FINAL CITY OF SAN DIEGO VERNAL POOL HABITAT CONSERVATION PLAN Environmental Impact Report/

Environmental Impact Report/ Environmental Impact Statement

October 2017

Project No. 441044 SCH# 2011111075

City of San Diego Planning Department 1010 Second Avenue, Suite 1200, MS 413 San Diego, California 92101





Planning Department Environmental & Policy Analysis Division

FINAL ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STUDY

PROJECT NO. 441044 SCH NO. 2011111075

SUBJECT: CITY OF SAN DIEGO VERNAL POOL HABITAT CONSERVATION PLAN

CITY COUNCIL APPROVAL and ADOPTION of the Vernal Pool Habitat Conservation Plan (VPHCP), the Vernal Pool Management and Monitoring Plan (VPMMP), Amendments to the City's General Plan, the Kearny Mesa Community Plan, the Otay Mesa Community Plan, Amendments to the Land Development Code (LDC) Environmentally Sensitive Lands Regulations (ESL), Land Development Manual (LDM) Biology Guidelines <u>and Local Coastal</u> <u>Program, and a Boundary Line Adjustment to the City's Multiple Species Conservation Program</u> (<u>MSCP) Multi-Habitat Planning Area (MHPA) on the Montgomery-Gibbs Executive Airport</u> (the discretionary actions under CEQA). Issuance of a federal Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA; the federal action under the National Environmental Policy Act "NEPA") will be required by the United States Fish and Wildlife Service (USFWS) after the City's approval process is complete.

APPLICANT: CITY OF SAN DIEGO PLANNING DEPARTMENT

FINAL DOCUMENT OCTOBER 2, 2017:

In response to comments received during public review and City staff input subsequent to distribution of the Draft Program Environmental Impact Report (PEIR)/Environmental Impact Statement (EIS), minor revisions, clarifications and/or additions have been made to the document which do not change the conclusions of the Final PEIR/EIS regarding the project's potential environmental impacts and required mitigation. As defined in the California Environmental Quality Act (CEQA) Section 15088.5, these revisions, clarifications or additions to the document – which are shown in strikeout/underline format, do not represent "significant new information" and therefore, recirculation of the Draft PEIR/EIS is not warranted. No new significant environmental impacts would occur from these modifications, and similarly, no substantial increase in the severity of environmental impacts would occur.

Additionally, in accordance with CEQA Section 15089, responses to comments received during the public review period of the Draft PEIR/EIS have been included in this final document and are located immediately after this Certification Section.

PROJECT DESCRIPTION:

The Vernal Pool Habitat Conservation Plan (VPHCP) is a conservation plan for vernal pools and seven threatened and endangered vernal pool species that do not currently have federal coverage under the City of San Diego's MSCP Subarea Plan (SAP).

The VPHCP would be compatible with, and would expand upon, the City's existing MSCP SAP to conserve additional lands with vernal pools that are occupied with threatened and endangered vernal pool species. The VPHCP Plan Area encompasses 206,124 acres. Once fully implemented, the VPHCP would expand the City's existing MHPA by adding approximately 275 acres of lands with valuable vernal pools resources. The VPHCP would conserve an additional eight vernal pool complexes and additional 226 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved. Once adopted, vernal pool lands within the MHPA would be subject to the provisions of the VPHCP, in addition to the City's MSCP SAP and other existing land use and biological resource plans, policies, and regulations.

The VPHCP would focus on the following seven threatened and endangered vernal pool species included for coverage (covered species):

- San Diego fairy shrimp
- Riverside fairy shrimp
- San Diego button celery
- Spreading navarretia
- San Diego mesa mint
- California Orcutt grass
- Otay Mesa mint

The VPHCP would provide additional conservation (beyond existing conservation) for the following covered species:

- San Diego mesa mint five additional occupied pools conserved (1% increase)
- San Diego button-celery -three additional occupied pools conserved (1% increase)
- Riverside fairy shrimp three additional occupied pools conserved (2% increase)
- San Diego fairy shrimp 30 additional occupied pools conserved (6% increase)

The VPHCP includes a Mitigation Framework that outlines required avoidance, minimization, and compensatory mitigation measures.

PROJECT LOCATION:

The VPHCP Plan Area is the geographical area for which the protections provided under the VPHCP are afforded to the seven covered species and for which the Section 10 permit applies. The VPHCP Plan Area includes lands subject to the City of San Diego's (CITY) jurisdiction within the jurisdictional boundary of the City, as well as three areas owned by the City's Public Utilities Department (PUD) in the unincorporated portion of San Diego County. The VPHCP Plan Area

also includes preserved lands within San Diego that are under the ownership of the USFWS or the CDFW. The VPHCP Plan Area's extent is, by design, the same area covered by the City's MSCP SAP, and includes lands inside and outside the MHPA.

ENVIRONMENTAL DETERMINATION:

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This document has been prepared as a joint Program PEIR/EIS due to the combined local, state, and federal discretionary actions and permits associated with the Project. Co-lead agencies are the City of San Diego pursuant to CEQA, and the USFWS pursuant to NEPA. The City and USFWS also coordinated with the California Department of Fish & Wildlife (CDFW) on the scope and analysis of this PEIR/EIS to support subsequent processing/issuance of any required amendments to and/or findings of consistency with the City's incidental take authorization (California Endangered Species Act [CESA]/Permit No. PRT-830421) that was received in 1997, with adoption of the City's MSCP in order to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP, and to meet the requirements under California Fish and Game Code Section 2800 et seq. for listed and non-listed species conserved under a Natural Communities Conservation Plan (NCCP).

Based on the analysis conducted for the project described above with CEQA and NEPA, the project could result in significant impacts to the following issue area(s): **Historical Resources** (including Historic Properties, Archaeological and Tribal Cultural Resources). All other environmental issue areas were not evaluated in this PEIR/EIS because the identified resource is not present within or around the VPHCP Plan Area, or because implementation of the Project or alternatives would clearly have no potential for substantial adverse effects with respect to the action being evaluated. In accordance with State CEQA Guidelines Section 15128, effects found not to be significant need not be discussed in detail in an EIR. Rather, a brief discussion as to why various possible effects of a project were determined not to be significant is appropriate. These issue areas are further described in Chapter 10 along with an explanation and rationale of why they have not been evaluated further in this EIR/ EIS.

RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.
- (X) Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.

Alynto

October 2, 2017 Date of Final Report

Planning Department

Alyssa Muto, Deputy Director

Analyst: Myra Herrmann, Planning Department

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the Draft PEIR/EIS and were invited to provide comments during the public review period. Agencies, groups, or individuals that provided comments on the Draft PEIR/EIS but were not part of the initial distribution are shown in underline format below. Copies of the Final PEIR/EIS, the Mitigation Monitoring and Reporting Program and any technical appendices may be reviewed in the offices of the Planning Department, or purchased for the cost of reproduction.

Federal Government

Federal Aviation Administration (1) U.S. Department of Transportation (2) MCAS Miramar Air Station (13) U.S. Army Corps of Engineers (16) U.S. Environmental Protection Agency (19) U.S. Border Patrol (22) U.S. Fish and Wildlife Service (23) U.S. Fish and Wildlife Service – Anan Raymond, Regional SHPO U.S. Army Corps of Engineers (26)

State Of California

CALTRANS District 11 (31) California Department of Fish and Wildlife (32) California Environmental Protection Agency (37A) Department of Toxic Substance Control (39) California State Parks – San Diego Coast District (40A) California State Parks – Southern Service Center (40B) Office of Historic Preservation (41) California Natural Resources Agency (43) California Regional Water Quality Control Board, Region 9 (44) State Clearinghouse (46A) California Coastal Commission (47) California Transportation Commission (51) California Transportation Commission (51A) California State Coastal Conservancy (54) Native American Heritage Commission (56) California Energy Commission (59) California Department of Conservation (60)

<u>County of San Diego</u>

Vector Control (63) Planning and Development Services (68) Parks Department (69) County Water Authority (73)

<u>City of San Diego</u>

Mayor's Office (91) Scott Chadwick Stacey LoMedico Paz Gomez David Graham Ron Villa **Jack Straw** Council President Cole, District 4 Councilmember Bry, District 1 Councilmember Zapf, District 2 Councilmember Ward, District 3 Council President Pro Tem Kersey, District 5 Councilmember Cate, District 6 Councilmember Sherman, District 7 Councilmember Alvarez, District 8 Councilmember Gomez, District 9

<u>Office of the City Attorney</u> Corrine Neuffer, Deputy City Attorney

<u>Planning Department (Applicant)</u> Jeff Murphy, Director Tom Tomlinson, Assistant Director Alyssa Muto, Deputy Director Myra Herrmann, Senior Planner – Environmental Kristy Forburger, Senior Planner/Project Manager – MSCP Kim Roeland, Senior Planner/Project Manager – MSCP Jeanne Krosch, Senior Planner – MSCP (Retired) Angela Abeyta, Supervising Management Analyst – Facilities Financing

<u>Real Estate Assets Department</u> Cybele Thompson, Director Rodney Propst, Deputy Director Wayne Reiter <u>Park and Recreation Department</u> Herman Parker, Director Andrew Field, Assistant Director Casey Smith, Deputy Director – Open Space Division Betsy Miller, Senior Planner

<u>Public Utilities Department</u> Halla Razak, Director John Helminski, Assistant Director Keli Balo, Project Officer Nicole McGinnis, Senior Planner

<u>Development Services Department</u> Kerry Santoro, Deputy Director Anita Eng, Biologist Environmental Analysis Senior Staff

<u>Public Works Department</u> James Nagelvoort, Director Marnell Gibson Carrie Purcell

<u>Economic Development Department</u> Kevin Sullivan

Environmental Services Department Mario Sierra, Director Darren Greenhalgh, Deputy Director Lisa Wood

<u>Transportation & Storm Water Department</u> Kris McFadden, Director Andrew Kleis, Deputy Director Genene Lehotsky Mark Stephens

<u>City Libraries</u> Central Library, Government Documents (81 & 81A) Balboa Branch Library (81B) Beckwourth Branch Library (81C) Benjamin Branch Library (81D) Carmel Mountain Ranch Branch Library (81E) Carmel Valley Branch Library (81F) City Heights/Weingart Branch Library (81G) Clairemont Branch Library (81H) College-Rolando Branch Library (81I) Kensington-Normal Heights Branch Library (81K) La Jolla/Riford Branch Library (81L) Linda Vista Branch Library (81M) Logan Heights Branch Library (81N) Malcolm X Library & Performing Arts Center (810) Mira Mesa Branch Library (81P) Mission Hills Branch Library (81Q) Mission Valley Branch Library (81R) North Clairemont Branch Library (81S) North Park Branch Library (81T) Oak Park Branch Library (81U) Ocean Beach Branch Library (81V) Otay Mesa-Nestor Branch Library (81W) Pacific Beach/Taylor Branch Library (81X) Paradise Hills Branch Library (81Y) Point Loma/Hervey Branch Library (81Z) Rancho Bernardo Branch Library (81AA) Rancho Peñasquitos Branch Library (81BB) READ San Diego (81CC) San Carlos Branch Library (81DD) San Ysidro Branch Library (81EE) Scripps Miramar Ranch Branch Library (81FF) Serra Mesa Branch Library (81GG) Skyline Hills Branch Library (81HH) Tierrasanta Branch Library (81II) University Community Branch Library (81II) North University Branch Library (81JJJ) University Heights Branch Library (81KK)

<u>City Advisory Committees and Boards</u> Airports Advisory Committee (MS 14) Historical Resources Board (87) Park & Recreation Board (89) Wetlands Advisory Board

Other City Governments

City of Chula Vista (94) City of Santee (104) San Diego Association of Governments (108) San Diego County Regional Airport Authority (110) Metropolitan Transit System (112/115) San Diego Gas & Electric (114) San Dieguito River Park JPA (116)

School Districts

Poway Unified School District (124) San Diego Unified School District (125/132) San Ysidro School District (127) San Diego Community College District (133) UCSD Library (134)

Community Groups, Associations, Boards, Committees and Councils

Community Planners Committee (194) Balboa Park Committee (226, MS 35) Black Mountain Ranch –Subarea I (226C) Otav Mesa - Nestor Planning Committee (228) Otay Mesa Planning Committee (235) Clairemont Mesa Planning Committee (248) Greater Golden Hill Planning Committee (259) Serra Mesa Planning Group (263A) Kearny Mesa Community Planning Group (265) Linda Vista Community Planning Committee (267) La Jolla Community Planning Association (275) City Heights Area Planning Committee (287) Kensington-Talmadge Planning Committee (290) Normal Heights Community Planning Committee (291) Eastern Area Planning Committee (302) Midway/Pacific Highway Community Planning Group (307) Mira Mesa Community Planning Group (310) Mission Beach Precise Planning Board (325) Mission Valley Unified Planning Organization (331) Navajo Community Planners Inc. (336) Carmel Valley Community Planning Board (350) Del Mar Mesa Community Planning Board (361) North Park Planning Committee (363) Ocean Beach Planning Board (367) Old Town Community Planning Committee (368) Pacific Beach Community Planning Committee (375) Pacific Highlands Ranch – Subarea III (377A) Rancho Peñasquitos Planning Board (380) Peninsula Community Planning Board (390) Rancho Bernardo Community Planning Board (400) Sabre Springs Community Planning Group (406B) San Pasqual - Lake Hodges Planning Group (426) San Ysidro Planning and Development Group (433) Scripps Ranch Community Planning Group (437) Miramar Ranch North Planning Committee (439) Skyline – Paradise Hills Planning Committee (443) Torrey Hills Community Planning Board (444A) Southeastern San Diego Planning Committee (449) Encanto Neighborhoods Community Planning Group (449A) College Area Community Planning Board (456) Tierrasanta Community Council (462) Torrey Highlands – Subarea IV (467) Torrey Pines Community Planning Board (469) University City Community Planning Group (480) Uptown Planners (498)

Town/Community Councils

Town Council Presidents Association (197) Barrio Station, Inc. (241) Downtown Community Council (243) Harborview Community Council (245) Clairemont Town Council (257) Serra Mesa Community Council (264) La Jolla Town Council (273) Rolando Community Council (288) Oak Park Community Council (298) Darnell Community Council (306) Mission Beach Town Council (326) Mission Valley Community Council (328 C) San Carlos Area Council (338) Carmel Mountain Ranch Community Council (344) Ocean Beach Town Council, Inc. (367 A) Pacific Beach Town Council (374) Rancho Penasquitos Town Council (383) Rancho Bernardo Community Council, Inc. (398) San Dieguito Planning Group (412) United Border Community Town Council (434) Tierrasanta Community Council (462) Murphy Canyon Community Council (463)

Other Agencies, Organizations and Individuals

Lindsey Cavallaro, AECOM (Environmental Consultant) San Diego Chamber of Commerce (157) Building Industry Association (158) Sierra Club (165) San Diego Canvonlands (165A) San Diego Natural History Museum (166) San Diego Audubon Society (167) Jim Peugh (167A) Environmental Health Coalition (169) California Native Plant Society (170) San Diego Coastkeeper (173) Citizens Coordinate for Century 3 (179) Endangered Habitats League (182/182A) San Diego Tracking Team (187) League of Women Voters (192) Carmen Lucas (206) South Coastal Information Center (210) San Diego History Center (211) San Diego Archaeological Center (212) Save Our Heritage Organisation (214) Ron Chrisman (215) Clint Linton (215B) Frank Brown - Inter-Tribal Cultural Resource Council (216) Campo Band of Mission Indians (217) San Diego County Archaeological Society Inc. (218) Kuumevaav Cultural Heritage Preservation (223) Kuumeyaay Cultural Repatriation Committee (225) Native American Distribution Barona Group of Capitan Grande Band of Mission Indians (225A) Campo Band of Mission Indians (225B) Ewiiaapaayp Band of Mission Indians (225C) Inaja Band of Mission Indians (225D) Jamul Indian Village (225E) La Posta Band of Mission Indians (225F)

Manzanita Band of Mission Indians (225G) Sycuan Band of Mission Indians (225H) Viejas Group of Capitan Grande Band of Mission Indians (225I) Mesa Grande Band of Mission Indians (225J) San Pasqual Band of Mission Indians (225K) Ipai Nation of Santa Ysabel (225L) La Jolla Band of Mission Indians (225M) Pala Band of Mission Indians (225N) Pauma Band of Mission Indians (2250) Pechanga Band of Mission Indians (225P) Rincon Band of Luiseno Indians (225Q) San Luis Rey Band of Luiseno Indians (225R) Los Coyotes Band of Mission Indians (225S) Deron Bear – Marion Bear Natural Park Recreation Council (253) Tecolote Canyon Citizens Advisory Committee (254) Friends of Tecolote Canyon (255) Tecolote Canyon Rim Owner's Protection Association (256) Marion Bear Natural Park Recreation Council (266A/267A) UCSD Natural Reserve System (284) John Stump (304) Friends of Peñasquitos Preserve, Inc. (313) Debbie Knight (320) Mission Trails Regional Park Citizens Advisory Committee (341) Carmel Valley Trail Riders Coalition (351) Carmel Mountain Conservancy (354) Los Peñasquitos Canvon Preserve Citizens Advisory Committee (360) Mike Kelly, Friends of Peñasquitos Canyon Preserve (382) Friends of Rose Canyon (386) Frank Landis (387) San Dieguito River Park CAC (415) Friends of San Dieguito River Valley (419) San Dieguito River Valley Conservancy (421) RVR PARC (423) Beeler Canyon Conservancy (436) Jim Dawe (445) Mission Trails Regional Park (465) Bob Allen (460) Dave Dilday (460A) John Turpit, Michael Merrill Architecture + Planning David Hogan, Chaparral Lands Conservancy Van Collinsworth **Joe Frichtel** Greg Mason, Alden Environmental Claudio Castruita Dustin Janeke, HDR Consulting John Buse, Center for Biological Diversity Richard Halsey, The California Chaparral Institute **Rodriguez Family Trust** David & Amy French L-3 Communications Corp Thuan Nguyen

Liew Chee Boon & Lai Lai Fong, Fah S & Polly Liew **Riesgo Family Trust** Kearny P C C P Otay 311 LLC Lisa Lawson, Pardee Homes San Diego Gas & Electric Company San Diego Spectrum Owners Assn Kenneth B & Karen Perry, et al Southview LLC – Clem Abrams Southview LLC ARE-SD Region No 32 Exchange LLC Carole G Marquez Trust Michael Lee **Blas Family Trust** INC Trustees et al Rami & Mutvala Challa Hemalatha Marcelino & Teresa Ortiz Trust Fine Particle Technology Corp Nhatnam Nguyen **Cubic Corporation** Pardee Homes Western Pacific Housing - Torrey Santa Fe LLC Solar Turbines Inc. Southview Development Partners LLC Elizabeth CH Aispuro Trust Sea Breeze 56 LLC Trust 06-13-97 Yoshindo & Betty T Shibuya Trust **BUMS** Properties LLC L N R Kearny Mesa Inc. Cook Inlet Region Inc. Friends of Los Penasquitos Canyon Preserve Garden Communities RP LLC **Greenfield Square LLC** City of San Diego Open Space Park Facilities District No 1 Valdivia Hilario G & Maria G Revocable 1997 Trust 06-13-97 Shibuya Yoshindo & Betty T Trust 06-16-82 Friends of Los Penasquitos Canyon Preserve Inc The Salk Institute for Biological Studies San Diego California Forest Park III L P H H Apartments L P Et Al Air California Adventure LLC, Dba Torrey Pines Gliderport San Diego Gas & Electric Co Otav-T J North L L C Dassons Real Estate LP Hattie M Davisson Trust Southview L L C Blackwill Pamela M Miranda Octaviano&Isabel M Castro Ramon V&Rosa O Et Al Rhodes Keith B Living Trust 11-11-99 Marmolejo Frank Cardoza Jose P&Raguel M

Luna Roberto A Gomez Marcia A **Eastgate Miramar Associates** Otay Business Park L L C State of California Department of Transportation **MBH Enterprises Teledyne Industries Inc** Pardee Homes State Of California Department Of Transportation Handler Trust 08-27-83 Expo Propane Inc Ytreeide Bruce A Revocable Living Trust 03-22-00 Kenneth B & Karen Perry Et Al, Kuta Living Revocable Trust Antoinette Saraspe, San Ysidro Industrial Park LTD Carrie Schneider, Canyon Coalition Rikki Schroeder, RMA Consultants Clifton Williams, Latham & Watkins Zoura Family Trust 10-08-09 Southview Development Partners L L C Otav Mesa LLC Arellano Burgueno Corp Manuel & Mary C Lieras **Rhodes & Grus Investments** Keith B Rhodes Living Trust 11-11-99 Dexstar Inc **Frederick Jennings** Robinhood III Robinhood III Eastgate Miramar Associates, Eastgate Miramar Associates Et Al Teresita L Alcaraz L Tr County of San Diego **Torrev Hills Master Assn** Roman Catholic Bishop of San Diego Carl & Rosa Harry Family 2007 Trust 12-27-07 Et Al Bruce A Ytreeide Revocable Living Trust 03-22-00 Perry Kenneth B & Karen Et Al Otay-T J North L L C San Diego C M I L L C **FELCO Construction Inc** Pulido Living Trust 12-12-06 Eastgate Industrial Center Owners Assn Inc Alvarez Jose Alvarez Josefina San Ysidro Land Trust 07-19-07 Corn Daxton J Corn Maxwell H Fieldstone Communities L L C Lozano Raymond S & Martha Peralta Gloria Southview L L C The Newland Group Inc The Pamela M Blackwill San Diego Spectrum Owners Assn Shibuya Yoshindo & Betty T Trust 06-16-82 San Diego Gas & Electric Co Iuan A & Pilar C Romero Daniel S & Jessica R Drosman Family Trust 10-31-05

San Ysidro Industrial Park Ltd Carlos R Luna Barbara Velez Jose A & Rosa Garcia & Guadalupe D P Garcia Jose A & Rosa & Atjian Pilar & Eduardo Hoffman Jose M & Blanca D Hoffman Jose Ir & Hoffman Jose & Blanca D **Kaiser Foundation Hospitals** Manzano Francisco J A & Deaguilar Elena C Velasquez Amparo S Revocable Trust 09-06-00 Valdivia Hilario G & Maria G Revocable 1997 Trust 06-13-97 **Torrey Highlands Homeowners Assn** Handler Trust 08-27-83 John S. Collins Salerno Ralph N Trust 04-26-06 Williams Gary T & Louise C Burrola Ernestina Living Trust 01-14-11 Avila Sylvia Square One Development Corp Beaver Essie M Wilcox William J Iose M Sanchez Leticia Valdivia Otav Business Park L L C Amparo S Velasquez Revocable Trust 09-06-00 Otay Mesa Crossing L L C San Diego Unified School District New Age LLC, Dba Mission Trails Golf Course Linda Abbott, Mildred G Abbott Family Trust Bruce April, Chief Caltrans District 11 Michael Beck, Endangered Habitats League Catholic Diocese of San Diego Eusebio Castruita Franciso & Ana Castruita Elizabeth Drakulich John Hagey et al, Robert H. Hagey Jr. Trust Nancy Hauser, Vista Del Verde HOA **Frederick Jennings** Jon Keeley, U.S. Geological Survey Su Kraus, Moose Creek Nursery Lincoff et al, Milton Handler Trust McMillan Otay Ranch LLC Ronaldo & Jocelyn Nimuan John Northrup Shaw Texas IV LLC/Pardee Homes Idec-Nobel Research Center Hanson Aggregates Pacific Kaiser Foundation Hospitals Kearny PCCP Otay 311 LLC **MBH Enterprises McCaw Family Trust** Otav Business Park LLC **Otay Greenfield Developers LLC** Otay Industrial One LLC **Otay Mesa Crossings LLC** Square One Development Corp

Sunroad Investment Corp **Candlelight Properties** Harold A Clayton Mike Abrams Theresa Acerro Glenn Allen, NRES Jimmy Ayala, Pardee Homes Lynne Baker, Endangered Habitats League Jeff Barfield, RBF Jillian Bates, Rincon Consultants Ellen Bauder PhD Michael Beck, Endangered Habitats League Vandana Bhairi **Spencer Bigelow** Molly Bigger, Sierra Club Chuck Black, MCAS Miramar Pam Blackwill, Rhodes Crossing Russ Boggs, SDMBA David Boyer, MCAS Miramar Adrienne Brown **Cindy Burrascano Cindy Buxton** Ed Caliri, US Border Patrol Roxy Carter, SD Audubon Society Josh Corona-Bennett, ECORP George Course, Back Country Coalition Beth Dirksen, Sna Diego County Parks Mark Dodero, Recon Environmental Shannon Dougherty, SD Audubon Society Angelika Drake, Del Mar Mesa Board Preston Drake, Del Mar Mesa Community Planning Board, Trails Subcommittee William Dudley, Balboa Park Examiner Brent Eastty, HDR Pamela Epstein, Sierra Club Mike Evans Beth & John Frice Grant Frost, SDG&E Cesar Garcia, Natiuos Juan Garcia Kimberly Gelardi Bonnie Gendron, Back Country Coalition Mike Gonzales, RBF Consulting Patricia Gordon-Reedy, CBI Gardner Grady, SDMBA Matt Guilliams, UC Berkeley Zarina Hackney Joy Hagin, Cubic Susan Hall Bobbi Herdes, Recon Tom Huffman, Helix Environmental Planning Mel Ingalls/Todd Ingalls, Ingalls Enterprises

Chad Iverson, Menlo Equities Vipul Joshi, Dudek Richard Julien, San Diego Mtn. Bike Association Robin Kinmont, Rincon Consultants Michael Klein, KEPS Fred Kramer, SDTT Yuko Kurahashi Jason Kurnow, Helix Environmental Planning Carmen Lopez Cary Lowe, Attorney at Law Ivan Maric Jerry McCaw Robert McDowell, SMPG Robert Mikutzit, San Diego Mtn. Bike Association Pat Mock, URS Mike Moore Kailash Mozumder, ICF International Tina Nagel Brian Nixon Cailin O'Meara, RECON Environmental Charlotte Orren Minette Ozaki, Los Penasquitos Canvon CAC. John Ponder, Sheppard Mullin Jennifer Price, County of San Diego Beth Procsal, RECON Environmental Alberto Pulido, ROR **Dave Robbins** Antonio Rodriguez, Rodriguez Trust Gustavo Rodriguez Rubin Rodriguez Evelyn Rubach, US Border Patrol Hal Ryan, OMP Otay Peter Sawicki Christina Schaefer Joe Schrats **Cody Sears** Catherine Sei Lee Sherwood, RECON Environmental Jenny Shih Marie Simouich, University of San Diego Gary Smith, Partners 4 Nature Grayson Sobel, Sierra Club Jeff Thomas, Panorama Environmental, Inc Victoria Urv Gabriel Valdez, Pulido Trust Gloria Valenti-Gerak, Media Planning & Placement Jim Whalen, J. Whalen Assoc. Lee Zoura ECO San Diego Jackson Development Taylor Orr/Audrey Jordan, Parker Sutton/Jackson Boehm

RESPONSE TO COMMENTS ON THE DRAFT EIR/EIS

The Draft Environmental Impact Report (Draft EIR) for the Vernal Pool Habitat Conservation Plan (VPHCP) was distributed for California Environmental Quality Act (CEQA) public review on September 30, 2016, initiating a 60-day public review period ending on December 1, 2016. The document was also distributed for the National Environmental Policy Act (NEPA) public review on December 23, 2016 through February 21, 2017.

The document was made available online, via mail request, and at the City of San Diego's Planning Department. Documents were also available during the NEPA public review online, via mail request, and at the U.S. Fish and Wildlife Service office in Carlsbad.

CEQA Guidelines §15088(a) require "the lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response." Also, NEPA regulations 40 CFR §1503 requires a federal agency preparing an EIS to provide an opportunity for comment on the Draft EIS and respond to those comments in the final EIS. Pursuant to these requirements, all comment letters received on the VPHCP Draft EIR/EIS were evaluated for environmental issues, and written responses to comments on the environmental issues were prepared.

In instances where duplicative comments were received from the same organization or individual for both the CEQA and NEPA review periods, those comments were fully addressed in the CEQA responses and then referred to in the NEPA responses to avoid lengthy duplication of responses to the same or highly similar comments.

Table 1 provides a list of the comment letters received as part of the CEQA public review and Table 2 provides a list of comment letters received in association with the NEPA public review. The tables include the agency, and organization or individuals that submitted the letter and a corresponding Letter ID number. For organizational purposes, each letter has been assigned a letter identification number. Each comment letter is reproduced in its entirety and is aligned side-by-side with the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter.

Letter					
ID		Letter			
Number	Commenter	Date			
	AGENCIES				
А	Office of Planning and Research	12/02/16			
В	California Department of Fish and Wildlife	12/07/16			
	ORGANIZATIONS AND INDIVIDUALS				
С	California Chaparral Institute, Center for Biological	11/30/16			
	Diversity, Save our Forest and Ranchlands,				
	Cleveland National Forest Foundation, Preserve				
	Wild Santee, and California Native Plant Society				
D	California Native Plant Society San Diego	12/01/16			
Е	Hogan, David	12/01/16			
F	Sheppard Mullin (Cubic)	12/01/16			
G	Sheppard Mullin (Rhodes)	12/01/16			
Н	Whalen, Jim (Otay Lake Road)	12/02/16			
Ι	Whalen, Jim (St. Jerome's)	12/02/16			
J	Whalen, Jim (Tierra Alta)	11/30/16			
K	RECON (Pardee)	11/22/16			
L	Jackson Pendo Development	12/01/16			
М	Friends of Rose Canyon	12/01/16			
Ν	Environmental Center of San Diego	12/06/16			
0	San Diego County Archaeological Society	11/27/16			
Р	Wescott, Doug	11/13/16			
Q	Blas, Antonio	11/29/16			
R	Sanchez, Roberto	11/29/16			

Table 1List of CEQA Comment Letters on the VPHCP Draft EIR

Table 2List of NEPA Comment Letters on the VPHCP Draft EIS

Letter		
ID		Letter
Number	Commenter	Date
	AGENCIES	
S	Environmental Protection Agency	02/22/17
Т	Federal Aviation Administration	02/21/17
	ORGANIZATIONS AND INDIVIDUALS	
U	California Native Plant Society San Diego	02/21/17
V	Hogan, David	02/21/17
W	Orr, Taylor; Audrey Jordan; Sutton Parker;	No date
	Boehm, Jackson	

RESPONSE TO COMMENTS



STATE OF CALIFORNIA GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



December 2, 2016

Myra Hermann City of San Diego 1010 Second Ave, Suite 1200, East Tower, MS 413 San Diego, CA 92101

Subject: Vernal Pool Habitat Conservation Plan (HCP) SCH#: 2011111075

Dear Myra Hermann:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 1, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely, Scott Morgan

Director, State Clearinghouse



A-1

CEQA LETTER A (1)

A-1 The letter informs that the State Clearinghouse did not receive any letters from state agencies by December 1, 2016, and acknowledges that State Clearinghouse review requirements have been complied with per CEQA.

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov Document Details Report State Clearinghouse Data Base

SCH# 2011111075 Project Title Vernal Pool Habitat Conservation Plan (HCP) Lead Agency San Diego, City of

Type EIR Draft EIR

Description Note: Review Per Lead

The VPHCP is a conservation plan for vernal pools and seven threatened and endangered vernal pool species that do not currently have federal coverage under the City of San Diego's Multiple Species conservation program subarea plan. The VPHCP would be compatible with, and would expand upon, the City's existing MSCP SAP to conserve additional lands with vernal pools that are occupied with threatened and endangered vernal pool species. The VPHCP plan area encompasses 206, 124 acres. One fully implemented, the VPHCP would expand the city's existing multi habitat planning area by adding approximately 275 acres of lands with valuable vernal pools resources. The VPHCP would conserve an additional eight vernal pool complexes and additional 226 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved. Once adopted, vernal pool lands within the MHPA would be subject to the provisions of the VPHCP, in addition to the City's MSCP SAP and other existing tand use and biological resource plans, policies, and regulations.

Lead Agend	cy Contact		
Name	Myra Hermann		
Agency	City of San Diego		
Phone	(619) 446-5372	Fax	
email			
Address	1010 Second Ave, Suite 1200, East Tower, M	S	
City	413	State CA	Zip 92101
	San Diego		
Project Loc	ation		
County	San Diego		
City	San Diego		
Region	and the state of t		
Lat/Long			
Cross Streets	City-wide		
Parcel No.	multiple		The second se
Township	Range	Section	Base -
Proximity to	0:		
Highways	5. 15. 52. 54. 56. 67. 76. 125		
Airports	Multiple		
Railways	Mulliple		
Waterways	Multiple		
Schools	Multiple		
Land Use	Varied - project is city-wide		
Project Issues	Drainage/Absorption; Water Quality; Landuse Biological Resources; Soil Erosion/Compactio Growth Inducing; Other Issues	a; Cumulative Effe on/Grading; Vege	ects; Air Quality; Archaeologio-Historic; tation; Wetland/Riparian; Wildlife;
Reviewing Agencies	Resources Agency; California Coastal Comm Department of Water Resources; Departmen Aeronautics; California Highway Patrot; Caltra Region 9; Department of Toxic Substances C Energy Commission; Public Utilities Commiss	ission; Department t of Parks and Re ans, District 11; R control; Native Am sion	nt of Fish and Wildlifa, Region 5; creation; Caltrans, Division of egional Water Quality Control Board, erican Heritage Commission; California

Document Details Report State Clearinghouse Data Base

Date Received	09/30/2016	Start of Review	09/30/2016	End of Review	12/01/2016	

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STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



A-2

EDMUND G. BROWN JR. GOVERNOR

December 8, 2016

Myra Hermann City of San Diego 1010 Second Ave, Suite 1200, East Tower, MS 413 San Diego, CA 92101

Subject: Vernal Pool Habitat Conservation Plan (HCP) SCH#: 2011111075

Dear Myra Hermann;

The enclosed comment (s) on your Draft EIR was (were) received by the State Clearinghouse after the end of the state review period, which closed on December 1, 2016. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2011111075) when contacting this office.

Sincere

Scott Morgan Director, State Clearinghouse

Enclosures cc: Resources Agency A-2 The letter provides a copy of the California Department of Fish and Wildlife (CDFW) letter that was received by the State Clearinghouse after the end of the state review period. Responses to the CDFW comment letter are provided below as Letter B.

LETTER A (2)

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Page RTC-6



State of California - Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE South Coast Region



www.wildlife.ca.gov December 7, 2016

(858) 467-4201

Governor's Office of Planning & Research DEC 07 2016

STATE CLEARINGHOUSE

Ms. Myra Herrman, Senior Planner City of San Diego, Planning Department 1010 2nd Avenue, Suite 1200 Executive Complex East Tower, MS 413 San Diego, California 92101

Subject: City of San Diego Vernal Pool Habitat Conservation Plan EIR/EIS (SCH# 2011111075)

Dear Ms, Herrman:

The California Department of Fish and Wildlife (Department) has reviewed the City of San Diego's Draft Vernal Pool Habitat Conservation Plan (VPHCP), Vernal Pool Management and Monitoring Plan, and the associated Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) (SCH# 2011111075) dated September 2016, The Department has worked closely with the City, their consultants, and the U.S. Fish and Wildlife Service (Service) during the preparation of the VPHCP and the associated documents, including proposed changes to the Biology Guidelines in the City's Land Development Code and to the Environmentally Sensitive Land Regulations. Collectively, the VPHCP and the associated documents will identify the conservation, monitoring, and adaptive management measures that will be implemented by the City to address seven federally listed species, which are associated with vernal pool habitat. Although these seven species are not presently covered by the federal permit issued for the City's Multiple Species Conservation Program (MSCP), which necessitated development of the VPHCP, the seven species are covered under the State's Natural Community Conservation Planning (NCCP) permit that was issued for the City's MSCP.

Once the VPHCP is officially approved by the City, the Department expects to provide written concurrence to the updated Land Development Code Biology Guidelines and the Environmentally Sensitive Land Regulations to memorialize the conditions and measures that the City will perform to address the conservation, monitoring, and management of the seven vernal pool-associated species. The Department believes these measures will meet or exceed the conservation requirements in the City's MSCP and the Department's existing NCCP Permit.

The Department appreciates the hard work undertaken by the City, their consultants, conservation partners, affected landowners, and other interested parties to prepare the VPHCP. and encourages the City's approval. If you have any questions concerning this letter, please contact David Mayer, Senior Environmental Scientist at David Mayer@wildlife.ca.gov or (858) 467-4234.

Singerely, C Gall K. Sevrens

Environmental Program Manager South Coast Region

Conserving California's Wildlife Since 1870

CALIFORNIA

State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE South Coast Region 3883 Ruffin Road San Diego, CA 92123 (858) 467-4201

UTAI Resources Agency EDMUND C SH AND WILDLIFE CHARLTO



www.wildlife.ca.gov December 7, 2016

Ms. Myra Herrman, Senior Planner City of San Diego, Planning Department 1010 2nd Avenue, Suite 1200 Executive Complex East Tower, MS 413 San Diego, California 92101

Subject: City of San Diego Vernal Pool Habitat Conservation Plan EIR/EIS (SCH# 2011111075)

Dear Ms. Herrman:

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Once the VPHCP is officially approved by the City, the Department expects to provide written concurrence to the updated Land Development Code Biology Guidelines and the Environmentally Sensitive Land Regulations to memorialize the conditions and measures that the City will perform to address the conservation, monitoring, and management of the seven vernal pool-associated species. The Department believes these measures will meet or exceed the conservation requirements in the City's MSCP and the Department's existing NCCP Permit.

The Department appreciates the hard work undertaken by the City, their consultants, conservation partners, affected landowners, and other interested parties to prepare the VPHCP, and encourages the City's approval. If you have any questions concerning this letter, please contact David Mayer, Senior Environmental Scientist at David.Mayer@wildlife.ca.gov or (858) 467-4234.

Sincerely,

Gail K. Sevrens Environmental Program Manager South Coast Region

Conserving California's Wildlife Since 1870

- B-1 The comment summarizes the CDFW involvement in development of the VPHCP. No further response is required.
- B-2

B-1

B-2

2 The comment states that CDFW anticipates providing written concurrence at the time of approval of the VPHCP to memorialize the conditions and measures required by the City, which are expected to meet or exceed the conservation requirements in the City's Multiple Species Conservation Program (MSCP) and existing Natural Community Conservation Planning (NCCP) Permit. No further response is required.

