienschein, District 5

La Jolla Town Council (273)
La Jolla Historical Society (274)
La Jolla Community Planning Association (275)
La Jolla Shores PDO Advisory Board (279)
La Jollans for Responsible Planning (282)
City Heights Area Planning Committee (287)
Rolando Community Council (288)
Kensington/Talmadge Planning Committee (290)
Normal Heights Community Planning Committee (291)
Normal Heights Community Association (292)
Normal Heights Community Center (293)
Oak Park Community Council (298)
Webster Community Council (301)
Eastern Area Planning Committee (302)
Marshall Community Council (304)
Darnell Community Council (306)
Midway Community Planning Advisory Committee (307)
Mira Mesa Community Planning Group (310)
Mira Mesa Town Council (311)
Friends of Penasquitos Preserve, Inc. (313)
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Mission Bay Park Committee (320)
League of Conservation Voters (322)
Citizens Coordinate for Century III (324A)
Mission Beach Precise Planning Committee (325)
Mission Beach Town Council (326)
Mission Hills Association (327)
Mission Valley Community Council (328C)
Friends of the Mission Valley Preserve (330)
Mission Valley Unified Planning Organization (331)
River Valley Preservation Project (334)
Friends of Adobe Falls (335)
Navajo Community Planners Inc. (336)
San Carlos Area Council (338)
Mission Trails Regional Park Citizens Advisory Committee (341)
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Carmel Valley Community Planning Board (350)
Carmel Valley Trail Riders Coalition (351)
Carmel Mountain Conservancy (354)
Arroyo Sorrento Homeowners Association (356)
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Burlingame Homeowners Association (364)
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Ocean Beach Town Council, Inc. (367A)
Old Town Community Planning Committee (368)
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Pacific Beach Community Planning Committee (375)
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Torrey Pines Association (379)
Rancho Penasquitos Planning Board (380)
Friends of Los Penasquitos Canyon Preserve, Inc. (382)
Rancho Penasquitos Town Council (383)
Los Penasquitos Canyon Preserve Citizens Advisory Committee (385)
Sunset Cliffs Natural Park Recreation Council (388)
Peninsula Community Planning Board (390)
Rancho Bernardo Community Council, Inc. (398)
Rancho Bernardo Community Planning Board (400)
Sabre Springs Planning Group (406B)
Sabre Springs Community Planning Group (407)
Carmel Mountain Conservancy (408)
The San Dieguito Lagoon Committee (409)
San Dieguito Planning Group (412)
San Dieguito River Park Citizens Advisory Committee Project Review Committee (415)
Friends of San Dieguito River Valley (419)
San Dieguito River Valley Conservancy (422)
San Dieguito River Park Joint Powers Authority (425A)
San Pasqual-Lake Hodges Planning Group (426)
San Ysidro Planning and Development Group (433)
United Border Community Town Council (434)
Beeler Canyon Conservancy (436)
Scripps Ranch Community Planning Group (437)
Miramar Ranch North Planning Committee (439)
Scripps Ranch Civic Association (440)
Skyline/Paradise Hills Planning Committee (443)
Sorrento Hills Community Planning Board (444A)
Southeastern Development Corporation (448)
Southeastern San Diego Development Committee (449)
Encanto Neighborhoods Community Planning Group (449A)
Central Imperial Redevelopment Project Area (452)
College Area Community Council (456)
Malcolm A. Love Library (457)
Tierrasanta Community Council (462)
Murphy Canyon Community Council (463)
Mission Trail Regional Park, Citizens Advisory Committee (465)
Torrey Pines Community Planning Group (469)
Torrey Pines Association (472)
Crest Canyon Citizens Advisory Committee (475)
University Community Planning Group (480)
University City Community Association (486)

University City Library (488)
University Heights Community Association (497)
Uptown Planners (498)
Hillside Protection Association (501)
Allen Canyon Committee (504)

Mr. Jimmy Ayala
C/O Pardee Homes
12626 High Bluff Drive, Suite 100
San Diego, CA 92130

Mr. Mike Singleton
3916 Normal Street
San Diego, CA 92103

Preparation of the joint SEIR/EA - CEQA/NEPA document will be reviewed by the City of San Diego serving as the Lead Agency under CEQA, and OES, FEMA serving as the Lead Agency under NEPA. A minimum 45-day public review period will be provided for the draft SEIR/EA.

Because there is a difference in the way the determination of "significance" is dealt with in CEQA versus NEPA, the SEIR/EA should be prepared generally in accordance with the City's "Environmental Impact Report Guidelines" (Revised September 2002), except that any discussion of the significance of impacts should be provided in a separate chapter entitled "CEQA Significance". The issues to be addressed are discussed below. A Notice of Preparation (NOP) will be distributed to Responsible Agencies and others who may have an interest in the project. Consequently, changes or additions to this scope of work may be required as a result of input received in response to the Notice of Preparation.

I. PROJECT DESCRIPTION

Discuss the goals, objectives, and major features of the project. Project objectives will be critical in determining the appropriate alternatives for the project which would reduce significant impacts. The SEIR/EA must also include a description of all permits and approvals required from federal, state, and other local agencies for which the SEIR/EA will be used. Please provide evidence of coordination with the State Coastal Zone Management agency or appropriate local agency. Describe all major project features associated with the project.

The SEIR/EA must include sufficient graphics and tables to provide a complete description of all major project features. Include descriptions of the increased width of Management Zone Two and how this proposed increase would impact surrounding open space, MHPA or private property. All plans should comply with the instructions for submittal requirements contained in the Applicant's Guide to Project/Permit Applications.

II. ENVIRONMENTAL SETTING

Describe the location of the project and present it on a regional map. Provide a regional description of the environmental setting of the project. Provide a recent aerial photo of the site and surrounding uses, and clearly delineate the urban interface with open space, MHPA, and private property.

III. ENVIRONMENTAL ISSUES

The potential for impacts must be thoroughly analyzed and mitigation measures to avoid or substantially lessen these impacts must be clearly identified and discussed. Address each of the issue statements identified below separately within each general environmental issue. Also, a separate section of the SEIR/EA should include a brief discussion as to why certain issues were not considered to be potentially significant. Identify a reasonable range of mitigation measures and/or alternatives, whether proposed or not, for each identified significant impact.

Significance determinations made in the SEIR/EA should reflect the fact that CEQA does not permit deferral of the establishment of mitigation measures and that an impact should be

considered significant if it cannot be demonstrated with certainty that it is not (i.e., if a significant impact "may" result).

A. Land Use

- Issue 1: Would the project result in a conflict with the purpose and intent of any current planning process or adopted environmental plans or policies in the City of San Diego, including lands within the California Coastal Commission jurisdiction?
- Issue 2: Would the proposed project result in a conflict with the purpose and intent of the Environmentally Sensitive Lands (ESL) regulations of the Land Development Code (LDC)?
- Issue 3: How is the project consistent with the region's Multiple Species Conservation Program (MSCP) and the City of San Diego Multi-Habitat Planning Area (MHPA) - MSCP Subarea Plan?

Identify potential conflicts with the purpose and intent of Environmentally Sensitive Lands (ESL) regulations of the Land Development Code (LDC), City of San Diego Multi-Habitat Planning Area, and the City of San Diego Multiple Species Conservation Program (MSCP). Please discuss how the project would conform to the guidelines of the LCP.

Upland biological resources would be directly impacted with the project implementation. Please provide an analysis which details how the project would conform to the ESL Ordinance. Any required approval of findings for alternative compliance should be fully addressed in this section. The analysis should describe existing environmental conditions and propose adequate techniques to minimize short and long range effects resulting from the implementation of the proposed brush management revisions. Discuss the project's conformance to City of San Diego Multi-Habitat Planning Area (MHPA) Land Use Adjacency Guidelines.

The land use section of the SEIR/EA should include any identified impacts and mitigation measures for potential impacts associated with the implementation of the proposed brush management revisions including environmentally sensitive lands.

Portions of the project are within the MHPA and would require conformance with the Land Use Adjacency Guidelines. Please discuss how the project would address the Land Use Adjacency Guidelines in regards to land use, drainage, toxic substances, lighting, noise, invasive plant species, and predator and pedestrian management. Please identify all mitigation measures proposed to address project implementation within the MHPA. Please identify all proposed project features to reduce potentially adverse short and long range effects. Please summarize and make references to the Biological Resources section of the SEIR/EA for a full discussion of mitigation measures for impacts to vegetation and wildlife communities.

B. Biological Resources

- Issue 1: Would the project reduce the number of any unique, rare, endangered, sensitive, fully protected species of plants or animals?
- Issue 2: Would the project interfere with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors?
- Issue 3: Would the project impact any sensitive habitat, including, but not limited to oak woodland, coastal sage scrub or chaparral?
- Issue 4: Would the proposal result in any conflict with the provisions of the City's Multiple Species Conservation Program Subarea Plan or other approved local, regional or state habitat conservation plan?

Upland resources and sensitive wildlife would be directly and indirectly affected by project implementation and potential weed invasion. Provide an updated biological technical report prepared by a qualified biologist in accordance with the City of San Diego's "Biology Guidelines". In addition, please discuss how the project would meet the requirements of the federal Endangered Species Act, and the Multi-Habitat Planning Area (MHPA) Land Use Adjacency Guidelines.

The SEIR/EA should describe the significance of the resources to be affected by the implementation of the proposed project. Address the potential for indirect impacts to any resources within, or adjacent to, subject properties within the City of San Diego.

Please discuss in the SEIR/EA alternative measures to minimize and avoid impacts to listed sensitive, threatened, and/or endangered species.

The mitigation section should propose measures to avoid any identified impacts or reduce them to below a level of significance. If any significant impacts are identified, provide mitigation ratios for the identified impacts in accordance with those specified in the Biology Review References.

The proposed project lies entirely within the limits of the City of San Diego. Please identify and discuss existing wildlife corridor movements and potentially adverse affects from the implementation of the proposed project.

Please discuss how the project would conform to the MHPA and operate in accordance with the MHPA Land Use Adjacency Guidelines. Please discuss the timing of brush thinning and measures to avoid thinning activities within the breeding season. Please identify the type of all construction equipment and materials to be utilized in performing brush management thinning. Please include an analysis of noise levels with a comparison of ambient levels to project construction and operating levels.

C. Hydrology/Water Quality

- Issue 1: Would the proposal result in an increase in pollutant discharges, including downstream sedimentation to receiving waters during or following construction?
- Issue 2: Would the proposal result in substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?
- Issue 3: Would the proposed project affect slope stability and on or off-site soil erosion?

The project has the potential to result in downstream sedimentation during brush management activities. Please provide the type and amount of pollutants anticipated to be generated from the implementation of the proposed project. Please discuss how the project would comply with the City of San Diego Standard Urban Stormwater Mitigation Plan (SUSMP). Please include any correspondence regarding formal or informal pre-consultation with the Regional Water Quality Control Board (RWQCB) and/or State Water Resources Control Board (SWRCB).

E. Neighborhood Character/Aesthetics

- Issue 1: Does the proposed project impact mature trees which could have a significant effect on neighborhood character/aesthetics?

The project proposes thinning areas which could include mature vegetation. Provide the affects this would have on shading, visual quality and neighborhood characteristics.

The City has determined that the following issues are not potentially significant and do not require analysis in the SEIR/EA: Agriculture Resources/Natural Resources/Mineral Resources, Air Quality, Energy, Historical Resources (Archaeology), Human Health/Public Safety, Noise, Paleontology, Population and Housing, Public Services, Transportation/Circulation, and Water Conservation.