LETTER B

LETTER C



November 30, 2016

Ms. Myra Hermann, Environmental Planner City of San Diego Planning Department 110 Second Avenue, East Tower, Suit 1200, MS 413 San Diego, CA 92101-3865 PlanningCEQA@sandiego.gov

RE: Vernal Pool Habitat Conservation Plan - #441044 / SCH No. 201111075

Dear Ms. Hermann,

Thank you for the opportunity to review the Draft Vernal Pool Habitat Conservation Plan (VPHCP EIR/EIS).

Alternatives

The "Reduced Take" / "Expanded Conservation Alternative" (3.7 acres of added basin area) is the only acceptable Alternative in our judgment. Vernal pool ecosystems have been so decimated in the region that even the adoption of the Reduced Take/Expanded Conservation Alternative leaves survival and recovery of endangered vernal pool species in significant doubt. Despite the calculated risks of this Alternative, in the interest of resolving the long dispute over vernal pool destruction we can support the adoption of the Reduced Take/Expanded Conservation Alternative. We cannot support the Project Alternative due to the Project Alternative's additional significant adverse impacts to endangered vernal pool species and the feasibility of avoiding those impacts.

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Preserve Wild Santee

C-1

1

C-1 This comment expresses support for the Expanded Conservation Alternative and a lack of support for the Project.

Mitigation & Monitoring Funds / Implementation / Funding Mechanism

The EIS/EIR fails to adequately disclose the significant adverse impacts of continued permitting of take upon the viability of the Recovery Plan for endangered vernal pool species. How does the project and other alternatives specifically impact or fulfill the specific items prescribed in the Recovery Plan?

The Executive Summary identifies "Funding and availability of perpetual funding mechanism" [ES-8] as an issue of controversy, but the ES fails to discuss if and how this significant issue is addressed. Chapters in the EIS lack certainty with regard to how the needs identified will be specifically funded. The EIS is inadequate without resolving this issue.

The potential funding mechanisms discussed in VPHCP Chapter 10 are not specific enough to establish how the costs identified in VPHCP Appendix E will be covered. Current fund balances and the amount of revenues to be generated should be clearly identified and specified for the line items identified within Appendix E Cost Analysis. Financial reports should be due annually and accompany the required biological monitoring reports.

Successful plan implementation will depend, in part, upon adequate reporting and transparency. The VPMMP, Section 5.0, pages 36-37 describes a process that is not adequate. The "summarized results" due to the Wildlife Agencies by September 30, should be provided to a list of interested non-government individuals and organizations and posted upon the City's vernal pool website. A meeting should be scheduled with the City, the Wildlife Agencies and non-government organizations (NGOs) if an NGO expresses interest prior to December. Financial reports for VPHCP implementation and monitoring should be included that reflect current balances, annual expenditure and projected expenditures with specific funding sources identified.

The EIS states, the No Project Alternative would involve "status quo monitoring" but doesn't explain what status quo monitoring is, or how effective it is in comparison to the monitoring for the project and alternative.

How do Army Corps rules now under consideration impact the VPHCP and what are the inconsistencies? The VPHCP should go beyond Corp minimum standards, but appears deficient in terms of meeting a 100' minimum buffer and annual monitoring C-6 for restored pools - 10 years.

[2016-DVPGL, DRAFT Vernal Pool Mitigation and Monitoring Guidelines - attached] http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/996958/2016-dvpgl-draft-vernal-pool-mitigation-andmonitoring-guidelines/

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- C-2 The analysis in the EIR/EIS found that the VPHCP is consistent with the Recovery Plan for Vernal Pools of Southern California by contributing to the recovery of the covered species (USFWS 1998). The VPHCP goals and objectives were developed based on the stipulations outlined in the HCP Handbook that require that an HCP contribute to the recovery of a species (USFWS 2000). A significant impact regarding the consistency with the Recovery Plan was not identified in the EIR/EIS. As described in Section 3.3.6 of the EIR/EIS, consistency with the Recovery Plan is an integral part of the conservation strategy of the VPHCP. The ability of the Project and the alternatives to be consistent with and fulfill the requirements of the Recovery Plan is analyzed specifically in Biological Resources, Section 5.3.4 of the EIR/EIS under the heading Consistency with the USFWS Recovery Plan. In the VPHCP document, refer to Section 1.1.2, Section 4.1.1, and Section 5.1, which state that the biological goal of the VPHCP is to contribute to the recovery of vernal pool species. Table 5-1 of the VPHCP summarizes conservation objectives to achieve this.
- VPHCP Chapter10 has been updated to identify the VPHCP funding mechanisms (10.3), C-3 funding for one-time costs (10.3.1), and funding mechanisms for annual costs (10.3.2) for implementation of the VPHCP. This information has been added to Table 3-13 in the Final EIR/EIS. Additionally, the EIR/EIS includes funding availability as an area of potential controversy based on public input as detailed in Section ES.5. Potential Areas of Controversy. However, the EIR/EIS clearly states in Section 1.2, specifically where funding information can be found in the VPHCP and provides funding requirements within the analysis, most specifically in Section 5.1, Land Use and Section 5.2, Biological Resources. Approval of the funding mechanisms to implement the VPHCP will be an action item before the City Council with adoption of the VPHCP.

Updated financial reporting is a required as part of the VPHCP annual report (once the Project is approved), which will be submitted to the Wildlife Agencies (USFWS and CDFW) and made public on the City's MSCP website. As required in Chapter 8 Section 8.6.1, Permittee Responsibilities of the VPHCP, the annual report prepared by the City shall include an accounting of funds expended for management and monitoring as well as identification of the funding mechanisms for the following year. The City will make the VPHCP annual reports available for review by the public on the City's website. There is an annual MSCP workshop, which is open to the public, that will cover the results of the VPHCP management and monitoring each year. For more information, please refer to the City's MSCP website at https://www.sandiego.gov/planning/programs/mscp.

- C-4 The comment does not explain why the report process is not adequate. The City and Wildlife Agencies find that there is adequate and appropriate transparency in the monitoring and reporting process as required in the VPHCP. As described in Section 5.0 of the VPMMP, as well as Section 7.7 of the VPHCP, the data shall be provided to the San Diego Management and Monitoring Program (SDMMP), a multi-taxa database. which the public is able to access. Non-Government Organizations (NGOs) and other interested parties will be able to access the City's VPHCP annual report on the City's MSCP website and provide public comment/questions at the annual MSCP workshop. Refer to response to comment C-3 regarding financial reporting for the VPHCP.
- C-5 Information has been added to the final EIR/EIS. Sections 3.4.2 and 5.2.4. to provide more detail of the current monitoring that would continue under the Existing Conservation/No Project Alternative and analysis of that monitoring in comparison to

C-5

2

C-4

C-2

C-3

What current laws, legal standards and plans impact the VPHCP and what are the inconsistencies?

Site Discussions

Site Description Error for Bachman J34:

The VPMMP description and site assessment for Candlelight and Southview parcels refers to Sweetwater High School. This should be corrected to San Ysidro High School.

J36 Southview:

"Per the Southview Project Stipulated Settlement Agreement [Case No. 98-CV-02234-B (JMA)] management, in perpetuity, of the vernal pools on the eastern parcel (Southview East) would include maintaining a perimeter fence, eliminating weeds, and constructing and maintaining no trespass signs to protect the conserved areas. These activities shall be monitored at least every two months to ensure the management activities are their goal of preserving vernal pools on the eastern area. Additionally, the Southview East project will also include implementation of the MSCP Adjacency Guidelines and a Covenant of Easement on the conservation area."

Language in the paragraph above should be modified to include continued reporting to plaintiff organization contacts that have already been provided consistent with the Stipulated Settlement Agreement. Any future development of Southview East must be consistent with the Stipulated Settlement Agreement in [Case No. 98-CV-02234-B (JMA).

Please reference our letters of April 10, 2015, April 25, 2011 and December 12, 2011, which remain relevant.

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what is proposed under the VPHCP. This additional detail provides information but does not change the analysis or conclusions presented in the EIR/EIS.

Status quo monitoring refers to monitoring that is currently being conducted on MHPA Preserve lands, either by the City as part of the City's MSCP program, or by private entities as part of individual project permits at vernal pool mitigation and/or preserve sites that require long-term management (e.g., Caltrans-owned Dennery Canyon West vernal pool restoration site). Monitoring requirements and data collection/analysis vary by individual entity depending on project permit conditions and/or regional monitoring guidance (e.g., MSCP). There is no Preserve-wide monitoring program under the Existing Conditions/No Project scenario.

- C-6 The City's VPHCP focuses solely on the City's permitting policy and ordinances to implement the VPHCP. The City is not applying for a Section 404 permit as part of the VPHCP nor is the City relying on the Section 404 process to implement the VPHCP conservation strategy and is, therefore, not subject to review or standards set by the US Army Corps of Engineers (USACE). The VPHCP includes vernal pool mitigation and restoration requirements developed in coordination with USFWS, the permitting entity for the VPHCP. The VPHCP is consistent with all applicable laws and legal standards, as demonstrated throughout the EIR/EIS analysis.
- C-7 The site description typo in the VPMMP regarding Bachman J34 has been corrected.

The Stipulated Settlement Agreement [Case No 98-CV-0223-B (JMA)] is between two private parties (plaintiff organization and landowner); the City was not a party to this agreement. The Southview East (J36) project (PTS No. 371807) is currently in process and would include management and monitoring consistent with the VPHCP and VPMMP. We assume the plaintiff organization and landowner will ensure the Southview East project submitted to the City is consistent with this agreement.

3

C-6

cont

C-7

9222 Lake Canyon Road, Santee, CA 92071

Response to Appendix B Response to Key Public Comments CBD et al.

Our current responses are numbered and appear below the table excepts that follow:

Commenter CBD et al.	General Topic	Comment Summary	Response to Comment
1	Guiding principles from 2011 letter	The VPHCP should include a section in the introduction that analyzes how well the VPHCP achieves the objectives and essential plan components requested by the 2011 letter.	The VPHCP meets the guiding principles outlined in the 2011 letter. Refer to Chapter 5 and Appendix C for an analysis of conservation of vernal pools and species, including the conservation strategy. The analysis is based on an updated vernal pool inventory (as discussed in Section 1.3.4). Refer to Chapter 10 and Appendix F for the funding strategy!

1. The plan assures the loss of vernal pools. Prospects for vernal pool ecosystems recovery are speculative and adequate funding remains in question. Appendix F referenced by the RTC is a "Model Certificate of Inclusion", not a "funding strategy."

C-8

C-9

C-10

C-11

2	Provide for recovery	The VPHCP needs to provide for recovery of the species.	Although not required, the City's VPHCP is consistent with the Recovery Plan for Vernal Pools of Southern California. Refer to Section 1.1.2, Section 4.1.1, and Section 5.1 of the VPHCP, which state that the biological goal of the VPHCP
			is to contribute to the recovery of vernal pool species. Table 5-1 of the VPHCP summarizes conservation objectives to achieve this.

2. Recovery remains in question.

3	Comprehensive vernal pool ecosystem inventory	A comprehensive inventory of vernal pools should be developed.	A comprehensive inventory was completed. Refer to Sections 1.3.3 and 1.3.4, Table 2-2, and the vernal pool mapping tool on the City's website at https://www.sandiego.gov/planning/programs/mscp
			/vphcp. This information is the best scientific data available for the seven vernal pool species addressed in this VPHCP. The mapping tool now has a table of references.

3. Geographic inventory of vernal pools appears to be generally complete, but issues remain for identification of specific pools within the general areas of the region. Reference the separate letter from CNPSSD/Landis. Specific data in regard to species populations, fairy shrimp hybridization and other relevant conditions are still needed.

	Adequate funding	Establish an adequate and reliable funding mechanism to implement the recovery strategy in perpetuity.	Adequate funding is an issuance criterion that must be met (see Section 1.4.1). Chapter 10 was not complete in the preliminary draft VPHCP. Chapter 10 has been updated in the Public Review Draft VPHCP.	
4 t	. It remains c apped for spec	lifficult to establish the sp fific funding requirements	ecific fund sources that will be and thus, to determine if the	
P	olan is adequat	ely funded. Section 10.7 h	as a list of potential funding	4

C-8 It is correct that the VPHCP allows for some loss of vernal pool; however, the loss of a very small percentage of pools (7%) would be in exchange for: expansion of the City's existing MHPA by adding approximately 275 acres of lands, and restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation value in the MHPA. This strategy will conserve an additional eight vernal pool complexes within the Plan Area, and an additional 226 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved. The VPHCP also ensures adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources within the city.

The vernal pool recovery plan states that restoration is necessary to recover listed vernal pool species. The City and Wildlife Agencies disagree with the commenter that vernal pool ecosystem recovery is speculative as based on monitoring of many sites to date, restoration and enhancement have been successful in many instances. As an example, based on this success, restoration on City lands is being done even by conservation organizations such as the Chaparral Lands Conservancy, in coordination of the City and Wildlife Agencies.

C-9 The City and Wildlife Agencies disagree with the commenter that adequate funding is in question. Please see response to comment C-3 regarding adequate funding availability.

In the previous response to comments regarding the Preliminary Draft VPHCP, Appendix F was correctly referenced in that version of the document. In the Public Review Draft version, Appendix E includes costing and funding information.

- C-10 The comment does not provide any justification to support the assertion that "recovery remains in question." As stated in Chapter 5, the VPHCP's overall conservation strategy is to allow impacts to degraded vernal pools with low long-term conservation value in exchange for restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation value in the MHPA. The design of the VPHCP conservation strategy includes habitat-based and species-specific objectives for conservation, management, and/or restoration of the vernal pools and species covered under the VPHCP. Implementation of the conservation strategy would achieve the VPHCP's biological goal of contributing to the recovery of the VPHCP covered species resulting in continued persistence of the covered vernal pool species populations identified in the VPHCP. In the VPHCP document, refer to Section 1.1.2, Section 4.1.1, and Section 5.1, which state that the biological goal of the VPHCP is to conservation objectives to achieve this.
- C-11 The City and Wildlife Agencies acknowledge that environmental conditions are continually changing and vernal pools are dynamic. The VPHCP conservation analysis is based on information available at the time the VPHCP was prepared. In addition, analysis of modeled vernal pool habitat (i.e., suitable soils, topography) was completed as part of the VPHCP impact assessment to identify potential impacts from covered projects and covered activities in locations with potential for vernal pools to occur (e.g., road pools on Del Mar Mesa) where they had not been previously mapped (see VPHCP Appendix C). These are considered sufficient for purposes of the Impact Analysis in Section 6 of the VPHCP. Project-level surveys will be required and as part of the development entitlement process discussed in Section 8.1 of the VPHCP. Any additional vernal pools, species information, and other relevant data will need to be included in the development entitlement process. Impact analysis and mitigation for individual projects will be evaluated based on the project-level surveys, If additional vernal pool resources are identified within the MHPA, the City will update its vernal pool database and associated web mapping tool annually, as discussed in Section 7.7 of the VPHCP.

mechanisms" for annual recurring costs, but does not commit any of these potential sources.

C-12

cont

C-13

C-16

5

5. - 10. Noted.

11	Data Base	Establish a universal standardized system and database tracker.	Refer to Section 7.7. The VPHCP data will be s to multi-taxa database at SDMMP.
	11. Data shou	ld also be provided to othe	er interested NGOs on a timely

12. Noted.

basis.

Commenter	General Topic	Comment Summary	Response to Comment
13	ESA requirements	The VPHCP does not follow standards of the USFWS Vernal Pool Recovery Plan.	The VPHCP does follow the standards of the USFWS Vernal Pool Recovery Plan (see Section 1.4.1).

13. The documents fail to include a detailed analysis of the requirements C-14 in the USFWS Vernal Pool Recovery Plan and how the SD VPHCP fulfills or furthers specific items within the Recovery Plan.

Refer to Section 7.7. The VPHCP data will be sent to multi-taxa database at SDMMP.

14	Lawsuit requirements	The Endangered Species Act and the Southwest Center for Biological Diversity v. Bartel decision (470 F. Supp. 2d 1118, S.D. Cal. 2006) require that the standards of the USFWS Vernal Pool Recovery Plan must be utilized for the preparation of the new VPHCP.	There were no binding agreements associated with this law suit and the case was dismissed.
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14. The case was dismissed because the City surrendered its "take C-15 authority." The findings by the court remain relevant if the City wishes to regain "take authority."

15	Consistency with 1998 Recovery Plan	There is not a discussion of how the impacts to vernal pools, allowed by covered projects, is consistent with the 1998 Recovery Plan.	The Recovery Plan anticipated that development would continue and that some pools would be lost; however, this would be balanced with active management and monitoring. Language has been added to Chapter 5 that clarifies the intent of the Base of the Construction of the second
		-	Plan is analyzed in Chapters 5 and 6.

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15. Discussion in "Chapters 5 and 6" of consistency with the 1998 USFWS Vernal Pool Recovery Plan is limited at best. What prescriptions in the 1998 plan have since been foreclosed and how does that impact prospects for Recovery as defined in the 1998 plan?

16. Noted - reference response #3 above. 17. - 20 Noted.

The City and Wildlife Agencies are mindful that the dynamic environment can result in unmapped pools and altered situations that can create inconsistences with actual conditions and the database and mapping tool. It is not possible to continually survey all the expansive vernal pool resource locations within City jurisdiction for purposes of updating the database prior to completion of the VPHCP document. It is for this reason that the proposed annual monitoring, management, and reporting requirements of the VPHCP are so important for improved and updated database and mapping accuracy. Once the Project is approved, annual surveys and monitoring data will be added to the City's database. A key component of the VPMMP involves updating complex-specific management and monitoring requirements, as appropriate, based on annual monitoring results.

The comment does not explain what additional information should be included regarding hybridization. Hybridization is discussed in VPHCP Section 3.9. Threats and Pressures. and Section 9.2.4, Versatile Fairy Shrimp. The discussion of Adaptive Management in Chapter 1 states that methods for management of fairy shrimp will be modified over time as additional understanding is obtained regarding hybridization.

- C-12 Refer to response to comment C-3 regarding identification of the funding source.
- C-13 NGOs and other interested parties will be able to access the City's VPHCP annual report on the Citv's MSCP website. Refer to response to comment C-3.
- C-14 This comment was specific to the Preliminary Draft VPHCP that was provided for public review in 2011. Refer to response to comment C-2 regarding consistency with the Recovery Plan.
- C-15 The City relinquished federal coverage of the seven vernal pool species. It should be noted that the City did not have "Take Authority" for these species. The case (98-CV-2234-B [WVG]) was determined moot on April 4, 2011, and did not include a requirement for the City to pursue a VPHCP. The VPHCP is a new permit and has been closely coordinated with the Wildlife Agencies to ensure consistency with all the requirements of a federal Habitat Conservation Plan. See response to comment B-2; the conditions and measures of the VPHCP are expected to meet or exceed the conservation requirements in the City's MSCP and existing NCCP permit.
- C-16 Please see response to comment C-2 regarding consistency with the Recovery Plan.

City of San Diego VPHCP EIR/EIS Response to Comments

21	Vernal Pool Preservation Fund	Discussion is needed that provides the status and dollar balance of the Vernal Pool Preservation Funds and what vernal pool land acquisitions and other activities the fund has been used for.	The status of the Vernal Pool Preservation Fund is included in Section 1.3.1.	7	C
2	21. An accounti	ng and dollar balance for	the City Vernal Pool		
E E	Preservation Fu established that use for "3 or mo	and does not appear in Set \$650,000 had been "ina pre years." What is the cu	ection 1.3.1. In 2010, it was dvertently redirected" due lack of rrent balance and how have these	C-17	
ł	https://www.yo	outube.com/watch?v=f01	PXwm0xQ4	4	C
2	22. – 33. Noted.			7 5	
3	34. The claim is	not supported by substa	ntial evidence.	C-18	
3	35 38. Noted.			1	
2	39. Noted. How addressed.	ever, the issue of hybridi	zation is not adequately	C-19	
4	40. – 48. Noted.	o of funding and vanartiv	a nomelu	C-20	
	50 Noted	es of funding and reportin	ig remain.		
	51 Noted Expa	nded Conservation Alter	native should be adopted	C-21	C
5	52. – 59. Noted.	naca conservation meet	native should be adopted.	1000	
6	50. Noted. What	t incentives/penalties are	e there for failure to perform	C-22	C
c	obligations?			1	С
e	51 62. Noted.				

63	Funding for changed and unforeseen	On Page 8-2, define what amounts project applicants are required to fund long-term management a nd monitoring of conserved lands and how those needs and funding requirements determined.	Assured funding must be identified for responding to changed circumstances (see Chapter 10). Appendix F in Chapter 10 identifies funding for changed circumstances.
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63. The plan assures the loss of vernal pools. Prospects for vernal pool ecosystems recovery are speculative and adequate funding remains in question. Appendix F referenced by the RTC is a "Model Certificate of Inclusion", not a "funding strategy."

64	History of Unforeseen Circumstances	On Page 91, Assurances for Unforeseen Circumstances, define what funds are available to respond to a finding of "unforeseen circumstances" and what funds are being established up to respond to a finding of "changed circumstances" and where are the funds maintained and managed.	This finding has not been made for any of the approved southern California regional HCPs. Following the 2003 and 2007 fires, USFWS collaborated with USGS and SANDAG to establish post-fire monitoring to determine the effects of these large fires and their impacts on covered species; this effort is ongoing.	
	64. The failure to	o prepare a finding of "u	nforeseen circumstances" after	1
	the 2003 and 20	07 mega-fires appears to	b be based upon politics rather	C-24
	than biological ir	npacts, which does not i	nspire confidence that any	1

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significant unforeseen impact will ever be recognized.

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C-17 The Vernal Pool Preservation Funds were restored to their original accounts on December 7, 2010, per City Resolution No. 306373. The current balance is approximately \$291,000. The funds have been, and will continue to be, utilized for vernal pool management and monitoring, as intended. The Vernal Pool Preservation Fund is managed by the City's Park and Recreation Department/Open Space Division. Please see response to comment C-3 regarding adequate funding availability.

- C-18 The comment is not clear on what claim is not substantiated by evidence. The comment appears to reference back to a response addressing mitigation of the impacted vernal pools. As stated in Section 5.2 of the VPHCP, mitigation shall be consistent with requirements established in the VPHCP, the City's LDM Biology Guidelines of the Land Development Manual, and the ESL Regulations for wetland impacts. Mitigation will prevent any net loss of vernal pool functions and values of impacted vernal pools. Consistent with the ESL Regulations, the Mitigation Framework includes compensatory measures that would result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved.
- C-19 Please see response to comment C-11 regarding fairy shrimp hybridization.
- C-20 Please see response to comment C-3 regarding adequate funding availability.
- C-21 The comment expresses support for the Expanded Conservation Alternative.
- C-22 The City fully intends to implement the management and monitoring program outlined in the VPHCP and comply with the conditions of the ITP, once issued. However, it is understood that, should the City not fulfill its obligations under the ITP, USFWS could revoke the permit and take authority from the City. The ITP will include consequences for failure to comply with conditions of the permit.
- C-23 C-23 Please see response to comments C-8 and 9.
 - C-24 The City and Wildlife Agencies disagree with the comment, as a full analysis was conducted by USFWS to determine post-fire impacts to MSCP species. Based on that analysis, USFWS did not determine that the fire impacts result in a Jeopardy finding to any of the covered species. Management funding was redirected, as needed, to species determined to be most in need. Chapter 9, Section 9.1 of the VPHCP specifically addresses assurances for unforeseen circumstances and findings of unforeseen circumstances, including wildfire. This information outlines the requirements and procedures associated with a situation involving unforeseen circumstances and the actions of the City and Wildlife Agencies that must occur. These are provisions for future actions and are not reflective of past events as referenced in the comment.

65	Large Fires	The catastrophic 280,000 acre Cedar Fire of 2005 had severe impacts upon MSCP "covered species" status and was an unforeseen circumstance. Define how firefighters are trained to avoid vernal pool impacts.	Large fires are not unforeseen as they have happened twice in the last decade and therefore should be planned for, as they are in the VPHCP under Changed Circumstances. Training of firefighters is beyond the scope of the VPHCP. Impacts to vernal pools from emergency response are evaluated in Chapter 9.
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65. The resources to prevent the spread of invasive species and restore MSCP preserve habitats after fire impacts are largely absent. Why should we conclude that adequate resources would be available in similar circumstances or in others that are unforeseen?

66. Noted. 67. See response #63 above. 68. – 74 Noted.

Recovery Criteria from the "Recovery Plan for Vernal Pools of Southern California"

How does the draft VPHCP meet the following Recovery Criteria that "**must** be met" within the "Recovery Plan for Vernal Pools of Southern California" 1998? If it doesn't, then why doesn't it and what is the impact of not doing so?

"Recovery Criteria:

Reclassification to threatened status may be considered for Eryngium aristulatum var. parishii, Pogogyne abramsii, , Pogogyne nudiuscula, Orcuttia californica; San Diego and Riverside fairy shrimp; and the long-term conservation of Navarretia fossalis, a species proposed as threatened, will be assured when the following criteria are met:

1. The following conditions must be met to maintain the current status of Navarretia fossalis, Eryngium aristulatum var. parishii, Pogogyne abramsii, , Pogogyne nudiuscula, Orcuttia californica; San Diego and Riverside fairy shrimp in order to maintain genetic diversity and population stability of the listed species and other sensitive species:

- Existing vernal pools currently occupied by Orcuttia californica, Pogogyne nudiuscula, and Riverside fairy shrimp and their associated watersheds should be secured from further loss and degradation in a configuration that maintains habitat function and species viability;...

- Existing vernal pools and their associated watersheds located on Stockpen soils (Otay Mesa) should be secured from further loss and degradation in a configuration that maintains habitat functions and species viability, to provide for the recovery of species restricted to this soil type (i.e., Pogogyne nudiuscula; and

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C-25 The City and Wildlife Agencies disagree that the resources to address the spread of invasive species and restoration after fire impacts are absent from the VPHCP. Risk assessment, preventative measures, and planned responses specific to fire events are specifically discussed in Section 9.2.1 of the VPHCP. The document states that post-fire monitoring will assess the response of exotic plants. It is also specified that management of burned Preserve areas includes monitoring of natural regrowth within the damaged area for a period of 5 years and implementation of measures to minimize the invasion by exotic species. In the event of habitat loss, land management and habitat restoration measures will be implemented within affected preserve sites to ensure the reestablishment of native vegetation through active or passive management, as appropriate. It is assumed that, following 5 years of post-fire restoration, a burned complex will be elevated to Stewardship (i.e., Level 1) monitoring and management. In addition, adequate funding has been allocated for invasive species treatment. Refer to C-3 regarding adequate funding for the VPHCP.

C-26 Please see response to comment C-2 regarding consistency with the Recovery Plan.

C-26

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C-25

- Remaining vernal pools and their associated watersheds contained within the complexes identified in [Figure]...4 must be secured in a configuration that maintains habitat function and species viability (as determined by prescribed research tasks)

2. The vernal pools and their associated watersheds contained within the complexes identified in [Figure]...5 are secured in a configuration that maintains habitat function and species viability (as determined by recommended research).

3. Secured vernal pools are enhanced or restored such that population levels of existing species are stabilized or increased

C-26

cont

8

4. Population trends must be shown to be stable or increasing for a minimum of 10 consecutive years prior to consideration for reclassification. Monitoring should continue for a period of at least 10 years following reclassification to ensure population stability.

Delisting of each of the species is conditional on the downlisting criteria shown above, improvement (stabilized or increasing population trends) at all currently known sites: restoration protection, and management of the minimum habitat area and configuration needed to ensure long-term viability; and establishing historic but locally extirpated species populations when needed to ensure viability.

Actions Needed:

- 1. Conduct surveys and research essential to the conservation of species.
- 2. Secure the existing vernal pools and their associated watersheds.
- 3. Where necessary reestablish vernal pool habitat to the historic structure
- 4. Manage and monitor habitat and listed species."

Conclusion

The most fundamental question regarding the Draft VPHCP is does the plan do enough to address the finding of the court that the previous practice of allowing "incidental take" of vernal pool species violates both the spirit and letter of the law? In essence, does the Draft VPHCP provide for the recovery of these species and thus conserve them?

The *Southwest Center* opinion was highly critical of the practice that now continues and is proposed to continue within the draft VPHCP that allows "incidental take" of vernal pool species up front in exchange for uncertain or unproven mitigation. "*In short, while vigorous development is certain, the purported mitigation is unlikely to conserve listed species.*"¹

The draft VPHCP suffers from the same flaw by including a long list of "covered" and "pipeline" projects that would allow further take of vernal pool species in exchange for mitigation. In this regard, the Draft VPHCP tries "the same thing over and over again and expects different results."² The take of vernal pool species allowed by "covered" and "pipeline" projects conflicts with the Recovery Standard of the law.

Ellen Bauder points out "Given that <5% of the ecosystem remains, and much of this is in terrible shape, it is clear that many large and small compromises have been made in the years since the late 1970's. And pool conservation lost most of them." The real driver of this HCP cannot be as a means to continue development by "incidental" destruction of vernal pools – the exact situation the court has recognized.

If we provide the benefit of the doubt to the Draft VPHCP and assume that mitigation required has been increased and supplemented by additional measures to the point that Recovery is possible or likely, we must still assume that these increased measures and this program of supplemental actions will be funded and implemented effectively. The Draft VPHCP still lacks certainty in this regard.

Finally, we recognize that the VPHCP is a significant attempt to reconcile competing interests. We appreciate your efforts in this respect. In recognition of these efforts and in hope that the issues raised in our letters will be addressed, we are compelled to support the Biologically Preferred / Reduced Take / Expanded Conservation Alternative.

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C-27 Please see response to comments C-2, C-3, C-8, and C-10. The VPHCP does not allow for incidental take in exchange for uncertain mitigation as described in the comment. The VPHCP must ensure adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources within the city. The VPHCP is not a means to simply continue development by allowing incidental take as indicated in the comment; rather, it allows for appropriate and compatible economic growth and development that is consistent with applicable laws, as is stated in the Project Objectives in Section 3.2.1 of the EIR/EIS. Furthermore, the VPHCP conservation strategy will include restoration, management, and monitoring that will contribute to the recovery of vernal pool species and offset the minimal impacts to existing vernal pools.

C-28 This comment states support for the Expanded Conservation Alternative.

C-28

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C-27

¹ 470 F. Supp. 2d at p. 1123.

² Author unknown – but without evidence Albert Einstein is often credited.

Sincerely,

Van

Van K. Collinsworth Natural Resource Geographer Director, Preserve Wild Santee Coordinator, California Chaparral Institute Vernal Pool Conservation Program

- Buse

John Buse Senior Counsel, Center for Biological Diversity

Richard W. Halsey Director, California Chaparral Institute

Frank Landis Conservation Chair California Native Plant Society, San Diego Chapter

Duncan Mc Lethicfe

Duncan McFetridge Director, Cleveland National Forest Foundation President, Save Our Forests & Ranchlands

Attachment: 2016-DVPGL, DRAFT Vernal Pool Mitigation and Monitoring Guidelines

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Preserve Wild Santee

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APPENDIX A

MITIGATION AND MONITORING GUIDELINES FOR VERNAL POOLS

I. Introduction

These vernal pool guidelines (Guidelines) are a supplement to the South Pacific Division (SPD) Final Regional Compensatory Mitigation and Monitoring Guidelines (MMG) for mitigation banks, in-lieu fee programs and permittee-responsible projects involving compensatory mitigation for unavoidable losses of vernal pools and vernal pool complexes. The Corps of Engineers (Corps) and the Federal and state agencies that review Corps permits under Section 404 of the Clean Water Act of 1972 and Section 10 of the Rivers and Harbors Act of 1899 reserve the right to make case-by-case determinations that may vary from these Guidelines. On April 10, 2008, the Corps and U.S. Environmental Protection Agency promulgated the "Compensatory Mitigation For Losses of Aquatic Resources; Final Rule" (Federal Register Vol. 73, No. 70, April 10, 2008; 33 CFR Parts 325 and 332 for U.S. Army Corps of Engineers and 40 CFR Part 320 for U.S. Environmental Protection Agency) (Rule). All elements of the regulations and MMG also apply to use of these Guidelines.

Other Federal, state and local agencies with separate authority (e.g., the Endangered Species Act, administered by the U.S. Fish and Wildlife Service) over vernal pools may adopt, incorporate or use these Guidelines.

Compensatory mitigation ratios will be determined by the Corps on a case-by-case basis, through use of the SPD Standard Operating Procedure for Determination of Mitigation Ratios. In general, the goal of compensatory mitigation under the Clean Water Act is to establish highly functional wetlands, including vernal pools.

Specific mitigation for impacts to vernal pool complexes that support Federally-listed plants or animals will be determined on a case-by-case basis through the Endangered Species Act, Section 7 consultation process. Mitigation requirements will depend on the species, the extent and nature of the impacts, cumulative impacts to the species and their habitat, and other factors.

II. Definitions

For the purposes of these Guidelines, vernal pools are defined as follows:

Vernal pools are seasonally inundated wetlands that form in relatively shallow soil depressions underlain by a water-restricting layer such as clay, cemented alluvium, or volcanic basalt at or near the surface. These depressions fill with rainwater, near surface groundwater and/or runoff from adjacent areas during the winter and may remain inundated until spring or early summer, sometimes filling and emptying multiple times during the wet season. Vernal pools are typically characterized by endemic plants species.

Vernal pools annually undergo four distinct phases: (1) the wetting phase occurs in the fall and early winter with the first rains; (2) the aquatic phase when persistent inundation occurs; (3) the drying phase, when many plants flower and produce seed and many animals disperse; and finally (4) the drought phase when the soil dries, and the plants go dormant, as seed or underground roots (Zedler, 1987).

Definitions of terms used in these Guidelines are in the Rule, MMG, or listed below:

baseline: the physical and biological conditions of the impact or mitigation site prior to any human impacts due to the project. Establishing baseline usually involves monitoring hydrology, vegetation, soils, and surveying for wildlife such as aquatic invertebrates, insects, birds, and mammals, with particular attention to the presence or absence of candidate and listed threatened and endangered species.

mitigation vernal pool: a vernal pool established, re-established, rehabilitated, or enhanced for the purposes of satisfying compensatory mitigation requirements.

impacted vernal pool: a vernal pool that is proposed to be filled, excavated or otherwise adversely modified.

mitigation site: area where vernal pool establishment, restoration, or enhancement is to occur.

period of inundation: the sum total of days of water standing on the pool bottom, starting from when first measureable and ending when the water level drops below the soil surface in the spring;

preliminary monitoring: initial monitoring of vernal pool and site conditions, including estimate of absolute vegetative cover, list of five most dominant plants and aerial percent of inundation for each mitigation pool.

quantitative monitoring: measured, numerical data.

reference vernal pool: a naturally-occurring vernal pool with high California Rapid

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Assessment Method (CRAM) physical and biotic structure attribute scores, usually in the same watershed, on or near to the mitigation site that is and will remain undisturbed for the entire monitoring period. A reference pool represents the target vegetation, hydrology, soils and topography, of proposed mitigation vernal pools. Data from these pools is used to develop performance standards and to compare with mitigation vernal pools.

vernal pool complex: an assemblage of vernal pools, swales and associated uplands within a defined area (e.g., micro-watershed).

vernal pool density: the acreage of vernal pools divided by the acreage of vernal pool supporting soils of appropriate slope within the mitigation site.

III. Objective

To provide guidance for permit applicants and others (e.g. bank and in-lieu fee program sponsors) to select appropriate compensatory mitigation sites, construct compensatory vernal pools and complexes, and establish a monitoring program that will adequately assess compliance with the performance standards established in the mitigation plan.

IV. Data and Information Attributes

Mitigation and monitoring plans required for projects involving impacts to waters of the U.S. under Section 404 of the Clean Water Act must provide data and information with specific, useful attributes that facilitate the resource and regulatory agencies' review of mitigation proposals, interpretation of monitoring results, and determination of mitigation success and/or permit compliance. The data and information must be verifiable, interpretable, practical, and consistent with the criteria in the Rule and MMG.

V. General Information

A. Reference Pools

The Corps and relevant resource and regulatory agencies shall have the final approval of the number and location of reference pools to be monitored prior to approval of the compensatory mitigation plan, bank instrument, or in-lieu fee program site.

If no appropriate reference pools are available, narrative and quantitative descriptions of the targeted hydrology, soils, and vegetation community performance standards may be substituted with agency approval. For vegetation targets, a regionally-tailored list of vernal pool species which represents the potential impact site may be used. <u>Appendix 1 of the California Rapid Assessment Method (CRAM) for Vernal Pool Systems and</u>

Individual Vernal Pools provides a list from which a regionally-tailored list of species can be developed for a specific compensatory mitigation project.

Selection and Number of Reference Vernal Pools: The number of reference pools will be a minimum of thirty or ten percent of the number of mitigation vernal pools, whichever is greater. If there are fewer than thirty mitigation vernal pools, then the number of reference pools will be equal to or greater than the number of mitigation vernal pools. The selection and number of reference pools will be based on a number of factors, including soil type, geologic landform, proximity to the mitigation site, level of past disturbance, size of pools, and vegetation. Reference pools must be on sites where they are protected from adverse impacts and long-term access is assured. Reference vernal pools, with a range of specific attributes (e.g., size, depth, period of inundation, or occupancy by listed species) as appropriate for the landscape setting of the mitigation site. Baseline data for proposed references must be provided to the Corps for review and approval.

B. Site Selection (see 33 CFR Part 332.3 (c) and (d) and 332.4(c) (3) and MMG Section 4.3 for more information): Vernal pool mitigation efforts should target mitigation sites that formerly supported vernal pool complexes. Lands which historically supported vernal pools may be restored to their documented historic density provided such restoration is supported by a current watershed analysis. An example of appropriate documentation of historic vernal pool density would be that shown on a 1937 aerial photograph. Mitigation sites must be large enough to accommodate mitigation and existing vernal pools, density, and buffer requirements. Additionally, mitigation sites shall be selected utilizing a watershed approach (see 33 C.F.R. 332.3(c) and Section 3.2 of the MMG). Specifically, compensatory mitigation sites shall be located in the same watershed, have the same landform, geologic formation, and soil type as the impact and reference sites, to the maximum extent practicable.

C. Baseline (or Pre-project) Monitoring: A baseline survey of the vernal pools on the impact (where applicable), reference, and mitigation sites shall be conducted in advance and the baseline data shall be included in the mitigation plan. Baseline conditions in some of these vernal pools may need to be monitored for more than one year to provide meaningful, useful data. The baseline survey shall include: a delineation of current wetlands and other waters for all applicable sites, including representative data sheets pursuant to the 1987 Corps of Engineers Wetlands Delineation Manual and appropriate Regional Supplements; specific information on soil conditions, including modifications, farming history, etc.; historic and existing plant communities, including an inventory of species, their relative distribution, percent cover, etc.; historic and existing hydrology, including connectivity, and any irrigation or drainage patterns; the presence, absence and relative abundance of any Federal- or state-listed species or candidates proposed for listing; and a CRAM vernal pool

assessment conducted by qualified biologists. If any special-status species are found, the relative abundance of each species will be included in the draft plan. See "Baseline Information" requirements in the Compensatory Mitigation Rule (33 CFR 332.4(c)(5)) and MMG Section 4.8.8.

D. Design Considerations: In addition to the requirements of Section 4.4 of the MMG, each vernal pool mitigation plan and subsequent reports shall describe the proposed types of mitigation vernal pools and/or complexes in accordance with a published classification method, and with a crosswalk to Cowardin and the California Aquatic Resource Inventory (CARI) Classifications. Mitigation vernal pools proposed to be established or re-established should be of similar sizes, depths, and types as reference and impacted vernal pools and must be connected to each other and downstream waters by a system of drainage swales to duplicate natural vernal pool complexes exhibiting such features. Compensatory mitigation may include vernal pool restoration in previously cultivated or otherwise disturbed or degraded vernal pool habitat provided the restricting layer(s) are intact. No artificial layers or soil amendments (e.g., Bentonite) may be used.

The plan must describe the soil types, slopes, general drainage pattern, and other aspects of the watershed that will influence successful vernal pool establishment.

Plans which include establishment of vernal pools in the vicinity of existing vernal pools must consider and discuss adjacent landscapes and land uses and the measures that will be taken to minimize adverse effects to the existing vernal pools. Examples of such measures include designing for appropriate vernal pool density, directing urban runoff away from vernal pool mitigation sites and not placing mitigation vernal pools within high quality vernal pool preservation or on-site avoidance areas.

The following specific items must be included in the Mitigation Plan:

1. A site assessment identifying the presence, depth, and topography of waterrestricting layer(s),

2. A site assessment of surface topography and extent of watershed (catchment) contribution to hydrology of proposed mitigation vernal pools.

Additionally, in certain circumstances (e.g., construction in existing vernal pool complexes), a water balance for every proposed mitigation vernal pool or complex under dry, average, and wet year scenarios using the following equation, or other Corps-approved equation or model, may be required:

 $[\Delta S = (P + Qi + \theta) - (ET + Qo)$, where Storage (S), Rainfall (P). Evapotranspiration (ET), surface and groundwater runoff in (Qi), surface and groundwater runoff out (Qo),

existing soil moisture (θ) (soil saturation 35-50% of soil volume)]

E. Construction Techniques:

1. Mitigation vernal pools must have the same physiographic features (e.g., side slopes, depth of inundation, and aerial extent of inundation) and similar plant community associations as the reference pools. Proposals must accurately match side slope and pool bottom construction specifications for mitigation vernal pools with those of the reference pools. In addition, proposals must match the depth, surface area, and inundation period of the mitigation vernal pools with the reference vernal pools.

2. If the use of inoculum is approved, remove soils containing seeds, cysts, eggs and/or other inoculum-bearing material from donor pools only after soils are thoroughly dry and all endemic vernal pool plant species have dispersed seed. Vernal pools from which inoculum is collected, shall be free of plants with an overall High rating by Cal-IPC. Reserved soils should be placed in the mitigation vernal pools prior to the next rainy season, but in no case shall the soil be stored for more than one year or mixed with soils from another complex.

 Remove all spoil and borrow material resulting from the construction or restoration of vernal pools from the mitigation or preserve site.

4. The mitigation plan must include the locations of the mitigation vernal pools and where they are in relationship to existing pools on site. In addition, the mitigation plan must clearly identify the areas of cut or fill that are adjacent or within preserve or mitigation areas.

5. Provide and maintain a buffer of at least 100 feet around all vernal pool preserves and mitigation sites. Buffers will consist of native vegetation or regionally characteristic annual grassland without cut or fill as a result of adjacent development, developed recreation facilities, roads, trails, fire breaks, or other intrusive development. The appropriate buffer width will depend on adjacent land uses and resource values that need to be maintained in the preserve, in consideration of the topographic and hydrologic conditions.

6. Fencing and low earthen berms may be required in certain cases to protect the mitigation vernal pools from vehicular traffic or unwanted disturbance. Berms must not adversely alter the mitigation area hydrology and construction activities must minimize adverse impacts to the mitigation area.

VI. Performance Standards and Mitigation Monitoring Methods:

For each permittee-responsible, mitigation bank or ILF program site, monitoring will include CRAM vernal pool assessments, reference data, and monitoring data in accordance with the approved plans (e.g. hydrologic and vegetative standards, including invasive species), fauna, and reporting signs of unauthorized human disturbance. In some instances, other agencies will require monitoring such as special status plant and animal species (if found on site). The intensity and extent of monitoring will depend on site-specific conditions and surrounding land uses and will be included in the final mitigation plan to be approved by the Corps. The specific performance standards to be used for vernal pool mitigation projects are summarized below:

A. Performance Standards:

1. Final Performance Standard for Vernal Pool Area:

The acreage of mitigation vernal pool habitat must equal the acreage required by the Corps permit or approved development plan.

2. Final Performance Standards for Hydrology:

a. The total area of inundation of the mitigation vernal pools must be equal to the area proposed in the approved mitigation plan.

b. Each mitigation vernal pool must be inundated for a duration and depth that is within the range of inundation for the reference vernal pools.

c. The average depth and duration of inundation of the mitigation pools must be within one standard deviation of the average depth and duration of the reference pools.

3. Final Performance Standards for Vegetation:

a. The absolute cover for each mitigation vernal pool must fall within or above the range of the reference pools.

b. The average absolute cover of the mitigation pools must meet or exceed the average absolute cover for the reference pools. Constructed vernal pools that fail to meet vernal pool performance standard 3a, 3c, or 3e will be excluded from the mitigation pool average.

For example, if the reference pools range from 40-70% cover with an average of 58%, then all mitigation pools with 40-70% cover would meet the standard, providing the average % cover for the mitigation pools was at least 58%.

c. The total number and relative cover of vernal pool endemic species (from Appendix 1 of the CRAM Vernal Pool Systems and Individual Vernal Pools Modules) for each mitigation vernal pool must fall within or above the range observed in the reference vernal pools.

d. The average number and relative cover of vernal pool endemic species of the mitigation pools must meet or exceed the average number and relative cover of vernal pool endemic species for the reference pools. Constructed vernal pools that fail to meet vernal pool performance standard 3a, 3c, or 3e will be excluded from the mitigation vernal pool average.

e. The absolute cover and number of non-native or invasive species for each mitigation vernal pool must fall within or below the range observed in the reference vernal pools.

f. The average absolute cover and average number of non-native or invasive species of the mitigation pools must be less than the average absolute cover and average number of non-native or invasive species for the reference pools. Constructed vernal pools that fail to meet vernal pool performance standard 3a, 3c, or 3e will be excluded from the mitigation vernal pool average.

4. Interim Performances Standards:

Interim standards allow for an assessment of whether the mitigation vernal pools are developing as proposed in the approved mitigation plan and early identification of problems or issues which may require remedial action.

For example, the interim standards for vegetative cover (e.g., relative percent cover of vernal pool endemic species in reference pools) for each mitigation vernal pool must increase in each successive year (e.g., year two 10%, year four 20%, year five 30%, etc.) based on initial quantitative monitoring of reference pools. Similarly, CRAM scores on representative assessment areas should increase, both by index (or total) scores and by attribute scores, but mostly by physical and biotic attribute scores.

Interim standards are not necessary for hydrology, since the final standards should be met in the first rainy season following construction,

5. Projected Numerical Performance Standards:

When the Corps determines that reference pools are not available and that the mitigation site is otherwise appropriate, baseline monitoring of impacted vernal pools or regionally available data may be used to develop numerical performance standards. Such standards must be based on attributes which are objective, verifiable, and utilize the best available science that can be measured or assessed in a practicable manner.

6. Multiple Classes of Vernal Pools:

Where substantially different classes (e.g., shallow vs. deep) of vernal pools would be constructed at a mitigation site, there should be reference pools and performance standards that are specific to each class.

B. Monitoring Methods

1. Hydrology Monitoring for Vernal Pools

Hydrology monitoring will be conducted for all mitigation vernal pools and reference vernal pools in the first, second, third, fifth, seventh and tenth years of the monitoring program. Hydrology monitoring will not be necessary in additional or intervening years except in those cases where the hydrology monitoring or vegetation monitoring indicates a potential problem. If vernal pools are constructed within an existing vernal pool complex, adjacent pools will be selected and monitored for hydrology.

a. Quantitative Hydrology Monitoring

i. Install level loggers at the deepest location of each vernal pool to be monitored. Monitoring will be conducted continuously from November 1 until May 15. Record depth and duration of inundation for each vernal pool. Data collected must be provided in the monitoring reports.

ii. Aerial photographs of the monitored pools will be taken at least once annually during monitoring years to document the extent of inundation in the mitigation and reference vernal pools. The aerials will be taken at maximum inundation (typically January or February).

iii. Record area of inundation for each pool. Area of inundation will be determined either through digitizing the maximum inundation on the aerial photo or in the field using a sub-meter accurate GPS unit and importing the data into ArcGIS or similar software program for acreage calculations. Data documenting the areas of inundation must be provided in monitoring reports.

2. Vegetation Monitoring for Mitigation Vernal Pools

Vegetation monitoring for mitigation vernal pools will focus on both species composition and the vegetation communities present. Mitigation and reference vernal pools shall be monitored during the peak of the spring flowering phase.

a. Methods for Quantitative Vegetation Monitoring:

i. Identify vegetation zones within a pool. When zones are present, divide each pool into visually homogeneous zones. While walking through or around a pool, choose one or more vegetation zones that are visually distinct from each other. Vegetation homogeneity can be defined by the presence throughout a zone of the same dominant species and a set of less abundant associated species having a uniform architecture and phenologic stage. Typically, two or three zones are present in a given pool. The boundaries between zones may be sharp and clear, reflected by the change in flower color of dominant taxa (see examples on Figure 1) and the height of the plants.

ii. Map pool vegetation zones. On datasheet 1 (see Appendix 1) and on CRAM data sheets as appropriate, make a simple sketch of the entire pool that shows pool shape, maximum length and width (in meters), and the approximate location for all vegetation zones. Site-specific information (site name, geomorphic surface, landform, and soil series) can be completed prior to or after the fieldwork, based on soil and geologic maps. Pool-specific information (pool number, date of the survey, surveyor, pool length (m), pool width (m), pool maximum depth (m), surrounding vegetation type(s), and geographic setting - slope steepness and aspect, pool elevation (m), and Lat/Long coordinates of the pool's approximate center) will be provided in the appropriate field on the datasheet.

iii. Locate plots within a zone. Within each unique vegetation zone, at least one 10 m² plot must be placed to characterize its vegetation. If a given zone is represented in the pool in several separate areas, choose and sample the area that will best represent that vegetation zone. The plot should be both relatively homogenous and representative of the vegetation of the entire patch. Habitat conditions and plant cover should be visually uniform within the plot area. That is, the plot should not have dense plant cover on one part and very open cover on another. The plot should not be dominated by one species on one part and by a second species in another. The plot shape should be square when possible, but it can become narrowly rectangular for narrow zones. Figure 2 shows plot locations in a pool with two vegetation zones. To avoid areas where the vegetation appears to be transitioning from one type to another, locate the plots well away from boundaries. If patch width is > 3.2 m, the center of the plot should be placed at the intersection of two longest perpendicular transects across the biggest patch. The diagram in Figure 3 shows locations of sample plots in a pool with three zones. If the surveyor thinks that the centrally located plot is atypical for this zone, one additional plot should be sampled. If the zone is < 10 m², then the entire zone will be sampled, making notes about its size and shape paying special attention to plot homogeneity.

iv. Take plot data. On datasheet 2 (see Appendix 2), record all plot data, including sitespecific information (site name, geomorphic surface, landform, and soil series) and pool-specific information (date, pool number, surveyor, pool length/width/maximum depth, surrounding vegetation, date, surveyor). After recording Lat/Long coordinates (using reference datum of NAD83) for each plot, the following plot-specific data should be recorded: total herb cover (%), bare soil (%), rocks/cobbles (%), open water (%), algal matting (%), thatch (%), plot length (m), plot width (m), plot depth relative to the pool edge (cm), position of the plot within the pool, phenology, evidence of grazing, type of grazing animals, and percent of the pool's area that the plot represents. Then the complete list of all taxa, together with an estimate of each taxon's absolute percent cover, should be recorded for each plot. Nomenclature of vascular plants must follow the most recent CRAM Vernal Pool Plant List.

v. Complete the pool map. (i) Regarding the "syntaxonomy" box: Give descriptive, provisional names to patch type/zones. The name of the zone typically includes names of one or two dominant species. It also can include names of less abundant species if they are more typical for this zone relative to other vegetation zones in the pool. Record the names of all zones, with their percent cover in the pool, in the syntaxonomy box. The cumulative percent cover of all zones should total 100%. If part of the pool was covered by bare ground or open water without vegetation, the percentage of non-vegetated area must be recorded. (ii) Regarding the "cross section" box: Make a cross-sectional sketch of the pool that shows the position of each zone along the gradient of relative elevation within the pool. Indicate zones on the sketch by giving them the same number as in the "syntaxonomy" box. These should be consistent in the CRAM datasheets if a CRAM assessment is being done on the same pool or complex.

b. Preliminary Vegetative monitoring:

For each mitigation and reference vernal pool, record total absolute cover and absolute cover for all dominant species (in accordance with the 50/20 rule).

c. Faunal and Water Quality Monitoring

At this time, there are currently no specific faunal or water quality monitoring indicators being considered for inclusion in these methods. On a case-by-case basis, faunal or water quality monitoring may be required.

d. Site Quality Monitoring

1. Each time the site is visited, monitor the area for signs of excessive or uncontrolled human disturbance or other adverse conditions to develop. Potential problems include: erosion flooding, plowing, ditching, feral animals, off-road vehicle use, trash and litter, human foot traffic, excessive grazing, run-off water, etc.

2. Performance Standards for Site Quality Monitoring: There are currently no specific attributes for this element. However, any excessive signs of disturbance must be documented in the annual report. The Corps project manager will decide, in consultation with the review agencies if necessary, on any appropriate remedial action.

C. Duration and Schedule of Monitoring

1. Duration: Vernal pool construction projects will be monitored for a minimum of 10 years, beginning the first wet season after the construction of the mitigation wetlands is completed. In addition and prior to sign-off, continued success of the mitigation vernal pools, without human intervention, must be demonstrated for at least 3 consecutive years. For example, if remedial action is required in the 8th year, then the vernal pools and associated habitat requiring remediation will be monitored at least until the 11th year. Extension of the monitoring period to meet the consecutive year requirement need only be applied to those features not meeting the quantitative performance standards.

2. Monitoring Schedule: In Years 1, 2, 3, 8, and 9, preliminary vegetation monitoring of the mitigation and reference vernal pools is required as outlined in table 1. In the first three years, the purpose of the monitoring will be to determine if the mitigation vernal pools are beginning to support appropriate vernal pool vegetation or if there is an obvious need for remediation. In later years, this monitoring will allow the monitoring biologist to track increases in invasive plant species composition and to take action, if needed. Quantitative vegetative monitoring is required for all reference and mitigation pools in years 4, 5, 6, 7, and 10. If a mitigation pool meets all the vegetation performance standards during 3 consecutive years of detailed monitoring, quantitative monitoring will not be required again until year 10. If a mitigation vernal pool does not meet all the vegetation performance standards for 3 consecutive years by year 7, it will be monitored quantitatively in years 8 and 9 and potentially longer to meet the 3-year standard (monitoring of reference pools would then also be required, but not adjacent pools). All mitigation, adjacent, and reference vernal pools will be quantitatively monitored in year 10 to demonstrate continued success.

Table 1. Monitoring Schedules

Year 1	Year 2	Year 3	Year 4	Year 5
All reference and mitigation vernal pools receive preliminary vegetative and quantitative hydrologic monitoring	All reference and mitigation vernal pools receive preliminary vegetative and quantitative hydrologic monitoring	All reference and mitigation vernal pools receive preliminary vegetative and quantitative hydrologic monitoring Wetland delineation	All reference and mitigation vernal pools receive quantitative vegetative monitoring CRAM	All reference and mitigation vernal pools receive quantitative vegetative and hydrology monitoring

Year 6	Year 7	Year 8	Year 9	Year 10
All reference and mitigation vernal pools receive quantitative vegetation and hydrology monitoring	All reference and mitigation vernal pools receive quantitative vegetative and hydrology monitoring CRAM Wetland delineation	All reference and any mitigation vernal pools that do not pass 3 consecutive years receive quantitative vegetative and hydrology monitoring	All reference and any mitigation vernal pools that do not pass 3 consecutive years receive quantitative vegetative and hydrology monitoring	All reference and mitigation vernal pools receive quantitative vegetative CRAM Wetland delineation

VII. Remediation/Adaptive Management of Mitigation Vernal Pools

If at any time preliminary or quantitative monitoring indicates mitigation vernal pools are not demonstrating adequate progression toward the performance standards, remedial action and/or substitute mitigation must be proposed by the permittee or sponsor in accordance with the approved mitigation plan or bank or ILF instrument for Corps review and approval.

The Corps will make final determinations of compensatory mitigation performance and permit compliance, and may require additional mitigation monitoring and/or remedial action or substitute mitigation.

A minimum of three years of quantitative monitoring after any human intervention, other than required/approved site management will be conducted for any mitigation vernal pool that is remediated.

Monitoring will follow the schedule outlined above if remediation occurs in the summer of Years 1 through 7 (i.e., there will be no difference between the monitoring schedule for remediated pools and for the remaining mitigation vernal pools). If remediation occurs in Year 8 or after, the Quantitative monitoring period for the remediated vernal pools as well as the reference pools will be extended until the remediated pools meet the performance standards for 3 consecutive years without human intervention.

If the remediated pools do not meet the vegetation performance standards at the end of the three years of Quantitative monitoring, it will be determined by the Corps if further remediation and monitoring are warranted or if the mitigation vernal pools will not count toward the mitigation requirement and additional mitigation is required.

VIII. Quality Assurance and Quality Control (QA/QC)

QA/QC procedures must be developed for all monitoring programs. Reference vernal pools must be approved by, and accessible to, agency staff during the entire monitoring period. Field personnel must be trained to collect, observe and record hydrologic data. If water quality data is collected, field sampling must follow standard protocols. Statistically valid methods of analysis must be used and references for those methods cited as appropriate.

CRAM data must be collected by personnel formally trained in the CRAM vernal pool module. Data must be entered into <u>www.cramwetlands.org</u> with appropriate assurances that the data were reviewed, checked for transcription and transposition errors, and geo-spatial information was correct. Permittees and sponsors must seek appropriate agency representation on CRAM teams.

IX. Reporting

As discussed in the MMG, monitoring data must be compiled in an annual report that accurately documents monitoring results and QA/QC procedures, interprets data, states conclusions, and makes recommendations. See Regulatory Guidance Letter 2006-03 and MMG Section 6.4.3 for content and format of reports.

Monitoring reports shall be submitted for each year that monitoring is required for the duration of the project, including a final report at the end of any extended monitoring demonstrating continued success of the mitigation without human intervention.

Reports shall be submitted to agencies with jurisdiction over the compensatory mitigation project (Corps, US Environmental Protection Agency, US Fish and Wildlife Service, and the California Department of Fish and Wildlife). In accordance with the 33 C.F.R. 332.6(c)(3), the District Engineer must provide copies of monitoring reports to other interested Federal, tribal, state, and local resource agencies, and the public upon request.

As built drawings with micro-topography (1-inch contours) of the entire mitigation site, including all mitigation vernal pools, must be prepared and submitted within 90 days following completion of mitigation construction.

Reports must include all of the data and information required by the MMG and the following:

1. Graphical comparison of quantitative monitoring data for mitigation pools and reference pools (e.g., bar graphs showing inundation, percent cover with target plants, species richness). See Appendix 3 for example.

2. Documentation of hydrologic connectivity between mitigation pools and down-slope waters.

3. Pictures of each mitigation and reference pool from fixed reference points.

X. General References

Barbour, M.G., A.I. Solomeshch, and J.J. Buck. 2007. Classification, ecological characterization, and presence of plant taxa of vernal pool associations in California. Report to US Fish and Wildlife Service No. 814205G238. 117p.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual (on-line edition), Technical Report Y-87-1, US Army Engineer Waterway Experiment Station, Vicksburg, Miss.

The Jepson manual: higher plants of California, Second Edition. 2012. Hickman, J.C., editor. Berkeley and Los Angeles: University of California Press.

Holland, R.F. 1986. Preliminary description of the terrestrial natural communities of California. California Department of Fish and Game. Sacramento, Calif. Unpublished report.

Reed, P.B., Jr. 1988. National Wetland Plant List

Zedler, P.H. 1987. The ecology of southern California vernal pools: a community

profile. (Biological Report 85 [7.11] US Fish and Wildlife Service. Washington, DC.

Final Training Manual to Evaluate Habitat Quality of Vernal Pool Ecosystems Sites in Santa Rosa Plain, 1998.



Figure 1. Examples of vegetation zones recognized by dominant species

Response to Comments

Figure 2. Locating 10m² plots within the pool with two vegetation zones.

- (a) Plot A on pool bottom has quadrat shape and pool B representing pool edge has a rectangular shape
- (b) Plant community of the pool bottom was wide enough to accommodate a quadrat plot 3.2 x 3.2 m
- (c) The pool edge was narrow and the the widest homogeneous plot we were able to use was

1.5 x 7m





Figure 3. A diagrammatic example of locations of sample plots in pool with three vegetation zones.



Appendix 1. Data Sheet 1, Pool Map

Landform:			Soil Series: Surr			runging vegetation:					
Date:		/2003	Botanist	Pool Length:	m	Pool Width:	m	Max Depth:cm	GPS:_	please GPS each releve and annotal	te on revers
				VERNAL POOL AND SURRO	UNDING ARE	A SKETCH MAP				Total Number data forms this pool:	
										GENERAL COMMENTS:	
										CICLUS PARTA VOLICIAN.	Dente
										STORES IN PASTOR	Parce
										-	
											_
											-
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										-	
										2	
											100
											100
										CROSS SECTION SKETCH (w/ releve plots):	
EFAN	11050	TO SUOP -	calls manage anoder langers and	Recordson Incoding of pints and theme	lationation free	and the second sec	aining disease	a units arithin part manifes I agendar and			
The Code	i ultero	TO SHOW.I	oral arten, robat, renota, poo	economy, location of provident and	eaglaton lea	ina, approximite acta	numer of regentio	in which intern poor, ansate a mostery poor		Littlend eternation	on marker VI
			_								
	_										

GPS coordinates for each releve

A =		
B =		
C =		
D =		_
E =		
F =		_
G =		
H =		
1 =		
J =		1
K =		-
L =		
M =		
N =		
O =		
P =		
Q =		
R =		-
S =		
T =		
U =	4	
V =		
W =		
X =		
Y =		
7 =		



Appendix 2. Data Sheet 2, Plot Data

 \bigcirc

2002 Vernal Pool Class	sincation - Relev	e Data Form (3/25/02 Version)		Site Name: Pool Number:					
Geomorphic Surface:		Landform:		Soil Series	Su	rrounding Vegetation:			
Date://2002	Botanist:	Pool Length: r	n Pool Width:	m Max Depth:c	m GPS:				
PECIES REL#		SPECIES REL#		SPECIES RELA		OTHER SPECIES REL#			
shyrachaena molis		Elatrie		Myosurus minimus					
rosts		Eleocharis acicularis acicularis		Navametra					
ra caryophyliea		Eleocharis macrostachya		Navametia					
liam amplectens		Epitobium		Navametta					
opecurus saccatus		Eremocarpus seligerus		Pilularia americana		The second se			
nagalis amensis		Erodium isotrys		Plagioloothrys stipitatus micranthus					
ratida oligantka		Enyngium		Plagiolothys					
Lines		Gastridium ventricosum		Plagiokotkrys	- [-] - (
ennosperma nanum nanum		Geranium dissectum		Plantago elongata					
rza minor		Giyoena		Plaetago					
rodiaea N-I-F		Graticia ebracteata		Pleuropogon californicus					
rodiaea		Hemizonia fitahi		Pos annua					
romus kordeaceus		Hordeum marinum gussoneanum		Poa					
alanekinia oliata		Hypochaens glatera		Pogogyme zzyphoroides					
alliniche marginata		Isoetes croutbi		Polygonum anenostrum					
ardamine oligosperma		isoetes		Polypogon monspellensis		% TOTAL HERB COVER			
ostilleja attenuata		Juncus kutonius		Psilocarphus brevissimus krev.		% kare soil (all forms)			
astilieja compestris		Juncius capitatus		Psilocamphus oregonus		% rocks/cobbles			
entaurea solstitola		Juncus uncialis		Psilocarphus tenellus gickilerous		* % open water			
eritunculus minimus		Lactuca serriola		Ranunculus aquatilis		1% algal matting			
erastum giomeratum		Lasthenia californica		Ranunculus konariensis trisepalus		* % cryptogams			
hamaesyoe		Lasthenia herronti		Rumex crisplus		* % thatch (thick matting)			
kicrogatum angustifolium		Lasthenia glabersma		Rumex	-	* % itter (under plants)			
icendia quadrangularis		Layia fremonti		Sorikneria kolanderi		* % animal droppings (cow)			
lankia pumpunea	2010	Leontodon taraxicolides		Sidaloes		* % animal punch (2 cm deep)			
onvulvulus arvensis		Lepidium		Spergularia		1 % animal throw (current yr)			
otula coronopifolia		Linnarthes		Taeniatherum caput-madusae		* % surface slamage (other)			
rassula aquatica		Loium multiforum		Trickosterna lanceolata		AVG HEIGHT HERBS (am)			
125542		Lupinus		Triblum		MAX HEIGHT HERBS (cm)			
ypsis		Lythrum hyssopitolia		Tritolium		RELEVE LENGTH (m)			
uscuta howelliana		Marsilea vestita		Telbium		RELEVE WIDTH (m)			
ynoxion daatylan		Micropus californious californious		Triphysaria eriantha eriantha		RELEVE REL ELEV (pm)			
anisonium californicum		Microseris		Trileleia hyacirthina		* POSITION IN POOL			
eschampsia danthonicides		Microseris		Veronica peregrina xalapensis		*** PHENOLOGY			
ichelostemma		Mimulus tricolor		Vugia inomoides		GRAZING? (Y)#0, (N)0			
lowningia		Minüsrtia californica		Vulpia microstachya		(S)heep, (C)ows, (H)orses			
Investeraio		Montia fontana		Vide a mounts	-	DELEVE & OF TOTAL POOL			



Appendix 3. Example of Graphical Comparison

California Native Plant Society

San Diego Chapter of the California Native Plant Society P O Box 121390 San Diego CA 92112-1390 conservation@cnpssd.org | www.cnpssd.org

December 1, 2016

Myra Herrmann Environmental Planner City of San Diego Planning Department 1010 Second Avenue, East Tower, Suite 1200, MS 413, San Diego, CA 92101 PlanningCEQA@sandiego.gov

RE: Vernal Pool Habitat Conservation Plan - #441044 / SCH No. 201111075

Dear Ms. Hermann:

Thank you for the opportunity to comment on the draft of the City of San Diego's Vernal Pool Habitat Conservation Plan ("VPHCP") and its associated combined Environmental Impact Report/Statement (EIR/S). Normally I comment on behalf of the California Native Plant Society's San Diego Chapter (CNPSSD), and confine my comments to native plant issues. As I have special knowledge of Del Mar Mesa and its vernal pools, due to research and frequent volunteer work in the area stretching back to 2010, I am addressing non-plant issues as a private citizen. Here I am combining both roles in one letter.

CNPSSD has also co-signed a letter by other environmental groups that analyzes the text of the VPHCP in detail. They make critical points about continued take of vernal pools and species in the face of a clear directive to preserve vernal pools and to stabilize or increase populations of the seven species covered by the VPHCP. In the face of greater than 95% loss of vernal pools, the continued planned take of pools and critical habitat misses the point of the USFWS directive. The lack of research on current conditions, outdated and inaccurate maps of vernal pools, ownership, and pending projects, vague and incomplete population descriptions are all issues that need to be fixed before the VPHCP is approved, let alone implemented.

Most of the above quote is a verbatim quote from my comments on the preliminary draft from April 2015. Unfortunately, the City has chosen to denigrate those comments, summarizing them without context or source in an appendix of the current draft. Given the City's checkered history with vernal pools, I had hoped for better, since all of the problems identified need to be fixed to produce a workable VPHCP. I will go over them in order, before moving onto other problems. D-1 The comment provides introductory statements that are summarized in this comment and detailed later in the letter. The co-signed letter referenced in the comment is included and responded to in these responses to comments as letter Conservation Groups. The responses to the comments contained in that letter are provided above. Although not required, the City provided the Preliminary Draft VPHCP for public review for the purpose of soliciting public input to be considered at that phase in the document development process. The response to key comments/issue areas received on the Preliminary Draft VPHCP provided in Appendix B of the VPHCP were published as a courtesy to those commenters, and are incorporated herein by reference. The City, Wildlife Agencies, and Consultants reviewed all comments and, as noted within the response to key comments/issue areas table, several revisions, clarifications, and additional information were added to the Draft EIR/EIS prior to distribution for public review.

Dedicated to the preservation of California native flora

Letter D

D-1

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Lack of Current Research on Current Conditions

The City has repeatedly asserted, without evidence, that the draft vernal pool database and map¹ are comprehensive and accurate, despite comments dating back to 2012 reviews of the original white papers that said this was not the case.

D-2

D-3

D-4

To test this argument, in 2015 and 2016 I did a bit of research on Del Mar Mesa. It was easy to find mapped vernal pools that no longer exist. An unpaved road was closed in (I believe) 2011 or 2012 and brushed, all by City Department of Parks and Recreation. I knew there were pools of water along the road before it was brushed, so over the years I have gone into the area to try to remove branches, to see if the pools will return. Nonetheless, none of these areas have held water o vernal pool plants since before 2012, so by the City's definition,² they are not currently functioning vernal pools, and they were destroyed by City activity. **This loss is not reflected in the database or the map.** Photos and coordinates are shown in Table 1 below (pp. 3-6). Additionally, two of the vernal pools are functionally destroyed, because the bottom of the pool broke through the hard pan and drained into an underlying tunnel (presumably dug by rabbits). This is a fairly common occurrence on Del Mar Mesa. It is a mistake to assume that pools are permanent.

The critical point here is that the City had known vernal pools, they were massively disturbed by City personnel closing trails, and this change in condition is not reflected in the current database. If the database were complete, it would not be possible to find 15 degraded or destroyed vernal pools on City land under City management.

The vernal pool database does not have current data on pool conditions. As a result, pools are disappearing on City-controlled land.

The vernal pool database and maps are incomplete

This is the third time I have made this comment, and each time, the City has blandly asserted as a rebuttal that the database is complete. On what grounds and with what evidence?

As a counterexample, in 2015 I recorded data on seventeen vernal pools (Attachment 1) that had formed from road ruts, which met the City's definition of vernal pools in footnote 2 below. In 2015, I provided coordinates for 28 unmapped pools that met the City's definition of vernal pools. On November 29, 2016, I went up and photographed them again. Several of the 2015 pools are no longer functioning pools, as the bottoms have the hardpan and the pools now drain. Still, Table 2 (pp. 7-15 below) contain data on 25 unmapped pools that met the City's definition of vernal pools in 2015. If there is more rain, I will start watching for fairy shrimp in those pools in a few weeks. Many of the pools have supported fairy shrimp in the past.

This is the critical, key factor that the City needs to address: There are vernal pools on City land, containing species covered by the VPHCP that are not in the City database, and there has been no activity by the City to remedy the situation. Why not?

- D-2 Please see response to comment C-11 for additional information regarding the vernal pool database.
- D-3 Please see response to comments C-11 and D-2 for additional information regarding the vernal pool database and associated mapping tool and annual updates.

D-4 Please see response to comment C-11 and D-2. The VPHCP database, in conjunction with the modeled vernal pool habitat analysis, is considered sufficient for the purposes of a baseline condition from which the VPHCP and EIR/EIS analysis was based.

¹ http://sandiego.maps.arcgis.com/apps/webappviewer/index.html?id=7cfd12d64af8424b986af45712933b88
² EIR Page 2-4:" The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species, based on the species listed in Appendix A of the VPHCP. Consistent with the City's LDM Biology Guidelines Attachment II, A.3, depressions that are man-made, such as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indictor plant species. Road ruts and other seasonal depressions that are not vernal pool may contain wildlife associated with vernal pools, such as San Diego or Riverside fairy shrimp, but will not contain vernal pool plant indicator species (often referred to as road pools). The VPHCP and reference to vernal pools in this EIR/EIS also applies to these man-made road ruts and other seasonal depressions if they contain one or more of the covered species."

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Please include update the database and map to include these pools. Additionally, please check all other vernal pool areas to find out the current status of all vernal pools, and to include vegetated road ruts that meet the City's definition of vernal pools.

Table 1. Mapped vernal pools that were brushed over in 2012, and/or no longer exist, as the bottom has broken through the underlying hardpan and the pool no longer holds water. While some of these depressions hold water, vernal pool species have never been seen around them since 2010. Photos were taken November 29, 2016.



D-5 As noted in response to comment D-4, it is not feasible to continually re-survey all of the vernal pool resources within the City as the VPHCP Plan Area (i.e., the area within the City's jurisdiction for which the VPHCP applies) encompasses 206,124 acres. As part of the VPHCP, the City will update the vernal pool database and associated web mapping tool annually, as discussed in Section 7.7 of the VPHCP.







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Table 2. Unmapped vernal pools on Del Mar Mesa. These pools are not mapped in the VPHCP, but they hold water every year, except in extreme droughts. In 2015, the indicator plants and animals listed below each image were found on these pools. Pictures were taken November 29, 2016. When the pictures were taken, it was too early in the rain year for even visible fairy shrimp to be present, but fairy shrimp have been observed in many of them in the past.



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The "Expanded Conservation Alternative" (3.7 acres of added basin area) is the only acceptable alternative

There are two reasons for this statement: Vernal pool systems are >95% gone, and the all of the alternatives guarantee both an additional 25% take of total vernal pool area and incidental take of the seven species covered by the VPHCP. All alternatives guarantee that more vernal pools will be taken for development.

D-6

D-7

However, in the interests of settling the long-running dispute over vernal pool destruction, we (CNPSSD) can support the Expanded Conservation Alternative.

We cannot support the Project alternative, as it results in avoidable impacts and avoidable take of endangered vernal pool species. As the EIR/S analysis demonstrated, these impacts can be totally and feasibly avoided. The difference between the preferred alternative and the Expanded Conservation Alternative is 3.7 acres of vernal pools. Developing this acreage will due effectively nothing to solve the region's housing crisis or to increase its business facilities, but that is a significant amount of pool acreage that does not need to be lost.

The EIR/S fails to adequately disclose the significant adverse impacts of continued permitting of take upon the viability of the Recovery Plan for endangered vernal pool species.

How does the project and other alternatives specifically impact or fulfill the specific criteria prescribed in the Recovery Plan? These recovery criteria are:

- "Reclassification to threatened status may be considered for *Eryngium aristulatum* var. *parishii, Pogogyne abramsii, Pogogyne nudiuscula, Orcuttia californica*; San Diego and Riverside fairy shrimp; and the long-term conservation of *Navarretia fossalis*, a species proposed as threatened, will be assured when the following criteria are met:
- The following conditions must be met to maintain the current status of Navarretia fossalis, Eryngium aristulatum var. parishii, Pogogyne abramsii, Pogogyne nudiuscula, Orcuttia californica; San Diego and Riverside fairy shrimp in order to maintain genetic diversity and population stability of the listed species and other sensitive species:
 Existing vernal pools currently occupied by Orcuttia californica, Pogogyne nudiuscula, and Riverside fairy shrimp and their associated watersheds should be secured from

further loss and degradation in a configuration that maintains habitat function and species viability;...

- Existing vernal pools and their associated watersheds located on Stockpen soils (Otay Mesa) should be secured from further loss and degradation in a configuration that maintains habitat functions and species viability, to provide for the recovery of species restricted to this soil type (i.e., *Pogogyne nudiuscula*)

- Remaining vernal pools and their associated watersheds contained within the complexes identified... must be secured in a configuration that maintains habitat function and species viability (as determined by prescribed research tasks)

2. The vernal pools and their associated watersheds contained within the complexes identified... are secured in a configuration that maintains habitat function and species viability (as determined by recommended research).

3. Secured vernal pools are enhanced or restored such that population levels of existing species are stabilized or increased

D-6 The comment expresses support for the Expanded Conservation Alternative. To clarify, the difference between the Proposed Project and the Expanded Alternative is 0.5 acre of basin area.

D-7 Please see response to comment C-2 addressing the consistency and contribution of criteria outlined in the Recovery Plan. No significant impacts regarding implementation of the VPHCP and continued viability of the Recovery Plan were identified in the EIR/EIS.

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4. Population trends must be shown to be stable or increasing for a minimum of 10 consecutive years prior to consideration for reclassification. Monitoring should continue for a period of at least 10 years following reclassification to ensure population stability. Delisting of each of the species is conditional on the downlisting criteria shown above, improvement (stabilized or increasing population trends) at all currently known sites: restoration protection, and management of the minimum habitat area and configuration needed to ensure long-term viability; and establishing historic but locally extirpated species populations when needed to ensure viability."

Funding for the VPHCP is unclear.