However, if these or other potentially significant issue areas arise during detailed environmental investigation of the project or in the evaluation of project alternatives, then consultation with EAS is recommended to determine if these other issue areas that need to be addressed in the SEIR/EA. Additionally, as supplementary information is submitted the SEIR/EA may need to be expanded to include additional issue areas. Mitigation measures should be clearly identified and discussed and their effectiveness assessed in each issue section of the SEIR/EA. In addition, a monitoring and reporting program for each mitigation measure must be included. At a minimum, this program should identify: 1) the department responsible for the monitoring; 2) the monitoring and reporting schedule, 3) the completion requirements. The separate mitigation, monitoring and reporting program (MMRP) should also be contained (verbatim) in a separate section, which will be attached to the SEIR/EA. A separate section of the SEIR/EA should include a brief discussion of why certain areas were not considered to be potentially significant.

Page 9

Mr. Sam Oates

March 9, 2004

cc: Ann Hix - Park and Recreation Department
Keith Greer - Planning Department
Jeanne Krosch - MSCP, Planning Department
Holly Cheong - MSCP, Planning Department
Chad Kane - MSCP, Planning Department
Carol Wood - Park and Recreation Department
EAS Senior Planners
EAS File

Notice of Completion

Appendix F

See NOTE below

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

SCH # _____

Project Title: Brush Management Revisions to the Land Development Code and grant from OES, FEMA.
 Lead Agency: CITY OF SAN DIEGO Contact Person: LAUREA KRERS
 Street Address: 1272 FIRST AVE., MS 501 Phone: 619-446-5346
 City: SAN DIEGO CA Zip: 92101 County: SAN DIEGO

Project Location
 County: SAN DIEGO City/Nearest Community: ENTIRE CITY LIMITS
 Cross Streets: _____ Total Acres: _____
 Assessor's Parcel No. _____ Section: _____ Twp. _____ Range: _____ Base: _____
 Within 2 Miles: State Hwy #: _____ Waterways: _____
 Airports: _____ Railways: _____ Schools: _____

Document Type

CEQA: NOP Supplement/Subsequent EIR (Prior SCH No.) Other _____
 EIR (Prior SCH No.) Other _____
 Neg Dec Draft EIR

NEPA: NOI EA Draft EIS FONSI

Other: Joint Document Final Document Other _____

Local Action Type

General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, Parcel Map, Tract Map, etc.) Other Revisions to brush management within the LAND DEVELOPMENT CODE

Development Type

Residential: Units _____ Acres _____ Employees _____
 Office: Sq.ft. _____ Acres _____ Employees _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____
 Educational: _____
 Recreational: _____

Water Facilities: Type _____ MGD _____
 Transportation: Type _____
 Mining: Mineral _____
 Power: Type _____ Watts _____
 Waste Treatment: Type _____
 Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document

Aesthetic/Visual Flood Plain/Flooding Schools/Universities Water Quality
 Agricultural Land Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Air Quality Geologic/Seismic Sewer Capacity Wetland/Riparian
 Archeological/Historical Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Landuse
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Fiscal Recreation/Parks Vegetation Other _____

Present Land Use/Zoning/General Plan Use

Project Description
Increase the required brush management zone to 100 feet from structure for the entire area of the City of San Diego. Revisions will require changes to the current regulations within the San Diego Land Development Code.

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Revised October

Reviewing Agencies Checklist

KEY

- S = Document sent by lead agency
- X = Document sent by SCH
- ✓ = Suggested distribution

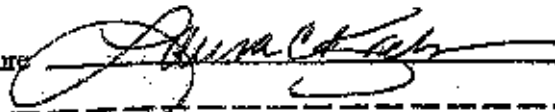
- Resources Agency
 - Boating & Waterways
- Coastal Commission
 - Coastal Conservancy
 - Colorado River Board
 - Conservation
- Fish & Game
 - Forestry
 - Office of Historic Preservation
- Parks & Recreation
 - Reclamation
 - S.F. Bay Conservation & Development Commission
 - Water Resources (DWR)
- Business, Transportation & Housing
 - Aeronautics
 - California Highway Patrol
 - CALTRANS District # _____
 - Department of Transportation Planning (headquarters)
 - Housing & Community Development
- Food & Agriculture
- Health & Welfare
 - Health Services _____
- State & Consumer Services
 - General Services
 - OLA (Schools)

- Environmental Affairs
 - Air Resources Board
 - APCD/AQMD
 - California Waste Management Board
 - SWRCB: Clean Water Grants
 - SWRCB: Delta Unit
 - SWRCB: Water Quality
 - SWRCB: Water Rights
 - Regional WQCB # _____ (_____)
- Youth & Adult Corrections
 - Corrections
- Independent Commissions & Offices
 - Energy Commission
 - Native American Heritage Commission
 - Public Utilities Commission
 - Santa Monica Mountains Conservancy
 - State Lands Commission
 - Tahoe Regional Planning Agency
 - Other _____

Public Review Period (to be filled in by lead agency)

Starting Date March 9, 2004

Ending Date April 8, 2004

Signature 

Date 03/08/04

Lead Agency (Complete if applicable):

Consulting Firm: _____

Address: _____

City/State/Zip: _____

Contact: _____

Phone: (____) _____

For SCH Use Only:

Date Received at SCH _____

Date Review Starts _____

Date to Agencies _____

Date to SCH _____

Clearance Date _____

Applicant: CITY OF SAN DIEGO FIRE-RESCUE DEPT.

Address: 1010 2nd Avenue, Suite 300, MS 603

City/State/Zip: San Diego, CA 92101

Phone: (619) 533-4400

Notes:



Arnold
Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Jan Boal
Acting Deputy
Director

Notice of Preparation

March 9, 2004

To: Reviewing Agencies

Re: Brush Management Revisions to the Land Development Code and Grant from OES, FEMA
SCH# 2004031041

Attached for your review and comment is the Notice of Preparation (NOP) for the Brush Management Revisions to the Land Development Code and Grant from OES, FEMA draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Laura Krebs
City of San Diego
1222 First Avenue, MS-501
San Diego, CA 92101

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

for 
Scott Morgan
Senior Planner, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2004031041
Project Title Brush Management Revisions to the Land Development Code and Grant from OES, FEMA
Lead Agency San Diego, City of

Type NOP Notice of Preparation
Description Increase the required brush management zone to 100 feet from structure for the entire area of the City of San Diego. Revisions will require changes to the current regulations within the San Diego land development code.

Lead Agency Contact

Name Laura Krebs
Agency City of San Diego
Phone 619 446-5346 **Fax**
email
Address 1222 First Avenue, MS-501
City San Diego **State** CA **Zip** 92101

Project Location

County San Diego
City
Region

Cross Streets

Parcel No.

Township

Range

Section

Base

Proximity to:

Highways

Airports

Railways

Waterways

Schools

Land Use

Project Issues Aesthetic/Visual; Vegetation; Water Quality; Landuse

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Forestry and Fire Protection; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Office of Emergency Services; Native American Heritage Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 11; Regional Water Quality Control Board, Region 9

Data Received 03/09/2004 **Start of Review** 03/09/2004 **End of Review** 04/07/2004

Resources Agency

Rosario Agency
Nedra Gayou

Dept. of Boating & Waterways
Suzi Becker

California Coastal
Commission
Elizabeth A. Fuchs

Colorado River Board
Garold R. Zimmerman

Dept. of Conservation
Roseanne Taylor

California Energy
Commission
Environmental Offices

Dept. of Forestry & Fire
Protection
Allen Robertson

Office of Historic
Preservation
Hans Krautberg

Dept. of Parks & Recreation
B. Joseph Tighman
Environmental Stewardship
Section
Leif Bulford

Sanita Monica Mountains
Conservancy
Paul Eckman

S.F. Bay Conservation &
Dev't. Comm.
Steve Mickelson

Dept. of Water Resources
Resources Agency
Maddal Geyou

Dept. of Fish & Game 3
Robert Fiesche
Region 3

Dept. of Fish & Game 4
William Laudemilk
Region 4

Dept. of Fish & Game 5
Don Chazwick
Region 5, Habitat Conservation
Program

Dept. of Fish & Game 6
Gabina Gatchel
Region 6, Habitat Conservation
Program

Dept. of Fish & Game 6 IRI
Terry Allen
Region 6, Inyo/Mono, Habitat
Conservation Program

Dept. of Fish & Game M
George Isaac
Marina Region

Dept. of Fish & Game 1
Dorndt Koch
Region 1

Dept. of Fish & Game 2
Stanley Curtis
Region 2

Dept. of Fish & Game 3
Robert Fiesche
Region 3

Dept. of Fish & Game 4
William Laudemilk
Region 4

Dept. of Fish & Game 5
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George Isaac
Marina Region

Dept. of Fish & Game 1
Dorndt Koch
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Stanley Curtis
Region 2

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Ken Lewis

State Lands Commission
Jean Searfo

Tahoe Regional Planning
Agency (TRPA)
Cherry Jacques

Business, Trade & Housing
California - Division of
Aeronautics
Sandy Hessard

California - Planning
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California Highway Patrol
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Office of Special Projects

Housing & Community
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Cathy Creweel
Housing Policy Division

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Dept. of Transportation 2
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District 2

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Dept. of Toxic Substances Control
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Debbie Treadway

Delta Protection Commission
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Office of Emergency Services
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Governor's Office of Planning
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CITY OF SAN DIEGO

DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL ANALYSIS SECTION (EAS)
PUBLIC SCOPING MEETING

This meeting is held pursuant to the *California Public Resources Code Section 21083.9 et seq.*, and is provided to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of the proposed project. This information will be used to develop the scope and content of the proposed environmental document for the project action to be described at this meeting. Please record your comments in the space provided below and submit this form to City staff at the conclusion of the meeting. Thank You.

Project Brush Management Ordinance Date 3/20/04

Comments

Please review the possible impacts associated with increased erosion, tree removals, invasive species and introduction of flash fuels resulting from the thinning and probable lack of maintenance and improper thinning techniques that will likely occur. Also 2 alternatives should be discussed 1) Allow for or require replacement of flammable native vegetation with low-flammable and sustainable vegetation that does not have to be thinned and 2) allow for use of supplemental watering (drip or overhead spray) with non-native low flammable vegetation to increase safety.

Name Mike Singleton Signature [Signature]
Address 3916 Normal Street SD 92103
619-294-4477

Use back of sheet if additional space is necessary.

March 19, 2004

Comments on NOP of EIR for Brush Management Revisions to Land Development Code

- Any proposed clearing, planting, or irrigation in Zone 2 would need to be consistent with the City of San Diego MSCP implementing agreement. Zone 2 is considered "impact neutral" under the current plan. Changes in codes or management that cause habitat changes to Zone 2 may require mitigation.
- The California State Code allows exemptions from brush management for structures that are fire-proof, and for land that has been set aside for its natural beauty or habitat conservation. We ask that the Code acknowledge that.
- At least as important as brush management, if not more so, is reducing the flammability of structures. The Code must include improvements in reducing structure flammability. We suggest that the City investigate ways, such as grants, to help property owners retrofit their houses. Brush management is an annual expense; retrofitting homes is a one-time expense.
- When the fire department tells people that they must thin vegetation in Zone 2, many people interpret this as permission to clear all vegetation from the area. Excessive clearing leads to excessive erosion and invasion by weeds, many of which dry into kindling during the summer and fall. We request that a hotline be set up whereby citizens may obtain information about proper management techniques, and improper techniques may be reported.
- We request that City crews and contractors involved in brush management be properly trained to recognize native and non-native plants, and that non-native plants be prioritized for removal when thinning is needed.
- Use of non-vegetative combustible materials in Zone 1 is often overlooked, although things such as wood fences can create a fire ladder to a house. This should be prioritized before requiring changes to vegetation.
- We ask that the Code forbid the use of invasive plants as a "solution". The use of Freeway Iceplant in back yards over the years is leading loss of acres of habitat around the city, as it spreads downhill far from the original site. It would be optimal if the City would develop a guide to property owners concerning appropriate plants and management techniques. CNPS would be glad to offer support in developing this.