The Executive Summary identifies "Funding and availability of perpetual funding mechanism" [ES-8] as an issue of controversy, but they do not solve it. Chapters in the EIR/S lack certainty with regard to how the needs identified will be specifically funded. Potential funding mechanisms discussed in VPHCP Chapter 10 are not specific enough to determine how the costs identified in VPHCP Appendix E will be covered. Current fund balances and the amount of revenues to be generated should be clearly identified and specified for the line items identified within Appendix E Cost Analysis. Financial reports should be due annually and should accompany the required biological monitoring reports.

How do Army Corps rules now under consideration impact the VPHCP and what are the inconsistencies?

The VPHCP should go beyond Corp minimum standards³, but appears deficient in terms of meeting a 100 foot minimum buffer and annual monitoring for restored pools of 10 years. What current laws, legal standards and plans impact the VPHCP? What are the inconsistencies?

Current Projects and Ownership are outdated

Again, Del Mar Mesa is the example. According to the VPHCP, the two projects on Del Mar Mesa that affect the vernal pools are Rhodes Crossing and whatever was supposed to go on with land owned by the Roman Catholic Diocese. If the City had consulted their own records, they would have found three active projects that will impact Del Mar Mesa in 2017 and thereafter. These are:

- Rhodes Crossing, which is much smaller than it used to be. Planned development comes within about 10 feet of known San Diego mesa mint populations.
- Merge 56, which contains the northwestern portion of the former Rhodes Crossing development, plus the southward extension of Camino Del Sur and Carmel Mountain Boulevard. My understanding is that their unreleased EIR is in something like the ninth iteration of its biology report, and it is over a year late. This project should be part of the VPHCP, especially considering that the men behind both projects sit on the Del Mar and Rancho Peñasquitos Planning boards, respectively.
- The Catholic Church sold their land in 2016 to a developer, who is currently designing a 500,000 square foot office complex for that site. The project is known as "The Preserve at Torrey Highlands," and presumably Development Services has paperwork on file. Not

D-7 cont

D-8

D-9

D-10

D-8 Please see response to comment C-3 addressing funding.

D-9 Please see response to comment C-6 addressing USACE requirements.

D-10 Refer to response to comment G-11 below related specifically to the Rhodes Crossing and Merge 56 projects. See VPMMP Sheet H 1-10, H 13-15, H 18-23, H 24-25, which includes the Our Lady of Mount Carmel Catholic Church project. The management sheet currently states the site may or may not be developed with a church and that any alternative project would include Management Level 1 activities. The management sheet has been updated to reflect the new ownership (Jason Wood) and project (Preserve at Torrey Highlands/PTS No. 442880) for the former Our Lady of Mount Carmel project site.

³ http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/996958/2016-dvpgldraft-vernal-pool-mitigation-and-monitoring-guidelines/

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only is the VPHCP at least two years out of date on land ownership, their boundaries for the Preserve Property do not even agree, as seen in Figure 1 on the next page. Please update the VPHCP to reflect the current development landscapes around ALL vernal pools within the jurisdiction of the project. Make sure all maps are congruent, current, and accurate.

Reporting process is not adequate. (VPMMP, Section 5.0, pages 36-37)

The "summarized results" due to the Wildlife Agencies by September 30, should be provided to a list of interested non-government individuals and organizations and posted upon the City's vernal pool website. A meeting should be scheduled with the City, the Wildlife Agencies and non-government organizations (NGOs) if an NGO expresses interest prior to December. Financial reports for VPHCP implementation and monitoring should be included, and they should contain current balances, annual expenditure and projected expenditures with specific funding sources identified. Also, the EIR/S states that the No Project Alternative would involve "status quo monitoring" but doesn't explain what status quo monitoring is, or how effective it is in comparison to the monitoring for the project and alternative.

What rules govern SDG&E activities on Del Mar Mesa and in other VPHCP areas not on SDG&E land?

From the VPHCP, it seemed that the SDG&E Subregional NCCP governed their work on Del Mar Mesa and was the basis for the take permit that allowed them to drive through road rut pools and damage them.

However, the only language that I could find in the SDG&E Subregional NCCP was (p.63):

"SDG&E will avoid vernal pools and their watersheds in the construction of new facilities, including roads. When pools are located above gas lines and repair work is necessary, work areas should be minimized and soil should be stockpiled for replacement after repairs. For new gas lines, avoid through routing changes. For access roads, stay within existing footprint, no new roads through vernal pool areas. Under certain circumstances, SDG&E is prepared to consider rerouting an existing access road which passes through a vernal pool area as potential mitigation for the impacts of utility Activities on vernal pools that cannot be otherwise avoided pursuant to the Operational Protocols in the Plan, such as in an emergency. This rerouting would only be done if it was possible without compromising operational integrity and safety. The mitigation value of the rerouted road would be at 1: 1 level."

Note that this does not protect the road rut pools on Del Mar Mesa or elsewhere, because the roads apparently pre-date the power lines (and certainly pre-date the modern structures), and those roads are on City property covered by the VPHCP.

What plan governs SDG&E use of vernal pool lands, what are they required to do under that plan, and what is the basis for their take permit?

D-10 cont

D-11

D-12

D-11 Please see response to comments C-4 and C-13 addressing public access to the reporting process. Please see response to comment C-5 addressing status quo monitoring.

D-12 The topic of SDG&E rights-of-way is addressed in Section 2.1 of the VPHCP. Vernal pools within SDG&E rights-of-way are not covered under the VPHCP. Questions regarding other entities' HCPs and permits are outside of the scope of this project. D-13



D-13 The proposed MHPA at Torrey Highlands would be conserving the vernal pool preserve area consistent with the requirement of the prior approved Our Lady of Mount Carmel Catholic Church project and as correctly shown on the interactive map. Figure 4-8 of the VPHCP shows the property line of Preserve at Torrey Highlands and not the proposed MHPA.

Does the Draft VPHCP provide for the recovery of these species and thus conserve them?

The *Southwest Center* opinion criticized the practice of continued "incidental take" of vernal pool species and certain development in exchange for uncertain mitigation. The VPHCP will allow for continued take of vernal pool species (under "covered" and "Pipeline" projects) in a way that appears to conflict with the Recovery Standard of the law. The real driver of this HCP cannot be as a means to continue development by "incidental" destruction of vernal pools. This exact situation was already recognized by the court, and the VPHCP should remedy the problem, not continue the problematic practice.

Three Mitigation Issues

1. Weed control lists are inadequate. Criteria in the EIR/S include (p. 11-8): " Success criteria for weed cover shall be as follows: 0% cover for weed species categorized as High or Moderate in the Cal-IPC Invasive Plant Inventory, and relative cover of all other weed species is no more than 5% and 10% coverage in the pools basins and watersheds, respectively, for other exotic/weed species for all 5 years of the monitoring period." The VPHCP states (p. 9-9) " If the influx of invasive species involves a species included on the California Invasive Plant Council (Cal-IPC) "List A" or state or federal "noxious" weeds, within 30 days of such notice to the Wildlife Agencies, City staff biologists and/or preserve manager(s) will assess...[etc.]"

If one looks at the CAL-IPC lists, there are not any highly invasive, list A species (other than perhaps *Ehrharta*) that are likely to invade vernal pools. Instead, the big threats to vernal pools are species of moderate or limited invasibility, far down the lists. At Del Mar Mesa, the most problematic plants are tocolate (*Centaurea melitensis*, moderate invasibility), stinkweed (*Dittrichia graveolens*, moderate invasibility) and brass buttons (*Cotula coronopifolia*, limited invasibility).

Focusing on highly invasive species is misleading and useless. Please change the weed mitigations to focus on whatever invasive species are threatening the pools and their watersheds, no matter how they are ranked by outside groups.

2. Weed control decision loop is too slow. As noted above, weed control decisions have a cycle of months or longer. If this protocol was strictly followed, annual weeds like brass buttons or tocalote will have set seed by the time weed control is started.

The alternative is quite simple: set up and train weed control groups (volunteer or paid) to scout vernal pools, control weeds as they find them, and report regularly on their actions. That is what I do at Del Mar Mesa. By doing this, I pulled the first stinkweed I found and headed off an infestation. Unfortunately, I merely reported the brass buttons infestation when I found it. After two years of agency inaction, I got permission to start hand-pulling it, which I will continue to do so long as I have permission. At this point, the infestation is no longer expanding, but those two years of delay allowed this weed to get established in the biggest population of San Diego mesa mint on the mesa, and it didn't have to happen.



D-14 Please see response to comments C-2, C-10, and C-27.

D-14

D-15

D-16

- D-15 The comment on the EIR/EIS refers specifically to weed control success criteria for project-specific vernal pool restoration and enhancement plans, not ongoing weed control under the VPMMP. The success criteria for weed cover are appropriate. The comment regarding the VPHCP refers to the section on Changed Circumstances for Invasive Species (VPHCP Section 9.2.3). The VPHCP identifies invasion of an exotic species as "an introduction of a species within a Preserve that has (a) not previously been known to occur in the vicinity of the Preserve and has been noxious elsewhere; or (b) is a particularly noxious variety of nonnative species that is resistant to typical control measures." The Planned Response provided, as referenced in the comment letter, is appropriate to address this Change Circumstance. Weed control is required at all levels (Levels 1, 2, and 3) to address invasive and problematic weed species in covered vernal pools. As noted in Table 7-6 of the VPHCP, the primary goals of weed control are to "prevent spread of invasive nonnative species into covered species pools and eradicate problematic invasive species upon detection."
- D-16 The decision to implement weed control, when needed based on qualitative monitoring observations, is intended to be immediate. The primary purpose of the annual monitoring protocol in the VPMMP is to inform management decisions, especially those that are time-sensitive, like weed control. As stated in VPHCP Section 7.5 "The data collected under the VPMMP are intended to efficiently inform management decisions with the ultimate purpose of achieving the VPHCP objectives." Language has been added to VPHCP Sections 7.5.3 and 7.6.2 to clarify the timing of the management decision feedback loop. If monitoring results identify the need to address problematic weeds, this information will be captured on the qualitative monitoring form, including recommendations on the timing in which management actions (e.g., weed control) should be implemented (e.g., immediately, when feasible, etc.). The VPHCP monitoring form (VPMMP Appendix C) has also been updated to include a recommendation for timing of management actions. The City and Wildlife Agencies appreciate volunteer efforts and are open to coordinating with volunteer groups once the Project is approved.

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Please rewrite the weed control measures to make them proactive, rather than reactive. Identify suitable volunteers and workers, train them appropriately, give them access permission well in advance, require them to report regularly (annually) on their actions, and independently monitor to assure that they are doing a proper job. This is much simpler and more effective. CNPSSD will be glad to aid in such an effort.

3. Fence and Forget is an unfair summation, but that was my impression on reading the mitigation measures. The focus on fencing and exclusion, especially during development, is necessary but inadequate. Fences need to be repaired and maintained, and no agency has showed much interest or budget in keeping fences maintained once they are installed.

Fences, to the extent they are required, need to be respected by the community they serve. This leads to the next point:

4. Education, training, and outreach are critical mitigation measures. In the last few years, damage to vernal pools has been caused, among other things, by SDG&E trucks driving into them, Development Services cars driving into them, CalTrans trucks driving through them, mountain bikers riding through them, dogs playing in them, kids jumping in them, City Parks personnel brushing them over, and high school cross country teams running through them, among others. What unites these impacts is that they could all have been avoided through proper outreach, education, and training. No one wants to bog a vehicle in a vernal pool, but every year, someone drives, rides, or runs into one unthinkingly. Most mountain bikers avoid pools, simply because they have to clean their bikes after riding through them, runners avoid the ones that eat shoes, and so forth. It's not that hard to get people to police their behavior around pools, even in heavily traveled areas like the trails on Del Mar Mesa. Most of them do it already.

In the VPHCP, education is presented as a public good, and that is fine. But the focus on kiosks and signage is insufficient. Education, outreach, and training need to be part of active mitigation efforts to keep people out of pools. CNPS, San Diego Zoo, and San Diego Botanic Garden have discussed collaborating to create educational materials for vernal pools, and CNPSSD is happy to help the City create, distribute, and curate educational and training materials free of charge. What this requires from the City is an active willingness to permit and assist outreach, education, and training, both within its divisions and to other groups and agencies. To date, City personnel have blocked public education and outreach efforts, and this needs to change. The best way forward is to include outreach, education, and training in the mitigation measures, and to work within the City, across agencies, with NGOs and local communities to help make them happen. It is a lot easier than it sounds, and it will benefit the other mitigation activities.

Climate change is an issue for San Diego fairy shrimp

San Diego fairy shrimp have an unusual reproductive biology that is poorly known. Past research indicates that their their eggs only hatch below 15°C (59°F), although the larvae need higher temperatures to reach maturity⁴. In the face of severe climate change, we may stop getting the cold winter storms that apparently trigger their eggs to develop and hatch. If such

D-16 cont

- D-17 It is assumed that the comment is referencing the General Avoidance and Minimization Measures provided in the Mitigation Framework. The VPHCP Mitigation Framework plan provides a wide variety of general avoidance and minimization measures beyond fencing, as described in Section 11.2 of the EIR/EIS and Section 5.3 of the VPHCP. Permanent fencing would be maintained per the VPMMP monitoring and management requirements. Costs for installing and maintaining fencing are specifically included and accounted for in the implementation cost tables in Chapter 10 of the VPHCP.
- D-18 The comment does not address the adequacy of the Draft EIR. However, as noted in Table 3-3 of the EIR/EIS, the VPHCP includes educational components as part of Preserve Management. The VPHCP states that educational projects are currently planned for areas such as Del Mar Mesa, Carmel Mountain, and Otay Mesa, and may be expanded to other areas of the MHPA based upon the success of the current projects. Please refer to the City's MSCP website given below for additional information on the City's outreach, education, training, and coordination with volunteer group within the City's parks and open space:

 $https://www.sandiego.gov/sites/default/files/7_management_report_2015_low_res_roelandl.pdf$

D-19 Climate change is listed as a Stressor/Threat in Section 3.9 of the VPHCP and discussed specifically in relation to fairy shrimp species. Climate change is discussed in detail in Section 9.2.6 of the VPHCP. Climate change is also analyzed within the EIR/EIS in Section 5.4, Greenhouse Gas Emissions, and consistency with the City's Climate Action Plan is a specific threshold of significance listed in Section 5.4.3.

D-19

D-18

⁴ Eriksen, C. H. and D. Bel. 1999. *Fairy Shrimps of California's Puddles, Pools, and Playas.* Mad River Press, Eureka, CA.

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storms stop for a century or more (possible under the RCP 8.5 of the IPCC5), then the species will go extinct.

While the VPHCP is too small a plan to tackle global climate change, this risk needs to be recognized in the plan. The appropriate route is for the City to follow its own Climate Action Plan, exceed those goals, foster industry that does not contribute to climate change, and to encourage its neighbors and trading partners to do likewise.

Conclusion

Ellen Bauder points out "Given that <5% of the ecosystem remains, and much of this is in terrible shape, it is clear that many large and small compromises have been made in the years since the late 1970's. And pool conservation lost most of them." The most fundamental question regarding the Draft VPHCP is does the plan do enough to address the finding of the court that the previous practice of allowing "incidental take" of vernal pool species violates both the spirit and letter of the law? In essence, does the Draft VPHCP provide for the recovery of these species and thus conserve them? In order to pass muster, this HCP needs to actually conserve the seven species it covers, rather than trying to provide cover for continued development through "incidental" destruction of vernal pools. That approach has already failed.

If the Draft VPHCP gets the benefit of the doubt, if its mitigation and other measures could work, if the plan is followed, recovery is possible or likely, it still needs to be funded completely and implemented effectively. The Draft VPHCP still lacks certainty in this regard.

Despite these uncertainties, this VPHCP is an attempt to reconcile competing interests. I appreciate your efforts in this respect. In recognition of these efforts and in hope that the issues raised in everyone's comment letters will be addressed, I and CNPSSD support the Expanded Conservation Alternative, and plan to work with the City and agencies to insure that vernal pools and the species they contain are protected.

Thank you for taking my comments. Please keep me informed of all developments with this project, at conservation@cnpssd.org and franklandis03@yahoo.com.

Sincerely,

Frank Landis, PhD Conservation Chair California Native Plant Society, San Diego Chapter

Attachments:

1. CNPSSD 2015 comment letter on Preliminary Draft VPHCP 2. CNPSSD 2012 comment letter on Vernal Pool White Papers

D-19

cont

D-20

D-21

D-22

D-20 Please see response to comments C-2, C-10, and C-27.

- D-21 Please see response to comment C-3 addressing funding.
- D-22 This comment restates support for the Expanded Conservation Alternative.

California Native Plant Society

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April 10, 2015

Jeanne Krosch City of San Diego Planning Department 1200 Third Avenue, Suite 1400, MS 560 San Diego, California 92101

RE: PRELIMINARY DRAFT, CITY OF SAN DIEGO VERNAL POOL HABITAT CONSERVATION PLAN

Dear Ms. Krosch,

Thank you for the opportunity to comment on the preliminary draft of the City of San Diego's Vernal Pool Habitat Conservation Plan ("VPHCP"). Normally I comment on behalf of the California Native Plant Society's San Diego Chapter (CNPSSD), and confine my comments to native plant issues. As I have special knowledge of Del Mar Mesa and its vernal pools, I am addressing non-plant issues as a private citizen. Here I am combining both roles in one letter.

CNPSSD has also co-signed a letter by other environmental groups that analyzes the text of the VPHCP in detail. They make critical points about continued take of vernal pools and species in the face of a clear directive to preserve vernal pools and to stabilize or increase populations of the seven species covered by the VPHCP. In the face of >95% loss of vernal pools, the continued planned take of pools and critical habitat misses the point of the USFWS directive. The lack of research, outdated maps, vague and incomplete population descriptions are all issues that need to be fixed before the VPHCP is approved, let alone implemented.

Here I address issues not covered by the other letter.

My academic background is that I have a PhD in plant ecology from UW-Madison and an MA in botany from Humboldt State University. I have lived in San Diego since 2008 and I have hiked Del Mar Mesa since 2009. Since 2011, I have worked as a City Parks volunteer on Del Mar Mesa, tending trails, clearing weeds, and talking to people on Del Mar Mesa. Currently, I am working with CNPSSD volunteers and outside botanists to create a flora for Del Mar Mesa. Every year, I have watched the vernal pools form and dry down, and I am quite familiar with their fauna and flora, as well as the way they are treated by human visitors.

Since the process of a preliminary draft in a CEQA context is unclear to me, I hope that these comments and responses to them will be included in the draft CEQA documents to be released later this year. Clarification of the process would be very useful.



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The Preliminary Draft VPHCP as written has several issues.

- It is difficult to evaluate the HCP without the management and monitoring plan attached (Appendix D). The draft needs to contain this document, and I will not comment further on this.
- It is fundamentally flawed in its treatment of road pools, which affects the San Diego fairy
 shrimp and perhaps other species. The issue is shown by the apparent fact (demonstrated
 below) that over 40% of the habitat of the San Diego fairy shrimp on Del Mar Mesa, during
 drought years, is not only not protected, it is not mapped. Logically, it is extremely difficult
 to say that a habitat conservation plan conserves habitat if it misses that much habitat for a
 species it is supposed to conserve.
- There are substantial errors in the map, including not mapping a CalTrans inholding whose "maintenance" has caused damage to one of the covered species.

I will deal with these issues in each section below.

Road Pool Issues

According to the VPHCP: "The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species, based on the species identified by the U.S. Army Corps of Engineers (USACE 1997), which are listed in Appendix A. Consistent with the City's Biology Guidelines Attachment II, A.3, depressions which are manmade, such as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indictor plant species. Road ruts and other seasonal depressions which are not vernal pools may contain wildlife associated with vernal pools, such as San Diego or Riverside fairy shrimp, but will not contain vernal pool plant indicator species. The VPHCP also applies to these manmade road ruts and other seasonal depressions if they contain one or more of the covered species." (p. 1-3)

Unfortunately, this criterion was not used to map the road pools on Del Mar Mesa. The map provided by the City⁵ shows the main powerline access road through Del Mar Mesa (in parcels APN #: 3090101800, 3090101500, 3090102200, 3090100200, 3090101800, 3060501200, 3060501100, and 3060502200) as having essentially no vernal pools on it. This is contrary to my experience and the experience of everyone who passes through there in the winter, for the road hosts a plethora of pools, many of which are visible on the City online map even through the overlay. In my experience, most or all of these pools hold fairy shrimp during the winter months. Additionally, as shown on Table 1 on the next page, all of these pools also hold vernal pool indicator plants, while a full dozen of the mapped pools (including Mapped Vernal Pools A and B in Table 1) had no wetland plants currently, and probably held no fairy shrimp last winter, although admittedly I did not check.

To determine whether the road pools meet the criteria for VPHCP-covered vernal pools, 1 walked the road on April 9, 2015 and simply recorded the plants and animals that were present in each pool. I recorded data in 28 unmapped road pools, and for comparison, in 5 mapped vernal pools that are immediately adjacent to the road pools. The data are presented in Table 1 (next two pages)

All of the road pools on the list contained vernal pool indicator species under the VPHCP's definition. Conversely, mapped vernal pools A and B are part of a complex of approximately a dozen pools in an area where the trail was closed by brushing years ago.

⁵ http://sandiego.maps.arcgis.com/apps/webappviewer/index.html?id=7cfd12d64af8424b986af45712933b88

Response to Comments

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Table 1. Road pool and mapped vernal pool data from Del Mar Mesa, collected April 9, 2015. X show presence of organisms (or their remains) at each pool. Although tadpoles are not part of the VPHCP, I recorded them as well. The road pools on Del Mar Mesa are the only breeding areas left for spadefoot toads and Pacific treefrogs. The VPHCP provides an umbrella of protection for many species.

Pool	Location (Lat, Long)	Callitriche marginata	Crassula aquatica	Elatine californica	Lilaea scilloides	Pilularia americana	Psilocarphus brevissimus	Tadpoles
Mapped Vernal Pool A	32.947507,- 117.164116							
Mapped Vernal Pool B	32.947149,-			11.2		11 2 - 11		11 11
Mapped Vernal Pool C	32.945481,-	-			x		x	x
Mapped Vernal Pool D	32.94503,-	x	1	11.00	x	x	÷	1
Mapped Vernal Pool E	32.947591,- 117.164655	x			x	x		
Road Pool 01	32.951586,- 117.168899	x			1		х	
Road Pool 02	32.951477,- 117.168999						x	
Road Pool 03	32.951574,- 117.168645			1111	х		х	х
Road Pool 04	32.951476,- 117.16797		j				x	
Road Pool 05	32.950905,- 117.167471				Х	X	x	x
Road Pool 06	32.950449,- 117.16716	X				X		1.000
Road Pool 07	32.950236,- 117.166901				x	X		
Road Pool 08	32.94995,- 117.166622	х			x	x		
Road Pool 09	32.949798,- 117.166455					X	1	1823
Road Pool 10	32.949548,- 117.166242		j — —		x	x		1
Road Pool 11	32.949382,- 117.166092			10.24	X	х		100
Road Pool 12	32.949216,- 117.165969	Х	x		x	X		
Road Pool 13	32.949085,- 117,165861					x		
Road Pool 14	32.948958,- 117.165759					x		
Road Pool 15	32.948654,- 117.166626	1				х		1
Road Pool 16	32.948546,- 117.167023				1	x		
Road Pool 17	32.948562,- 117.165505				1	x		

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32.944985,-

117.166815 32.945166,-

117.167132

Road Pool 27

Road Pool 28

Pool	Location (Lat, Long)	Callitriche marginata	Crassula aquatica	Elatine californica	Lilaea scilloides	Pilularia americana	Psilocarphus brevissimus
Road Pool 18	32.948302,- 117.16517	х		x	х	x	
Road Pool 19	32.946321,- 117.164033				х		
Road Pool 20	32.946094,- 117.164006		х		х	x	х
Road Pool 21	32.945351,- 117.164539	x		1			
Road Pool 22	32.945164,- 117.164962		1		х		
Road Pool 23	32.944347,- 117.16553				х	Х	
Road Pool 24	32.944293,- 117.165734						х
Road Pool 25	32.944117,- 117.166583				х	x	х
Road Pool 26	32.944128,- 117.167273	1	1				х

(continued from page 2) After the trail was brushed, I went through and physically removed the brush from the vernal pools (during the dry season, with ranger approval) since I had observed that tannins leached by dead wood and leaves appear to inhibit pool organisms. Even with these efforts, today, these pools rarely fill, and have not in my experience supported any VPHCP species since the trail was brushed closed.

Tadpoles

X

х

X

The critical issue is that, in a low rainfall winter like 2014-2015 or 2013-2014, the Del Mar Mesa vernal pools off the road (with two exceptions) do not fill or support fairy shrimp. Conversely, approximately 66 road pools, both mapped and unmapped, hold water, due to the additional compaction of tire ruts. Most of these pools support fairy shrimp. Of those 66 road pools, 28 are not on the city's maps. Therefore, over 40% of the road pools on Del Mar Mesa are not covered by the VPHCP in its current form. They need to be included in the VPHCP.

I understand from talking with AECOM personnel at the 2012 workshops that road pools are problematic, but that is not a reason to exclude road pools from the VPHCP. While yes, those pools are more heavily impacted, both by public use by hikers, dog walkers, mountain bikers, and equestrians, and by trucks driven by SDG&E, City Parks rangers, police, sheriffs, and CDFW wardens. I can understand why City planners might want to keep such heavily impacted pools out of the VPHCP. Unfortunately, this strategy will backfire rather badly. The road pool problem is one of public legitimacy. Imagine trying to explain to a member of the public that one road pool is not protected and can be disturbed without penalty, while another road pool a few yards away is protected. An uninformed member of the public will be confused, because the two kinds of pools look superficially identical. An informed member such as myself will be frustrated, because the fairy shrimp in the unprotected pools are there for anyone to see, while the protected pools could be empty. When the City imposes an arbitrary rule on what is protected and what is not based on an incomplete map or outdated surveys, the plan loses

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legitimacy in the eyes of the public. All the fences in the world are not going to protect pools if people don't respect them, especially if they think that vandalizing the fences makes some sort of statement. I say that not as someone who tears down fences, but as someone who has tried to repair fences for years on Del Mar Mesa and has spent years trying to find better ways to keep people out of pools. It is essential that the VPHCP be seen to be doing its function in a fair and effective manner. That will encourage public buy-in and participate in protecting San Diego's vernal pools. Haphazard designations based on years-old data may well encourage skepticism and vandalism, as will building fences without public engagement.

The requirement of public participation is far from wishful thinking on my part. In the absence of any official action on vernal pools, I have spent years talking with the people illegally using Del Mar Mesa, working to find ways to informally protect Del Mar Mesa's pools. Most mountain bikers will not ride in the pools anyway, because the mud clogs their chains and gear shifts and they need to clean their bikes afterwards. From my personal observation, most of the damage appears to be caused by teenagers and people new to the mesa. Most mountain bikers consider themselves environmentalists, and even before I began volunteering, many had instituted a word-of-mouth policy of avoiding pools that contained tadpoles. Today, they also avoid most of the pools and plants, including the San Diego button celery shown in Figure 1.



Figure 1. This trail is part of the Del Mar Mesa trails plan. The plants in the foreground are San Diego button celery, and the pool they border is covered by the VPHCP. The trail in the background is where the mountain bikers ride. This is the kind of voluntary protection achieved by informal outreach.

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I strongly urge the City to build on this informal set-up, rather than to destroy it. The process for doing so is straightforward:

- Officially include in the VPHCP all road pools that meet the VPHCP standards. This
 includes pools throughout the VPHCP's jurisdiction, not just on Del Mar Mesa.
- Protect these road pools, through monitoring, invasive species removal, and similar techniques.
- Work with USFWS to allow taking based on official vehicle use (by SDG&E and others) as is already permitted. Also work to permit incidental (accidental) taking as part of recreation and education efforts. This is no more than keeping the status quo. Assuming that utilities and other groups with take permits act responsibly, there is no reason to use the presence of road pools to curtail their activities.
- Include outreach and education as active conservation and management measures in section 5.2 and elsewhere. While the VPHCP does consider impacts of education, it does not consider the benefits of education and outreach for conservation and management. This is a major lapse. People have been engaged with vernal pools in San Diego for decades. This includes not only scientists and environmental groups, but Girl Scouts (who years ago installed the ring of stones around unmapped pools seen in Figure 2 below), grade school students (who are active in protecting Carmel Mountain's pools), mountain biking organizations (who help close trails), rangers, and volunteers like myself who have spent many hours talking with everyone we meet by the pools. Most importantly, it includes all the people who walk or ride around the pools and stay out when the trails are wet. A small minority of the public are causing the vast majority of the problems. The majority of people are positively engaged and trying to leave no impact. The City needs to get this majority on its side to protect the pools if this plan is to have any chance of success. Outreach and education are the tools for this effort.
- Where pools occur in heavily-used trails, do not fence them. This serves multiple purposes. The trails have to be passable by vehicles, so fencing is infeasible. Road fencing gets vandalized, and often the pieces are thrown into the pools. Moreover, the pools are water sources for animals, including deer and coyotes, and fencing them off stresses the animals, forcing them to jump the fence (and potentially get trapped), to depend on polluted urban runoff, or to venture into people's back yards. Fencing pool complexes away from roads is a different issue, but even these fences get vandalized, especially when they go up unannounced and destroy native vegetation when installed. While fences and k-rails do keep motorized vehicles out of pool complexes, they are not a panacea, and they do not stop mountain bikers or hikers.
- Where people are concerned that road pools will spread and impede development rights, work on education and outreach. Educate people about the activities that form road pools, including truck traffic on wet roads (SDG&E) or high speed turns on dry roads (wardens pursuing a fleeing mountain biker) that gouge and compact the road surface, as well as how vehicular traffic through pools spreads propagules. The City cannot use fencing and enforcement to stop the spread of road pools inhabited by vernal pool species. Indeed, CDFW wardens created an incipient road pool on Del Mar Mesa through their high-speed enforcement activities two years ago. If creation of road pools is considered a problem, the only solution is to follow the conservation and preservation

Page 7 of 8

measures that environmentalists have advocated for years, and to separate the pools from traffic.



Figure 2. One of the road pools. The partial ring of stones was installed by Girl Scouts to encourage vehicles to miss the pool. Most vehicles now do.

Mapping Errors

In general, the maps included in the document are incomplete and too small. When the legend isn't legible and the pools aren't visible, the map isn't useful. Considering the hurdles I had to overcome to access the online map, I strongly advocate going the old fashioned route and publishing the maps in the forthcoming draft. In that draft, maps of the vernal pool areas, vernal pool complexes and especially maps showing non-conserved and conserved pools need to be included. All maps in the draft need to be larger, to have legible legends and to have all pools visible.

In examining the City's online map, I caught two errors and a major concern. The first error involves parcel APN 3060502600 on Del Mar Mesa. At least part of this parcel belongs to CalTrans, although the map shows it as a City possession. This is problematic, as a CalTrans truck drown through Mapped Vernal pool C on its way to brushing and fencing its property. That brushing activity involved branches cut from a sensitive Nuttall's scrub oak (*Quercus nuttallii*) that were piled atop part of the San Diego button celery population at that location. The button celery is currently trying to grow up through the cut branches, and a CalTrans biologist

Page 8 of 8

excused their actions on the grounds that they have a take permit. Has CalTrans been contacted about its property on Del Mar Mesa in regards to the VPHCP? Is it willing to comply with the City VPHCP while its vehicles are on City property? What is CalTrans' response?

The second error is Parcel APN 30958101, which is marked as 100% conserved. According to the Merge 56 development proposal, this parcel will be at least half filled if the southern extension of Camino Del Sur is constructed. Has the City taken these impacts into account and proposed proper mitigation for this impact? More generally, why are the pipelined projects not shown on the online map?

While I am not as familiar with Otay and Brown's field and other areas in the VPHCP, in the online map, there appear to be the same kinds of questionable mapping, with missed pools at Brown's field (APN 6460302600), and on Otay Mesa (e.g. APN 6452802300).

Given the number and importance of mapping mistakes on Del Mar Mesa, I very strongly suggest that the City and its consultants go over the map again, review it against active ("pipeline") and proposed developments, double-check the ownership of all parcels, and otherwise insure its accuracy. This is a critical part of legitimizing this program in the eyes of the public.

Final thoughts

Given the vagueness and lack of data in the VPHCP, and especially given the lack of a management and monitoring plan, I am very concerned about how they will be implemented. An image like Figure 1 was sent to the City as part of the comment on the Del Mar Mesa trails plan, to simply point out that there were vernal pools and endangered species present on the trails, and that these needed to be accounted for. While the CNPSSD and USFWS comments on this issue were noted by the City, no change at all was made in the Mitigated Negative Declaration. Thus, when I see 28 pools left out of Del Mar Mesa, I wonder whether the City intends to actually protect those pools, or whether they will be ignored, as happened in the DMM MND.

Hopefully we can work together to not just protect vernal pools, but to make them a normal part of life in San Diego, much as they are in Sacramento County. We are more than willing to help make this happen, provided the City comes up with a workable VPHCP that follows USFWS and court guidelines, and then implements it effectively.

Thank you for taking my comments.

Sincerely,

Frank Frank

Frank Landis, PhD Conservation Chair California Native Plant Society, San Diego Chapter

California Native Plant Society

San Diego Chapter of the California Native Plant Society P O Box 121390 San Diego CA 92112-1390 info@cnpssd.org | www.cnpssd.org

November 1, 2012

Ms. Jeanne Krosch Development Services Department, Planning Division City of San Diego 1222 First Avenue, MS 413 San Diego, CA 92101-4101

RE: Vernal Pool Habitat Conservation Plan White Papers

Dear Ms. Krosch:

We appreciate the opportunity to comment on the recommended finding of a mitigated negative declaration for the City's Vernal Pool Habitat Conservation White Papers. The California Native Plant Society (CNPS) works to protect California's native plant heritage and preserve it for future generations. CNPS promotes sound plant science as the backbone of effective natural areas protection. We work closely with decision-makers, scientists, and local planners to advocate for well informed and environmentally friendly policies, regulations, and land management practices. In regard to the proposed plan, we have two major concerns, focused primarily on white papers three and four, the Adaptive Management and Monitoring Strategy. Based on years of experience with the vernal pools on Del Mar Mesa, we believe that the strategy proposed will not adequately safeguard the most active, most often filled, vernal pools, due to an apparently incomplete database of vernal pools used for the white papers, an inadequate characterization of the threats they face, and inadequate methods for managing them.

Understand, please, that our primary goal is the protection of vernal pools, and our concern is that the plans laid out in the white papers fail to provide adequate protection. It definitely fails to protect the most active pools on Del Mar Mesa, and we are concerned that similar weaknesses show up in other pool complexes which we less regularly visit.

The first problem is that the white papers were created using only an existing database. Because we cooperate closely with the Parks Department to monitor Del Mar Mesa, we were given a copy of the vernal pool map for that area. It is evident from that map that at least nine pools were never mapped, and at least one of those unmapped pools contained fairy shrimp in 2012. The unmapped pools are in roads, and we understand that early workers made a decision that so-called "road rut" pools were not vernal pools, and therefore did not map them. Subsequent workers did map pools in roads elsewhere on Del Mar Mesa, but these nine were never mapped.

We are therefore very concerned that the database used in this project is incomplete. In early sessions, we offered to ground-truth the Del Mar Mesa database free of charge in order to advance this project. Unfortunately, that offer was ignored. Later, we reported the location and contents of these nine pools, without any response. In many scientific fields, it is standard



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practice to submit data to outside reviewers, for them to find issues with the data that can be corrected. The City's repeated failure to do this forces us to question how complete and accurate their vernal pool database is. Questions raised by reviewers of the white papers about the completeness and accuracy of surveys only heighten our concern.

The critical problem here is that the HCP is based on the presence of seven focal species, while the maps used in the database rely on data gathered based on pool mapping, where pools were defined by at least two waves of workers using diverging criteria. To be successful, the HCP has to protect the seven focal species where they occur. Depending on maps of pools is therefore insufficient.

The second problem is that the most active pools on Del Mar Mesa are the road-rut pools. The issue is simple: the roads are compacted, and they hold water better. They fill up earlier, with less rain, and last longer before drying down. In 2012, all but one of the active pools on Del Mar Mesa were road rut pools, although many rare plants bloomed in mud that was never inundated. Given that climate change models uniformly predict fewer wet years for the foreseeable future, these road rut pools will be the only pools active in most years.

Unfortunately, the road rut pools are explicitly not covered by the white papers. The authors of the management strategy are correct: most of the pools on Del Mar Mesa are not road rut pools, and the principal threat to these other pools are invasive plants. Unfortunately, these pools only become active in the wettest years. In all the other years, they remain dormant, while the listed species that are the focus of the HCP are concentrated in road-rut pools, in areas that experience substantial human traffic. Because of this situation, in most years, the proposed plan provides no protection to the most active pools on Del Mar Mesa. Therefore, it fails in its fundamental goal of habitat conservation for the seven focus species.

Worse, the plan for dealing with human traffic (fencing and annual sign replacement) is laughably inadequate. On Del Mar Mesa, signs are torn down weekly, and fences are typically breached within three days of closure (this from two years of weekly and biweekly monitoring). The white paper management plan is totally inadequate to deal with this level of vandalism.

There is a solution that was missed by the white papers: education and public involvement. San Diego, unlike Sacramento, has done pitifully little to educate the public about vernal pools. Where Sacramento has SacSplash (www.sacsplash.org) a school science program that incorporates vernal pools into elementary science lessons, San Diego has little but a few articles and a few short videos. This does not have to be the case: Dave Hogan of the Chaparral Lands Conservancy has done a remarkable job of educating the children at Ocean Air Elementary School about the vernal pools on adjacent Carmel Mountain, and he has recruited them to help protect vernal pools. CNPS members such as myself are very active in monitoring Del Mar Mesa, picking up trash, reporting vandalism, and educating the public, all as volunteers. Some members of the mountain biking community are similarly helpful, and even bikers who regularly trespass have created a set of "folk conservation rules" about which pools to avoid and when (for example, they avoid riding through pools with tadpoles). Some bring their children out to watch the tadpoles every spring.

The point is that the City could readily recruit citizens to help monitor and protect every vernal pool complex in the City. The interest is there, and skilled individuals are happy to train



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volunteers whenever possible. The two things lacking are public knowledge, and the will of the City to support and expand existing efforts. That knowledge is readily available, both locally and by adapting the freely available SacSplash curriculum. Volunteers are freely available too. Unfortunately, utilizing these free resources and community enthusiasm is not part of the white papers.

From the outside, it appears that the City (and perhaps the agencies) want to treat its vernal pools as white elephants. They are to be locked away from the public, protected to comply with court order, but otherwise to be ignored because they have no intrinsic value. This approach is both sad and short-sighted. While we absolutely agree that vernal pools are fragile and need protection, they are amazing, scientifically interesting and perhaps commercially valuable. Getting the public to value them will make protecting them far easier.

From a scientific perspective, vernal pools are miniature, high-speed ecosystems. From dry mud, they develop into fully functioning miniature ponds in a matter of weeks, then dry down and disappear in another month or two. Moreover, each one is different, and they differ between years in the ecosystems they support. As a trained ecologist, I wish that more people could study vernal pools. They develop so fast that they can readily be studied by scientists who are trying to understand how to restore wetlands on highly degraded sites, as well as by researchers interested in how ecosystems self-assemble. Unfortunately, vernal pools are so rare that we have to spend all our time protecting them from development and careless trespassers.

Vernal pools even have potential commercial applications. Most vernal pool organisms go dormant when the water goes away, and they can stay dormant for decades, if not centuries. If humans could do this, we could travel between stars, as in the movie *Avatar*. More practically, the various dormancy systems used by vernal pool organisms might be used to extend the shelf life of pharmaceuticals, to store live vaccines without refrigeration, and to extend the storage life of transplantable organs. Unfortunately, because vernal pools are so rare, no one can do that research, find out whether there's a million dollar process waiting to be discovered. Instead, we have to spend all our time protecting them from development and careless trespassers.

Whether you believe these ideas or not, the fact is that people value vernal pools. This includes scientists, amateur naturalists, environmentalists, even hikers and mountain bikers who stop and admire them without knowing what they are. Yes, they need to be protected, but public ignorance will not protect them. Silence from the City and the agencies feeds into misleading stories, spread on the internet by vandals who claim that they are increasing public access against idiotic and misguided fencing attempts by clueless bureaucrats. The City could easily counter such silly claims if it chose, and we hope you will.

Ultimately, it is sad that the City has so far chosen to treat vernal pools as a problem. Yes, they are fragile, and they absolutely must be protected. Unfortunately, that protection cannot come from building fences and refusing to educate the public about the value of vernal pools. The solution has to come from engaging San Diegans in protecting a unique treasure. So far, the City has failed to use the palpable interest and enthusiasm around vernal pools. There are volunteers and school children already helping on their own, often against bureaucratic inertia. This is a waste on all fronts.

If the City wants to truly protect vernal pools, it needs to release its database to qualified



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researchers and ask whether it is complete, rather than making bland assertions. It needs to document current conditions, especially of the road pools on Del Mar Mesa. The parks department documents this damage, but that information has not made it into the white papers. Finally, the City can only protect vernal pools if it educates the public, both through schools and through the media, about vernal pools and how to protect them. None of this is difficult—Sacramento has done it for years—but it requires thinking of vernal pools as some of San Diego's most unique treasures, rather than as a nuisance.

Thank you for taking our comments.

Sincerely,

Frank Franks

Frank Landis, PhD Conservation Chair California Native Plant Society, San Diego Chapter



Dedicated to the preservation of California native flora

LETTER E

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December 1, 2016

Ms. Myra Hermann, Environmental Planner Ms. Jeanne Krosch City of San Diego Planning Department 110 Second Avenue, East Tower, Suit 1200, MS 413 San Diego, CA 92101-3865 <u>PlanningCEQA@sandiego.gov</u> jkrosch@sandiego.gov

RE: Comments on the Vernal Pool Habitat Conservation Plan (Project Number 441044)

Dear Ms. Hermann and Ms. Krosch,

Thank you for the opportunity to review the Draft City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP). The VPHCP represents a significant act of pro-active conservation planning on the part of the City with significant potential to provide important and longpromised conservation for critically imperiled vernal pool wetlands and dependent sensitive species. The following comments are offered in the spirit of support and constructive criticism in the hope that the purpose, goals, and promise of the VPHCP are ultimately achieved.

General Comments

Please provide additional information on the relationship between the duration of the take permit issued under the VPHCP and the goals of the VPHCP to provide management and monitoring in perpetuity. How will the City be obligated to uphold the stated goals of the VPHCP to manage and monitor vernal pools and covered species in perpetuity past the expected 2047 expiration of the City's VPHCP and MSCP SAP permits?

The VPHCP should provide information on whether each private property containing vernal pool soils or other modelled vernal pool habitat within the City of San Diego has been surveyed for

E-1 The comment is an introduction to comments that follow, which are addressed individually below. This general comment expresses overall support for the VPHCP. Note that the comments contained in the letter pertain to the VPHCP document only and not the adequacy of the EIR/EIS.

E-1

E-2

E-3

- E-2 When the ITP expires (anticipated 2047), USFWS could then renew the ITP. If an ITP is not renewed, the City would no longer have "take authorization" for the seven covered species. Management and monitoring of the vernal pools that have been added to the Preserve at the time of the ITP expiration would continue in perpetuity consistent with the VPHCP, regardless of whether the ITP is renewed or not.
- E-3 The VPHCP includes lands currently within the MHPA as well as lands not currently conserved but known to contain vernal pool resources (e.g., suitable soils), based on available survey data and/or modeled habitat. The City does not have authorization to survey private properties proposed for inclusion in the MHPA. If those properties apply for a development permit, the City could require surveys. Please see response to comments C-11 and D-2 for additional information regarding the vernal pool database. The parcel located east of the SANDER property and west of Magnatron Boulevard is owned by the federal government and is not included in the VPHCP. The City's interaction map has been updated to reflect this parcel as "Not subject to the VPHCP or ESL regulations."

the presence of vernal pools or vernal pool species and whether this information was used as a basis for proposed expansion of the MHPA. For example, a private parcel immediately east of the Sanders property and immediately west of Magnatron Boulevard appears to include flat mesa-top topography and vernal pool soils and was identified by Dr. Ellen Bauder in 1986 as a part of the U 15 Complex. Yet no vernal pools are identified and no expansion of the MHPA is proposed for this parcel under the VPHCP. If this or other properties have not been surveyed but support suitable soils, other modelled vernal pool habitat, or are located within previously identified vernal pool complexes, then these properties should be included within the MHCP at a 75% conservation level.

Chapter 2

Please clarify the regulatory relationship between the VPHCP and HCPs prepared by San Diego Gas and Electric (SDG&E) and the San Diego County Water Authority (SDCWA). This issue is of particular concern where conserved lands owned by the City of San Diego seemingly provide protection for vernal pools and vernal pool species but where SDG&E claims a right of access and routinely uses roads through vernal pools to reach utility infrastructure on or near City conserved lands. For example, research by the City of San Diego Park and Recreation Department Open Space Division found that legal descriptions of several properties owned by the City in the Carmel Mountain and Del Mar Mesa preserves do not appear to include rights of access by SDG&E. Yet SDG&E asserts prescriptive easements on these properties and routinely drives through vernal pools supporting listed species in dirt roads. This issue should be reviewed by City and USFWS attorneys to determine the extent to which SDG&E has a legal right to utilize these roads and in turn whether use and maintenance of these roads is a part of the SDG&E HCP or this VPHCP.

Chapter 3

Little mousetail and Western spadefoot toad should be included as covered species under the VPHCP. The justification for excluding little mousetail because "the same species occurs outside of San Diego County"¹ is also true for several of the other covered vernal pool species yet these are still included in the VPHCP.

Little mousetail should be protected and restored in City of San Diego vernal pools because it is an important element of the biodiversity of these vernal pool ecosystems irrespective of any taxonomic questions. Western spadefoot toads should also be included as a covered species under the VPHCP because they are a highly sensitive vernal pool species in San Diego, because they are a California Species of Special Concern, because providing for protection of this species E-3 cont

E-4 Please see response to comment D-12.

E-4

E-5

E-6

- E-5 Per direction from the Wildlife Agencies, little mouse tail is not included in the VPHCP because it is not a unique species to southern California vernal pools and is widely distributed throughout California (see Section 1.1 of the VPHCP).
- E-6 Comment is specific to western spadefoot toad, which is not a species covered by the VPHCP because this species is not limited to vernal pool habitat. The VPHCP was prepared to address the seven vernal pool species relinquished in 2010 and does not include the western spadefoot toad. However, the restoration, management, and monitoring of vernal pools under the VPHCP will benefit habitat for the western spadefoot toad.

^{1.} VPHCP at 1-1.

would help provide important upland buffer preserve areas around protected vernal pools, and because restoration activities could result in significant harm to this species if it is not taken into account as an important target species in vernal pool restoration and management.

Chapter 4

For the 5.2 acre Pasatiempo Parks site on the west side of Pasatiempo Avenue, the City should determine whether SDG&E truly has legal rights to utilize the dirt road across this site (see comments under Chapter 2 above). Please include language in the VPHCP that any future trails impacting vernal pools on this site shall be routed to avoid vernal pools and shall include vernal pool interpretive signs.

The loss of an extremely valuable potential vernal pool restoration site on the City's Pure Water Program/Pueblo Lands property north of Eastgate Mall Road is an unfortunate new addition to the VPHCP since distribution of the preliminary review draft document. The loss of any vernal pool preservation or restoration opportunities on property already owned by the City of San Diego significantly undermines the purpose and goals of the VPHCP to restore, enhance, and preserve vernal pools with long-term conservation value in the MHPA. On the Pueblo Lands property, vernal pools have been significantly degraded or lost to various impacts resulting from decades of neglect by the City vet the property still supports some degraded pools and a relatively significant area of vernal pool soils suitable for restoration on a defensible site. But the City is essentially rewarded for neglecting the site with mitigation proposed for just the five remaining vernal pools on the Pueblo Lands property. The proposed 2:1 vernal pool mitigation on the City's Sanders property for loss of vernal pools on the Pueblo Lands property might be acceptable but only to the extent that this ratio is applied to the loss of all former and/or potential vernal pool habitat on the Pueblo Lands property rather than to just the few remnant vernal pools remaining on the site. Dr. Ellen Bauder's mapped 1986 I 12 vernal pool complex or just suitable vernal pool soils should serve as the basis for determining the extent of vernal pool habitat requiring mitigation for development of this important property.

For the Sanders mitigation property, VPHCP map Figure 2-2 should be updated to reflect the proposed 100% hardline vernal pool preserve / mitigation area on the Sanders property rather than the 75% conservation level shown in the current Figure 2-2. The VPHCP should also provide information on whether the proposed mitigation on the Sanders property duplicates any required mitigation measures for this property that may have been included in a previous USFWS Section 7 consultation transferring this property from the Navy to the City. Additional vernal pool mitigation measures should be required to the extent that the same mitigation was already required in the previous Section 7 consultation. Also, vernal pool mitigation in the form of construction of new vernal pool basins on the Sanders property (or for that matter on any other City property) should be barred in any area supporting original natural vegetation or microbiotic soils and should be conducted only in areas of significant prior disturbance. If the amount of

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E-7 Please see response to comment D-12.

E-8 As noted in the site-specific management sheet for the Pasatiempo site in the VPMMP (refer to Appendix D of the VPHCP), the future Pasatiempo park site has been identified as a covered project and will be designed (including trails) consistent with the VPHCP, the City's ESL Regulations, and Biology Guidelines.

E-9 Vernal pool impacts at the Pure Water North City site would require mitigation consistent with the project-level Environmental Impact Report (EIR) prepared for the Pure Water San Diego Program, North City Project No. 499621/SCH No. 2016081016 which is currently out for public review. The VPHCP Preliminary Draft EIR/EIS and workshop maps excluded the Pueblo Lands property north of Eastgate Mall Road. This is consistent with the City's MSCP, which excluded this site from the MHPA as it was always intended to be used for an expansion of the City's North City Water Treatment Plant. The site was in the Expanded Conservation Alternative but removed in coordination with Wildlife Agencies.

E-10 Refer to response to comment C-11 and E-9.

E-11 VPHCP Figure 2-2 correctly shows 100% hardline for the Sanders property. Requirements for vernal pool mitigation are included in VPHCP Section 5.3. The VPMMP has been updated to include the Management Sheet for the SANDER site (U 15), which was inadvertently left out. The SANDER site was acquired from the Navy and was named for the planned, but never developed, San Diego Energy Recovery facility. Impacts to vernal pools on the SANDER site were permitted by Biological Opinion 1-1-83-F-29R. The 5.6-acre Brown parcel (see VPMMP Management Sheet for B 7-8) located at Lopez Ridge was acquired for mitigation of the proposed impacts to the SANDER site and all requirements per the Biological Opinion were implemented. The SANDER facility was not constructed. Therefore, no impacts to vernal pools occurred and the mitigation implemented at the Brown parcel was not required. The SANDER site has not been used to mitigate impacts from any other projects. All vernal pool restoration projects must occur on lands that historically supported vernal pools. In some instances it may be acceptable to impact native vegetation given the limited availability of lands for vernal pool restoration.

previously disturbed land on the Sanders property is inadequate to accommodate full mitigation for the loss of vernal pool suitable habitat (not just existing pools) on the Pueblo Lands property, then additional mitigation should be required elsewhere.

For the San Diego City airports, Brown Field Municipal Airport and Montgomery-Gibbs Executive Airport, the VPHCP should include measures to address the possible impacts of airport operations and maintenance activities for the time period between the approval of the vernal pool HCP and the future operation plans² planned to implement requirements of the VPHCP as they relate to airport activities. Plans such as this can take many years to prepare as illustrated by the years required to prepare preserve management plans to implement the City's MSCP Subarea Plan and VPHCP covered species shouldn't suffer harm in the interim. The VPHCP should therefore include a binding schedule for preparation of the operation plan. Activities that may harm vernal pools and species should be temporarily barred and no take of vernal pool species should be authorized under the VPHCP at the San Diego City airports until operation plans are complete, circulated for public review, and approved by the USFWS. Take authorization for vernal pool species can be obtained through a separate ESA Section 7 consultation as is currently being conducted for Brown Field Municipal Airport, but take authorization under this separate permitting process also should not be authorized until operation plans are complete, circulated for public review, and approved by the USFWS.

For the Montgomery-Gibbs Executive Airport, VPHCP map Figure 2-3 should be updated to reflect the proposed 100% hardline vernal pool preserve on the Montgomery-Gibbs Executive Airport as shown on VPHCP Figure 4-4 rather than the 75 - 100% conservation levels shown in the current Figure 2-3.

Chapter 5

Section 5.3.2 General Conditions of Compensatory Mitigation conditions appear to be drafted from the perspective of mitigation for development impacts to vernal pools. Please clarify whether these same conditions would apply to pro-active vernal pool restoration projects that are not conducted as mitigation (e.g. vernal pool restoration projects at Carmel Mountain, Proctor Valley, and Otay Mesa by The Chaparral Lands Conservancy). This section is for compensatory mitigation so a new section addressing general design criteria for proactive restoration projects may be warranted in the VPHCP.

For section 5.3.2 General Conditions of Compensatory Mitigation conditions 1.f and 1.g, mapping entire restoration sites to 0.5-foot contours and mapping watershed for each vernal pool is probably unnecessary except for extremely degraded sites that will be nearly or entirely re-

E-11 cont

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E-12 Airport operations and maintenance is a covered activity under the VPHCP. No impacts to vernal pools will occur unless the covered activity has been processed by the City consistent the VPCHP and in coordination with FAA. Take authorization for impacts to vernal pools at the City's airports would not occur unless consistency with the VPHCP is determined.

- E-13 Although the small scale makes the colors between 100% and 75% conservation hard to distinguish, VPHCP Figure 2-3 correctly shows 100% hardline preserve at Montgomery-Gibbs Executive Airport. In addition, footnote has been added to the figure to clarify that Montgomery-Gibbs Executive Airport is within a VPHCP Minor Amendment area, as described in VPHCP Section 8.4.3.
- E-14 Proactive vernal pool restoration projects would still be subject to projectspecific environmental review, including submittal of a vernal pool restoration plan that meets the criteria in VPHCP Section 5.2.3, where applicable, as determined by the City and the Wildlife Agencies. Proactive vernal pool restoration projects would also be subject to the avoidance and minimization measures for covered projects identified in VPHCP Section 5.2.1, as applicable. While measures for design, planning, and implementing proactive vernal pool restoration projects are generally the same as for compensatory mitigation projects (VPHCP Section 5.2.3 Conditions 1.a. through 1.n), requirements related to achievement of performance criteria may not be applicable for non-mitigation-related vernal pool restoration projects.

E-15 The requirements in VPHCP Section 5.3.2 are consistent with the USFWS standards for vernal pool restoration projects. Using 0.5-foot contours is important to ensure vernal pools restoration sites are graded correctly.

^{2.} VPHCP Table 4-7.

graded for vernal pool and uplands habitat restoration (e.g. Cal Terraces North). For sites where the majority of original topography is intact and will remain so during restoration grading (e.g. Clayton), project planning for vernal pool restoration can be accomplished by mapping the location and configuration of perimeters of existing pools, the configuration of perimeters of proposed repaired and/or reconfigured existing pools, the location and configuration of perimeters for proposed constructed pools, and existing and proposed vernal pool hydrology. On these sites the depths of all restored pools can be estimated with application of standard and appropriate slope ratios to the size of the pool with final vernal pool locations, configurations, and depths established at the discretion of the vernal pool restoration specialist overseeing restoration grading. Heights for Mima mounds restored using fill excavated from restored vernal pools can be estimated with application of standard and appropriate slope ratios with final Mima mound configuration and heights established at the discretion of the vernal pool restoration specialist overseeing restoration grading. Heights for Mima mounds restored using fill excavated from restored vernal pools can be estimated with application of standard and appropriate slope ratios with final Mima mound configuration and heights established at the discretion of the vernal pool restoration specialist overseeing restoration grading.

Clarification should also be provided on condition 1.g. for required vernal pool restoration/ enhancement/preservation plans that "restored pools and their watersheds shall not impact the watersheds of any extant pools except where needed to establish hydrologic connections." Some highly degraded vernal pool sites (e.g. Clayton) may warrant construction of new vernal pools within the watersheds of existing degraded vernal pools to restore a higher functioning vernal pool complex and hydrologic system.

For condition 1.h, the introduction of inoculum from donor vernal pools should not be a last resort, especially for restoration that is not mitigation and where salvaged inoculum is not available from pools to be impacted.

For condition 1.q, please explain the basis for requiring measurements for water quality. Have water quality elements of pH, temperature, total dissolved solids, and salinity been correlated to the needs of particular vernal pool species?

Chapter 6

The location of brush management zones for new development in the MHPA is not acceptable including for uplands and buffer areas around vernal pools. All brush management should be located with the 25% development footprint for private properties located within the MHPA.

Chapter 7

The discussion of "Edge Effects Maintenance" in Table 7-6 should be revised to include specific mention of urban runoff or other water drainage problems affecting vernal pool hydrology.

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- E-16 The term "restored pools" includes the potential creation of new pools as necessitated by an approved restoration plan. The City and Wildlife Agencies will review proposed restoration plan designs to verify that changes to the watershed of extant pools needed to establish hydrologic connections result in equal or higher functioning vernal pool hydrology.
- E-17 The priority for restoration projects, regardless of whether the project is for mitigation purposes, is to utilize to the extent feasible on-site inoculum to preserve on-site genetics and diversity. Donor inoculum from off-site locations would only be considered if on-site inoculum is not available and with authorization from the City and the Wildlife Agencies.
- E-18 Water quality elements are directly correlated to habitat suitability for both vernal pool plants and invertebrates. Sources regarding the correlation of water quality and invertebrate habitat suitability are provided below.

Hathaway, Stacie A. and Marie A. Simovich. Factors Affecting the Distribution and Co-Occurrence of Two Southern Californian Anostracans (Branchiopoda), *Branchinecta sandiegonensis* and *Streptocephalus woottoni. Journal of Crustacean Biology*, Vol. 16, No. 4. (Nov. 1996), pp. 669–677.

Gonzalez, Richard J., Jeff Drazen, Stacie Hathaway, Brent Bauer, and Marie Simovich. Physiological Correlates of Water Chemistry Requirements in Fairy Shrimps (Anostraca) from Southern California. *Journal of Crustacean Biology*, Vol. 16, No. 2. (May 1996), pp. 315–322.

- E-19 As noted in VPHCP Section 6.3, brush management zone requirements for new development projects would be consistent with the City's Municipal Code Brush Management requirements, LDC Section 142.0412. Additionally, Brush Management Zone 2 will not be allowed within areas of the MHPA containing vernal pool basins, but may be considered on a case-by case- basis within the associated watershed and buffer with approval from the Wildlife Agencies.
- E-20 VPHCP Table 7-6 includes examples of management actions, not issues affecting vernal pool hydrology. Note that "changes in irrigation designs or schedules" are included as a possible management action.

Chapter 8

All lands conserved as part of the development entitlement process should be subdivided and dedicated in fee title to the City of San Diego Park and Recreation Department Open Space Division, USFWS, or suitable and qualified non-profit conservation organization. Homeowners associations are not appropriate long-term managers of vernal pool preserves even with retention of qualified contractors due to potential conflicts of interest with resident's desires for conflicting uses of preserves (e.g. predator control, pet walking, mountain biking, etc.).

Chapter 10

The VPHCP appears to compile a thorough list of *potential* funding sources to implement the plan but doesn't appear to specify the actual proposed funding method intended for recommendation to the San Diego City Council alongside adoption of the VPHCP, community plan amendments, and other elements to adopt the VPHCP. Clear and unequivocal funding sources must be included in the final VPHCP.

Significantly increased cost estimates will be needed to implement necessary revised VPMMP management and monitoring level categories for a number of currently miscategorized vernal pool sites as discussed in the VP Management and Monitoring Plan section below. Contractors have provided The Chaparral Lands Conservancy a cost estimate for Level 3 management of the Clayton site including vernal pools and uplands at approximately \$112,000 per acre for five years. VPHCP Appendix E Table 3 appears to significantly underestimate costs when it excludes installation of access control and several important elements of uplands vegetation restoration on vernal pool sites. (According to VPHCP Appendix E Table 3, dethatching, seed collection, seed dispersal, container plant care and installation, and topographic repair are all limited to vernal pool units of measurement). Yet access control installation as needed and restoration of upland vegetation across the entirety of vernal pool sites are crucial and required elements of Level 3 VPHCP management. Management costs shown in VPHCP Appendix E Table 3 therefore appear to significantly underestimate the true cost of this level of management.

Please disclose the actual balance of funds remaining in the City's Vernal Pool Preservation Program / Fund and identify the City department responsible for administering this fund. To uphold the mitigation purpose of the Vernal Pool Preservation Program, remaining funds should be spent only on VPHCP Level 3 management activities.

For section 10.7.1 Recurring Annual Costs, the VPHCP states that, "No new funding would be required from the City's General Fund. But judging from existing budgets for staff, equipment, and materials, current General Fund levels are totally insufficient to provide for existing MSCP SAP obligations let alone new and intensive conservation management proposed under the VPHCP. City Park and Recreation Department staff are trained and highly focused on managing recreation use of City open space rather than management of the MHPA for MSCP covered

E-21 E-21 Comment noted. The comment does not address the adequacy or accuracy of the VPHCP or EIR/EIS. In general we agree that homeowners associations are not appropriate long-term land managers, and an appropriate land manager must be approved by the City and Wildlife Agencies per Section 5.3.2 of the VPHCP

E-22 Please see response to comment C-3 regarding the funding source for implementation of the VPHCP.

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E-23 Comment noted. The following information has been added to the VPHCP, Section 5-1: There are City-owned parcels (e.g., J13, J16-18) with vernal pool complexes where enhancement and/or restoration may be necessary to achieve the species-specific restoration objectives identified in Table 5-1. These parcels are identified in the VPMMP Appendix A. A project-level evaluation of these sites is needed to determine if enhancement (Level 2) or restoration (Level 3) is necessary to achieve the species-specific restoration objectives. The City and Wildlife Agencies will identify the level of effort needed at these vernal pool complexes, and the City will fund the necessary enhancement or restoration consistent the funding strategy identified in Chapter 10 as further detailed in Appendix E. The costs for enhancement and restoration activities are identified in Appendix E including funding required for detailed restoration and topographic plans. Once an approach is determined based on the project-level assessment, the required enhancement and restoration methods will be documented in the VPMMP as well as associated costs and funding sources. Enhancement and/or restoration that is conducted, as well as maintenance and monitoring, will be documented in the VPHCP Annual Report.

> Optional costs for Levels 1, 2, and 3, such as site-specific restoration plans and topographic restoration, are not included as part of the total implementation costs in Table E-3 because not all complexes will require these activities. These costs are provided in Table E-4 for reference, if and when monitoring indicates the need for such activities (as determined by the City). Additionally, start-up costs for activities such as access control are shown in Table E-6, not in Table E-3.

- E-24 The Vernal Pool Preservation Fund is managed by the City's Park and Recreation Department/Open Space Division. Please see response to comment C-3 regarding adequate funding availability. The fund may be used to implement all aspects of the VPHCP, not just Level 3 management activities. There is currently approximately \$292,000 available in this fund (see Section 10.3 of the HCP).
- E-25 Please see response to comment C-3 regarding the funding source for implementation of the VPHCP. Please refer to Appendix E of the VPHCP for more details on staffing cost assumptions.

species. And many additional staff specializing in management of vernal pool resources will be needed to implement the VPHCP. In just one example, just *two* absolutely dedicated City rangers are currently responsible for the near-impossible task of maintaining open space recreation facilities while simultaneously implementing most MSCP SAP obligations on the Carmel Mountain, Del Mar Mesa, Lopez Ridge, and Los Penasquitos Canyon Preserves. Yet major mountain bicycling trespass problems impacting vernal pools persist on the Del Mar Mesa Preserve and many additional staff will be needed to control this problem of many, to implement important existing MSCP area specific management directives, and to implement VPHCP management levels 1-3 on Carmel Mountain and Del Mar Mesa. It seems highly unlikely that this can be accomplished with current levels of City Park and Recreation Department Funding from the City's General Plan. As such, the VPHCP should specify how the General Fund will provide significant additional funding to implement the VPHCP beyond existing levels or specifically what funding sources will fill any funding gaps.

Chapter 11

The final VPHCP should include a more realistic and attainable Expanded Conservation Alternative providing for preservation of additional vernal pool habitat for species and designated critical habitat other than for just San Diego fairy shrimp. A revised Expanded Conservation Alternative for all VPHCP species would not necessarily include all areas identified in the VPHCP Expanded Conservation Alternative for San Diego fairy shrimp, particularly in southwest Otay Mesa. At a minimum, an Expanded Conservation Alternative for all VPHCP species should include the same "Expansion Alternative" areas shown in the VPHCP online interactive map for the Cubic / U 19 Complex and the Otay Mesa La Media Swale. The J 13 South vernal pools should also be included in a MHPA preserve configuration that provides connectivity to Finger Canyon and the proposed MHPA 100% Conservation Area located east of the J 13 South vernal pools and north and west of Finger Canyon without necessarily including all areas identified in the VPHCP online interactive map as an Expansion Alternative for just San Diego fairy shrimp. And the Handler and Goat Mesa (Private) sites should be included in the MHPA at the 75% conservation level and the Menlo KM private site included in the MHPA at 100%.

VPHCP Management & Monitoring Plan

The VPHCP's proposal to exclude conservation management for several private vernal pool preserves established prior to adoption of the San Diego MSCP defies the purpose and need, the conservation goals, and, ultimately, the promise of the VPHCP to provide management for vernal pool sites that did not previously receive adequate accommodation for long-term management through past development entitlements.

This has been the first opportunity for public review the proposed categorization of particular vernal pool sites in three management levels as described in the Vernal Pool Management and

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E-26 The VPHCP Expanded Alternative was developed in coordination with the City, Wildlife Agencies, and SANDAG, and in consideration of input from the public, including private land owners. As stated in Section 3.4.1 of the EIR/EIS, "the Expanded Conservation Alternative was developed with the Wildlife Agencies to include lands identified with historical vernal pool resources, designated Critical Habitat, appropriate soil types for vernal pools, or other factors that could provide quality vernal pool habitat." Currently, 2 million dollars in Section 6 grant funds has been awarded the City by USFWS for the acquisition of lands containing vernal pool resources and the City will be coordinating with land owners regarding potential purchase of private lands.

E-27 As noted in Appendix A of the VPMMP, the City does not have authority to require management of private sites established prior to adoption of the City's MSCP. In addition, as separate funding becomes available (e.g., grant funds) the City may work with private land owners to implement additional recommended management as identified on the site specific VPMMP management. Section 5.2.2. of the VPHCP has been updated to include this information.

E-28 Refer to E-23 and E-27, Appendix A has been updated.

Monitoring Plan (VPMMP). Unfortunately, this document significantly undermines one of the main promises of the VPHCP that, in exchange for the continuing loss of isolated or otherwise degraded vernal pools to development, other vernal pools will be permanently preserved in a better conservation configuration and provided with conservation management to achieve longterm viability of vernal pool resources. The City, City VPHCP contractors, and USFWS have supported this promise by citing several "orphan" pool preserve sites, typically highly isolated sites located on supposedly protected private property that were preserved as a condition of development prior to adoption of the San Diego MSCP, that would now receive conservation management under the VPHCP in partial exchange for additional vernal pool losses elsewhere. According to the VPMMP Appendix A, six of these orphan sites (Fieldstone, East Ocean Air, Arjons, Ford Leasing, Facilities Development, and Empire Center) support eighty-six vernal pools including forty-eight pools with San Diego mesa-mint and twenty-eight pools with San Diego button-celery. Yet these sites would receive no conservation management whatsoever under the VPHCP. One particularly glaring orphan site is Arjons where the City mistakenly authorized the property owner to grade a previously preserved site and where resulting damage to important vernal pools and listed species was never remedied or restored.

The VPHCP doesn't appear to provide any real explanation or justification for withholding management of these important orphan vernal pool sites. The sites are all located on private property, but other private preserves and properties are included and subject to preservation and management conditions of the VPHCP. Text in appendices A and B of the VPMMP suggests that the six private preserves are excluded at least in part due to their conservation prior to adoption of the MSCP. But the timing of adoption of the MSCP is irrelevant to the promise and goals of this new VPHCP to provide for conservation of vernal pools and covered species. All of the six orphan sites but Fieldstone are identified by the USFWS for conservation and management needed to stabilize and reclassify several listed vernal pool species³ so exclusion of these sites would significantly impede recovery of these species. And all of these sites are subject to the conservation conditions contained in the City's MSCP Subarea Plan (MSCP SAP) that serves as the basis for continuing coverage of the vernal pool species by the California Department of Fish and Wildlife (CDFW).4 "Area specific management directives" required as conditions of coverage for the vernal pool species under the MSCP by CDFW have never been provided for the orphan sites (or for that matter many other vernal pool sites) so these sites must now be included in the management level framework as part of the VPHCP. Otherwise, these sites should be removed from calculations for the number of pools conserved under the VPHCP and the number of conserved populations of the three covered species occupying these sites, San

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E-29 Although there was a desire to provide management and monitoring for some of the private baseline lands (e.g. Fieldstone, Arjons) we are unaware of any "promise", as this is outside the authority of the City. Furthermore, these sites were all existing baseline lands under the City's MSCP Subarea Plan, therefore the same constraints of access apply. They are included in the calculations for the number of pools conserved because they are part of the baseline conditions and will not be impacted by covered activities in the HCP. Appendix A has been updated to indicate that management is not required for any of the 6 orphaned properties, but is recommended for Fieldstone, Arjons, and Empire Center. Refer also to response to comment E-23 and E-27.

^{3.} Recovery Plan for Vernal Pools of Southern California appendices F. and G.

^{4.} See e.g. discussion of each covered vernal pool species in the MSCP SAP Appendix A which assumes that all vernal pools on conserved land will be preserved and provided "area specific management directives".

Diego fairy shrimp, San Diego button-celery, and San Diego mesa mint, and CDFW should no longer treat these as covered species under the MSCP.

Appendix A of the VPMMP also lists several vernal pool sites that are identified in mistaken or otherwise inappropriate categories of VPHCP management that will significantly limit necessary conservation management of vernal pools and covered species. Many of these vernal pool sites should be recategorized as Level 2 or 3. Several other sites that might include a majority of the site in Level 1 will also require Level 2 or 3 management for a relatively limited portion of the site (e.g. Del Mar Mesa City and state/federal). The following discussion recommends revised VPHCP management levels for several vernal pool sites or requests clarification of VPMMP recommendations and information:

VPHCP management and monitoring should be provided at Level 2 for Mesa Norte. Offsite urban drainage runoff flows onto the site, eucalyptus trees around portions of the site perimeter deposit significant leaf litter and appear to alter the water chemistry of vernal pools, and an extensive cover of exotic grasses should be dethatched and addressed with Level 2 general weed control.

The Fieldstone site is in need of VPHCP Level 1 management and monitoring to address threats as described and recommended in the VPMMP Appendix B evaluation and management form.⁵ The proposed exclusion of the Fieldstone site in VPMMP Appendix A defies the promise and goals of the VPHCP to provide management for vernal pool sites that did not receive adequate accommodation for long-term management during the process of past development entitlements.

The 2.56 acre private Menlo KM site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.⁶ The site also appears to be located inside rather than outside of the VPHCP plan area as noted in the VPMMP Appendix A.⁷ The 2.56 acre

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E-30 Please see response to comment E-28.

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- E-31 Comment noted. Mesa Norte is a privately owned mitigation site with an existing SSMP that outlines the requirements for management and monitoring.
- E-32 Please see response to comment E-27 and 29.
 - E-33 The VPMMP management sheet for Menlo KM states that the site is privately held and that the owner may seek to sell the site for future mitigation. The management sheet has been updated to reflect that the owner/consultants are coordinating with USFWS on a restoration plan for the site and will be pursuing selling the site for mitigation or establishing a mitigation bank.

⁵ "Management Level 1 and the following list of tasks are recommended for the sites: Conduct all Management Level 1 recommended activities, including targeting serious invasive problems (plants or animals), trash removal, and other general management activities."

^{6. &}quot;The vernal pool at this complex has suffered substantial off-road and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics.

^{7. &}quot;The remaining 2.56 acres of the parcel (APN No. 369-082-3000) continues to be in private ownership within the City's jurisdiction."

private Menlo KM site should be included in the MHPA with a 100% conservation level in accordance with the complex description included in the VPMMP Appendix B.⁸

Del Mar Mesa (City and Private) vernal pool sites inside the VPHCP plan area are in need of levels 1-3 VPHCP management and monitoring as described in the VPMMP Appendix B evaluation and management form.⁹ Level 1 management would be sufficient for many Del Mar Mesa vernal pools. But serious, ongoing trespass by mountain bicyclists and past damage from off-road vehicles, construction of fire breaks, and utility activities warrants provision of management and monitoring levels 2 or 3 for many Del Mar Mesa City and private vernal pools.

Please provide an explanation for assigning management level 1 to Del Mar Mesa vernal pools shown as "state/federal" when these are also noted as outside of the VPHCP plan area in VPMMP Appendix A. If the large vernal pool property owned by the California Department of Fish and Wildlife is to be managed as part of the VPHCP then it should be recognized that the same issues described for City parcels on Del Mar Mesa apply to CDFW parcels and warrant provision of management and monitoring levels 2 or 3 for some CDFW Del Mar Mesa vernal pools.

Please identify the location of any Del Mar Mesa vernal pools still owned by Caltrans as shown in VPMMP Appendix A.

The Arjons site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁰ The proposed exclusion of the Arjons site in VPMMP Appendix A defies the promise and goals of the VPHCP to provide management for vernal pool sites that did not receive adequate accommodation for long-term management during the process of past development entitlements. The City has an even greater obligation to provide VPHCP management and monitoring in light of the mistaken grading permit issued in 1999 and resulting impacts to eight vernal pools on approximately one-third of the site that apparently have never been repaired.

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E-34 Please see response to comment E-23. A map of vernal pools at Del Mar Mesa is included in VPMMP Appendix B. Wildlife Agency lands will be managed consistent with the VPHCP as funding allows. Appendix A has been updated to show that they are inside the VPHCP plan area. Caltrans lands (formerly known as Zamudio) on Del Mar Mesa are the lands shown "as not a part" on the interactive map. Lands owned and managed by Caltrans are not within the VPHCP Plan Area because they are not under the jurisdictional land control of the City or Wildlife Agencies. These lands are conserved and managed separately from the VPHCP. If a Caltrans-owned complex is transferred to the City, CDFW, or USFWS, the site would be managed consistent with the VPHCP. Additionally, the VPMMP and Interactive Map would be updated accordingly.

E-35 Please see response to comment E-27 and E-29.

City of San Diego VPHCP EIR/EIS Response to Comments

^{8. &}quot;The site is proposed to be sold for future mitigation and is proposed to be added to the expanded MHPA as 100% conserved."

^{9 &}quot;While many of the vernal pools at this complex are protected from topographic disturbance, off- road activity and access for utility maintenance has created topographic disturbance at some pools. In some cases, this topographic disturbance may have impacted the watershed and ponding characteristics of some of the pools."

^{10 &}quot;...illegal impacts to approximately one-third of the site, including eight vernal pools, has occurred. These impacts resulted in artificial changes to the watershed, ponding characteristics, and flow patterns."

The Pueblo Lands (South) site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹¹ There also appears to be discrepancies in descriptions of the number of pools found on the site between the VPMMP appendices A and B, and between the text description and table in Appendix B.

The Anderprises (City) site is in need of VPHCP Level 3 management and monitoring to address threats as described in the VPMMP Appendix B evaluation and management form.¹²

Please provide an explanation for the lack of any assigned management and monitoring level in VPMMP Appendix A for the Brown Field Basins site. No evaluation and management form appears to be provided for this site in VPMMP Appendix B. The source is unknown but at one time information was circulated that Riverside fairy shrimp occupied the "Kelco" seaweed drying beds in large artificial basins on or near Brown Field.

The Handler site should be included in the MHPA with a 75% conservation level to protect the ecological and hydrological integrity of Goat Mesa.