Carrie Schneider
California Native Plant Society
San Diego Chapter
info@cnpsd.org
858-352-4413

4421 32ND ST
SAN DIEGO CA 92104

April 10, 2004

Chris Zirkle, Assistant Deputy Director
Development Services Department
Land Development Review Division
1222 First Avenue, Mail Station 501
San Diego CA 92101



RE: Project no. 31245 Brush Management revisions to the Land
Development Code and Federal Grant from OES and FEMA

Dear Ms. Zirkle:

I appreciate the opportunity to comment on this proposal. We agree that the accumulated fuel load in open space areas needs to be reduced. There are considerations to be made in the process, however.

Tecolote Canyon Natural Park was included in a fuel load reduction project some years ago after the devastating fire on the south slopes and finger canyons of Mission Valley. At that time, the native plants were cut back to about two feet from the ground. Plants were not uprooted. It is important, again, to keep plants and shrubs in place to prevent soil erosion.

Weed control would be an issue within Tecolote Canyon where soil around native plants is disturbed. Opportunistic weeds take advantage of disturbed areas and crowd out native species.

Please take into consideration nesting territories of birds, especially endangered species. Friends of Tecolote Canyon undertook a two-acre restoration project in 1981 that was a nesting site for the least Bell's vireo. The site is located adjacent to the San Diego Gas and Electric station, south of the golf course. This site is one we still monitor, and it has been used for nesting again.

Sincerely,

A handwritten signature in cursive script that reads "Sherlie Miller". The signature is written in dark ink and is positioned above the printed name and title.

Sherlie Miller
President



San Diego County Archaeological Society, Inc.

Environmental Review Committee

14 March 2004

To: Ms. Laura Krebs, Associate Planner
Development Services Department
City of San Diego
1222 First Avenue, Mail Station 501
San Diego, California 92101

Subject: Notice of Preparation of a Draft Joint Environmental Impact
Report/Environmental Assessment
Brush Management Revisions to the Land Development Code and Federal Grant
from the Office of Emergency Services (OES), Federal Emergency Management
Agency (FEMA)
Project No. 31245

Dear Ms. Krebs:

Thank you for the Notice of Preparation for the subject project, received by this Society earlier this month.

We note that historical resources are not included in the areas of significant impacts from this project. We do not agree with that assessment. While certainly not questioning the need to address the brush clearance zone, there is potential for both direct and indirect impacts to historical resources caused by brush clearance.

Direct impacts could occur particularly where the clearing is done mechanically, by operation of vehicles and equipment over sites. It could also occur outside the brush clearance zone in the access routes taken by such vehicles and equipment. Indirect impacts could result from exposure of sites in the cleared zones and subsequent illegal collecting of cultural material.

We also note that, with the proposed policy in place, any future project would have to include evaluation of the potential for impacts to historical resources in the zone where brush clearance would be required to occur.

Finally, involvement of federal funding in this project will require curation of all resulting archaeological collections in accordance with 36 CFR 79.

With the addition of historical resources to the list of subject areas to be addressed in the DEIR, we look forward to reviewing it during the upcoming public comment period. To that end, please include us in the distribution of the DEIR, and also provide us with a copy of the cultural resources technical report(s).

SDCAS appreciates being included in the City's environmental review process for this project.

Sincerely,


James W. Royle, Jr., Chairperson
Environmental Review Committee

cc: SDCAS President
File



San Dieguito River Valley
Regional Open Space Park
18372 Sycamore Creek Road
Escondido, CA 92025
(858) 674-2270 Fax (858) 674-2280
www.sdrp.org

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22nd District Agricultural Assoc.

Dick Roberts
Executive Director

April 7, 2004

Chris Zirkle
Assistant Deputy Director
City of San Diego
Development Services Dept.
1222 First Avenue, MS 501
San Diego, CA 92101

**Subject: Comments on NOP for Draft SEIR/EA
Brush Management Revisions to the Land Development Code**

Dear Mr. Zirkle:

The San Dieguito River Park JPA staff has reviewed the NOP for the City's proposed brush management revisions to the LDC. The JPA is interested in this subject because a significant part of the San Dieguito River Park Focused Planning Area (FPA) consists of natural open space areas that are part of the City's MSCP, particularly the San Pasqual Valley. This area contains sensitive coastal sage scrub and chaparral habitat along the interface with suburban development. This habitat is vulnerable to edge effects associated with urban development including fire risk.

In addition to the issues identified in the scoping letter for the draft SEIR/EA, we request that the SEIR/EA also address the following:

- The SEIR/EA should thoroughly document the purpose and need for the brush management revisions. Reports have been made that no degree of brush management would have reduced the damage done by the Cedar Fire that tore through the San Diego region in 2003 due to its ferocity and other factors. Also, the City does not monitor or enforce its current brush management regulations and if more attention were made to managing the urban fire interface then the fire risk would be less. Please document how the proposed revisions will serve to reduce fire risk.
- The LDC should state that for new development the brush management zones shall not encroach into MSCP land. Therefore, the new zones should be included in the "developable" portion of a new development proposal, not the open space preserve. Along with evaluating the consistency of the proposed revisions with the MHPA Land Use Adjacency Guidelines, the SEIR/EA should evaluate how the city would enforce compliance with MSCP so that application of the brush management regulations respect the adopted MSCP.

We appreciate the opportunity to provide input into the SEIR/EA and look forward to receiving a copy during the public review period. Thank you.

Sincerely,

Shawna C. Anderson
Environmental Planner

DEPARTMENT OF FISH AND GAME

South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(858) 467-4201
FAX (858) 467-4235



April 8, 2004

Laura Krebs, Associate Planner
City of San Diego
Development Services Center
Land Development Review Division
1222 First Avenue, MS 501
San Diego, CA 92101

Comments on the Notice of Preparation of a Draft Joint Subsequent Environmental Impact Report/Environmental Assessment for Brush Management Revisions to the Land Development Code and Federal Grant from the Office of Emergency Services, Federal Emergency Management Agency (SCH# 2004031041)

Dear Ms. Krebs:

The California Department of Fish and Game (Department) has reviewed the notice of preparation (NOP) of a draft Joint Subsequent Environmental Impact Report/Environmental Assessment (draft EIR/EA) for brush management revisions to the Land Development Code and federal grant from the Federal Emergency Management Agency. We have also reviewed the January 21, 2004, City Manager's Report regarding the proposed revisions, and the March 9, 2004, letter from the City of San Diego's (City) Development Service's Department to the City's Fire-Rescue Department regarding the scope of work for the draft EIR/EA (City's letter). We and the U.S. Fish and Wildlife Service (Service) also attended a meeting with Ms. Ann Hix and Mr. Keith Greer of the City on January 9, 2004, about the proposed brush management revisions. On April 7, 2004, the City granted the Department a one-day extension on the comment period (pers. comm., Laura Krebs) for this NOP. We appreciate the extension. Because the project could affect a significant amount of the City's conserved habitat at the urban wildland interface, our comments are more detailed than usual on an NOP.

The proposed brush management revisions arise in response to the fires in the City and the County of San Diego in October of 2003. Currently Brush Management Zone I is the area adjacent to structures and consists of pavement and permanently irrigated ornamental plantings. Brush Management Zone II is an area of native plant material thinned to reduce fuel load. The width of Zone I varies from 20 to 40 feet west of Interstate 805 and El Camino Real, and 30 to 45 feet east of this intersection. Zone II varies from 20 to 30 feet west of the intersection, and 40 to 50 feet east of it. Put another way, the Zones I and II combined range from 40 to 70 feet west of Interstate 805 and El Camino Real, and 70 to 95 feet east of the intersection. The proposed revisions would entail establishing a city-wide 100-foot wide brush management area consisting of

35 feet in Zone I and 65 feet in Zone II. In addition, Zone II would be expanded accordingly to achieve 100 feet of brush management where Zone I occupies less than 35 feet from existing structures. The purpose of the standard 100-foot brush management zone would be to allow for a greater defensible space against impending fire.

The City's Park and Recreation Department manages approximately 22,600 acres of open space. This open space includes 220 linear miles of urban wildland interface, and the City is responsible for brush management within Zone II. Preliminary calculations indicate that an assumed Zone II width of 65 feet would occupy approximately 1,750 acres. The City hopes to thin the entire area within Zone II on an average of every two years. Much of the City's open space is within the Multiple Habitat Preservation Area (MHPA) of the City's Multiple Species Conservation Program (MSCP) Subarea Plan.

The draft EIR/EA would tier off of the EIR that was prepared for the City's *Land Development Code*. Final adoption of the proposed revisions would require approval by the California Coastal Commission for modifications of the City's Local Coastal Plan necessitated by the revisions. We offer the following comments to assist the City in minimizing and mitigating project impacts to biological resources, a particularly impacts on the MHPA.

1. We generally agree with the scope of work in the City's letter. We emphasize that the draft EIR/EA must ensure and verify that all requirements and conditions of the Subarea Plan and associated Implementing Agreement would be met if the proposed brush management revisions were approved and implemented. The draft EIR/EA should also address biological issues that are not addressed in the Subarea Plan and Implementing Agreement, such as specific impacts to and mitigation requirements for wetlands or sensitive species and habitats that are not covered by the Subarea Plan and Implementing Agreement.
2. Issue areas in the draft EIR/EA that may be influenced by the Subarea Plan and Implementing Agreement include "Land Use," "Landform Alteration/Visual Quality," "Biological Resources," "Drainage/Urban Runoff/Water Quality," and "Cumulative Effects."
3. The draft EIR/EA should discuss whether the proposed brush management revisions are consistent with the Memorandum of Understanding, dated February 26, 1997, among the Department, the Service, and the San Diego County Fire Chief's Association.
4. The draft EIR/EA should discuss the potential impacts from, and propose mitigation for, the construction of access roads, if any, that might be necessary to reach the expanded areas of Zone II.
5. The City Manager's Report alludes to revisions to the building code to promote fire resistant construction (e.g., Class "A" roofs, boxed eaves) of buildings adjacent to areas of high risk for wildfires. One of the alternatives the City's letter identifies for the draft EIR/EA to consider in a detailed alternatives analysis is an "alternative where revisions to the building code would provide the level of protection equal to that provided by this project." We support that approach to reduce the potential impact on the MHPA, and recommend that, structural and material

alternatives be the first line of defense against fire, rather than brush management. That is, structural designs and materials that reduce the need for brush management, particularly within the MHPA, should be employed first and then brush management requirements determined. For new construction, structural and material alternatives should be required, and not considered optional. As to existing structures, the building code should be revised to require that certain features of structures at the urban wildland interface be upgraded to meet the revised building codes (e.g., flammable siding or roofing on houses upgraded to less flammable or inflammable materials). These revisions to the building code would reduce the City's brush management operational costs in Zone II. The draft EIR/EA should thoroughly address the issue of concurrent and commensurate levels of effort to revise the City's brush management regulations and building code to achieve protection from fire at the urban wildland interface.

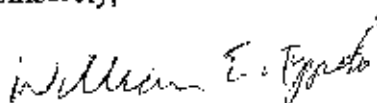
6. The draft EIR/EA should discuss the loss of habitat within the MHPA from the implementation of the revised brush management regulations. This discussion should (a) thoroughly address the assumptions that were made regarding the protection of MSCP-covered species, (b) include full consideration of a reduction of impacts from brush management afforded by revisions to the building code, and (c) describe how the City would compensate for the loss of sensitive habitats within the MHPA, the net loss of acreage within the MHPA, and the potential impacts on MSCP covered-species.
7. Another alternative the City's letter identifies for the draft EIR/EA to consider is an "alternative that addresses weed control once the brush is thinned within Brush Management Zone 2." Weed control in areas where brush management has occurred should not be considered an alternative, particularly within or adjacent to the MHPA. As the City's letter notes, potential weed invasion would affect habitats and sensitive wildlife where brush management occurs. We recommend that weed control be automatically required as part of the brush management activities.
8. A third alternative the City's letter identifies for the draft EIR/EA to consider is an "controlled burn - analyze the effectiveness of controlled burn to thin brush outside of brush management zone 2." It appears from this that draft EIR/EA would not consider controlled burns within Zone II. The draft EIR/EA should explain why. The discussion should include examples of controlled burns that have worked well and others that have not and thoroughly explain why they succeeded or failed. The discussion should also address the recovery of the habitat after controlled burns.
9. The documents we reviewed do not seem to contemplate situations in which all or a portion of Zones I and/or Zone II are within wetlands or riparian habitats. These habitats present less of a fire hazard than do upland communities. The draft EIR/EA should discuss whether brush management requirements in these habitats would differ from the requirements for upland habitats, and if so, how.
10. The draft EIR/EA should address any planned use of hydroseeding to stabilize soils exposed by brush management activities, and should prohibit the use of hydroseeding preparations that include invasive species.

Ms. Laura Krebs
April 8, 2004

4

The Department appreciates the opportunity to comment on this NOP. The Department finds that the implementation of the revised brush management regulations would not be de minimis in its effects on fish and wildlife per section 711.4 of the California Fish and Game Code. Please contact Libby Lucas at (858) 467-4230 if you have any questions or comments concerning this letter.

Sincerely,



William E. Tippetts
Deputy Regional Manager

cc: City of San Diego (Keith Greer, Ann Hix)
State Clearinghouse
U.S. Fish and Wildlife Service (Susan Wynn)

APPENDIX B
BIOLOGICAL RESOURCES REPORT

**City of San Diego
Brush Management Evaluation
Biological Technical Report**

March 2004

**Holly Cheong
Environmental Biologist
City of San Diego Multiple Species Conservation Program**

Introduction

Brush Management Zones were established in the City of San Diego Land Development Code to protect habitable structures from potential fire dangers and provide thinning of native vegetation to reduce the amount of fuel for a potential fire and allow for access to vegetation for fire personnel. Each year San Diego Fire-Rescue responds to over 800 vegetation fires. During certain times of the year, native vegetation can pose a wildfire risk and requires proper management of the urban wildland interface. The City has a total of approximately 22,600 acres of open space managed by Park and Recreation Department which creates approximately 220 linear miles of urban wildland interface. Over 16,000 acres of City open space presents a moderate to severe fire threat to communities through out the City, not including the thousands of privately owned interface properties.

The current brush management regulations in the Land Development Code (LDC) were developed in conjunction with the Multiple Species Conservation Program (MSCP). The regulations were approved by City Council in November 1997 and by the California Coastal Commission in November of 1999. They were made effective with the entire Land Development Code on January 3, 2000.

The primary focus of the 1997 changes was to simplify regulations, to improve predictability, to make them more enforceable, and to coordinate brush management requirements with the City's goal to preserve environmentally sensitive habitat. Changes to the regulations included replacement of the complex three zone system of brush management of varying widths (50' to 110') based upon classifications of fire severity with a two zone system based upon the location of the property's location west or east of Interstate 805 and El Camino Real. The dividing line of Interstate 805 and El Camino Real was selected based upon analysis of historical fire data in and outside areas of climatic coastal influence. Analysis of the Cedar Fire indicates that if the Santa Ana winds had continued, it is likely that the fire could have burned all the way to the ocean. The climatic coastal influence would not have been a factor in this event. This has prompted the Fire-Rescue Department to re-evaluate the current distinction and propose a single citywide brush management system.

In light of the size and severity of the Cedar fire, and other wildfires in October of 2003, the Fire Chief is recommending a City wide 100 foot brush management area consisting of 35 feet of Zone One and 65 feet of Zone Two. In addition, it is proposed that Zone Two would be expanded accordingly to achieve 100 feet of brush management where Zone One is less than 35 feet from existing structures. A standard 100 foot brush management zone would allow for a greater defensible space against impending fire.

The project would involve increasing the width of the current Brush Management Zones. The project is located within the limits of City of San Diego, and includes the City of San Diego Multi-Habitat Planning Area (MHPA) of the Multiple Species Conservation Program (MSCP), City of San Diego Open Space Lands, private property, and lands within the California Coastal Commission jurisdiction.

An increase in the width of current Brush Management Zone 2 may result in an additional impact to biological resources not previously analyzed with the adoption of the current brush management regulations. The purpose of this brush management evaluation and biological technical report is to evaluate the current impacts associated with Brush Management Zone 2. Specific impacts analyzed include exotic plant invasion and soil erosion. By evaluating the current impacts associated with brush management, impacts associated with an increase in Zone 2 can then be extrapolated.

Methodology

This evaluation included brush management conducted by the City of San Diego, homeowner's associations, and private property owners. A total of 25 brush management areas were evaluated as part of this project. Of all the brush management areas evaluated, 13 were thinned by the City of San Diego Park and Recreation Department, 11 were thinned by private landowners, and 1 brush management area was thinned by a homeowner's association.

For purpose of comparison, adjacent areas that were not brush managed were also evaluated, if available. These areas are referred to as controls. However, it was difficult to find comparable control areas. Most brush management is conducted in a comprehensive manner so it was difficult to find comparable areas that had not been brush managed. Only two control areas have been evaluated as part of this effort.

A variety of brush management areas throughout the City were selected. Park and Recreation staff, David Monroe and Josh Woods, selected 13 areas where brush management was conducted by Park and Recreation staff. Areas selected by Park and Recreation varied in size and date of brush management conducted. For example, some of the brush management areas had been thinned as recently as February 2004 whereas others selected have not been thinned for over 5 years. This variety in brush management areas helps provide information on both the long term effects of brush management as well as the immediate impacts.

Planning Department staff, Khalil Martinez, selected an additional 12 areas where brush management was conducted by either the homeowner or the homeowner's association. Since there was no information available on the date of brush management for these sites, Mr. Martinez selected 4 brush management areas within 3 different canyons: Peñasquitos Canyon, San Clemente Canyon, and Tecolote Canyon. Areas were selected throughout the canyons to give a good evaluation of the different kinds of private brush management conducted.

Each site was visited during the daylight hours by Holly Cheong, Environmental Biologist for the MSCP. Sites were each visited once on either March 1, 2004, March 4, 2004, or March 9, 2004. The surrounding vegetation communities were surveyed to determine habitat type. Habitat type was considered disturbed if 50% or more of species cover within the habitat were exotic plant species. Undisturbed native habitat contained

less than 50% exotic cover. Native habitats observed included coastal sage scrub, mixed chaparral, chamise chaparral and oak woodland. Areas were considered ornamental if over 90% cover was attributed to exotic plant species. Eucalyptus woodland, which could also be considered an ornamental area, is identified specifically where observed. The percent cover of exotic and native species were estimated within each brush management area. Any dominant exotic and native species were noted. Plant regrowth within the brush management areas was evaluated and the height of vegetation within the brush management areas was estimated. Slope gradient and aspect were noted as well as any on-site irrigation. Soil type was also determined by visual observation. If it could be determined, it was noted whether the brush management area was on a manufactured or natural slope. Soil erosion was noted if present and the source and extent of erosion was noted if present. If wetlands were within the brush management area, this was also noted. Finally, digital photographs were taken of each brush management area, the surrounding habitat and any erosion.

The date that brush management was first performed and the last date brush managed was performed was noted for each site if that information was available. The size of the brush management area was also noted. For Park and Recreation sites, this was based on the information provided by them for each site. For homeowner and homeowner's association sites, the size of the brush management area was estimated from the SANGIS parcel layer assuming that the brush management area would correspond to the area outside of the development area on the site. The date that brush management was conducted was not available for homeowner and homeowner's association brush management sites.

It should be noted that the evaluation of 25 slopes cannot yield a scientifically significant result on the impacts associated with Zone 2 brush management. Due to the time constraints associated with the project, additional brush management areas could not be evaluated. Given the wide variety of brush management conducted throughout the City of San Diego, it would be difficult to yield a scientifically significant result. Although the information from this report should be treated as purely anecdotal, evaluation of these 25 slopes can help the City of San Diego determine the general impacts associated with brush management.

Results

Exotic species cover within brush management areas varied from 0-100%. Native species cover also varied from 0-100%. Table 1 lists the exotic species observed within brush management areas. Table 2 lists the native species observed within brush management areas.

Table 1: Exotic Plant Species Within Brush Management Areas

ID #	% Exotics	Surrounding Habitat	Dominant Exotics	City/Owner/HOA
1	50-75%	Eucalyptus woodland	<i>Eucalyptus</i> sp., <i>Carpobrotus</i> sp.	City
2	50-75%	Coastal sage scrub	<i>Centaurea melitensis</i> , <i>Salsola tragus</i>	City
3	11-25%	Mixed chaparral	<i>Eucalyptus</i> sp., <i>Carpobrotus</i> sp., <i>Salsola tragus</i>	City
4	11-25%	Coastal sage scrub /mixed chaparral	<i>Brassica nigra</i> , <i>Centaurea melitensis</i> , <i>Eucalyptus</i> sp.	City
5	50-75%	Eucalyptus woodland	<i>Eucalyptus</i> sp., <i>Carpobrotus</i> sp.	City
6	11-25%	Eucalyptus woodland	<i>Eucalyptus</i> sp., <i>Hypochoeris glabra</i>	City
7	1-10%	Eucalyptus woodland	<i>Schinus molle</i>	City
8	1-10%	Coastal sage scrub	<i>Phoenix canariensis</i> , <i>Cortaderia</i> sp., <i>Carpobrotus</i> sp.	City
9	11-25%	Eucalyptus woodland	<i>Eucalyptus</i> sp.	City
10	26-50%	Coastal sage scrub	<i>Eucalyptus</i> sp., <i>Pennisetum setaceum</i>	City
11	1-10%	Coastal sage scrub, ornamental	<i>Eucalyptus</i> sp.	City
12	1-10%	Ornamental	<i>Gazania linearis</i>	City
13	1-10%	Chamise chaparral	<i>Brassica nigra</i>	City
14	1-10%	Mixed chaparral	<i>Nicotiana glauca</i> , <i>Eucalyptus</i> sp.	Owner
15	11-25%	Mixed chaparral	<i>Pinus</i> sp., <i>Malva</i> sp., <i>Rosa</i> sp.	Owner
16	1-10%	Chamise chaparral	<i>Phoenix canariensis</i> , <i>Carpobrotus</i> sp.	Owner
17	1-10%	Chamise chaparral	<i>Avena</i> sp.	HOA
18	0%	Disturbed coastal sage scrub	n/a	Owner
19	75-100%	Coastal sage scrub	<i>Carpobrotus</i> sp.	Owner
20	75-100%	Disturbed coastal sage scrub	<i>Carpobrotus</i> sp.	Owner
21	11-25%	Coastal sage scrub	<i>Carpobrotus</i> sp.	Owner
22	75-100%	Disturbed oak woodland	<i>Carpobrotus</i> sp., <i>Ricinus communis</i>	Owner
23	75-100%	Ornamental	<i>Carpobrotus</i> sp.	Owner
24	1-10%	Oak woodland, coastal sage scrub	<i>Carpobrotus</i> sp.	Owner
25	75-100%	Mixed chaparral	<i>Carpobrotus</i> sp.	Owner