The Goat Mesa (City and private) and Wruck Canyon sites are in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹³ The Goat Mesa

- E-36 E-36 Please see response to comment E-28. The discrepancy in VPMMP Appendices A and B and associated text has been corrected.
 - E-37 Comment acknowledged. Please see response to comment E-28.

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- E-38 Brown Field Basins is currently conserved within the MHPA, however no covered species have been observed within the basin and therefore no specific vernal pool management is required, thus no VPMMP site form is needed. The referenced basin is a former sewage/detention basin and is not the "Kelco" basins that have supported Riverside fairy shrimp in the past (Helix 1998) which are located on Brown Field Municipal Airport, just north of the runway.
- E-39 E-39 The Handler site is included in the MHPA at 100% conserved under the proposed VPHCP. Refer to VPHCP Appendix C, Table C-2.
- E-40 E-40 Goat Mesa is included in the MHPA at 100% conserved under the proposed VPHCP. Refer to VPHCP Appendix C Table C-2. See also response to comment 28.

^{11. &}quot;The site is currently unfenced and is at risk from dumping and other trash accumulation. ... There is evidence from aerial mapping of vehicle disturbance so issues may exist with concern to hydrological flow patterns, inundation levels, and general watershed function. ... The site is characterized by nonnative grasses that may be a factor in the lack of sensitive vernal pool plant species. ... Conduct a dethatching program. ... Conduct topographic reconstruction where appropriate."

^{12. &}quot;The vernal pools at this complex have suffered considerable off-road damage over the years and this damage has resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

^{13. &}quot;Major impacts have occurred from recreational off-road vehicles, immigrant traffic, and Border Patrol vehicles. ... The vernal pools at this complex have suffered considerable off-road damage over the years and this damage has resulted in changes in hydrologic connection, flow patterns, and inundation characteristics. While most of the pools were topographically repaired at this site as part of restoration conducted in 2008–2009 (AECOM 2010), the remainder of the pools have substantial topographic disturbance. ... Management Level 3: Conduct a dethatching program. ... Conduct a seed collection/bulking program. Conduct cyst collection and inoculation for Riverside fairy shrimp (*S. woottoni*) as needed. Conduct container plant propagation and installation if necessary. Conduct topographic reconstruction where appropriate. Goat Mesa/Wruck Canyon: Continue the dethatching program with the *TransNet*-funded restoration. Conduct topographic reconstruction on basins that were not recontoured during the *TransNet*-funded restoration where appropriate."

(Private) site should be included in the MHPA with a 75% conservation level to protect the ecological and hydrological integrity of Goat Mesa.

The Clayton site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁴ A pending restoration project by The Chaparral Lands Conservancy is so far limited to just five acres of the Clayton site so Level 3 management and monitoring is needed for the remainder of the site.

Please provide an explanation for the lack of any assigned management and monitoring level in VPMMP Appendix A for the West Otay A (Private) site. No evaluation and management form appears to be provided for this site in VPMMP Appendix B.

The West Otay C site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁵

The Pasatiempo site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁶

The Marron Valley site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁷

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- E-41 Please see response to comment E-28.
- E-42 Comment noted. The portion of West Otay A (APN 645-061-110) that contains the vernal pools has been acquired by the State (Caltrans) for mitigation. Therefore, the site is no longer within the City's jurisdiction and would not be subject to the VPHCP. If a Caltrans-owned complex is transferred to the City, CDFW, or USFWS, the site would be managed consistent with the VPHCP. Additionally, the VPMMP and Interactive Map would be updated accordingly.
- E-43 Please see response to comment E-28.
- E-44 Please see response to comment E-28.
- F-45 E-45 Please see response to comment E-28.

^{14. &}quot;The following list of tasks are recommended for the site: ... Conduct a dethatching program. ... Conduct a seed collection/bulking program for *Eryngium aristulatum* and *Navarretia fossalis*. Under Management Level 3, off-site seed collection may be considered. ... Conduct cyst collection and inoculation as needed. ... Conduct container plant propagation and installation. ... Conduct topographic reconstruction where appropriate."

^{15. &}quot;The following list of tasks are recommended for the non-restored portions of the complex: Conduct a dethatching program. ... Conduct container plant propagation and installation. ... Conduct topographic reconstruction where appropriate on the fill pad area and disturbed roadbeds."

^{16. &}quot;The vernal pools at this complex have been impacted by off-road and other damage over the years resulting in potential changes in hydrologic connection, flow patterns, and inundation characteristics."

^{17. &}quot;This area is frequented by Border Patrol, but the major threat to this area results from the high intensity foot traffic of immigrants. Impacts from trampling of sensitive vegetation, litter, and an unnaturally short fire interval are all visible in Marron Valley as a result of undocumented migrants. In addition, cattle from Mexican lands cross the river to feed in preserved areas in Marron Valley. ... The vernal pools at this complex were impacted by off-road

The Serra Mesa Library site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁸ This site appears to be a good candidate for introduction of several covered vernal pool species that are present at the nearby Montgomery Field.

An explanation should be provided for the lack of any assigned required management and monitoring level to Tecolote Canyon in VPMMP Appendix A. No covered species appear to be present but this may be the result of past disturbance rather than any intrinsically lower function or value of these pools. No vernal pools are conserved in this area and the site may provide a unique important opportunity for conservation of vernal pool resources in an otherwise neglected area of the City.

Proctor Valley sites are in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁹ Proctor Valley sites undergoing restoration by The Chaparral Lands Conservancy in conserved City properties (ORV sites A and B) are appropriately categorized at Level 1. But most if other vernal pools on City property in Proctor Valley are in need of intensive restoration and other Level 3 management and monitoring.

The Cubic site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.²⁰ Limiting VPHCP management and monitoring to Level 1 in

E-46 Please see response to comment E-28.

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E-47 Please see response to comment E-28.

E-48 Please see response to comment E-28.

E-49 Comment acknowledged. Appendix A has been updated to indicate Level 3 management is needed.

damage over the years, and the basins were topographically reconstructed in 2008. With continued Border Patrol activity, this issue remains a threat."

^{18. &}quot;Prior to fencing of this complex, the vernal pools were impacted by off-road vehicles and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

^{19. &}quot;Trespass is a major threat, as noted in the *Vernal Pool Management Plan* (City of San Diego 1996). In particular, off-road vehicles tracks are present in the basins and watershed of several vernal pools. Dumping has also been a continuing problem in this area in spite of increased enforcement activities. ... Dumping and litter are continuing problems in this area in spite of increased enforcement activities. ... The vernal pools at this complex have suffered major off-road and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics. ... historic grazing introduced nonnative grasses and *Erodium* spp. to many areas, and off-road vehicles have denuded large areas within and adjacent to the vernal pools."

^{20. &}quot;The vernal pools at this complex have been affected by off-road vehicles and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

the event of a discretionary development application on this private parcel is inexplicable and unacceptable given the particular conservation importance of this site.

Please clarify the status of the Magnatron vernal pool site under the VPHCP. The site appears to be shown on VPHCP Figure 2-3 as located inside the existing MHPA but does not appear to be identified for preservation or management in VPMMP appendices A and B. Magnatron is mentioned as a related site in the VPMMP Appendix B evaluation and management recommendations for the Menlo KM and Cubic parcels but does not appear to be listed in the VPMMP Appendix A nor have its own evaluation and management form in the VPMMP Appendix B.

Thank you for your consideration.

Sincerely,

David Hogan

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E-50 As shown on the City's vernal pool mapping tool and VPHCP Figure 2-3, the small City owned portion of the Magnatron site is located outside of the MHPA and is not conserved under the VPHCP. The remaining area is owned by the military and is not a part.

SheppardMullin

December 1, 2016

619.338.6646 direct jponder@sheppardmullin.com File Number: 0HXC-210096

F-1

F-2

VIA E-MAIL AND U.S. MAIL

Myra Herrmann Environmental Planner City of San Diego Planning Department 1010 Second Avenue, East Town, Suite 1200 MS413 City of San Diego, California 92101 E-Mail: <u>PlanningCEQA@sandiego.gov</u>, mherrmann@SanDiego.gov

Re: Vernal Pool Habitat Conservation Plan EIR/EIS (Project No. 441044)

Dear Ms. Herrmann:

On behalf of our client Cubic Corporation ("Cubic"), we appreciate the opportunity to comment on the draft environmental impact report / environmental impact statement ("Draft EIR/EIS") for the Vernal Pool Habitat Conservation Plan ("VPHCP" or the "Plan"). Cubic is the owner of property located at 5660-78 Kearny Mesa Road in the City of San Diego (APN 356-032-01-00) (the "Cubic Property" or "Property"). While Cubic is supportive of the VPHCP, the Cubic Property will be directly impacted by the VPHCP and would like to use this correspondence, among other concerns, to confirm Cubic's position that Cubic is a hardline project and the consequences of such designation.

I. Inappropriate Inclusion of Critical Habitat and Resulting Hardline Preserve Area

A letter addressing the Preliminary Draft of the VPHCP was submitted to the City of San Diego ("City") on April 10, 2015 on behalf of Cubic, which contained a detailed discussion of a number of issues and concerns regarding the Plan. This correspondence is incorporated herein by reference and attached hereto as <u>Exhibit 1</u>. Among others, our concern in this correspondence, and in those that followed, is that portions of the Cubic Property were incorrectly designated critical habitat. Specifically, land within the Cubic Property designated as "Critical Habitat", and subject to the 75-99% conservation targets set out in the VPHCP, does not include primary constituent elements ("PCEs") and its topography is not conducive to vernal pools

F-1 The comment is an introduction to comments that follow, which are addressed individually below.

F-2 The City responded to the April 10, 2015, letter included in Exhibit 1 comment letter on July 28, 2016. To reiterate, the purpose of the VPHCP is not to add or delete critical habitat designations. The purpose is to include/exclude areas from the VPHCP preserve that are already designated as critical habitat by USFWS. The VPHCP is not a mechanism for USFWS to modify critical habitat designations. The request regarding a modification to a critical habitat designation needs to be addressed specifically and solely with USFWS, as the City has no ability or authority to change critical habitat designations.

LETTER F

¹ Cubic also owns the adjacent property located at 5650-60 Kearny Mesa Road, San Diego, California 92111.
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A. Deletion of Incompatible Portions of the Cubic Property Is Consistent with the Law and USFS Protocol.

Under the Endangered Species Act of 1973 ("ESA") (16 U.S.C. § 1531 *et seq.*), the United States Fish and Wildlife Service ("USFW") is required to designate as critical habitat areas which are essential to the conservation of listed species. Once such areas are designated, the ESA prohibits federal agencies from permitting, funding or carrying out any activity which will result in "destruction or adverse modification" of such habitat.

Under the ESA, a species' "Critical Habitat" includes areas occupied by the species that are "essential to the conservation of the species" and that "may require special management considerations or protection." It also includes areas not occupied by the species that are nonetheless essential to the species' conservation. Section 7(a)(2) of the ESA provides that "[e]ach Federal agency shall ... insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary... to be critical..."

The regulations implementing Section 7 define "destruction or adverse modification" as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species."

Recent case law has set forth the required findings of adverse modification, and determined that the USFW should compare the action's impacts to the whole Critical Habitat designation area, not the unit or subunit area. In the noteworthy *Butte Envt'l Council v. USACE* (9th Cir. 2010) 607 F.3d 570, the USFW determined that a proposed development, which would destroy 234.5 acres, or 0.04%, of total Critical Habitat shared by vernal pool fairy shrimp, would not likely result in the adverse modification or destruction of the Critical Habitat for the fairy shrimp. The *Butte* court upheld this decision, determining that "adverse modification' occurs only when there is 'a direct or indirect alteration that appreciably diminishes the value of critical habitat' and the project at issue did not meet this threshold as it "would affect only a very small percentage of the total critical habitat can be destroyed without appreciably diminishing the value of the species' critical habitat overall."

The USFW's ESA consultation handbook provides support for the Butte holding, explaining:

"Adverse effects on individuals of a species or constituent elements or segments of critical habitat generally do not result in jeopardy or adverse modification determinations unless that loss, when added to the environmental baseline, is likely to result in significant adverse effects throughout the species' range, or appreciably diminish the capability of the critical habitat to satisfy essential requirements of the species."

Additionally, a USFW Memorandum on the application of the adverse modification standard also supports the comparison of the actions impacts to the entire critical habitat designated area,

F-3 Please see response to comment F-2.

F-3

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stating that the USFW should "discuss the relationship of the affected unit(s) in the action area to the entire designated or proposed critical habitat with respect to the conservation of the critical species, unless the proposed or final rule designated critical habitat has already clearly done so."

The City has indicated it is unable to delete the "Critical Habitat" designation from the parcel within the Cubic Property. However, these affected acres only represent a *de minimis* portion of the designated Critical Habitat. Under the case law and USFW standards, removal of the Critical Habitat designation would not amount to "adverse modification" because deletion of this *de minimis* amount of property represents only a very small percentage of the total Critical Habitat for vernal pool fairy shrimp. Removal of the Critical Habitat designation from the parcel would not result in an indirect or direct alteration that would appreciably diminish the value of the Critical Habitat or result in significant adverse effects throughout the fairy shrimp's range. Therefore, removal of the "Critical Habitat" designation is supported in both law and fact.

Moreover, the affected parcel does not support the PCEs necessary to support the function of the critical habitat. The USFW determines adverse modification on the basis of whether the proposed project would disrupt the function of the critical habitat (or prevent the current ability for PCEs to be established) to serve the intended conservation role of the species. Pursuant to Section 3(5)(A)(i) of the ESA, the FWS uses the PCEs to determine which areas within the geographical area occupied by the species at the time of the listing to designate as critical habitat.

The three PCEs for San Diego fairy shrimp Critical Habitat are identified as: (i) certain types of vernal pool complexes; (ii) appropriate connecting hydrology; and (iii) appropriate soils and topography. All three PCEs must be present for property to be designated as Critical Habitat for the fairy shrimp.

Based on correspondence from Helix to the City dated April 10, 2015, attached hereto as <u>Exhibit A</u> to <u>Exhibit 1</u>, a significant portion of the Cubic Property, including the acres at issue, do not appear to support, or in the future have the potential to support, vernal pool resources without substantial grading and restoration actions (PCE 1). The area not only lacks any indication of vernal pools, but, more importantly, is characterized by sloping topography that lacks depression features typical of vernal pools. A large portion of the area is developed or highly disturbed from routine maintenance of the property. Further, the area occurs at lower elevations than the previously mapped vernal pools and their estimated watersheds that occur in their eastern portion of the Property. These topographic features do not support dispersal, promotion of hydroperiod, or contribution to vernal pool watershed (PCE 2). Therefore, two of the three required PCEs for San Diego fairy shrimp do not currently occur in the area currently designated as "Critical Habitat." Based on this information, portions of the Cubic Property west of the drainage ditch do not warrant conservation because there are no existing vernal pools resources there to conserve. As such, the Critical Habitat designation is inappropriate under USFW standards.

F-3 cont

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B. Confirmation of Hardline Preserve Area

In response to this concern, the City and Cubic have worked diligently and cooperatively to address these concerns. As a result, it is Cubic's understanding the parties have agreed to a hardline preserve area ("Preserve Area") depicted on the map attached hereto as <u>Exhibit 2</u>. (See VPHCP, pg. 1-10.) As The Preserve Area is approximately five (5) acres, leaving approximately nine (9) acres ("Remainder Area") for future development. Cubic would like to maximize the potential development of the Remainder Area.

In addition to confirmation of the hardline, Cubic would like to confirm that a project proposed on the Cubic Property and/or the Remainder Area consistent with the Plan hardline would not be required to either mitigate for critical habitat or provide a buffer. The Plan hardline provides a 100' buffer from the vernal pool watershed. As a result, development of the Remainder Area will not result in impacts to vernal pools, watersheds and/or buffers and would consequently not require mitigation. It is our understanding that this position has been included in the Plan; however, we would like to confirm this is the correct interpretation. (See VPHCP, pg. 1-3.) Additionally, it is our understanding that, because of the consideration provided by the hardline, no edge effects from the development would occur. (EIR/EIS, pg. 5.2-27.) Lastly, please confirm that Zone 2 brush management will be permitted within the hardline Preserve Area.

II. Calculation of Density and FAR

To assure the maximum potential development of the Remainder Area, Cubic respectfully request's the City to opine on its methodology for calculating density and floor area ratio ("FAR") for the Cubic Property. Specifically, Cubic requests the City confirm that the Preserve Area will be included in any calculation of density and FAR for development of the Remainder Area.

A. Density Calculations

The relevant San Diego Municipal Code ("Municipal Code") sections addressing methodology for calculating density, Sections 113.0130 and 113.0222 of the Land Development Procedures and Section 143.0410(b) of the Planned Development Permit Regulations, provide guidelines on how to calculate maximum density.

Section 113.0130 defines "density" as "the relationship between the number of dwelling units existing or permitted on a *premises* and the area of the *premises*." The term "premises" is defined in this section as "an area of land with its structures that, because of its unity of use is regarded as the smallest conveyable unit." Municipal Code section 113.0222 provides that "for multiple dwelling unit development, the maximum number of units that may be permitted on a premises is determined by dividing the lot area of the premises by the number of square feet required for each dwelling unit (maximum permitted density), as prescribed by the applicable base zone."

The Planned Development Permit Regulations provides that "[t]he number of dwelling units to be built on the premises shall not exceed that set forth by the applicable zone and land use plan, and shall be based on the entire premises. (Municipal Code § 143.0410(b)(1).) Section

F-4 The project description and figure of the Cubic property included in the Public Review Draft VPHCP, as referenced in the comment letter, are correct. Based on a site visit with the property owner on May 19, 2015, and biological surveys provided by Helix Environmental, a hardline preserve has been agreed to by the property owner, Wildlife Agencies, and the City. Figure 2-3 of the VPHCP is consistent with Exhibit 2 as referenced in the comment letter. Development within the "Remainder Area" of the Cubic Property would not require additional mitigation for critical habitat or an additional buffer beyond the identified hardline Preserve area. Refer to response to comment E-19 regarding requirements for brush management for new development.

F-5 Comment does not address the adequacy or accuracy of the environmental document and no further response is necessary.

F-5

F-4

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143.1410(b)(4) mandates that areas designated for public or private streets may not be utilized in the calculation of maximum density. Sections 143.1410(b)(3) and (5) further provide that <u>open space</u> and private driveways may, but are not required to, be used in the calculation of maximum density. Specifically, the following language in Section 143.1410(b)(3) indicates that open space may be included in the calculation of density:

"(3) If the PDP includes property that is shown as part of a designated open space system in the applicable *land use plan*, and is accepted by the City as dedicated open space, that portion of the property may be included in the calculation of the overall project *density* by using the *density* of the base zone."

(Emphasis in original.)

Moreover, Section 143.0140(b) provides that "[t]he allowable development area for all proposed subdivisions is based on the existing lot or premises to be subdivided. If no development is proposed on any newly created lot, the future development area of the lot shall be indicated on the grading plan and included in the maximum allowable development area calculation for the subdivision.

It appears that a reasonable interpretation of these Municipal Code sections is that the Preserve Area may be included in calculating density for the Remainder Area. However, Cubic would appreciate obtaining City staff's input on this interpretation.

F-5

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F-6

B. FAR Calculation

Municipal Code section 113.0234 addresses methodology for calculating FAR. Section 113.0103, FAR is defined as "the numerical value obtained by dividing the gross floor area of all buildings on a premises by the total area of the premises on which the buildings are located. See Section 113.0234 for additional information on calculating gross floor area." (Emphasis in original.) The term "gross floor area" is defined in this section as "the sum of the horizontal square footage of all existing, proposed, and phantom floors of a building which may or may not be completely enclosed within the exterior surface of the surrounding exterior walls." (Emphasis in original.) As identified above, "premises" is "an area of land with its structures that, because of its unity of use, is regarded as the smallest conveyable unit."

Municipal Code section 113.0234 provides for the method of calculating gross floor area. A link to this code sections can be found at: http://docs.sandiego.gov/municode/MuniCodeChapter11/Ch11Art03Division02.pdf

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It is not clear from the code sections how the Preserve Area would be utilized in calculating FAR for the Remainder Area. Again, Cubic would request City staff's input on this issue.

III. Violations of CEQA and NEPA

In addition to the confirmation requested above, we believe, as drafted, the VPHCP Draft EIR/EIS violates the California Environmental Quality Act ("CEQA") (Pub. Res. Code § 21000 et

F-6 The VPHCP EIR/EIS meets the requirements of CEQA and NEPA, and complies with the ESA. Adequate restoration measures (referenced in letter item (i)) are included in the VPHCP Mitigation Framework (Chapter 11 of the EIR/EIS). A reasonable range of alternatives (letter item ii) are included in Section 3.4, and analyzed under each issue area under Chapter 5. Updated biological information (item iii) is contained throughout the VPHCP and EIR/EIS; also, refer to response to comment D-2. Population and housing impacts are discussed in Section 10.8 (item iv). This comment introduces these issues without substantiation and more detailed responses are provided for each topic as it is addressed in the comment letter.

Myra Herrmann December 1, 2016 Page 6

seq.) and the National Environmental Policy Act ("NEPA") (42 U.S.C. § 4321 *et seq.*) due to its failure to provide: (i) adequate restoration measures; (ii) a reasonable range of alternatives; (iii) updated biological information; and (iv) an adequate analysis of population and housing impacts. Additionally, it is our position that that, as drafted, the Plan does not fully comply with the ESA for the above-stated reasons. Moreover, as it relates to the Cubic Property, the VPHCP improperly includes a large portion of each Property. The lands included in the Plan from the Cubic Property do not contain PCEs and the topography is not conducive to vernal pools. Therefore, we believe the VPHCP Draft EIR/EIS should be revised to address the deficiencies described in detail herein and remove certain sections from the Plan Area.

F-6

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F-7

F-8

A. Deficient Analysis of Consistency with Land Use Plans

The Draft EIR/EIS must discuss inconsistencies with applicable land use plans. (CEQA Guidelines § 15125(d).) More specifically, the Draft EIR/EIS was required to identify "any inconsistencies" between a proposed project and the governing general plan and other applicable land use plans. (*N. Coast Rivers Alliance v. Marin Mun. Water Dist.* (2013) 216 Cal.App.4th 614, 632; *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552.) The Draft EIR/EIS fails to comply with this mandate and, as a result, fails to analyze whether an inconsistency will result in a significant environmental impact. (Pub. Res. Code §§ 21002, 21002.1(a).)

The Draft EIR/EIS determines the Plan is consistent with the applicable land use plans despite the fact it will result in drastic development restrictions on private land not designated or zoned for "open space" and where, instead, higher levels of development and density are currently permitted. (EIR/EIS, p. 5.1-12.) The Draft EIR/EIS avoids further discussion of this land use plan inconsistency by claiming that these lands would "likely" be subject to other federal, state or local restrictions that would result in development prohibitions similar to what is proposed under the Plan. (Id.) However, there is no evidence demonstrating that all of the 206,124 acres in the Plan Area would be subject to substantially similar restrictions as proposed by the Plan. By painting with such a broad brush stroke, the EIR/EIS uses this assumption to avoid analyzing the Plan's inconsistencies with land use designations and zoning provided for parcels within the Plan Area. This assumption is also used to allow the EIR/EIS avoid discussion of the Plan's inconsistencies with the General Plan's development mandates. Without this analysis, there is no meaningful consideration as to whether the Plan's admitted inconsistencies with the existing land use designations would result in environmental impacts requiring mitigation or avoidance. Therefore, there is no substantial evidence to that the Plan will not result in significant land use impacts.

B. Deficient Analysis of Biological Impacts

The Draft EIR/EIS must adequately analyze the Plan's effects to foster informed decisionmaking and allow the public to fully understand those impacts. (40 C.F.R. §§ 1500.1, 1502.24 [information used must be of "high quality" and professional integrity"]; Pub. Res. Code § 21002.1; CEQA Guidelines §§ 15121, 15126, 15125.2; *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428.) Only with a complete analysis can the agency discharge its CEQA and NEPA duty to avoid or reduce to

F-7 As discussed in EIR/EIS Section 3.3.1, the VPHCP would expand the City's existing MHPA by adding approximately 275 acres of land with valuable vernal pool resources. No other land use designations within the remaining Plan Area (approximately 205,849 acres) are proposed. Of the 275 acres, 84 acres (Table 3-2) are already conserved and 191 acres of lands are currently unconserved (Table 3-1). Of the 191 acres, 59 acres are City-owned and 132 acres are under private ownership. Tables 3-1 has been expanded to include (1) designation of Public or Private ownership, (2) Community Plan area, and (3) Land Use Designation. Section 10.8 of the EIR/EIS acknowledges the VPHCP may slightly reduce the amount of vacant land available to accommodate future residential or other development in the VPHCP Plan Area. Section 10.8 has been updated to incorporate information regarding land use for the 275 acres that would be added to the MHPA.

As a result of public outreach to landowners within the proposed expanded MHPA areas, several landowners contacted the City. The City and Wildlife Agencies coordinated with all of these landowners to identify hardline preserve and development areas on their properties, resulting in 90 acres of hardline preserve areas. Additionally, the City is currently in the process of acquiring one parcel (0.9 acre).

The remaining 38 acres encompasses two parcels within the Kearny Mesa community planning area and nine parcels within the Otay Mesa community planning area. Of the acreage within Otay Mesa, 5 acres are designated Village Center/Residential and 26 acres are designated Industrial. The 11 acres located in Kearny Mesa are designated Industrial. The existing Otay Mesa Community Plan includes 530 acres designated as Village Center/Residential and 2,510 acres designated as Industrial. The Kearny Mesa Community Plan currently has 1,900 acres designated as Industrial.

As discussed in Section 5.4.1 of the EIR/EIS, these lands have existing biological constraints (i.e., vernal pools, wetlands, burrowing owl habitat, and/or nonnative grasslands) that would restrict development under current city, state, and federal regulations. Furthermore, the EIR/EIS explains that, at a programmatic level, the VPHCP is consistent with land use policies and plans as the VPHCP allows for reasonable use of private property and is consistent with the existing MSCP, which includes 25% allowable development in the MHPA. At this programmatic level, the potential for some VPHCP acreage to slightly differ from current development restrictions does not cause an exceedance of the thresholds that guide the determination of significance regarding land use consistency.

F-8 Please see response to comment D-2.

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insignificance all significant impacts whenever feasible to do so. (Pub. Res. Code § 21002; CEQA Guidelines §§ 15121, 15126.4.) In order to identify and analyze these impacts, the Draft EIR/EIS must be based on adequate biological surveys that fully document the resources in the area. (Pub. Res. Code § 21002.1; CEQA Guidelines §§ 15121, 15125, 15126, 15126.4.)

Here, this mandate has not been complied with. The Draft EIR/EIS admits that the biological data was collected in 2004 and 2005 surveys, or nearly twelve years ago at the latest. (EIR/EIS, pg. 5.2-16 – 5.2-17.) Additionally, the April 10, 2015 correspondence identified a number of issues with the biological data used to support the VPHCP in violation of the ESA. The Draft EIR/EIS has failed to remedy the issues identified in this correspondence including: (i) stale information for San Diego fairy shrimp and Riverside fairy shrimp; and (ii) the failure to include the best scientific data relating to Otay Mesa mint. This lack of adequate, relevant, and timely biological surveys denies the public and decisionmakers the opportunity to accurately determine the Plan's biological impacts. (40 C.F.R. §§ 1500.1, 1502.24; CEQA Guidelines § 15125(a); *Vineyard Area Citizens for Responsible Growth*, 40 Cal.4th at 448, 449; *Berkley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1367.) Without this information, the Draft EIR/EIS violates CEQA and NEPA. (40 C.F.R. §§ 1500.1, 1502.24; CEQA Guidelines § 15121, 15165, 15126.2, 15126.4, 15125(a).)

C. Deficient Analysis of Alternatives

1. <u>The Draft EIR/EIS Does Not Contain a Reasonable Range of Alternatives</u>

F-8

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F-9

An EIR/EIS must present a reasonable range of potentially feasible alternatives to the project, or to its location, which would feasibly attain most of the basic objectives of the Plan but would avoid or substantially lessen and effects of the Plan. (CEQA Guidelines §§ 15126.6(a); 40 C.F.R. § 1505.1(e).) The nature and scope of the alternatives to be studied in an EIR is governed by the rule of reason. (*Id.; In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1163; *Citizens for Open Gov't v. City of Lodi* (2012) 205 Cal.App.4th 296, 312.) Under the rule of reason, an EIR must discuss those alternatives necessary to permit a reasoned choice. (CEQA Guidelines § 15126.6(f); *Cal. Native Plant Soc'y v. City of Santa Cruz* (2009) 177 Cal.App.4th 957; *Residents Ad Hoc Stadium Comm. v. Bd. of Trustees* (1979) 89 Cal.App.3d 274, 286.) Under NEPA, reasonable alternatives are those that are practical or feasible from a technical and economic perspective, and based on common sense. (46 CFR § 18026; 51 CFR § 15618.) The Draft EIR/EIS should provide "enough of a variation to allow informed decisionmaking." (*Mann v. Cmty Redev. Agency* (1991) 233 Cal.App.3d 1143, 1151.)

The scope of alternatives reviewed must be considered in light of the nature of the project, the project's impacts, relevant agency policies, and other material facts. (*Mira Mar Mobile Cmty v. City of Oceanside* (2004) 119 Cal.App.4th 477; *City of Rancho Palos Verdes v. City Council* (1976) 59 Cal.App.3d 869.) The selection of alternatives discussed in the Draft EIR/EIS may be overturned if it is shown that the alternatives are "unreasonable and that they do not contribute to a reasonable range of alternatives." (*Town of Atherton v. Cal. High-Speed Rail Auth.* (2014) 228 Cal.App.4th 314, 353; *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 355.)

F-9 A reasonable range of alternatives are analyzed in the EIR/EIS, consistent with the requirements of CEQA and NEPA, as stated in Section 3.4. The two alternatives presented in the EIR/EIS are adequate to provide the public and decision-makers with options of both additional conservation and reduced conservation relative to the proposed VPHCP. The alternatives are both based on common sense and logical options as the Expanded Conservation Alternative adds only lands that encompass the most valuable vernal pool resources with high biological value and further achieves the project objectives. The Existing Conservation/No Project Alternatives provides an option allowing for the ongoing conservation efforts without the addition of other lands. The City and Wildlife Agencies acknowledge that there could be an unlimited variation of options, either increasing or decreasing conservation efforts; however it is not necessary to address every potential alternative available. Thus, the EIR/EIS has adequately met the requirements of NEPA and CEQA regarding a reasonable range of alternatives. Additional alternatives that were considered, but rejected, are included in Section 3.5 of the EIR/EIS.

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The Draft EIR/EIS only contains two alternatives: (i) Expanded Conservation Alternative, which adds additional lands to the MHPA beyond those conserved under the Plan; and (ii) the No Project Alternative, which result in no new actions, policies or permits. These two unreasonably narrow alternatives, one of which is much more expansive than the proposed Plan and one that results in no new actions, do not represent a reasonable range of alternatives in light of the nature of the VPHCP, impacts, relevant agency policies and other material facts. For example, there is neither an alternative that includes a reduced level of conservation aside from no additional conservation efforts, nor an alternative. The lack of variation between the alternatives proposed unreasonably hinders the City Council's ability to engage in informed decisionmaking and the public's participation in violation of CEQA and NEPA.

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F-11

2. Expanded Conservation Alternative Is Not Necessary

The Draft EIR/EIS identified the Expanded Conservation Alternative as the environmentally preferable/superior alternative as it would result in the highest amount of conservation, restoration, maintenance and monitoring of vernal pools and their associated resources. This alterative adds lands to the MHPA beyond those conserved under the proposed VPHCP. Cubic strongly opposes this alternative. Not only would this alternative represent a substantial taking of private land, it is not necessary to meet the CEQA objective of reducing significant impacts of the project.

As demonstrated by Table 6-1 of the Draft EIR/EIS, environmental impacts of the Plan are all less than significant with mitigation, and would result in several beneficial effects. Environmental consequences of the Expanded Conservation Alternative would be equivalent or similar to the Plan's effects. Furthermore, the Draft EIR/EIS states that this alternative is required to meet the objectives of the Plan for fairy shrimp and would result in a reduction of industrial and residential development opportunities within the Kearny Mesa and Otay Mesa Community Plan areas.

D. Deficient Analysis of Population and Housing

The Draft EIR/EIS determined that Population and Housing Impacts were not significant and did not warrant discussion pursuant to CEQA Guidelines section 15128. This determination is supported by the Draft EIR/EIS conclusion that the Plan will not displace existing housing or people. (Draft EIR/EIS, pg. 10-5.) However, this statement ignores the unprecedented housing shortage San Diego County is currently facing. The VPHCP area includes property under private ownership that is currently, or may be in the future, eligible for residential zoning. The Plan imposes restrictions on such property that will make it either physically or financially impossible for the development of the needed residential units, thereby drastically reducing the amount of vacant land available to accommodate future residential development. As such, the Plan will result in direct, indirect and cumulatively Population and Housing impacts that need to be analyzed in the Draft EIR/EIS and mitigated to the extent feasible. (Pub. Res. Code § 21100(b)(1); CEQA Guidelines §§ 15126(a), 15144–15145, 15151.)

F-10 This comment expresses a lack of support for the Expanded Conservation Alternative. This alternative is necessary to provide a reasonable range of alternatives as required by CEQA and NEPA and allow the public and decision-makers to consider the pros/cons of increased conservation. As stated in EIR/EIS Section 6.3, although the Expanded Alternative is identified as the Environmental Preferred Alternative, this alternative is not necessary to meet the objectives of the VPHCP.

F-11 Please see response to comment F-7. As noted in the EIR/EIS, many lands included in the VPHCP Plan Area are already subject to development restrictions due to their on-site environmentally sensitive resources. As stated in Section 10.8 of the EIR/EIS, the VPHCP may slightly reduce the amount of vacant land available to accommodate future residential or other development in the VPHCP Plan Area. As discussed in response to comment F-7, the VPHCP proposes to expand the MPHA by 275 acres. Of this acreage, only 44 acres are privately owned, not currently conserved or proposed for conservation, and designated for residential uses (see Tables 3-1 and 3-2). Land use designations within the remaining VPHCP Plan Area (approximately 205,849 acres) would remain the same, including approximately 51,000 acres designated as residential within the Plan Area. Therefore, any new development restrictions are expected to have a minimal impact on the existing housing demand within the region. The VPHCP would not affect the overall planned population or housing growth throughout the San Diego region and would not constitute a significant environmental impact requiring further analysis.

Myra Herrmann December 1, 2016 Page 9 Sheppard Mullin Richter & Harnpton LLP 501 West Broadway, 19th Floor San Diego, CA 92101-3598 619.338.6500 main 619.234 3815 main fax www.sheppardmullin.com

IV. Violations of the ESA

We believe, as drafted, the VPHCP fails to fully comply with the ESA due its failure to: (i) base its analysis and conclusions on the best scientific information currently available; and (ii) provide a reasonable range of alternatives. These issues were originally identified in the April 10, 2015 correspondence submitted to the City on Cubic's behalf. Since the submission of that correspondence, the issues identified therein have not been remediated and, therefore, the VPHCP remains deficient. In order to reduce redundancy, we direct you to that correspondence, attached as Exhibit 1, and incorporate the concerns identified therein by reference hereto.

F-12

V. Conclusions

For these reasons, Cubic respectfully requests the City revise the VPHCP EIR/EIS and the Plan itself to address these issues. Please do not hesitate to contact the undersigned with any questions or concerns regarding the information contained herein or attached hereto.

Sincerely,

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John E. Ponder for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:479993068.5

Enclosures

- cc: City Clerk
 - Jim Edwards Ray Higgins Joy Hagin Karl Osmundson

F-12 This comment is a summary of the comments included in the previously submitted comment letter, which are addressed in responses above.

EXHIBIT 1

Sheppard Mullin Richter & Hampton LLE 501 West Broadway 19th Floor San Diego, CA 92107-3596 619 338 6500 math 818 234 3815 math fax www.sheppardmullin.com

April 10, 2015

619 338 6646 direct ponder@sheppardmuilin.com

File Number. 08C8-100232

VIA E-MAIL AND U.S. MAIL

Jeanne Krosch Senior Planner, Planning Department City of San Diego 1222 1st Avenue, MS 413 San Diego, California 92101 E-Mail: jkrosch@sandiego.gov

Re: Preliminary Draft of the Vernal Pool Habitat Conservation Plan

aune Dear Ms. Krosch:

On behalf of our client, Cubic Corporation ("Cubic"), owner of property located at 5660-78 Kearny Mesa Road¹ in the City of San Diego (APN 356-032-01-00) ("Cubic Property"), we appreciate the opportunity to comment on the Preliminary Draft of the Vernal Pool Habitat Conservation Plan ("VPHCP" or "Plan"). As currently drafted, the VPHCP includes the Cubic Property, which has been partially developed.

We believe, as drafted, the VPHCP fails to fully comply with the Federal Endangered Species Act of 1973 ("ESA"), 16 U.S.C. sections 1531 *et seq.*, due its failure to: (i) base its analysis and conclusions on the best scientific information currently available; (ii) provide adequate monitoring measures; (iii) detail and identify funding that will be provided for the VPHCP's implementation; and (iv) provide a reasonable range of alternatives. As it relates to the Cubic Property, the VPHCP improperly includes a large swath of the Cubic Property because the land does not include primary constituent elements and the topography is not conducive to vernal pools. We believe the Plan should be revised to address the deficiencies below and remove certain sections from the VPHCP area.

I. Violation Of The ESA

A. Biological Data

Preparing an acceptable habitat conservation plan ("HCP") requires the utilization of upto-date biological information on the species being considered within the plan area. After delineating the boundaries of a HCP area and the species within to be included in the HCP, current biological information for each of those species <u>must</u> be obtained. (50 C.F.R.

¹ Cubic also owns the adjacent property located at and 5650-60 Kearny Mesa Road, San Diego, California

Jeanne Krosch Senior Planner, Planning Department April 10, 2015 Page 2

§ 222 22(b)(5).) The HCP must utilize "the best scientific and commercial data available" in fulfilling its provisions (ESA § 7(a)(2).) Data pertaining to the species' ecology, geographical distribution, and occurrence is required and may be available from existing sources. If existing information is not available or not sufficient, biological studies <u>must</u> be completed to supplement this requirement.