Table 2: Native Plant Species Within Brush Management Areas

ID #	% Natives	Surrounding Habitat	Dominant Natives	City/Owner/HOA
1	1-10%	Eucalyptus woodland	<i>Eriogonum fasciculatum</i>	City
2	1-10%	Coastal sage scrub	<i>Opuntia prolifera</i> , <i>Rhus integrifolia</i>	City
3	0%	Mixed chaparral	n/a	City
4	11-25%	Coastal sage scrub /mixed chaparral	<i>Salvia apiana</i> , <i>Opuntia littoralis</i> , <i>Eriogonum fasciculatum</i> , <i>Ferocactus viridescens</i>	City
5	1-10%	Eucalyptus woodland	<i>Rhus integrifolia</i>	City
6	0%	Eucalyptus woodland	n/a	City
7	0%	Eucalyptus woodland	n/a	City
8	75-100%	Coastal sage scrub	<i>Eriogonum fasciculatum</i> , <i>Baccharis sarothroides</i>	City
9	1-10%	Eucalyptus woodland	<i>Opuntia littoralis</i>	City
10	1-10%	Coastal sage scrub	<i>Baccharis sarothroides</i>	City
11	1-10%	Coastal sage scrub, ornamental	<i>Baccharis sarothroides</i> , <i>Salvia apiana</i>	City
12	11-25%	Ornamental	<i>Adenostoma fasciculatum</i> , <i>Eriogonum fasciculatum</i>	City
13	11-25%	Chamise chaparral	<i>Adenostoma fasciculatum</i> , <i>Eriogonum fasciculatum</i>	City
14	26-50%	Mixed chaparral	<i>Encelia californica</i> , <i>Rhus integrifolia</i> , <i>Adenostoma fasciculatum</i>	Owner
15	1-10%	Mixed chaparral	<i>Baccharis sarothroides</i> , <i>Viguiera californica</i>	Owner
16	11-25%	Chamise chaparral	<i>Malosma laurina</i> , <i>Ceanothus verrucosus</i>	Owner
17	11-25%	Chamise chaparral	<i>Baccharis sarothroides</i> , <i>Adenostoma fasciculatum</i>	HOA
18	11-25%	Disturbed coastal sage scrub	<i>Opuntia littoralis</i>	Owner
19	1-10%	Coastal sage scrub	<i>Artemisia californica</i>	Owner
20	1-10%	Disturbed coastal sage scrub	<i>Eriogonum fasciculatum</i>	Owner
21	11-25%	Coastal sage scrub	<i>Rhus integrifolia</i>	Owner
22	0%	Disturbed oak woodland	n/a	Owner
23	0%	Ornamental	n/a	Owner
24	50-75%	Oak woodland, coastal sage scrub	<i>Malosma laurina</i> , <i>Quercus dumosa</i>	Owner
25	0%	Mixed chaparral	n/a	Owner

96% of the slopes evaluated contained some sort of exotic plant invasion within the brush management area. This exotics invasion could not always be attributed to a high percentage of exotics in the adjacent habitat. Five brush management areas (20%) were estimated to have 75-100% cover of exotic plant species. Of those areas, one brush management area abutted non-native ornamental areas, two were adjacent to disturbed native habitats, and two were adjacent to undisturbed native habitats. Three brush management areas (12%) were estimated to have 50-75% cover of exotic plant species.

Of those areas, two were adjacent to eucalyptus woodland and one was adjacent to undisturbed native habitat. One brush management area (4%) was estimated to have 26-50% cover of exotic plant species. This area was adjacent to undisturbed native habitat. Six brush management areas (24%) were estimated to have 11-25% cover of exotic plant species. Of those areas, four of them were adjacent to undisturbed native habitat and 2 were adjacent to eucalyptus woodland. Eight brush management areas (32%) were estimated to have 1-10% cover of exotic plant species. Of those areas, five of them are adjacent to undisturbed native habitat, one area was adjacent to an area split between undisturbed native habitat and ornamental, and two are adjacent to eucalyptus woodland/ornamental. Only one brush management area (4%) did not contain exotic plant species. That area is located adjacent to disturbed native habitat.

Native species were observed within 76% of the brush management areas evaluated. 90% of the brush management areas with native species have 50% or less cover from native species.

For the brush management areas where controls were available (8, 11 and 12), less exotic species were observed within the control areas than the brush management areas. Please note brush management areas 11 and 12 were assigned the same control. Photos of each brush management area, the control areas, and the surrounding habitat are on file in the offices of Land Development Review.

Only two brush management areas had erosion within the site. Both sites with erosion were brush managed by homeowners. The source of the erosion could not be determined in either case. Brush management area 13 had minor erosion on-site. The slope was manufactured and the soil appeared to be sandy. No irrigation was observed on-site. Brush management area 24 had moderate erosion on-site. The slope was also manufactured and the soil appeared to be sandy. No irrigation was observed on-site. Photos are on file in the offices of Land Development review. All data collected is given in the table at the end of this report.

Conclusion

As noted in the introduction to this report, the number of brush management areas evaluated cannot yield a scientific result. Therefore, all conclusions are anecdotal in nature.

Invasion of exotic plant species into brush management areas appears to be the biggest impact associated with biological resources and performing brush management. As stated above, 96% of the twenty-five slopes evaluated contained some level of exotic plant invasion. Exotic invasion could not be directly attributed to the quality of the adjacent habitat. 13 of the 24 brush management areas (54%) with exotic plant invasion were adjacent to undisturbed native habitat. Exotic plant invasion may also be associated with what was planted within the brush management areas during the time of construction of the housing developments or what was installed by the owners or homeowner's association after construction. In many cases, this encroachment may be

considered out of compliance with the City of San Diego Municipal Code and would not be included in the evaluation of impacts associated with the implementation of brush management as allowed by the City of San Diego Municipal Code.

The two control areas evaluated also had less exotics invasion than the adjacent brush management areas, further indicating that exotic invasion may be an issue with brush management. However, additional evaluation would be necessary in order to determine if this trend is significant.

Soil erosion was only observed on two slopes that had been brush managed. The erosion within the brush management areas can be attributed to the sandy soils on the slope and, in the case of brush management area 24, the way the slope was constructed. Brush management area 24 was cut quite steep in order to accommodate a utility access road. The sandy soils have moderate erosion due to this steep cut. In both cases, there is no clear association between brush management and the erosion on-site.

In conclusion, exotic plant invasion appears to be an issue with brush management areas as indicated by the 25 site visits conducted. Soil erosion did not appear to be an issue on the 25 sites evaluated. While 25 sites were visited, additional sites would need to be evaluated to conclusively determine the effects of exotic invasion and soil erosion on areas where brush management has been conducted.

BM_ID	REGROWTH_DESC	AVG_HT	SLOPE_G	SLOPE_A	IRRIGATE	SOIL	SLOPE_T	EROSION	SOURCE	SOURCE	EROSION	WETLANDS
1	limited native regrowth	0	>25	south	yes	clay	manufactured	no	n/a	n/a	n/a	no
2	weedy, cholla looks good	1	5-25%	southeast	no	sand/clay	natural	no	n/a	n/a	n/a	no
3	low non-native plant growth	<1 (trees=30)	<5	east	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
4	some shrubs small in size but growing back, large shrubs growing back well, no crown resprouting	1	>25%	south	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
5	mostly exotic, lemonade berry small	20	>25%	west	no	sand/clay	natural	no	n/a	n/a	n/a	no
6	low growing exotics	<1	>25%	north	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
7	half of pepper trees cut down, no regrowth yet	15	>25%	south	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
8	vegetation high, not cut in a while	5	5-25%	west	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
9	low growing exotics	<1 (trees=40)	5-25%	south	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
10	exotics low growing under eucalyptus trees	2 (trees=20 ft)	5-25%	southwest	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
11	small plants	2	5-25%	east	yes	sand/clay	manufactured	no	n/a	n/a	n/a	no
12	small plants	<1	>25%	east	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
13	small plants	2	>25%	southeast	no	sandy	manufactured	yes	unknown	unknown	minor	no
14	good height, no crown resprouting	5	5-25%	west	yes	sand/clay	manufactured	no	n/a	n/a	n/a	no
15	plants look like containers	5 (trees=30)	>25%	west	yes	sand/clay	manufactured	no	n/a	n/a	n/a	no
16	some crown resprouting	6	>25%	west	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
17	small plants	1	>25%	north	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
18	no other plants besides cactus	4	>25%	south	no	sandy	natural	no	n/a	n/a	n/a	no
19	natives limited to holes in iceplant	<1	5-25%	east	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
20	natives limited to holes in iceplant	<1	<5%	west	no	sand/clay	natural	no	n/a	n/a	n/a	no
21	large shrubs	2	>25%	south	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
22	no natives	<1	5-25%	west	no	sand/clay	natural	no	n/a	n/a	n/a	no
23	no natives	<1	>25%	southwest	no	sand/clay	natural	no	n/a	n/a	n/a	no
24	no apparent brush management, shrubs quite large	5	>25%	northeast	no	sandstone	natural	yes	unknown	unknown	moderate	no
25	no natives	<1	>25%	west	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
26	n/a	5	5-25%	west	no	sand/clay	manufactured	no	n/a	n/a	n/a	no
27	n/a	<1	5-25%	east	no	sand/clay	manufactured	no	n/a	n/a	n/a	no

BM ID	NOTES	TYPE	CONTROL
1	has drainage ditch in middle	City	no
2	old irrigation on site	City	no
3	drainage ditch down middle of site	City	no
4	drainage ditch on west side of slope	City	no
5		City	no
6	old irrigation on site	City	no
7	cement trail within brush management area	City	no
8	drainage ditch in middle of slope, old irrigation on site	City	yes
9	old irrigation on site	City	no
10	drainage	City	no
11		City	yes
12		City	yes
13		City	no
14	trail in middle of slope, cut vegetation tossed down slope	Owner	no
15	cement trail fronts brush management area	Owner	no
16		Owner	no
17		HOA	no
18		Owner	no
19		Owner	no
20		Owner	no
21		Owner	no
22		Owner	no
23		Owner	no
24	powerlines in BM area	Owner	no
25		Owner	no
26	drainage ditch running north/south bisecting slope, old irrigation on site, control for 8	City	n/a
27	control for 11 & 12	City	n/a

APPENDIX C

**DRAFT ORDINANCE AMENDING THE BRUSH MANAGEMENT
REGULATIONS**

STRIKEOUT ORDINANCE

OLD LANGUAGE: ~~Strikeout~~
 NEW LANGUAGE: Underline

(O-2005-)

ORDINANCE NUMBER O-____ (New Series)

ADOPTED ON _____

AN ORDINANCE AMENDING CHAPTER 14, ARTICLE 2,
 DIVISION 4, OF THE SAN DIEGO MUNICIPAL CODE BY
 AMENDING SECTIONS 142.0402; 142.0403 AND 142.0412,
 ALL RELATING TO BRUSH MANAGEMENT
 REGULATIONS.

§142.0402 When Landscape Regulations Apply

- (a) [No change.]
- (b) [No change to first paragraph.]

Table 142-04A

Landscape Regulations Applicability

Type of Development Proposal			Applicable Regulations	Required Permit Type/ Decision Process
Column A	Column B	Column C		
1 - 8 [No change.]				
9. New structures; additions to structures; or subdivisions that create lots where new structures could be located on properties adjacent to any contiguous, highly flammable area of native or naturalized vegetation greater than 10 acres or contiguous area of native or naturalized vegetation greater than 50 acres			142.0403, 142.0412, and 142.0413	Building Permit Process One
10. 2 Existing structures on properties that are adjacent to any area of highly flammable native or naturalized vegetation. All existing or proposed lots where any open space, park area, and undeveloped public or private lands containing native or naturalized vegetation and areas containing environmentally sensitive lands are within 100 feet of an existing or proposed structure.			142.0403, 142.0412, and 142.0413	No permit required by this division if work is performed in accordance with applicable regulations
11. 10 Renumbered [No change.]				

§142.0403 General Planting and Irrigation Requirements

[No change to first paragraph.]

(a) [No change.]

(b) Plant Material Requirements

(1) through (9) [No changes.]

(10) Trees required by this division shall be maintained so that all branches over pedestrian walkways are 6 feet above the walkway *grade* and so that all branches over vehicular travel ways are ~~416~~ feet above the *grade* of the travel way.

(11) through (14) [No changes.]

(c) - (d) [No changes.]

§142.0412 Brush Management

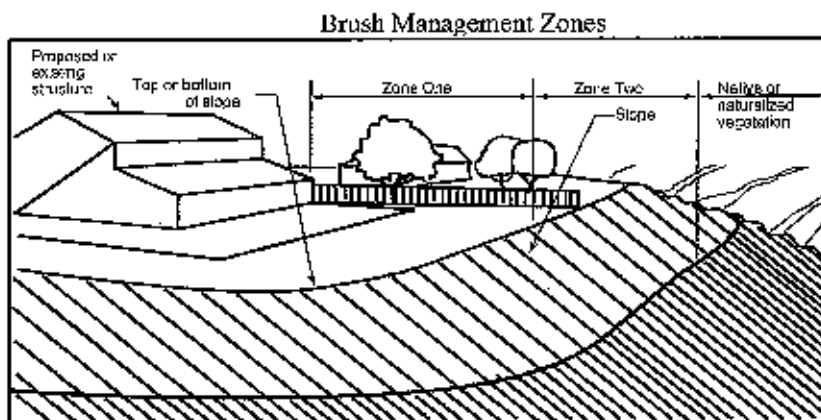
(a) Except as provided in Section 142.0412(i), brush management is required in all base zones for the types of development listed below when they are adjacent to any highly flammable area of native or naturalized vegetation that is greater than 10 acres as mapped by the City of San Diego, or adjacent to any area of native or naturalized vegetation that is greater than 50 acres, as shown in Table 142-04A. However, within the Coastal Overlay Zone, brush management is required for all coastal development within the MHPA and/or adjacent to steep hillsides containing sensitive biological resources where any open space, park area, and undeveloped public or private lands containing native or naturalized vegetation, and areas containing environmentally sensitive lands are within 100 feet of an

existing or proposed structure, except that brush management is not permitted in wetlands. Where brush management in wetlands is deemed necessary by the Fire Chief pursuant to Section 142.0412 (i)(1), that brush management shall not qualify for the exemption from the Environmentally Sensitive Lands Regulations pursuant to Section 143.0110(c)(7).

(+) through (+)

- (b) Brush Management Zones. Where brush management is required, a comprehensive program shall be implemented that reduces fire hazards around *structures* by providing an effective fire break between all *structures* and contiguous areas of ~~flammable~~ native or naturalized vegetation. This fire break shall consist of two distinct brush management areas called "Zone One" and "Zone Two" as shown in Diagram 142-04D.

Diagram 142-04D



- (1) [No change.]

(2) Brush management Zone Two is the area between Zone One and any area of native or naturalized vegetation and shall consist of thinned, native or ~~naturalized~~ non-irrigated vegetation.

(c) Except as provided in Sections 142.0412(f), 142.0412(h) or 142.0412(i), the width of Zone One and Zone Two shall meet or ~~exceed~~ that shown in Table 142-04H. ~~Where development is adjacent to slopes or vegetation that meets the criteria shown in the table, the required Zone One and Zone Two width shall be increased by the dimension shown.~~ Both Zone One and Zone Two shall be provided on the subject property unless a recorded easement is granted by an adjacent property owner to the owner of the subject property to establish and maintain the required brush management zone(s) on the adjacent property in perpetuity. The total width of brush management Zone One and Zone Two shall not exceed 100 feet.

**Table 142-04II
Brush Management Zone Width Requirements**

Criteria	Property Location	
	<u>Zone Widths West of Interstate 805 and El-Camino Real</u>	<u>East of Interstate 805 and El-Camino Real</u>
Minimum Zone One Width (See Section 142.0412(d))	20 ³⁵ ft.	10 ft.
Additional Zone One Width (See Section 142.0412(e)) Required when development is adjacent to slopes greater than 4:1 gradient that are 50 feet or greater in vertical height, or adjacent to vegetation greater than 24 inches in height, or adjacent to the MHP.	5 ft.	5 ft.
Zone One Width Within the Coastal Overlay Zone for subdivisions containing steep hillside with sensitive biological resources	30 ft. Min	
Minimum Zone Two Width (See Section 142.0412(f))	20 ⁶⁵ ft.	40 ft.
Additional Zone Two Width Required when Zone Two is on slopes greater than 4:1 gradient that are 50 feet or greater in vertical height, or the vegetation in Zone Two is greater than 48 inches in height. This additional width is not required for Zone Two located within the MHP.	10 ft.	10 ft.

(d) ~~The width of brush management Zone One shall be increased by 10 feet for structures that do not meet all of the following requirements:~~

~~(1) Roof material shall be fire retardant. Wood shake shingles, whether fire retardant treated or untreated, are not permitted.~~

~~(2) Walls, eaves, and overhangs shall be one hour, fire resistive.~~

~~(3) Eave vents shall be covered with wire screen not to exceed 1/4 inch mesh.~~

No brush management Zone Two thinning or pruning shall be performed in the coastal sage scrub habitat between March 1 through August 15.

(e) Where additional Zone One width is required adjacent to the MHPA or within the Coastal Overlay Zone, any of the following modifications to development regulations of the Land Development Code or standards in the Land Development Manual are permitted to accommodate the increase in width:

(1) through (3) [No changes.]

(f) ~~The minimum Zone Two width may be decreased by 2 1/2 feet for each 1 foot of increase in Zone One width over up to a maximum reduction of 30 feet of the Zone Two minimum width shown in Table 142-04H.~~

(g) Zone One Requirements

(1) The required Zone One width shall be provided between ~~flammable~~ native and naturalized vegetation and any structure and shall be measured from the exterior of the structure to the vegetation.

(2) Zone One shall contain no habitable *structures, structures* that are directly attached to habitable *structures*, or other combustible construction that provides a means for transmitting fire to the habitable *structures*. *Structures* such as *fences*, walls, palapas, play structures and nonhabitable gazebos that are located within brush management Zone One shall be of noncombustible construction.

(3) through (7) [No changes.]

(h) Zone Two Requirements

(1) The required Zone Two width shall be provided between Zone One and the undisturbed, ~~flammable~~ native or naturalized vegetation, and shall be measured from the edge of Zone One that is farthest from the habitable *structure*, to the edge of undisturbed vegetation.

(2) [No change.]

(3) Within Zone Two, 50 percent of the plants over 18 inches in height shall be ~~cut and cleared~~ reduced to a height of 6 inches. Non-native plants shall be reduced in height first before native plants.

(4) Within Zone Two, all plants remaining after 50 percent are ~~cut and cleared~~ reduced in height shall be pruned to reduce fuel loading in accordance with the Landscape Standards in the Land Development Manual. Non-native plants shall be pruned first before native plants.

(5) The following standards shall be used where Zone Two area is in an area previously graded as part of a legal development activity and is proposed to be planted with new plant material instead of clearing existing native or naturalized vegetation:

(A) All new plant material for Zone Two shall be native or ~~naturalized non-irrigated~~, low-fuel, and fire-resistive. No non-native plant material may be planted in Zone Two either inside the MHPA or in the Coastal Overlay Zone, adjacent to areas containing *sensitive biological resources*.

(B) New plants shall be low-growing with a maximum height at maturity of ~~2-feet~~ 24 inches. Single specimens of ~~fire-resistant native trees and tree form shrubs~~ may exceed this limitation if they are located to reduce the chance of transmitting fire from native or naturalized vegetation to habitable *structures* and if the vertical distance between the lowest branches of the trees and the top of adjacent plants are three times the height of the adjacent plants to reduce the spread of fire through ladder fueling.

(C) All new Zone Two plantings shall be irrigated temporarily until established to the satisfaction of the City Manager. Permanent irrigation is not allowed in Zone Two. Only low-flow, low-gallonage spray heads may be used in Zone Two. Overspray and runoff from the irrigation shall not

drift or flow into adjacent areas of native or naturalized vegetation. Temporary irrigation systems shall be removed upon approved establishment of the plantings. Permanent irrigation is not allowed in Zone Two.

(D) [No changes.]

(6) Zone Two shall be maintained on a regular basis by pruning and thinning plants; and controlling weeds; and maintaining any temporary irrigation system.

(7) Except as provided in Section 142.0412(i), on premises with existing structures where the required Zone One width shown in Table 142-04H cannot be provided, the required Zone Two width shall be increased by one foot for each foot of required Zone One width that cannot be provided.

(i) [No change to the paragraph]

(1) In the opinion of the Fire Chief, the requirements of this section fail to achieve the level of fire protection intended by the application of Zones One and Two; or

(+)(2) The modification to the requirements shall achieve an equivalent level of fire protection as provided by this section, other regulations of the Land Development Code, and the minimum standards contained in the Land Development Manual; and

(2)(3) The modification to the requirements is not detrimental to the public health, safety, and welfare of persons residing or working in the area.

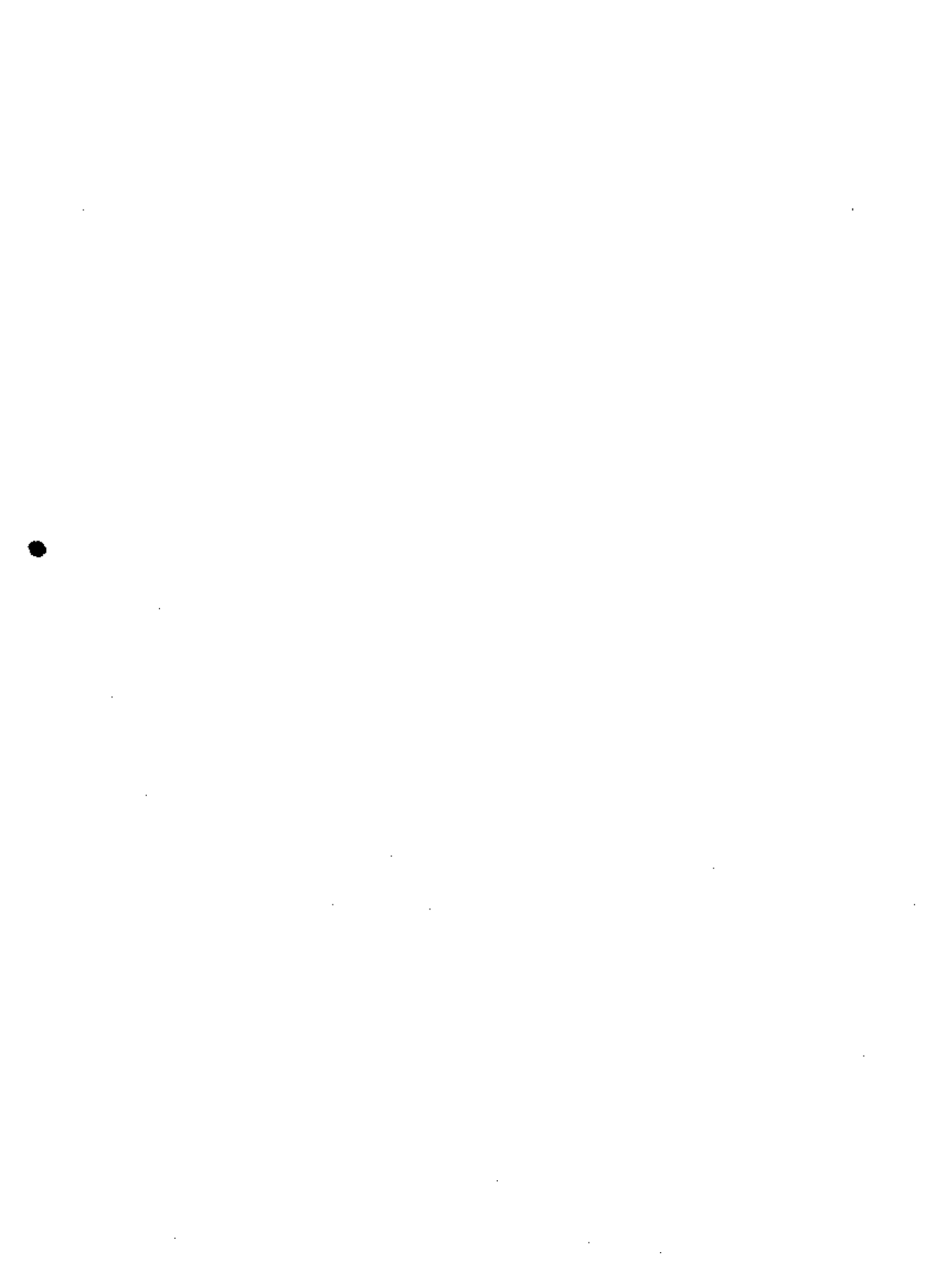
(j) (k) [No changes.]