In numerous instances, the VPHCP admits it did not utilize the best scientific and commercial data for each species covered by the VPHCP. From the onset the VPHCP states that eight species were originally identified for inclusion in VPHCP, but then immediately dismisses one species (little mouse tail [*Myosurus minimus* ssp. *apus*]) for "unresolved taxonomic issues." (VPHCP pg. 1-1.) The VPHCP does not specify the exact taxonomic issues or the procedures the City used to try to resolve such issues in order to obtain the requisite information. At minimum, the City was required to complete a biological study to establish that the species was properly excluded.

With regard to the remaining species covered in the VPHCP, the Plan does provide the required information for at least four species. But the VPHCP summarily dismisses the requirement to include the best scientific and commercial data related to the San Diego fairy shrimp and Riverside fairy shrimp by issuing a blanket statement that the procurement of such information has "not been feasible." (VPHCP at pg. 3-3, 3-5) Given the apparent lack of existing information on these species, the City was then required to perform a biological study to supplement the missing information. However, the Plan goes on to admit that protocol surveys for San Diego fairy shrimp have not been conducted despite the acknowledgement that the existing information is incomplete (VPHCP at pg. 6-2. ["...general observations... suggest the...distributional data for the San Diego fairy shrimp is incomplete"].)

Additionally, the VPHCP states: "California Orcutt grass is believed to be wind pollinated, although no studies of wind pollination or vector-assisted pollination in this species is currently known." (VPHCP pg. 3-11) The Plan also lacks the best available scientific data relating to the Otay Mesa Mint population.

The Plan's general dismissal of this requirement to include this information and the lack of biological studies are clear violations of ESA.

B. Monitoring Measures

ESA Section 10 regulations require that an HCP specify the measures the applicant will take to "monitor" the impacts of the taking resulting from project actions. (50 C.F.R. § 17.22(b)(1)(iii)(B), 50 C.F.R. 222 22(b)(5)(iii).) Monitoring measures described in the HCP should be as specific as possible and be commensurate with the project's scope and the severity of its effects. For regional and other large-scale HCPs, such as the VPHCP, monitoring programs should include periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on fulfillment of mitigation requirements (e.g., habitat acres acquired). Monitoring plans for HCPs should establish target milestones or requirements throughout the life of the HCP, and adaptive management options

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The Plan is not in compliance with ESA's monitoring requirements. Section 7 of the Plan, which details the Management, Monitoring and Reporting, does not include the monitoring requirements for regional and large-scale HCPs, such as periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on fulfillment of mitigation. Moreover, the monitoring activities are not analyzed elsewhere in the Plan. Furthermore, the Plan does not establish milestones or requirements throughout the life of the VPHCP. Therefore, the monitoring included in the Plan is deficient and in violation of ESA requirements.

C. Funding

The ESA requires that every HCP detail the funding that will be made available to implement the proposed mitigation program. Sufficient funding must be provided for all proposed activities, including those relating to any necessary surveys, monitoring programs, mitigation programs, and construction of the proposed project. The HCP must identify all financial contributors and planned allocation of funds.

VPHCP Section 10, Preserve Management and Funding Mechanisms, does not detail the finding that will be made available to implement the proposed mitigation program. Instead, this section includes a general discussion of potential funding sources but does not specify which sources will be accountable for providing sufficient funding for the proposed activities The Plan does not provide a guarantee the funding is available to support the VPHCP.

VPHCP Section 10 identifies the creation of a communities facilities district ("CFD") as a potential funding source. (VPHCP at pg. 10-4.) Should the City determine it practical to pursue a CFD, the City should be aware of the recent *City of San Diego v. Shapiro* (2014) 228 Cal.App.4th 756, which requires a vote of the entire City's electorate body in order to legally form a CFD.

D. Alternatives

The ESA requires a description of "alternative actions to such taking," or a discussion of other options, besides the proposed action/project, that will not result in the proposed taking Two alternatives commonly included in the "Alternatives Analyzed" section of the HCP are: (i) any specific alternative, whether considered before or after the HCP process was begun, that would reduce such take below levels anticipated for the project proposal; and (ii) a "no action" alternative, which means that no permit would be issued and take would be avoided or that the project would not be constructed or implemented. The applicant also must explain in this section why these alternatives were not adopted

Again, as it relates to the alternative requirements under ESA, the VPHCP summarily dismisses a key element of a legally compliant HCP. The Plan considers two alternatives for both the San Diego fairy shrimp and the Riverside fairy shrimp. However, when describing the alternatives considered for Riverside fairy shrimp, the VPHCP states. "The Reduced Take Alternative is effectively equivalent to the Not Take Alternative." As the two alternatives

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addressed mirror each other, the Plan does not contain a reasonable range of alternatives Moreover, the Plan does not adequately describe or analyze each alternative. Lastly, the Plan does not adequate explain why the alternatives were not adopted.

II. Regulatory Taking

The Fifth Amendment to the United States Constitution provides. "nor shall private property be taken for a public use without just compensation " Effectively, this is a reverse statement of the power of eminent domain: the government's ability to take private property for public use, as long as the government pays the owner just compensation. Coincident with the emergence of land use regulation in this country, an accompanying legal theory developed to challenge the government's ability to regulate land use. This concept is known as "regulatory taking." Under this theory, land use regulation affecting private property, including growth control measures, could have essentially the same effect as the government seizing property. Thus, under the regulatory taking theory, the government is required to provide just compensation for its actions.

The United States Supreme Court attempted to articulate when a land use regulation results in a compensable taking in *Penn Coal Co. v. Mahon* (1922) 260 U.S. 393. The Court said: "The general rule ... is, that while property may be regulated to a certain extent, *if regulation goes too far* it will be recognized as a taking." (Emphasis added.) (260 U.S. at 415.)

In determining when a regulation "goes too far," certain general rules have emerged. In *Agins v. City of Tiburon* (1980) 447 U.S. 255, the Supreme Court established a "two-prong" test. The Court held that a regulation results in a taking if either: (i) the regulation does not substantially advance legitimate state interests; or (ii) the regulation denies an owner economically viable use of his land. (*Id.* 447 U.S. at 260.)

Regarding the "economically viable" prong of the Agins test, subsequent cases clarified that this formula requires that the loss is total, denying the owner of all economically viable use of its property. (*Tahoe-Sierra Preservation Council, Inc. v. Tahoe Reg'l Planning Agency* (2002) 535 U.S. 302, *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003.) In addition to the *Agins* test, the courts have applied other standards for determining whether a regulatory taking has occurred. In *Penn Cent. Transp. Co. v. New York City* (1978) 438 U.S. 104, 123, the United States Supreme Court held that regulation that leaves some economically beneficial use of the affected property may still be shown, on a case-by-case basis, to go too far and amount to a regulatory taking. Critical inquiries are the economic impact of the regulation on the claimant, the extent to which the regulation has interfered with distinct investment-backed expectations, and the character of the governmental action. (*Penn Cent. Transp. Co.*, 438 U.S. at 123.) Similarly, the California Supreme Court identified thirteen possible considerations, and indicated that there are other valid factors, as well (*Kavanau v. Santa Monica Rent Control Bd.* (1997) 16 Cal 4th 761, 775.)

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Section 8.2 of the VPHCP assumes that 25% of all private and public lands that have not been conserved and are wholly within the multi-habitat protection area ("MHPA") will be lost (i.e., developed). This section allows development that would make reasonable use of the property. Therefore, property owners within the MHPA are permitted to develop at least 25% of each parcel of affected property. However, Cubic Property is not within the MHPA, and the VPHCP designates portions of the Cubic Property as having a target conservation level of upwards of 99%.

As demonstrated by the maps provided by HELIX, attached hereto as enclosures to <u>Exhibit A</u>, the designation of VPHCP area includes the Cubic Property The inability to develop this property will remove all economic viability of the Cubic Property, and will preclude Cubic from expanding its operations as desired The City must readjust the VPHCP boundary lines to avoid the previously entitled Cubic Property, or pay just compensation for its possession of the land.

III. Large Portions of the Cubic Property Are Incompatible Vernal Pools Sites

Based on the assessment and report performed by HELIX, attached hereto as Exhibit A, a significant portion of the Cubic Property, approximately 7.6 acre (57%) of the total 13 52 acres, does not currently support, or in the future have a potential to support, vernal pool resources without substantial grading and restoration actions. The area not only lacks any indication of vernal pools, but more importantly, it is characterized by sloping topography that lacks depression features typical of vernal pools. A large portion of the area is developed or highly disturbed from routine maintenance of the Cubic Property. Further, the area occurs at lower elevations than the previously mapped vernal pools and their estimated watersheds that occur in the eastern portion of the property. Based on this information, portions of the property west of the drainage ditch do not warrant conservation because there are no existing vernal pool resources there to conserve. These portions of the Cubic Property should not be subject to the conservation level targets in the VPHCP.

In the alternative, the inclusion of this land into the VPHCP is incompatible with existing land uses. The Cubic Property is zoned Industrial – Light-2-1, which allows for a mix of light industrial and offices uses with limited commercial. The industrial nature of the Cubic Property, which has already been partially developed with a large industrial/office structure, is not conducive to the creation, maintenance, and/or restoration of vernal pools.

IV. Deletion of the Incompatible Portions of the Cubic Property Will Have a De Minimus Impact on the Overall Critical Habitat

The revision of VPHCP to remove the incompatible portions of the Cubic Property will have a *de minimus* impact of critical habitat of the San Diego fairy shrimp and Riverside fairy shrimp (collectively, "Fairy Shrimp") For a finding of "adverse modification" the U.S. Fish and Wildlife Services ("FWS") must demonstrate that the project impacts "appreciably diminishes the value of critical habitat". If the incompatible portion of the Cubic Project does contain critical

Jeanne Krosch Senior Planner, Planning Department April 10. 2015 Page 6

habitat, it is only a very small percentage of the total critical habitat for the Fairy Shrimp and removal of it will not appreciably diminish the value of the Fairy Shrimp overall critical habitat.

A. Legal Background

1. Adverse Modification Standard

Under the ESA, the FWS is required to designate as critical habitat areas which are essential to the conservation of listed species. Once such areas are designated, the ESA prohibits federal agencies from permitting, funding or carrying out any activity which will result in "destruction or adverse modification" of such habitat.

Under the ESA, a species' "critical habitat" includes areas occupied by the species that are "essential to the conservation of the species" and that "may require special management considerations or protection." (16 U S.C. § 1533(5)(A)(i).) It also includes areas not occupied by the species that are nonetheless essential to the species' conservation. (16 U S.C. § 1532(5)(A)(ii).) Section 7(a)(2) of the ESA provides that "[e]ach Federal agency shall ... insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary ... to be critical..." (16 U.S.C. § 1536(a)(2).) The ESA requires the Secretary to provide a biological opinion detailing how the agency action affects the species or its critical habitat.

The regulations implementing section 7 define "destruction or adverse modification" as "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." (50 C.F.R. § 402.02.) In *Gifford Pinchot Task Force* v. USFWS (9th Cir. 2004) 378 F.3d 1059, the Ninth Circuit Court of Appeals held that "the regulatory definition of 'adverse modification' contradicted Congress's express command to require appreciable diminishment of either survival or recovery of the listed species in order for "adverse modification" to occur. (*Id.* at 1070.)

2. <u>Adverse Modification Determination Should Focus on Project's Effect on</u> <u>Total Critical Habitat Area</u>

Recent case law has set forth the required findings of adverse modification, and determined that the FWS should compare the action's impacts to the whole critical habitat designation area, not the unit or subunit area. In the noteworthy *Butte Envt'l Council v. USACE* (9th Cir. 2010) 607 F.3d 570, the FWS determined that a proposed development would destroy 234 5 acres of critical habitat shared by vernal pool fairy shrimp, which amounted to 0.04% of the fairy shrimp's total critical habitat. (*Id.* at 578.) The FWS nonetheless concluded that the project would not likely result in the adverse modification or destruction of critical habitat for the fairy shrimp. (*Id.* at 579.) An environmental organization filed suit against the FWS challenging this determination, asserting that the FWS's finding of no "adverse modification" conflicted with

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The *Butte* court held that that "adverse modification' occurs only when there is 'a direct or indirect alteration that *appreciably diminishes* the value of critical habitat " (*Id* at 582.) The court stated further that "[a]n area of a species' critical habitat can be destroyed without appreciably diminishing the value of the species' critical habitat overall." (*Id*. at 582.)

The FWS's ESA consultation handbook provides support for the *Butte* holding, explaining:

"Adverse effects on individuals of a species or constituent elements or segments of critical habitat generally do not result in jeopardy or adverse modification determinations unless that loss, when added to the environmental baseline, is likely to result in significant adverse effects throughout the species' range, or appreciably diminish the capability of the critical habitat to satisfy essential requirements of the species." (FWS Endangered Species Consultation Handbook: Procedures for Conducting Consultation

and Conference Activities Under Section 7 of the Endangered Species Act 4-34 (1998).)

The Ninth Circuit in the *Butte* court reasoned that "the project would affect only a very small percentage of the total critical habitat for the vernal pool fairy shrimp..." (*Butte*, 607 F.3d at 583.) The environmental organization plaintiff maintained that it was inappropriate for the FWS to focus on the project's impact on the species' total critical habitat because it masks the project's localized impact, but the court did not find that argument persuasive. The Ninth Circuit held that where "there is no evidence in the record that 'some localized risk was improperly hidden by use of large scale analysis" it will not second-guess the determination of the FWS. (*Id.*)

A FWS Memorandum on the application of the adverse modification standard also supports the comparison of the actions impacts to the entire critical habitat designated area, stating that the FWS should "discuss the relationship of the affected unit(s) in the action area to the entire designated or proposed critical habitat with respect to the conservation of the critical species, unless the proposed or final rule designated critical habitat has already clearly done so." (FWS Memorandum, Application of the "Destruction or Adverse Modification" Standard under Section 7(a)(2) of the Endangered Species Act (Dec. 9, 2004).)

3. Primary Constituent Elements

The FWS determines adverse modification on the basis of whether the proposed project would disrupt the function of the critical habitat (or prevent the current ability for primary constituent elements ["PCEs"] to be established) to serve the intended conservation role of the species. (72 Fed. Reg. at 70,665.) Pursuant to Section 3(5)(A)(i) of the ESA, the FWS uses the PCEs to determine which areas within the geographical area occupied by the species at the time of the listing to designate as critical habitat. (*Id.* at 70663.) PCEs include, but are not limited to. (i) space for individual and population growth and for normal behavior; (ii) food, water, air, light, minerals, or other nutritional or physiological requirements; (iii) cover or shelter;

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(iv) sites for breeding, reproduction, or rearing (or development) of offspring; and (v) habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

B. Deletion of Vernal Pool Incompatible Portions of the Cubic Property

The ESA requires that the FWS designate "specific areas" occupied by the Fairy Shrimp and containing the PCEs. (16 U.S.C. § 1532(5)(A)(1).) The FWS has identified three primary constituent elements ("PCEs") that must be present for property to be designated as critical habitat for the Fairy Shrimp: (i) certain types of vernal pool complexes, (ii) appropriate connecting hydrology; and (iii) appropriate soils and topography. (*Id.* at 70,665.) The Final Rule designating critical habitat for the Fairy Shrimp states that all of these elements are present on all land designated as critical habitat. (*Id.*) Even if not all of the acres within each subunit contain vernal pools at any given time, the FWS can appropriately conclude that the nonoccupied land is necessary for the critical habitat if it supports the existing vernal pools in the subunit (*Home Builders Ass'n of N. Cal. v. USFWS* (9th Cir. Cal. 2010) 616 F.3d 983.) But critical habitat designation does not equate to adverse modification.

As the Final Rule for the Fairy Shrimp critical habitat states, "[a]ctivities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that appreciably reduces the conservation value of critical habitat for San Diego fairy shrimp." (72 Fed. Reg. at 70676.) (Emphasis added.) Consistent with the Final Rule, the deletion of the vernal pool incompatible portions of the Cubic Property does not alter the PCEs to an extent that appreciably reduces the overall critical habitat for the Fairy Shrimp, as demonstrated in Exhibit A.

V. Further Notification

Please notify Cubic, as well as this office, when any additional draft and/or final VPHCP, environmental impact statements/environmental impact reports, Implementing Agreements and any other related documents are available for review Cubic can be notified at the following address:

C. Ray Higgins Cubic Corporation 9333 Balboa Avenue San Diego, California 92122

With a copy to:

John E. Ponder Sheppard, Mullin, Richter & Hampton LLP 501 W. Broadway, 19th Floor San Diego, California 92101

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VI. Conclusion

For these reasons, Cubic respectfully requests that the City revise the VPHCP to address these issues. Please do not hesitate to contact me with any questions or concerns regarding the information contained herein or attached hereto.

Sincerely,

onda oh gi

John E. Ponder for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH 436944218.2 Enclosures

cc: City Clerk Jim Edwards Ray Higgins Joy Hagin Larry Sward Jay Thomas Karl Osmundson

EXHIBIT A

HELIX Environmental Planning, Inc. 7578 El Cajon Boulevard Suite 200 La Mesa, CA 91942 619.462 1515 tei 819 462.0552 teix www.helikapi.com



April 10, 2015

Mr. James R. Edwards Cubic Corporation 9333 Balboa Avenue San Diego, CA 92123

Subject: Results of a Preliminary Vernal Pool Inventory and Assessment at the Kearny Mesa Cubic Property

Dear Mr. Edwards:

This letter reports on the results of a preliminary vernal pool inventory and assessment conducted by HELIX Environmental Planning, Inc. (HELIX) within the Kearny Mesa Cubic Corporation property located at the address of 5660-78 Kearny Mesa Road in the City of San Diego, California.

The purpose of the assessment was to confirm the presence or absence of potential vernal pool resources on the property, including vernal pools, approximate watershed areas, and vernal pool indicator species, and correlate biological information obtained in the field with ½-foot microtopographic survey data provided by Rick Engineering Company (RICK). The survey effort relied on the best available information given the time of year and scope of work presented to HELIX.

This letter is intended to present preliminary assessment results to supplement future study and comments on the City of San Diego (City) Preliminary Draft Vernal Pool Habitat Conservation Plan (Draft VPHCP; City of San Diego 2015), dated March 2015 and circulated for public review.

INTRODUCTION

The approximately 13.52-acre Kearny Mesa Cubic Corporation property is located immediately north and west of State Route (SR-) 163 and immediately south of SR-52 in the City of San Diego, California (see enclosed Figure 1). The property occurs within Assessor's Parcel Number (APN) 356-032-01-00 at the address of 5660-78 Kearny Mesa Road. Cubic Corporation also owns the parcel comprised of APN 356-032-02-00 at the address of 5650-60 Kearny Mesa Road, but that parcel was not the subject of this assessment given that it is entirely developed.

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The property occurs within the boundaries of the City's Draft VPHCP. Portions of the property support a known vernal pool complex referred to in the Draft VPHCP and other documents as the U19 complex (City of San Diego 2012, 2004). The vernal pools associated with this complex are depicted on the enclosed Figure 2 as *City Vernal Pool* data. Also depicted on Figure 2. approximately 13.0 acres of the 13.52-acre property are identified in the Draft VPHCP as having a target conservation level of 75-99%. Last, portions of the property are designated as critical habitat for the San Diego fairy shrimp (*Branchinecta sandiegonensis*), one of the species targeted for coverage under the Draft VPHCP.

METHODS

Prior to field survey efforts, HELIX reviewed the Draft VPHCP and compiled a data set that included records for previously mapped vernal pools (City of San Diego 2015, 2012, 2004), sensitive species (USFWS 2015a, CDFW 2015, CNPS 2010, County of San Diego 2015), City Multiple Species Conservation Program (MSCP) information (City of San Diego 1997), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (USFWS 2015b), U.S. Department of Agriculture (USDA) soils (USDA 2015), topographic maps (1996), and other data. Recent and historical aerial imagery was also reviewed (Google Earth 2015; NETROnline 2015).

RICK performed a land survey of the property the morning of April 2, 2015. Microtopographic data was collected at ½-foot contours throughout a grid that targeted both developed features (i.e., headwalls and fences) and undeveloped land within the property. HELLX biologist W. Larry Sward met with RICK on April 2, 2015 to provide direction during the land survey and help ensure that no inadvertent disturbance to sensitive vernal pool resources occurred during the survey effort. Mr. Sward also conducted a field reconnaissance and vernal pool assessment survey at the site that same day. The survey focused on assessment of the current status of previously mapped vernal pools, botanical inventory, and mapping features with a Global Positioning System (GPS) with sub-meter accuracy. A directed survey for vernal pool indicator plant species was also performed within previously mapped pools and other portions of the property. Other notable biological resources on the property were recorded and mapped in the field. RICK provided the land survey data to HELLX the evening of April 2, 2015.

On April 6, 2015, HELIX biologist Karl Osmundson and Mr. Sward performed a follow-up survey to compare the results of RICK's ½-foot microtopographic survey data with conditions in the field. Areas suggesting the presence of a basin or depression based on ½-foot microtopographic contour data were field-verified. HELIX specifically noted any agreements and disagreements between what is readily identifiable in the field, what is reflected in the ½-foot contour data, and what is recorded in the City mapping data. In addition to basin and depression features, the microtopographic data was field-verified to confirm the presence and direction of sloping topography, which then was used to suggest direction of surface and subsurface water flow and potential vernal pool watershed boundaries within the property.

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RESULTS

The ½-foot microtopographic contour data and conditions observed during the April 2015 surveys generally agree with the U19 complex vernal pool mapping in the Draft VPHCP. However, the contour data and conditions over a significant portion of the property do not agree with the 75-99% conservation level targets shown in the Draft VPHCP. That is, the sloping topography and conditions observed on the ground over a significant portion of the property do not warrant conservation because there are no existing vernal pool resources to conserve.

As depicted on Figure 3, elevations of the property generally trend east-west, with the highest elevations occurring in the furthest east portion of the property at 426 feet above mean sea level (AMSL) and the lowest elevations occurring in the furthest northwest portion at roughly 400 AMSL. The ¼-foot microtopographic contour data and conditions observed during the April 2015 surveys confirmed that the eastern and northernmost portions of the site support the U19 vernal pools in the general locations that they are mapped in the Draft VPHCP. The contours and conditions indicate that U19 vernal pool complex drains to the general north and west, depending on the location in the area. The estimated direction of surface and subsurface flow is shown on Figure 3 with black arrows.

A watershed was estimated for the U19 complex within the property following the contour data, estimated flow lines, and vernal pool locations from the City data. The estimated boundaries of the watershed were drawn following the areas demonstrated by the contour data to be upslope and immediately surrounding each vernal pool in the complex. All areas within the property estimated to catch and convey water downslope to the pools were captured in the watershed boundaries. As depicted on Figure 3, the estimated watershed for the pools is confined to the northern and eastern portions of the property. A 100-foot Vernal Pool Avoidance Buffer is depicted in yellow on Figure 3 to provide reference and identify potential avoidance area on the property in accordance with the requirements of the City's Biology Guidelines.

Related to hydrology and watershed area, there is a southeast-northwest trending drainage ditch or swale that serves as a clear physical and hydrological separation between the U19 vernal pool complex in the northern and eastern portions of the property and the remaining central and western portions of the property. This drainage ditch collects and conveys flows running west from the vernal pool complex, and similarly, collects and conveys flows running north from the central portion of the property. The western portions of the property are defined by downsloping topography to the north and west, again, away from the vernal pool complex. Because of the upward sloping topography and presence of the drainage ditch, it is not possible for the portions of the property that occur on the west side of the ditch to contribute flows to the U19 watershed. Following this logic, any future development or activities authorized west of the drainage ditch would be situated downslope and would be expected to have no potential to result in runoff or adverse modification of the U19 watershed hydrology. A hydrology study would be able to confirm this topographic- and biology-based assertion.

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Several listed or otherwise sensitive plant species were observed in and near the U19 vernal pools during the April 2015 surveys, including mesa mint (*Pogogyne abramsii*), San Diego button-celery (*Eryngium aristulatum* var. *parishii*), San Diego goldenstar (*Bloomeria clevelandii*), Orcut's brodiaea (*Brodiaea orcuttii*), and Orcutt's spineflower (*Choricanthe orcuttiana*). Several non-sensitive vernal pool indicator plant species were also observed, including wooly marbles (*Psilocarphus brevissimus*) and prairie plantain (*Plantago lanceolata*). All of the sensitive and vernal pool associated plant species were observed east of the drainage ditch within the U19 complex; none were observed west of the ditch.

The central and western portions of the property west of the drainage ditch currently support disturbed native habitat, pavement and buildings, or areas that have been routinely cleared or graded over the last 50 years as part of regular maintenance activities. This portion of the property is depicted on Figure 3 as *Disturbed Areas Outside of Vernal Pool Avoidance Buffer*. No sensitive biological resources, including vernal pool resources, were observed or expected in this area. As discussed above, the current topography is sloping and lacks depression features typical of vernal pools.

Last, as depicted on Figure 2, portions of the property are designated as critical habitat for the San Diego fairy shrimp. Critical habitat is designated over the entirety of the eastern portion of the site east of the drainage ditch, which is appropriate given the presence of the U19 complex and the fact the species is known to occupy several of the pools. However, critical habitat is also designated over the central portion of the property, west of the drainage ditch, which is not appropriate given there are no vernal pool resources in this area. The contour data and conditions observed during the April 2015 survey suggest that suitable habitat for San Diego fairy shrimp does not occur in this portion of the designated critical habitat. The primary constituent elements (PCEs) defined for the species' critical habitat do not occur. Therefore, any future development or activities authorized west of the drainage ditch would be expected to have no adverse effect on designated critical habitat for the San Diego fairy shrimp.

In summary, based on the contour and biological data reviewed for this assessment, conservation efforts should be targeted within the eastern portions of the property, east of the drainage ditch, where the U19 vernal pool resources actually occur. Portions of the property west of the drainage ditch do not warrant conservation because there are no existing vernal pool resources there to conserve. Similarly, portions of the property west of the drainage ditch perhaps should not have been included in designated critical habitat for the San Diego fairy shrimp because there is no suitable habitat present and no PCEs occur.

CONCLUSION

Based on our assessment, a significant portion of the property, approximately 7.6 acres (57%) of the total 13.52 acres, does not appear to currently support, or in the future have a potential to support, vernal pool resources without substantial grading and restoration actions. This portion of the property is depicted on Figure 3 as *Disturbed Areas Outside of Vernal Pool Avoidance Buffer*. The area not only lacks any indication of vernal pools, as evidenced by the April 2015 field

Page 5 of 6

surveys and City data, but more importantly, it is characterized by sloping topography that lacks depression features typical of vernal pools. A large portion of the area is developed or highly disturbed from routine maintenance of the property. Further, the area occurs at lower elevations than the previously mapped vernal pools and their estimated watersheds that occur in the eastern portion of the property. Based on this information, portions of the property west of the drainage ditch do not warrant conservation because there are no existing vernal pool resources there to conserve. These portions of the property should not be subject to the 75-99% conservation level targets in the Draft VPHCP.

Please do not hesitate to contact Larry Sward or me at (619) 462-1515 if you have any questions or concerns regarding this letter.

Sincerely,

Karl Osmundson Biology Group Manager

Enclosures:

Figure 1 Vicinity Map Figure 2 Draft City VPHCP Data Figure 3 Vernal Pool Resources

REFERENCES

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EXHIBIT 2





LETTER G

SheppardMullin

Import Mason Hassier & Hampton LLB of White Broadway. 25th Flags in Data, C.A. 622115-2608 (15-25) e500 mmo of 3-25th 5500 mmo of 3-3514 (335-mmo Jun of 5-3512) and 5-3500 mmo.

G-1

619.338.6646 direct jponder@sheppardmullin.com

File Number: 0HXC-210096

December 1, 2016

VIA E-MAIL AND U.S. MAIL

Myra Herrmann Environmental Planner City of San Diego Planning Department 1010 Second Avenue, East Town, Suite 1200 MS413 City of San Diego, California 92101 E-Mail: <u>PlanningCEQA@sandiego.gov</u>, <u>mherrmann@SanDiego.gov</u>

Re: Vernal Pool Habitat Conservation Plan EIR/EIS (Project No. 441044)

Dear Ms. Herrmann:

On behalf of our client Rhodes Crossing ("Rhodes"), we appreciate the opportunity to comment on the draft environmental impact report / environmental impact statement ("Draft EIR/EIS") for the Vernal Pool Habitat Conservation Plan ("VPHCP" or the "Plan"). Rhodes is the owner of property located in the northern portion of the City of San Diego, approximately two miles west of Interstate 15, at the current western terminus of Carmel Mountain Road ("Rhodes Property"). While Rhodes is in support of a San Diego VPHCP, the Rhodes Property will be directly impacted by the VPHCP.

We believe, as drafted, the VPHCP Draft EIR/EIS violates the California Environmental Quality Act ("CEQA") (Pub. Res. Code § 21000 et seq.) and the National Environmental Policy Act ("NEPA") (42 U.S.C. § 4321 et seq.) due to its failure to provide: (i) adequate restoration measures; (ii) a reasonable range of alternatives; (iii) updated biological information; and (iv) an adequate analysis of population and housing impacts. Additionally, it is our position that that, as G-2 drafted, the Plan does not fully comply with the Endangered Species Act of 1973 ("ESA") (16 U.S.C. § 1531 et seq.) for the above-stated reasons, as well as the Plan's failure to detail and identify: (i) funding that will be provided for the VPHCP's implementation; and (ii) monitoring measures. Moreover, the VPHCP improperly includes a portion of the Rhodes Property. Three isolated "vernal pool" areas included in the Plan from the Rhodes Property do not contain primary constituent elements ("PCEs") and the topography is not conducive to vernal pools. G-3 Therefore, we believe the VPHCP Draft EIR/EIS should be revised to address the deficiencies described in detail herein and remove certain sections from the Plan Area. Specifically, Rhodes requests removal from the VPHCP map the isolated vernal pool areas numbered 3, 4, and 5 as

- G-1 The comment is an introduction to comments that follow, which are addressed individually below.
- G-2 Please see response to comment F-6.
- G-3 The isolated vernal pools in areas 3, 4, and 5 were included in the "take authorized areas" of the VPHCP see section 4.3.2 List of Planned Projects. These lots have been correctly identified with a 100% conservation level on the interactive map due to existing conservation easements on these lots. However, they are not proposed to be added to the MHPA. Please see note on Figure 2-2 related to "Baseline Conservation," which is defined as the MHPA plus conserved lands, approved projects, projects with approved biological opinions, etc.

As stated under Issue 4 of EIR/EIS Section 5.4.3, "the City's ESL Regulations and LDM Biology Guidelines require no net loss of vernal pool habitat (i.e., all impacts will be offset with restoration and enhancement of an equal or greater acreage of habitat). Therefore, any direct impacts to vernal pools within the VPHCP Plan Area would be mitigated consistent with these regulations." Impacts to the vernal pools from the Rhodes Crossing project must be mitigated in accordance with the City's existing regulations and/or project's Biological Opinion, regardless if the VPHCP is approved. The VPHCP does not categorize any vernal pools as "non-viable." There is no in-lieu fee alternative for vernal pool mitigation.

Myra Herrmann December 1, 2016 Page 2

previously agreed upon and confirmed via footnote number 7 on page 4-26 of the VPHCP. (See Exhibit A.)

Any mitigation requirement proposed in the Plan must have a nexus and be roughly proportional to any adverse impact. (*Dolan v. City of Tigard* (1994) 512 U.S. 374, 391, 114 S.Ct. 2309; *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.) As drafted, the Plan does not contain constitutional mitigation measures for impacts to non-viable vernal pools. It is Rhodes's position that the VPHCP should include an in-lieu fee alternative for mitigating non-viable vernal pools. Without this alternative, the mitigation requirements contained in the Plan are inequitable, and without a nexus and/or rough proportionality.

I. Violations of CEQA and NEPA

A. Deficient Analysis of Consistency with Land Use Plans

The Draft EIR/EIS must discuss inconsistencies with applicable land use plans. (CEQA Guidelines § 15125(d).) More specifically, the Draft EIR/EIS was required to identify "any inconsistencies" between a proposed project and the governing general plan and other applicable land use plans. (*N. Coast Rivers Alliance v. Marin Mun. Water Dist.* (2013) 216 Cal.App.4th 614, 632; *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552.) The Draft EIR/EIS fails to comply with this mandate and, as a result, fails to analyze whether an inconsistency will result in a significant environmental impact. (Pub. Res. Code §§ 21002, 21002.1(a).)

The Draft EIR/EIS determines the Plan is consistent with the applicable land use plans despite the fact it will result in drastic development restrictions on private land not designated or zoned for "open space" and where, instead, higher levels of development and density are currently permitted. (EIR/EIS, p. 5.1-12.) The Draft EIR/EIS avoids further discussion of this land use plan inconsistency by claiming that these lands would "likely" be subject to other federal, state or local restrictions that would result in development prohibitions similar to what is proposed under the Plan. (Id.) However, there is no evidence demonstrating that all of the 206,124 acres in the Plan Area would be subject to substantially similar restrictions as proposed by the Plan. By painting with such a broad brush stroke, the EIR/EIS uses this assumption to avoid analyzing the Plan's inconsistencies with land use designations and zoning provided for parcels within the Plan Area. This assumption is also used to allow the EIR/EIS avoid discussion of the Plan's inconsistencies with the General Plan's development mandates. Without this analysis, there is no meaningful consideration as to whether the Plan's admitted inconsistencies with the existing land use designations would result in environmental impacts requiring mitigation or avoidance. Therefore, there is no substantial evidence to that the Plan will not result in significant land use impacts.

B. Deficient Analysis of Biological Impacts

The Draft EIR/EIS must adequately analyze the Plan's effects to foster informed decision making and allow the public to fully understand those impacts. (40 C.F.R. §§ 1500.1, 1502.24 [information used must be of "high quality" and professional integrity"]; Pub. Res. Code

G-4 Please see response to comment F-7.

G-4

G-5

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G-5 Please see response to comment F-8.

Myra Herrmann December 1, 2016 Page 3

§ 21002.1; CEQA Guidelines §§ 15121, 15126, 15125.2; Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 428.) Only with a complete analysis can the agency discharge its CEQA and NEPA duty to avoid or reduce to insignificance all significant impacts whenever feasible to do so. (Pub. Res. Code § 21002; CEQA Guidelines §§ 15121, 15126.4.) In order to identify and analyze these impacts, the Draft EIR/EIS must be based on adequate biological surveys that fully document the resources in the area. (Pub. Res. Code § 21002.1; CEQA Guidelines §§ 15121, 15126, 15126, 15126.4.)

Here, this mandate has not been complied with. The Draft EIR/EIS admits that the biological data was collected in 2004 and 2005 surveys, or nearly twelve years ago at the latest. (EIR/EIS, pg. 5.2-16 – 5.2-17.) Additionally, the April 10, 2015 correspondence identified a number of issues with the biological data used to support the VPHCP in violation of the ESA. The Draft EIR/EIS has failed to remedy the issues identified in this correspondence including: (i) dismissal of the little mousetail [*Myosurus minimus* ssp. *apus*] in the Plan; (ii) stale information for San Diego fairy shrimp and Riverside fairy shrimp; and (iii) the failure to include the best scientific data relating to Otay Mesa mint. This lack of adequate, relevant, and timely biological surveys denies the public and decisionmakers the opportunity to accurately determine the Plan's biological impacts. (40 C.F.R. §§ 1500.1, 1502.24; CEQA Guidelines § 15125(a); *Vineyard Area Citizens for Responsible Growth*, 40 Cal.Atp.Atth 1344, 1367.) Without this information, the Draft EIR/EIS violates CEQA and NEPA. (40 C.F.R. §§ 1500.1, 1502.24; CEQA Guidelines § 15121, 15165, 15126.2, 15126.4, 15125(a).)

- C. Deficient Analysis of Alternatives
 - 1. The Draft EIR/EIS Does Not Contain a Reasonable Range of Alternatives

An EIR/EIS must present a reasonable range of potentially feasible alternatives to the project, or to its location, which would feasibly attain most of the basic objectives of the Plan but would avoid or substantially lessen and effects of the Plan. (CEQA Guidelines §§ 15126.6(a), 40 C.F.R. § 1505.1(e).) The nature and scope of the alternatives to be studied in an EIR is governed by the rule of reason. (*Id.*; *In re Bay-Delta Programmatic Envt'I Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1163; *Citizens for Open Gov't v. City of Lodi* (2012) 205 Cal.App.4th 296, 312.) Under the rule of reason, an EIR must discuss those alternatives necessary to permit a reasoned choice. (CEQA Guidelines § 15126.6(f); Cal. Native Plant Soc'y v. City of Santa Cruz (2009) 177 Cal.App.4th 957; Residents Ad Hoc Stadium Comm. v. Bd. of Trustees (1979) 89 Cal.App.3d 274, 286.) Under NEPA, reasonable alternatives are those that are practical or feasible from a technical and economic perspective, and based on common sense. (46 CFR § 18026; 51 CFR § 15618.) The Draft EIR/EIS should provide "enough of a variation to allow informed decisionmaking." (Mann v. Cmty Redev. Agency (1991) 233 Cal.App.3d 1143, 1151.)

The scope of alternatives reviewed must be considered in light of the nature of the project, the project's impacts, relevant agency policies, and other material facts. (*Mira Mar Mobile Cmty v. City of Oceanside* (2004) 119 Cal.App.4th 477; *City of Rancho Palos Verdes v. City Council* (1976) 59 Cal.App.3d 869.) The selection of alternatives discussed in the Draft EIR/EIS may be

G-6 Please see response to comment F-9.

G-5

G-6

Myra Herrmann December 1, 2016 Page 4

overturned if it is shown that the alternatives are "unreasonable and that they do not contribute to a reasonable range of alternatives." (*Town of Atherton v. Cal. High-Speed Rail Auth.* (2014) 228 Cal.App.4th 314, 353; *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316, 355.)

The Draft EIR/EIS only contains two alternatives: (i) Expanded Conservation Alternative, which adds additional lands to the MHPA beyond those conserved under the Plan; and (ii) the No Project Alternative, which result in no new actions, policies or permits. These two unreasonably narrow alternatives, one of which is much more expansive than the proposed Plan and one that results in no new actions, do not represent a reasonable range of alternatives in light of the nature of the VPHCP, impacts, relevant agency policies and other material facts. For example, there is neither an alternative that includes a reduced level of conservation aside from no additional conservation efforts, nor an alternative. The lack of variation between the alternatives proposed unreasonably hinders the City Council's ability to engage in informed decisionmaking and the public's participation in violation of CEQA and NEPA.