(l) Brush management for existing *structures* shall be performed by the owner of the property that contains the ~~flammable~~ native and naturalized vegetation. This requirement is independent of whether the *structure* being protected by brush management is owned by the property owner subject to these requirements or is on neighboring property.

MJL:cfq
08/06/04
Or.Dept: DSD
O-2005-XXX

APPENDIX D

**MOU BETWEEN USFWS, CDFG, CDF, SD COUNTY FIRE CHIEF'S
ASSOCIATION AND THE FIRE DISTRICT'S ASSOCIATION OF SD
COUNTY**



MEMORANDUM OF UNDERSTANDING
BETWEEN
THE FISH AND WILDLIFE SERVICE OF
THE UNITED STATES DEPARTMENT OF THE INTERIOR,
THE CALIFORNIA DEPARTMENT OF FISH AND GAME,
THE CALIFORNIA DEPARTMENT OF FORESTRY,
THE SAN DIEGO COUNTY FIRE CHIEF'S ASSOCIATION AND
THE FIRE DISTRICT'S ASSOCIATION OF SAN DIEGO COUNTY

A. INTRODUCTION

Many species of plants and wildlife in the County of San Diego have been listed and continue to be listed as threatened or endangered by the Secretary of the Interior pursuant to the federal Endangered Species Act and by the California Fish and Game Commission pursuant to the California Endangered Species Act. Additionally, many listed and species that may be listed in the future are protected in certain areas by agreements among jurisdictions and the wildlife agencies, pursuant to the state of California's Natural Communities Conservation Planning (NCCP) program. In light of these listings, officials of the California Department of Forestry, and the members of the San Diego County Fire Chief's Association and the Fire Districts Association of San Diego County have expressed concerns regarding their ability to continue to require the abatement of flammable vegetation within their respective jurisdictions in order to protect life, property and the environment from the threat of fire.

B. AUTHORITIES

This Memorandum of Understanding is hereby made and entered into by and between the California Department of Forestry, hereinafter referred to as "CDF"; the San Diego County Fire Chief's Association, hereinafter referred to as the "Fire Chiefs"; the Fire District Association of San Diego County, hereinafter referred to as the "Districts"; the Fish and Wildlife Service of the United States Department of the Interior, hereinafter referred to as the "Service"; and the California Department of Fish and Game, hereinafter referred to as "Department" under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. Section 1531 et. seq.) the Fish and Game Code Section 702 and the California Endangered Species Act, as amended (Fish and Game Code Section 2050, et. seq.).

C. PURPOSE

The purpose of this Memorandum of Understanding is to establish guidelines by which the CDF, Fire Chiefs and the Districts can continue to protect lives and property from the threat of fire by requiring the abatement of flammable vegetation pursuant to State Law, County and District ordinances and Cities' municipal codes and to establish a cooperative mechanism whereby the Service and Department may assess, minimize, and help account for potential adverse impacts to sensitive species and habitats resulting from vegetation abatement activities.

D. RECITALS

1. Fire Districts are responsible for assuring compliance with applicable provisions of their ordinances, the California Health and Safety Code and the California Public Resources Code sections 4290 & 4291 regarding the abatement of flammable vegetation.
2. Fire Departments of the Cities are responsible for assuring compliance with the Government Code and applicable provisions of their municipal codes regarding the abatement of flammable vegetation.
3. CDF is responsible for assuring compliance with applicable provisions of the California Public Resources Code sections 4290 & 4291 regarding the abatement of flammable vegetation.
4. The Service is responsible for enforcing the federal Endangered Species Act of 1973.
5. The Department is responsible for enforcing the California Endangered Species Act, and the Native Plant Protection Act. The Service and Department together administer the state NCCP program (NCCP Act of 1991.)
6. Areas immediately surrounding improvements to real property, whether such areas are undeveloped wildlands or are altered in some way, do not generally constitute core natural habitat areas, nor do they typically support sensitive species, by virtue of their proximity to human activities.
7. Uncontrolled wildfires pose a serious threat to human lives and property, but are generally part of the natural disturbance cycle of adjacent wildlands. The propensity of wildlands to carry fire to human developments usually necessitate the provision of fuel breaks in order to reduce or eliminate the likelihood of damage to property.
8. Properly maintained fuel modification zones and fire breaks will reduce the incidence of non-Natural fires spreading from developed areas to natural land and lower the potential impacts of unseasonable and frequent wildfires to listed species and their habitats."

NOW THEREFORE, the parties hereto mutually agree as follows:

Section I. General Terms and Conditions:

This MOU authorizes the take of species listed as threatened or endangered, or candidate species (under Chapter 1.5 of Division 3 of the Fish and Game Code) for management purposes necessitated by or incidental to those certain fire protection measures described herein.

The management purposes for which this MOU is issued are:

1. Mandatory fire protection measures in accordance with Section 4290 of the Public Resources Code, specifically:

(a) Measures necessary to implement minimum fire safety standards related to defensible space which are applicable to state responsibility are lands under the authority of CDF.

(b) Measures necessary to implement minimum safety standards related to fuel breaks and greenbelts.

(c) Other measures required by Section 4290 as determined by the Director of CDF.

Mandatory fire protection measures in accordance with Section 4291 of the Public Resource Code, specifically:

(a) The maintenance around and adjacent to any building or structure in, upon, or adjoining any mountainous area or forest-covered lands, brush-covered lands, or grass-covered lands, or any land which is covered with flammable material, of a fire break made by removing and clearing away, for a distance of not less than 30 feet on each side of such building or structure or to the property line, whichever is nearer, all flammable vegetation or combustible growth.

(b) The maintenance around and adjacent to any building or structure such as is described in (a) above, additional fire protection or fire break made by removing all brush, flammable vegetation, or combustible growth which is located from 30 feet to 100 feet from such a building or structure or to the property line, whichever is nearer, as may be required by the Director of Forestry and Fire Prevention upon a finding that, because of extra hazardous conditions, a firebreak of only 30 feet around such building or structure is not sufficient to provide reasonable fire safety, and including the maintenance of grass and other vegetation more than 30 feet from such building or structure and less than 18 inches in height where necessary to stabilize the soil and prevent erosion.

3. Mandatory fire protection measures in accordance with Section 4296.5 of Public Resource Code, specifically, upon order of the Director of Forestry and Fire Protection or the agency having primary responsibility for the fire protection of the area, the destruction, removal, or modification so as not to be flammable, of any vegetation or other flammable material on any railroad right-of-way on forest-covered, brush-covered, or grass-covered land.
4. Any measures as deemed necessary by the Fire Chief and in accordance with the Guideline section of this MOU.

activities without further delay. Failure by landowners to provide adequate notification as described above may render landowners liable under State and Federal law.

Section IV. BIOLOGICAL SURVEYS

Property owners, their lessees, CDF, fire districts and cities shall not be required to perform biological surveys as a condition precedent to performance of the fire protection activities established by the guidelines set forth in Section I.

Section V:

PROJECT OFFICERS

a. Project Officer for the CDE is:

Ken. Miller, Ranger in Charge
California Department of Forestry
2249 Jamacha Rd.
El Cajon, California 92019

b. Project Officer for the Fire Chiefs is:

Erwin L. Willis, Fire Chief
Rancho Santa Fe Fire Protection District
P.O. Box 410
Rancho Santa Fe, CA 92067

c. Project Officer for the Districts is:

Ralph Steinhoff
North County Fire Protection District
315 East Ivy Street
Fallbrook, CA 92028

d. Project Officer for Service is:

Gail Kobetich, Field Supervisor
U.S. Fish and Wildlife Service, Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

e. Project Officer for the Department is:

Jacqueline Schafer, Director
Department of Fish and Game
1416 9th Street
Sacramento, California 95814

Section VI. SPECIAL TERMS AND CONDITIONS

The CDF, fire districts, cities, the Service and the Department shall comply with the Reasonable and Prudent Measures and the Terms and Conditions identified in Biological Opinion issued by the Service for this action. Take of listed species that is deliberate and results from an act outside the scope of the Project as defined in Section I is not authorized.

It is understood by the parties that the Service authorizes incidental take of the following Federally listed threatened and endangered species: arroyo toad (*Bufo microscaphys californicus*), coastal California gnatcatcher (*Polioptila californica*), and Stephen's Kangaroo Rat (*Dipodomys stephensi*), which may be impacted by the fire protection activities established by the guidelines set forth in Section I. Furthermore, it is understood by the parties that the Department authorizes the take of species listed as threatened species or endangered species, or candidate species (under Chapter 1.5 of Division 3 of the Fish and Game Code) which may be impacted by the fire protection activities established by the guidelines set forth in Section I.

Any person who becomes aware of the take of an individual of a candidate or listed species as a result of that person's engaging in the permitted activity shall report the take to the Department as soon as practicable and shall make available the remains of any animal or plant taken to the Department of Fish and Game upon demand.

Section VII. FINDINGS

Department Findings:

Pursuant to fish and Game Code Section 2081, the Department finds that implementation of the control, abatement, and protection measures contemplated by this MOU is not likely to result in jeopardy to the continued existence of the identified State listed or candidate species, if the terms and conditions of the MOU are fully implemented and adhered to. The Department finds, further, that by preventing or limiting the spread of fire to the identified species' habitat, this MOU will serve to protect the identified species from further degradation.

Section VIII. AMENDMENTS

Amendments to this MOU may be proposed by any of the parties and shall become effective upon being reduced to a written instrument executed by all of the parties. It is anticipated and understood by the parties that this MOU, specifically the arroyo toad (*Bufo microscaphys californicus*), coastal California gnatcatcher (*Polioptila californica*), and Stephen's Kangaroo Rat (*Dipodomys stephensi*), may be amended to include additional species that in the future are listed as threatened or endangered by the Secretary of the Interior or the California Fish and Game Commission. In addition, it is understood that this MOU may be amended to include additional parties.

Section IX. TERM OF AGREEMENT

This MOU shall become effective upon the date it is executed by the parties (execution date) and shall remain in effect for an initial period of one (1) year. Thereafter, this MOU shall be automatically extended from year to year on the aforementioned execution date unless the Service or the Department objects to the extension, in writing, within thirty (30) days prior to the expiration of this MOU. Any written objection must state the reason for the objection to the extension of this MOU. In the event a written objection is provided, the parties shall work cooperatively to resolve any problems so that the MOU may be extended.

IN WITNESS WHEREOF, each party hereto has caused this MOU to be executed by an authorized official on the day and year set forth opposite his or her signature.

U.S. FISH AND WILDLIFE SERVICE

By: Gail C. Kobetich

Date: 2.26.97

Title: Gail Kobetich, Field Supervisor

SERVICE CONTRACT SUFFICIENCY REVIEW

By: _____

Date: _____

Title: _____

CALIFORNIA DEPARTMENT OF FISH AND GAME

By: Jacqueline Schafer

Date: 2/26/97

Title: Jacqueline Schafer, Director

CALIFORNIA DEPARTMENT OF FORESTRY, SAN DIEGO RANGER UNIT

By: Ken Miller

Date: 2-26-97

Title: Ken Miller, Ranger in Charge

SAN DIEGO COUNTY FIRE CHIEF'S ASSOCIATION

By: Erwin L. Willis

Date: 2-26-97

Title: Erwin L. Willis, President

SAN DIEGO COUNTY FIRE DISTRICT'S ASSOCIATION OF SAN DIEGO COUNTY

By: Wayne Strange

Date: 2/26/97

Title: Wayne Strange, President

APPENDIX E

METHODOLOGY FOR BIOLOGICAL IMPACT ASSESSMENT

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Existing and proposed brush management impacts to the City of San Diego were determined by staff from the City's Planning Department and Information Technology & Communications (IT&C) Department using geographic information systems (GIS).

In order to determine brush management impacts, staff created an urban interface line. This was done by creating a boundary delineating vegetation from urban interface using 2003 color aerial orthophotos at a 1:3000 scale for the entire City. Next, staff determined the segments of the urban interface line that would be affected by new brush management guidelines. Parcels with structures that would require brush management were selected from the SanGIS parcel database. Staff then selected segments of the urban interface line that were adjacent to parcels with structures. The resulting segments were used for the analysis.

Buffers were applied to the applicable segments of the urban interface line to identify the impacts from brush management from both the existing regulations and the additional impacts from the proposed regulations. Buffer distances were determined using several variables pursuant to the existing Land Development Code (§142.0412). The first variable was the geographical zone of the City that brush management regulations currently apply to: (1) the coastal zone, (2) the non-coastal zone areas west of El Camino Real and Interstate 805, and (3) the areas east of El Camino Real and Interstate 805. The second variable was the adjacency of the parcel to the Multi-Habitat Planning Area (MHPA) for the City's Multiple Species Conservation Program (MSCP).

The resulting buffers were analyzed to determine impacts to vegetation, the MHPA, the MSCP Core Biological and Linkage Areas and sensitive species. Impacts were also analyzed for impacts to City owned lands and non-City owned lands. No impacts to wetlands are allowed under the proposed brush management regulations and therefore wetlands were removed from the total impacts.

The proposed code allows for an increase in zone two brush management for existing structures where zone one brush management is less than 35 feet. Staff increased the accuracy of the analysis by creating an additional buffer for this increase in zone two. This was done by measuring the distance from the structure to the urban interface line on 600 random parcels (200 per geographical zone) at a maximum scale of 1:1,000 on the 2003 color aerial orthophotos. A buffer was created that was the average width from the structure to the urban interface line for each of the three zones. This buffer was used to increase the impacts for any additional zone two clearing due to zone one deficiency to achieve worst-case analysis.

The results of these impacts can be found in Sections V.A-Land Use and V.B-Biological Resources.

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The results of these impacts can be found in Sections V.A-Land Use and V.B-Biological Resources.

The discretionary actions of the City of San Diego required for implementation of the Brush Management Revisions is the approval by City Council to implement the proposed brush management revisions.

Conclusions of the SEIR

The Final SEIR evaluates the following environmental issues in relation to the project: land use, biological resources, hydrology/water quality/erosion, and neighborhood character/aesthetics. The Final SEIR also evaluates cumulative and growth-inducing impacts, as well as alternatives to the proposed project. The City of San Diego Development Services, located at 1222 First Avenue, MS 501, San Diego, CA 92101, is the custodian of the documents and other materials which constitute the entire record and the proceedings upon which the decision is based (Administrative Record).

The Final SEIR indicates that direct and indirect impacts associated with the brush management revisions for the following environmental issues would not result in significant impacts or contribute to significant cumulative impacts: land use, hydrology/water quality/erosion, and neighborhood character/aesthetics. The Final SEIR states that the brush management revisions could have significant unmitigated biological resources related to non-covered species outside the MHPA.

FINDINGS

The following findings are made pursuant to Public Resources Code Section 21081 and Title 14 of the California Code of Regulations, Sections 15091 and 15093 (State CEQA Guidelines).

A. Public Resources Code Section 21081 (a) Feasible Mitigation Measures

Pursuant to Public Resources Code Section 21081 (a), the City of San Diego, having reviewed and considered the information contained in the Final SEIR for the project, the public record, and the administrative record, finds, pursuant to CEQA guidelines, that changes or alterations have been required in or incorporated into the project that mitigate, avoid, or substantially lessen the potentially significant direct and indirect environmental impacts as identified in the Final SEIR. No feasible mitigation measures are proposed with this project. However, changes to the proposed ordinance which have been proposed since public review of the Draft SEIR/EA started serve to reduce impacts.

B. Public Resources Code Section 21081 (a)(2)

The decision maker, having independently reviewed and considered the information contained in the Final SEIR for the project and the public record, finds that there are no changes or alterations to the project that avoid or substantially lessen the significant environmental impacts that are within the responsibility and jurisdiction of another public agency.

C. Public Resources Code Section 21081 (a)(3) Infeasible Mitigation Measures and Alternatives

The decision maker, having reviewed and considered the information contained in the Final EIR and its appendices for the project and the public record, finds that specific economic, legal, technological, social, or other considerations and benefits make infeasible the mitigation measures or project alternatives identified in the Final EIR and its appendices, other than the proposed project, as set forth below.

1. BIOLOGICAL RESOURCES

Significant Impacts (unmitigated): The Land Development Code EIR determined that a potentially significant impact on biological resources related to brush management outside the bounds of the Multi-Habitat Planning Area (MHPA) where non-covered species are affected could occur. The current Subsequent EIR has made the same determination.

Per the City's Biology Guidelines (page 24), as adopted by City Council on June 19, 2000, species specific analysis for sensitive species not covered by the MSCP may be required as part of the CEQA process. It is expected that the majority of CEQA sensitive species not covered by the MSCP will be adequately mitigated through the habitat based mitigation described in Sections B.1.a and B.1.b of the Biology Guidelines. However, a circumstance may arise, when mitigation specific to a particular species may be required. Therefore, while applying CEQA to new development projects would likely result in measures to mitigate these impacts (or at least afford the opportunity for future disclosure and mitigation of the impacts), impacts from brush management for existing development would remain significant because owners of existing development can undertake brush management activities without additional discretionary review by the City. In other words, there will be no subsequent regulatory process through which additional mitigation could be provided.

Facts in support of Finding:

Implementation of mitigation identified for future project and existing structures would reduce biological impacts to below a level of significance. Per this mitigation measure, existing property owners would be required to hire a biological consultant and provide mitigation for any potential impacts to non-covered species. However, it has been determined that requiring such a measure for existing structures would be an undue hardship for existing landowners as such mitigation could potentially be quite costly. Existing homeowners may decide to forego implementation of the expansion of zone two brush management on their properties in order to avoid this additional expense. Thereby, creating an at-risk condition for fire fighters as they attempt to battle fires in many of the canyons areas where these structures are located. Lack of defensible space to fight brush fires creates a dangerous condition for fire-rescue services.

At this time, implementation of brush management zone 2 for existing structures is exempt from the City permitting process. Therefore, there is no City process in place to determine

which existing structures are located outside the MIPPA in areas where potential significance impacts may occur to species not covered by the MSCP. To create such a process, would require a significant expense to the City and would be a multi-year process to complete. Additional city-wide biological surveys to identify the potential affected areas would be needed, along with the creation of a database for the new information and creation of a separate noticing and review process for these particular existing structures. This information would also not be valid for many species and resources soon after its development due to the dynamic nature of species development (i.e. species move from area to area). Finally, many of the areas which could benefit from these surveys occur on approximately 29,000 private properties which may not grant access to the City to conduct the surveys.

Given the considerable expense to homeowners of existing structures and the City combined with the increased risk to the life and safety of our fire fighters, it has been determined such a mitigation measure for existing structures would be infeasible and may result in potential harm to life and existing structures. Therefore, the impact would be partially mitigated through the adoption of the mitigation measure for future projects and the adoption of the Statement of Overriding Considerations for the existing structures.

Alternatives

The EIR for the Brush Management Revisions to the Land Development Code examined four alternatives in addition to the proposed revisions.

Alternative 1 - No Project Alternative

Project Description

Under the no project alternative, the existing brush management zones would remain in effect. Current brush management regulation state that the width of zone one varies from twenty-five feet to thirty-five feet west of Interstate 805 and El Camino Real, and thirty feet to forty-five feet on the east. Zone two currently varies from twenty feet to thirty feet west of Interstate 805 and El Camino Real and forty feet to fifty feet on the east.

Findings

The No Project Alternative would not provide an expansion of the brush management zones to a total of 100 feet (35 feet for zone one and 65 feet for zone two) or refine the existing regulations to provide an acceptable risk to fire personnel and structure from wildfires. Although impacts to biological resources as described in the SEIR would be avoided, increased safety to fire-rescue crews and existing structures would also not occur.

Alternative 2 - No Action Alternative

Project Description

NEPA requires that the No Action Alternative be described. The No Action Alternative assumes that there would be no federal funding available for the implementation of the

brush management revisions within City owned open space areas and as a result, no federal action to approve.

Findings

The proposed brush management revisions could still be implemented by the City; however, funding would need to be acquired from a different source(s). Since the City does not currently have an alternative source(s) of funding for the project it may take several years for the City to achieve the proposed brush management standards. Therefore, this alternative would not be able to implement the proposed refinements to the existing regulations to provide an acceptable risk to fire personnel and structure from wildfires in a timely manner.

Alternative 3 – Clear and Re-plant Zone Two

Project Description

Under this alternative, complete clearing would occur in brush management zone two and afterwards, the area would be re-planted with low height native plants.

Findings

Upon review and consideration of the comment letter received from the Wildlife Agencies (See comment A49) on the SEIR, it was determined this alternative would not result in a reduction in impacts to biological resources. Therefore, this alternative has been moved to Section IX of the SEIR, Alternatives Considered but Rejected.

Alternative 4 – Increasing Building Regulations

Project Description

Under this alternative, certain revisions to the existing building regulations would need to occur in order to eliminate the need for the increased brush management zones. The additional building regulations would have to include requirements that would make the buildings “fire-proof”.

Findings

“Fire-proofing” to the extent that the proposed addition to the brush management zones would no longer be necessary would require both new and existing structures to apply such techniques as cement or non-combustible walls with no windows openings and class A roofing on existing structures. The expense of such revisions would be beyond the financial ability of the average homeowner and unreasonable for the City to require.

Other measures, such as fire-rated windows and fire walls, while needed to increase the survivability of structures, would not eliminate the need for the proposed expansion of the brush management zones. This increase would still be necessary to provide additional defensible space to allow room for fire-rescue crews to contain the flame spread and safely perform rescues.

DRAFT
Statement of Overriding Considerations
Brush Management Revisions to the Land Development Code and Federal Grant
from the Office of Emergency Services (OES), Federal Emergency Management
Agency (FEMA)
Project No. 31245
SCH No. 2004031041

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental effects when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable (§ 12093[a]). CEQA further requires that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the Final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record (§ 15093[c] of the CEQA Guidelines.

The San Diego City Council, pursuant to Public Resources Code § 21081 (b) and State CEQA Guidelines § 15093, has: (1) reviewed and considered the information contained in the Final Subsequent EIR; (2) has balanced the benefits of the proposed Brush Management Revisions to the Land Development code and Federal Grant from the Office of Emergency Services (OES), Federal Emergency Management Agency (FEMA) as compared to its unavoidable environmental impacts to:

- Biological Impacts: to sensitive non-covered species located outside the MHPA

The proposed revisions to allow the 100-foot brush management zones (35 feet zone one and 65 feet zone two) would be consistent with the Memorandum of Understanding between the U.S. Fish and Wildlife Service, California Department of Fish and Game, the California Department of Forestry, the San Diego County Fire Chief's Association and the Fire District's Association San Diego County. The City of San Diego is a member of the County Fire Chief's Association. Additionally, the proposal would be consistent with the MSCP Subregional Plan and MSCP Subarea Plan.

The determination of unmitigated, significant impacts to biological resources is based on the potential affects of the subsequent implementation of an expanded brush management by private homeowners as allowed by this proposed ordinance change. Consistent with City's conservative CEQA analysis, this determination is based on the maximum affect of this potential, indirect impact. It assumes 100% compliance (i.e. city-wide implementation of the brush management requirements immediately following adoption