2. Expanded Conservation Alternative Is Not Necessary

The Draft EIR/EIS identified the Expanded Conservation Alternative as the environmentally preferable/superior alternative as it would result in the highest amount of conservation, restoration, maintenance and monitoring of vernal pools and their associated resources. This alterative adds lands to the MHPA beyond those conserved under the proposed VPHCP. Rhodes strongly opposes this alternative. Not only would this alternative represent a substantial taking of private land, it is not necessary to meet the CEQA objective of reducing significant impacts of the project.

As demonstrated by Table 6-1 of the Draft EIR/EIS, environmental impacts of the Plan are all less than significant with mitigation, and would result in several beneficial effects. Environmental consequences of the Expanded Conservation Alternative would be equivalent or similar to the Plan's effects. Furthermore, the Draft EIR/EIS states that this alternative is required to meet the objectives of the Plan for fairy shrimp and would result in a reduction of industrial and residential development opportunities within the Kearny Mesa and Otay Mesa Community Plan areas.

D. Deficient Analysis of Significant Irreversible Environmental Changes

The Draft EIR/EIS admits the Plan will result in an "irreversible and irretrievable commitment of a limited biological resource." (EIR/EIS, pg. 7-1.) It then goes on to justify these permanent changes by stating the restoration activities would result in increased preservation and recovery of the seven covered species and natural resources. However, the document is devoid of any evidence that the restoration would successfully or effectively counterbalance the certain environmental changes. The Draft EIR/EIS must provide a detailed statement identifying the mitigation measures proposed to minimize such losses, demonstrating the manner in which those significant effects can be mitigated or avoided. (Pub. Res. Code §§ 21002.1(a), 21100(b)(3); CEQA Guidelines § 15126.4.) Without the identification of effective restoration

G-7 Please see response to comment F-10.

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G-8 As stated in EIR/EIS Section 3.2, the VPHCP is designed so that "project mitigation is directed to those areas most critical to maintenance of ecosystem function and species viability. The goal of the VPHCP is to target the highest quality areas for vernal pool preservation, enhancement and/or restoration." The VPHCP Framework Mitigation Plan (Chapter 11 of the EIR/EIS) includes avoidance, minimization, and mitigation measures that would prevent a net loss of vernal pools. The detailed measures identified in the Framework Management Plan, including requirements for restoration, were developed in coordination with the Wildlife Agencies and CDFW "to prevent net loss of vernal pool functions and values of impacted vernal pools and result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved" (Section 3.3.7). Please see response to comment C-8 regarding success of vernal pool restoration.
Myra Herrmann December 1, 2016 Page 5

measures for reducing or avoiding irreversible environmental impacts, the Draft EIR/EIS fails to satisfy the requirements under CEQA or NEPA. (Pub. Res. Code §§ 21002, 21081(a).)

E. Deficient Analysis of Population and Housing

The Draft EIR/EIS determined that Population and Housing Impacts were not significant and did not warrant discussion pursuant to CEQA Guidelines section 15128. This determination is supported by the Draft EIR/EIS conclusion that the Plan will not displace existing housing or people. (Draft EIR/EIS, pg. 10-5.) However, this statement ignores the unprecedented housing shortage San Diego County is currently facing. The VPHCP area includes property under private ownership that is currently, or may be in the future, eligible for residential zoning. The Plan imposes restrictions on such property that will make it either physically or financially impossible for the development of the needed residential units, thereby drastically reducing the amount of vacant land available to accommodate future residential development. As such, the Plan will result in direct, indirect and cumulatively Population and Housing impacts that need to be analyzed in the Draft EIR/EIS and mitigated to the extent feasible. (Pub. Res. Code § 21100(b)(1); CEQA Guidelines §§ 15126(a), 15144–15145, 15151.)

II. Violations of the ESA

We believe, as drafted, the VPHCP fails to fully comply with the ESA due its failure to: (i) base its analysis and conclusions on the best scientific information currently available; (ii) provide adequate monitoring measures; (iii) detail and identify funding that will be provided for the VPHCP's implementation; and (iv) provide a reasonable range of alternatives.

III. Removal of Portions of the Rhodes Property

As it relates to the Rhodes, we would like to confirm the VPHCP does not include the three isolated vernal pools on the Rhodes Property. This land does not include PCEs and its topography is not conducive to vernal pools. We believe the Plan should be revised to address the deficiencies identified above and remove certain sections from the VPHCP area.

Specifically, isolated vernal pool areas numbered 3, 4, and 5 have been mistakenly included in the VPHCP. From the time Rhodes was first notified by the City of the VPHCP in 2012, to present, Jeanne Krosch, City Senior Planner and VPHCP Project Manager, has agreed that all the isolated vernal pools as identified in the Rhodes Crossing Biological Opinion FWS-SD-08B0401-12FC0578, dated September 17, 2012 would be left out of the VPHCP. Ms. Krosch agreed to include the footnote in the VPHCP in order to memorialize this understanding. (See Footnote No. 7; VPHCP page No. 4-26).

In 2013, KB Home purchased legal Lots 1, 6, and 7 of the Rhodes Crossing Project (APN's 306-420-01-00, 306-420-06-00, 306-420-07-00, respectively) from Rhodes. Legal Lot 1 contains vernal pool number 5, and Legal Lot 7 contains vernal pools numbers 3 and 4. As part of the Purchase and Sale Agreement ("Agreement") between KB Home and Rhodes, KB Home agreed to convey back to Rhodes the mitigation lots containing vernal pool areas numbered 3, 4, and 5, conditioned upon their ability to obtain a final map for legal Lots 1, 6, and 7 permitting G-8 cont

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G-10

G-9 Please see response to comment F-11.

- G-10 Please see response to comment D-2 regarding item (i) (use of the best scientific data available). Regarding item (ii), the comment does not explain why monitoring measures are inadequate. The City and Wildlife Agencies believe the VPHCP contains adequate monitoring measures, which are discussed in detail in VPHCP Chapter 7. Refer to response to comment C-3 regarding item (iii) (detail and identification of funding for VPHCP implementation). Refer to response to comment F-9 recording a reasonable range of alternatives, item (iv).
- G-11 Please see response to comment G-3

G-11

Myra Herrmann December 1, 2016 Page 6

them to build. However, in order for KB Home to obtain a grading permit for the Lots, the City required them to place a Covenant of Easement ("COE") over the mitigation lots.

KB Home reconveyed the mitigation lots back to Rhodes in April of 2014. The placement of these COEs, however, did not alter the fact that the City agreed those vernal pools were to be left out of the VPHCP. It is possible that the placement of the COEs just led to the inadvertent inclusion of those pools into a revised draft VPHCP map. As such, Rhodes request these isolated vernal pools be excluded from the VPHCP per the understanding conveyed by City staff and included in a footnote in the Plan.

Conclusions

For these reasons, Rhodes respectfully requests the City revise the VPHCP EIR/EIS and the Plan itself to address these issues. Please do not hesitate to contact the undersigned with any guestions or concerns regarding the information contained herein or attached hereto.

Sincerely,

p.

John E. Ponder for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:479993439.2 Enclosures

cc: City Clerk Keith Rhodes Pam Blackwill G-11 cont

EXHIBIT A

Colonel R. Mark Toy (FWS-SD-08B0401-12FC0578)



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LETTER H

	December 2, 2016			
	Ms. Myra Herrmann City of San Diego Planning Department			
1660 Hovel Circle North	RE: Comments on Final Draft EIR/EIS for the City of San Diego Vernal Pool HCPOtay Lakes Road Widening and Realignment			
Suite 725	Dear Ms. Herrmann:			
San Diego, California 92106 2820 619.683 5544 519.683 5585 FAX	This letter is submitted by J. Whalen Associates, Inc. on behalf of our clients, the owners of Otay Ranch Village 13. Thank you for the opportunity to offer these technical comments on the EIR/EIS for the City's draft Vernal Pool Habitat Conservation Plan (VPHCP). We will offer separate, more detailed, comments on the EIS when it comes out for public review.	H-1	H-1	The comment is an below. Note that th
www.jwhilen.net	We have worked on the VPHCP since its inception. Indeed, we participated in the discussions with the City of San Diego that led to the mooting of the environmentalist lawsuit over the MSCP's handling of vernal pools, as well as the helping conceive the settlement where preparing the VPHCP became the chosen path forward.			
	Otay Lakes Road is an unusual situation in light of the fact the subject road section is located entirely within the County of San Diego, so would not ordinarily be the subject of a letter commenting on a City of San Diego environmental document. However, due to the location of the road within land identified as Cornerstone Land in the City of San Diego Multiple Species Conservation Program, the proposed VPHCP is implicated.	H-2	H-2	Comment noted.
	As a result, Village 13 will be processing permits in both the City and County of San Diego. For the City, a Site Development Permit (SDP) and demonstrating compliance with the City's MSCP Subarea Plan requirements for development within Cornerstone Lands will be needed. The SDP has been submitted to the City, but the application has lain somewhat inactive due to the concurrent processing of the Village 13 approvals in the County.	×		
U Turis Sca	n Aprilinia Juna Miny w A Wandowa Postfanber Format (Advid JAN 1909) "Processing/Documby 2 doc y			

an introduction to comments that follow, which are addressed individually his is a joint EIR/EIS and a separate EIS document has not been prepared.

J_WA J. Whalen Associates, Inc.

Balancing the needs of the environment with those of business

In the County, tentative mapping and other associated actions including the preparation of a EIR are moving forward. The EIR has been released for public comment and responses are being prepared. It is conceivable a portion of the County's Village 13 EIR may be recirculated to address new information that arose during the public comment period.

Our clients do not have any particular issues with the VPHCP. City staff, in particular, Jeanne Krosch, have done a superb job in reaching out to the public and stakeholders, so in general, we support the VPHCP. Several comments do need to be made, however.

First, none of the vernal pools and road ruts proposed to be impacted are shown in the City's draft VPHCP or its wonderfully done Interactive Map. Perhaps this is because the land along the road is in the County, but vernal pools *are* mapped south of the Lake in open space as K5 Otay Lakes. There are 17 road rut-type pools in the project area. Eight have San Diego Fairy Shrimp. One pool is impacted by the road project and cannot practicably be avoided. It does not contain any fairy shrimp. Perhaps this is a mapping omission—if not, please advise and we will provide the biological resources mapping prepared for the widening. The road widening and realignment project is a subdivision improvement requirement for Village 13 and also is a covered project in the South County MSCP plan as a circulation element road included in the County's General Plan.

A second matter that needs to be discussed is mitigation. The City is authorized to sell mitigation credits in the first phase of a series of conservation banks, pursuant to the City's MSCP Subarea Plan Implementing Agreement and the Cornerstone Lands Conservation Bank. The first phase is in the Marron Valley, and includes all the habitat types needed to mitigate the impacts due to the road widening and realignment. Those are coastal sage scrub, grassland and vernal pools. Otay Ranch Village 13 would like to acquire the mitigation for impacts due to road project using credits from the Marron Valley Bank.

Thank you again for the opportunity to comment on the draft VPHCP. We look forward to working with the City in resolving

H-2 cont

H-3

H-4

H-5

H-3 Comment noted. The comment expresses general support for the VPHCP.

- H-4 Please see response to comment C-11 regarding the VPHCP conservation analysis based on information on vernal pools and vernal pool modeling available at the time of preparation.
- H-5 The road alignment would be considered an essential public project and would be eligible for Tier II and III habitat mitigation. Impacts to Tier II (with the exception of occupied burrowing owl lands in Otay Mesa) and III habitats may be mitigated at Marron Valley in accordance with the Cornerstone Lands Conservation Bank Agreement and City's Biology Guidelines. One project within the County of San Diego, approved by the Wildlife Agencies, purchased all of the vernal pool/San Diego Fairy shrimp critical habitat "credits" that occur in Marron Valley. Therefore, there are no remaining credits available in Marron Valley for vernal pools. Please contact Public Utilities Department/Water regarding mitigation credits that are available for essential public projects for Tier II and Tier III habitats. Please note that any impacts to Cornerstone Lands would need to be mitigated with replacement of new land and not mitigation credits.

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these issues. Please let us know if we can be of any assistance as you prepare your revisions.

Very truly yours,

J. Whalen Associates, Inc., a California corporation

By: James E. Whalen President

cc: Clients

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	${f J}_W{f A}$ J. Whalen Associates, Inc.			
	Balancing the needs of the environment with these of business.			
	December 2, 2016			
	Ms. Myra Herrmann City of San Diego Planning Department			
	RE: Comments on Final Draft EIR/EIS for the City of San Diego Vernal Pool HCP as it Concerns the Former St. Jerome Property			
1560 Hotel Circle North	Dear Ms. Herrmann:			
Suite 725	This letter is submitted by J. Whalen Associates, Inc. on behalf of our client, Elliot Medgal & Associates, as representative of the proposed	É la		
San Diego, Cabfornia 92108-2820	project on the former St. Jerome Property. Thank you for the opportunity to offer these technical comments on the EIR/EIS for the City's draft Vernal Pool Habitat Conservation Plan (VPHCP). We will offer separate.			
619.683.5544	more detailed, comments on the EIS when it comes out for public review.		I-1	This comment provides introductory statements and a history of the St. Jerome property
619.683.6586 FAX	We have worked on the VPHCP since its inception. Indeed, we participated in the discussions with the City of San Diego that led to the	1-1		general support for the VPHCP. Please note that the EIR/EIS is a joint document and a
www.jwhalen.net	mooting of the environmentalist lawsuit over the MSCP's handling of vernal pools, as well as the helping conceive the settlement where preparing the VPHCP became the chosen path forward.			separate document was not prepared for NEPA compliance.
	The former St. Jerome's property is a "covered project". (Please see VPHCP Section 4.1.2, et seq.). We worked closely with the City, who truly deserve kudos for pulling this plan together, and the U.S. Fish & Wildlife Service (USFWS), to obtain covered project status. We generally support the approval of the program as it is with one important addition.			
	We wish to have the City and FWS include an alternative in the Final EIR/EIS to the original St. Jerome Property footprint which will avoid more impacts to the vernal pools/habitat onsite than the covered project does. Our alternative could be called the Least Environmentally Damaging Practicable Alternative (LEDPA). As you know, the EIS must demonstrate that the LEDPA was selected in order for a permit to be issued by the USFWS. We are confident this carefully crafted plan will	1-2	I-2	The alternative proposed in this comment letter is not feasible because trading Federal Section 6 lands is a project-level action that is separate from the proposed VPHCP. The alternative could be submitted to the City and the Wildlife Agencies as a boundary line adjustment that would be processed separately outside of the VPHPC approval process.

Letter I

- proposed in this comment letter is not feasible because trading Federal
 - is a project-level action that is separate from the proposed VPHCP. The d be submitted to the City and the Wildlife Agencies as a boundary line t would be processed separately outside of the VPHPC approval process.

Our proposal has significantly reduced impacts to vernal pools and their obligate soils over those in the VPHCP, and therefore should be included in the VPHCP Final EIR/EIS. Note that the LEDPA involves the former Clayton property, a City-owned parcel to the immediate north of the St. Jerome's property that also contains heavily disturbed vernal pools. A small portion of the Clayton property has begun restoration under grant funding.

The eastern portions of both the former St. Jerome's and Clayton properties have few, if any, vernal pools or even the soils to support them, so we propose that the development footprint be shifted east as the environmentally superior alternative. This shift would reduce impacts to the vernal pools, their soils, and the species they support, namely both the Riverside fairy shrimp (*Streptocephalus woottoni*, RFS) and San Diego fairy shrimp (*Branchinecta sandiegoenesis*, SDFS), among others, and when restored and managed, could also support the burrowing owl and other rare plant and animal species endemic to vernal pool habitat.

This would be achieved by relocating the western portion of the approved development area on the former St. Jerome Property to the east, straddling the eastern third of that property and the Clayton Property. This would also allow a safe vehicular connection at the crucial, planned intersection with Ocean Hills Parkway and Hidden Trails Road. Pending an agreement with the City, the state Wildlife Conservation Board, and wildlife agencies, development of a neighborhood-focused, eminently walkable shopping center would occur along the edge of the properties abutting Ocean View Hills Parkway, and the developer would then be able to take the lead on working with the City and agencies on restoring the remainder of the two properties back to vernal pools, as well as adding about two acres of offsite vernal pool properties,

1-2

cont

In the proposed alternative, the community would be engaged in the process; in fact, if we are successful, the plan is to engage local residents to help it understand how precious the resource is and invest them in our success. The shopping center would be oriented towards the open space area and local schools would be able to use the area as an outdoor classroom.

The 1.62 added acres of net increased development on the combined site would be offset by acquiring two of the one-acre parcels located to the southwest of the site in an important vernal pool acquisition area. These parcels are identified for acquisition in the VPHCP, but no funding has been identified. The resultant combined St. Jerome and Clayton sites would thus accommodate the proposed development by our client on the least environmentally sensitive portions of both properties with a *significant net gain* in conservation and *no net loss of vernal pool soils*.

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The following tabulation compares how the proposed LEDPA alternative is superior to the Project as shown in the draft VPHCP. Mapping data from City of San Diego Interactive Vernal Pool Map data base.

	VPHCP	
Category	"Project"	LEDPA
Gross Acreage		
-Clayton	17.24	17.24
-St. Jerome	17.66	17.66
-One-Acre Parcels	0	2.0
Total Pools	59	59+
-Clayton	35	35+
-St. Jerome	24	24+
Pools Impacted		
-Clayton	0	3
-St. Jerome	6*	6*
Restored Pools		
-Clayton	0	35+
-St. Jerome	8	24+
Project Impacts		
-Clayton	0	4.02
-St. Jerome	10.42	8.02
Acres of VP Soils		
Impacted		
-Clayton	0	3.48
-St. Jerome	6.98	3.44
Acres of VP Soils		
Protected		
-Clayton	15.53	12.05
-St. Jerome	6.82	9.64
-One-Acre Parcels	0	2.0

I-2 cont

+ Amount of restored vernal pools is still to be determined, but will exceed existing mapped pools due to restoration in the disturbed interstice areas between the existing pools.

* Two of the six pools are not vernal pools, but holes left over from construction of Ocean View Hills Parkway that now have fairy shrimp.

**Number of pools to be restored under 5-acre grant to Chaparral Lands Conservancy is estimated.

Acreages subject to revision with finer scale mapping but considered accurate for analysis.

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Instead of the limited funding that has been found for only five acres of restoration of vernal pools on the Clayton property, Megdal would fund acquisition of the two one-acre parcels, plus the full restoration and permanent management of the combined onsite 24.86-acre preserve area when the shopping center was approved. Currently, there is no money for acquisition, full restoration, and permanent management of the preserve.

Thank you again for the opportunity to comment on the draft VPHCP. We look forward to the City incorporating this alternative in the VPHCP Final EIR/EIS and approving the plan. Please let us know if we can be of any assistance as you prepare your revisions.

Very truly yours,

J. Whalen Associates, Inc., a California corporation

N By: James E. Whalen

President

Attachments

cc: Elliott Megdal & Associates

I-2 cont

1-3

I-3

For the reasons described in response to comment I-2, the suggested alternative and revisions have not been incorporated into the final EIR/EIS.

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JOB No. 201528-10

DEC 2, 2016



3883 Ruffin Road, San Diego CA Suite 8 p: 858.810.7999 858.810.7998

JOB No. 201528-10 DEC 2, 2016

RECON

An Employee-Owned Company

November 22, 2016

Ms. Myra Herrmann Senior Planner City of San Diego Planning Department – Environmental 1010 2nd Avenue, Suite 1200 East Tower, MS 413 City of San Diego, CA 92101

Reference: Vernal Pool Habitat Conservation Program Project No. 441044/SCH No. 2011111075 (RECON Number 6860)

Dear Ms. Herrmann:

On behalf of our client, Pardee Homes ("Pardee"), owner of the property within the Otay Mesa West Village Specific Plan Area ("property"), we appreciate the opportunity to comment on the Draft City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP) Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The Draft VPHCP overlaps a portion of Pardee Homes' property within the Otay Mesa Southwest Village Specific Plan Area. These comments address issues related to the Draft VPHCP and the Expanded Conservation Alternative. A letter addressing the Preliminary Draft of the VPHCP was sent to Jeanne Krosch on April 8, 2015 from Sheppard Mullin on behalf of Pardee Homes and is attached for your reference (Attachment 1).

I. Draft VPHCP Boundaries

As stated in the letter of April 8, 2015, the City's proposed configuration in the Otay Mesa Southwest Village Specific Plan Area includes acreage that would substantially exceed what would be typically required to mitigate impacts to vernal pools from anticipated development. As such, this would require Pardee to mitigate above and beyond the City's traditionally imposed mitigation ratios and would result in an illegal regulatory taking of Pardee Homes' land.

Preliminary planning for development within the Southwest Village indicates that approximately 0.32 acre of vernal pool impacts would occur. Based on generally accepted mitigation ratio of 3:1 and 4:1 for vernal pool surface area and associated watershed, 15.92 acres would be required for anticipated vernal pool impacts. To ensure that more than enough land would be preserved, Pardee Homes has planned to include approximately 24 acres in open space (see Exhibit A of Attachment 1). In contrast however, the VPHCP designates 30.54 acres as a vernal pool preserve, an excess of about 6.54 acres than anticipated in Pardee Homes' preliminary plans.

As further indicated in the 2015 letter, Pardee Homes suggested that the westernmost "wedge area" be removed from the vernal pool preserve. This area is about 6.5 acres and is not unique from a vernal pool mitigation standpoint. Removal of this area from the preserve configuration would allow for necessary mitigation of anticipated impacts and would not jeopardize the biological success of the VPHCP.

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DEVELOPMENT AREA EXHIBIT OCEAN VIEW HILLS RETAIL SAN DIEGO, CALIFORNIA JOB NO 201528 10 DEC 2.2016

LETTER J



Balancing the needs of the environment with those of business

November 30, 2016

Ms. Myra Herrmann City of San Diego Planning Department

RE: Comments on Final Draft EIR/EIS for the City of San Diego Vernal Pool HCP as it Concerns the Tierra Alta Property

1660 Horel Circle North Dear Ms. Herrmann:

Suite 725This letter is submitted by J. Whalen Associates, Inc. on behalf of our client, the
Newland Group, as representative of the proposed project on the Tierra Alta
Property in Mira Mesa. Thank you for the opportunity to offer these technical
comments on the EIR/EIS for the City's draft Vernal Pool Habitat Conservation
Plan (VPHCP).

619.683.5544We have worked on the VPHCP since its inception. Indeed, we participated in
the discussions with the City of San Diego that led to the mooting of the
environmentalists' lawsuit over the MSCP's handling of vernal pools, as well as
the helping conceive the settlement where preparing the VPHCP became the
chosen path forward.

Newland Group worked equally closely with City Staff, the Wildlife Agencies and the California Coastal Commission staff to come up with a solution to allow the Tierra Alta project to proceed to final approval after being constrained by litigation against the City over its regulation of vernal pools. We especially commend City staff for its yeoman efforts to pull this plan together in the face of a recession, changed circumstances, recalcitrance on the part of some parties with outside agencies, and other hurdles. J-1

Please note that while the Newland Group generally supports the VPHCP, we need to point out that qualitative monitoring is not going to be required of the Tierra Alta project per its agreement on being included as a Covered Project in the plan. Further, the Tierra Alta project will be doing its own habitat management plan with its own Property Analysis Record, so the assumptions included in Table F-5 may not turn out as written today. We also note that in Table F-8, the stated Total Cost for VPMMP Implementation is simply 31 years multiplied by the annual cost in 2014 dollars to carry out the work and thus underestimates the true cost.

J-1 This comment provides introductory statements and provides a history of the Tierra Alta property project's involvement in the development of the VPHCP. The comment expresses general support for the VPHCP. No further response is necessary.

- J-2 Comment acknowledged regarding the PAR analysis for the Tierra Alta project. The cost analysis is a programmatic estimate and assumes a project-specific cost estimate will be developed for individual projects (see VPHCP Section 10.2).
- J-3 The cost analysis is a programmatic estimate based on 2014 dollars. Actual implementation costs will be determined on an annual basis based on the results of the prior year's VPMMP program to identify management and monitoring needs at each site that is managed under the VPHCP. Therefore, adjusting for inflation at the programmatic level is not necessary. As stated in Section 10.2 of the VPHCP, when determining final funding amounts on an annual basis, the City should assume an average annual inflation rate of 3% over time. It is assumed that, over time, revenues from the funding sources would also increase by at least the same rate on average.

As a final note, please be advised that in the draft VPHCP, the City uses the term Newland Communities instead of the proper name which is Newland Group, Inc. Thank you again for the opportunity to comment on the draft VPHCP. We look forward to the City incorporating this alternative in the VPHCP Final EIR/EIS and approving the plan. Please let us know if we can be of any as you prepare your revisions.

J-4

J-5

Very truly yours,

J. Whalen Associates, Inc., a California corporation

By: James E. Whalen President

- J-4 Comment noted. The Vernal Pool Management and Monitoring sheet for Tierra Alta has been updated to reflect the Newland Group, Inc. as requested.
- J-5 This comment provides closing statements regarding the requested revisions to the VPHCP. No further response is necessary.

LETTER K

RECON

An Employee-Owned Company

November 22, 2016

Ms. Myra Herrmann Senior Planner City of San Diego Planning Department – Environmental 1010 2nd Avenue, Suite 1200 East Tower, MS 413 City of San Diego, CA 92101

Reference: Vernal Pool Habitat Conservation Program Project No. 441044/SCH No. 2011111075 (RECON Number 6860)

Dear Ms. Herrmann:

On behalf of our client, Pardee Homes ("Pardee"), owner of the property within the Otay Mesa West Village Specific Plan Area ("property"), we appreciate the opportunity to comment on the Draft City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP) Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The Draft VPHCP overlaps a portion of Pardee Homes' property within the Otay Mesa Southwest Village Specific Plan Area. These comments address issues related to the Draft VPHCP and the Expanded Conservation Alternative. A letter addressing the Preliminary Draft of the VPHCP was sent to Jeanne Krosch on April 8, 2015 from Sheppard Mullin on behalf of Pardee Homes and is attached for your reference (Attachment 1).

K-1

K-2

1. Draft VPHCP Boundaries

As stated in the letter of April 8, 2015, the City's proposed configuration in the Otay Mesa Southwest Village Specific Plan Area includes acreage that would substantially exceed what would be typically required to mitigate impacts to vernal pools from anticipated development. As such, this would require Pardee to mitigate above and beyond the City's traditionally imposed mitigation ratios and would result in an illegal regulatory taking of Pardee Homes' land.

Preliminary planning for development within the Southwest Village indicates that approximately 0.32 acre of vernal pool impacts would occur. Based on generally accepted mitigation ratio of 3:1 and 4:1 for vernal pool surface area and associated watershed, 15.92 acres would be required for anticipated vernal pool impacts. To ensure that more than enough land would be preserved, Pardee Homes has planned to include approximately 24 acres in open space (see Exhibit A of Attachment 1). In contrast however, the VPHCP designates 30.54 acres as a vernal pool preserve, an excess of about 6.54 acres than anticipated in Pardee Homes' preliminary plans.

As further indicated in the 2015 letter, Pardee Homes suggested that the westernmost "wedge area" be removed from the vernal pool preserve. This area is about 6.5 acres and is not unique from a vernal pool mitigation standpoint. Removal of this area from the preserve configuration would allow for necessary mitigation of anticipated impacts and would not jeopardize the biological success of the VPHCP.

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K-1 The comment is an introduction to comments that follow, which are addressed individually below. The April 8, 2015, letter addressing the Preliminary Draft VPHCP is referenced. The City provided responses to key comments in that letter regarding Southwest Village Specific Area Plan, which are included in Appendix B of the Draft EIR/EIS and are incorporated herein by reference.

K-2 The VPHCP mapping has been updated to acknowledge that a pump station and detention basin can be located in this corner of the preserve. Ms. Myra Herrmann Page 2 November 22, 2016

II. Violation of the ESA

As stated previously in the letter dated April 8, 2015, in response to the Preliminary Draft of the VPHCP, we believe, as drafted, that the VPHCP fails to fully comply with the Federal Endangered Species Act of 1973 (ESA), 16 United States Code section 1531 et seq. due to its failure to; i) base analysis and conclusions on the best scientific information currently available; ii) provide adequate monitoring measures; and iii) detail and identify funding that will be provided for the VPHCP's implementation. So as not to be redundant, I refer you to the April 8, 2015 letter (see Attachment 1) for a full explanation of these deficiencies. I respectfully request that you consider the issues detailed in section I. A–C to ensure the preparation of a VPHCP that meets the requirements of the ESA.

III. Expanded Conservation Alternative

The Draft EIR/EIS identified the Expanded Conservation Alternative as the environmentally preferable/ superior alternative, as it would result in the highest amount of conservation, restoration, maintenance, and monitoring of vernal pools and their associated resources. This alternative adds lands, primarily in Otay Mesa, to the Multi-Habitat Planning Area (MHPA) beyond those to be conserved under the proposed VPHCP. As indicated in Table 3-9 of the Draft EIR/EIS and shown on Attachment 2, this would entail 7 parcels containing 158 acres within Pardee Homes' ownership to be added to the MHPA with 75 percent conservation (118.5 additional acres of Pardee Homes property to be added to the MHPA).

Pardee Homes strongly opposes this alternative and recommends against its selection by the City Council. Not only would this alternative represent a substantial taking of Pardee Homes' land, but it is not needed to meet the California Environmental Quality Act (CEQA) objective of reducing significant impacts of the project. As shown on Table 6-1 of the Draft EIR/EIS, environmental impacts of the VPHCP are all less than significant with mitigation, and several beneficial effects would result. Environmental consequences of the Expanded Conservation Alternative would be equivalent or similar to the project's effects. Furthermore, the Draft EIR/EIS states that this alternative is not necessary to meet the objectives of the VPHCP for San Diego fairy shrimp.

As stated in the Draft EIR/EIS (page 6-3), the Expanded Conservation Alternative "would further reduce residential and industrial development potential in the Otay Mesa Community Planning and would require an additional amendment to the Community Plan. In particular, the uses within the Southwest Village Specific Plan would be greatly reduced, including density planned for the area. With a decrease in density, the Otay Mesa community would in turn experience a loss of housing, new park acreage, commercial and employment opportunities, and funding potential for infrastructure improvements, including roads (i.e., contribution towards Development Impact Fees [DIF] and Facilities Benefit Assessment [FBA])." Clearly, this is contrary to the goals and objectives of the Otay Mesa Community Plan, which strives to achieve a balanced community with compact walkable mixed-use villages.

Sincerely,

Babbi Hendes

Bobbi Herdes Principal

Attachments: 1: Letter dated April 8, 2015 2: Expanded Conservation Alternative K-3 Please see response to comment D-2 regarding item (i) (use of the best scientific data available). Regarding item (ii), adequate monitoring measures, refer to response to comment G-10. Refer to response to comment C-3 regarding item (iii), detail and identification of funding for VPHCP implementation. Refer to response to comment F-9 regarding a reasonable range of alternatives, item (iv). Note that the comments in the April 8, 2015, letter are outdated because that letter provided comments on an older version of the VPHCP (Preliminary Draft). However, the responses above generally apply to the items referenced in Section 1.A-C of that letter.

K-4 This comment expresses a lack of support for the Expanded Conservation Alternative. Please see response to comment F-10.

K-5 As discussed in the referenced paragraph from Section 6.2.1 of the Draft EIR/EIS, the City acknowledges that the Expanded Alternative would greatly reduce the density planned within the Otay Mesa Southwest Village area. This would create a loss of housing, new park acreage, commercial and employment opportunities, and funding potential for infrastructure improvements.

ISA in the letter dated Anril 8, 2015

Page RTC-144

K-4

K-3

K-5

Attachment 1 Letter dated April 8, 2015

Sheppard Mullin Richter & Hampton LLP 501 West Broadway, 19th Floor San Diego, CA 92101/3598 619.338,6500 main 619.234.3815 main fax www.sheppardmullin.com

619.338.6646 direct jponder@sheppardmullin.com

File Number: 08C8-100232

April 8, 2015

VIA E-MAIL AND U.S. MAIL

Jeanne Krosch Senior Planner, Planning Department City of San Diego 1222 1st Avenue, MS 413 San Diego, California 92101 E-Mail: jkrosch@sandiego.gov

Re: Preliminary Draft of the Vernal Pool Habitat Conservation Plan

anne Dear Ms. Krosch:

On behalf of our client, Pardee Homes ("Pardee"), owner of property within the Otay Mesa West Village Specific Plan Area (the "Property"), which has been entitled (the "Project"), site, we appreciate the opportunity to comment on the Preliminary Draft of the Vernal Pool Habitat Conservation Plan ("VPHCP" or "Plan"). The VPHCP, as drafted, overlaps the Property and hinders development of the Project.

We believe, as drafted, the VPHCP fails to fully comply with the Federal Endangered Species Act of 1973 ("ESA"), 16 U.S.C. sections 1531 *et seq.*, due its failure to: (i) base its analysis and conclusions on the best scientific information currently available; (ii) provide adequate monitoring measures; (iii) detail and identify funding that will be provided for the VPHCP's implementation; and (iv) provide a reasonable range of alternatives. As it relates to the Property and the Project, the VPHCP will result in an illegal regulatory taking of Pardee's land as it removes the economic viability of numerous parcels. The current VPHCP boundaries lines require Pardee to mitigate above and beyond the City's traditionally imposed mitigation ratios.

I. Violation Of The ESA

A. Biological Data

Preparing an acceptable habitat conservation plan ("HCP") requires the utilization of upto-date biological information on the species being considered within the plan area. After delineating the boundaries of a HCP area and the species within to be included in the HCP, current biological information for each of those species <u>must</u> be obtained. (50 C.F.R. § 222.22(b)(5).) The HCP must utilize "the best scientific and commercial data available" in fulfilling its provisions. (ESA § 7(a)(2).) Data pertaining to the species' ecology, geographical

Jeanne Krosch Senior Planner, Planning Department April 8, 2015 Page 2

distribution, and occurrence is required and may be available from existing sources. If existing information is not available or not sufficient, biological studies <u>must</u> be completed to supplement this requirement.

In numerous instances, the VPHCP admits it did not utilize the best scientific and commercial data for each species covered by the VPHCP. From the onset the VPHCP states that eight species were originally identified for inclusion in VPHCP, but then immediately dismisses one species (little mouse tail [*Myosurus minimus* ssp. *apus*]) for "unresolved taxonomic issues." (VPHCP pg. 1-1.) The VPHCP does not specify the exact taxonomic issues or the procedures the City used to try to resolve such issues in order to obtain the requisite information. At minimum, the City was required to complete a biological study to establish that the species was properly excluded.

With regard to the remaining species covered in the VPHCP, the Plan does provide the required information for at least four species. But the VPHCP summarily dismisses the requirement to include the best scientific and commercial data related to the San Diego fairy shrimp and Riverside fairy shrimp by issuing a blanket statement that the procurement of such information has "not been feasible." (VPHCP at pg. 3-3, 3-5.) Given the apparent lack of existing information on these species, the City was then required to perform a biological study to supplement the missing information. However, the Plan goes on to admit that protocol surveys for San Diego fairy shrimp have not been conducted despite the acknowledgement that the existing information is incomplete. (VPHCP at pg. 6-2. ["...general observations...suggest the...distributional data for the San Diego fairy shrimp is incomplete"].)

Additionally, the VPHCP states: "California Orcutt grass is believed to be wind pollinated, although no studies of wind pollination or vector-assisted pollination in this species is currently known." (VPHCP pg. 3-11.) The Plan also lacks the best available scientific data relating to the Otay Mesa Mint population.

B. Monitoring Measures

ESA Section 10 regulations require that an HCP specify the measures the applicant will take to "monitor" the impacts of the taking resulting from project actions. (50 C.F.R. § 17.22(b)(1)(iii)(B); 50 C.F.R. 222.22(b)(5)(iii).) Monitoring measures described in the HCP should be as specific as possible and be commensurate with the project's scope and the severity of its effects. For regional and other large-scale HCPs, such as the VPHCP, monitoring programs should include periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on fulfillment of mitigation requirements (e.g., habitat acres acquired). Monitoring plans for HCPs should establish target milestones or requirements throughout the life of the HCP, and adaptive management options.

The Plan is not in compliance with ESA's monitoring requirements. Section 7 of the Plan, which details the Management, Monitoring and Reporting, does not include the monitoring requirements for regional and large-scale HCPs, such as periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on

Jeanne Krosch Senior Planner, Planning Department April 8, 2015 Page 3

fulfillment of mitigation. Moreover, the monitoring activities are not analyzed elsewhere in the Plan. Furthermore, the Plan does not establish milestones or requirements throughout the life of the VPHCP. Therefore, the monitoring included in the Plan is deficient and in violation of ESA requirements.

C. Funding

The ESA requires that every HCP detail the funding that will be made available to implement the proposed mitigation program. Sufficient funding must be provided for all proposed activities, including those relating to any necessary surveys, monitoring programs, mitigation programs, and construction of the proposed project. The HCP must identify all financial contributors and planned allocation of funds.

VPHCP Section 10, Preserve Management and Funding Mechanisms, does not detail the finding that will be made available to implement the proposed mitigation program. Instead, this section includes a general discussion of potential funding sources but does not specify which sources will be accountable for providing sufficient funding for the proposed activities. The Plan does not provide a guarantee the funding is available to support the VPHCP.

VPHCP Section 10 identifies the creation of a communities facilities district ("CFD") as a potential funding source. (VPHCP at pg. 10-4.) Should the City determine it practical to pursue a CFD, the City should be aware of the recent *City of San Diego v. Shapiro* (2014) 228 Cal.App.4th 756, which requires a vote of the entire City's electorate body in order to legally form a CFD.

D. Alternatives

The ESA requires a description of "alternative actions to such taking," or a discussion of other options, besides the proposed action/project, that will not result in the proposed taking. Two alternatives commonly included in the "Alternatives Analyzed" section of the HCP are: (i) any specific alternative, whether considered before or after the HCP process was begun, that would reduce such take below levels anticipated for the project proposal; and (ii) a "no action" alternative, which means that no permit would be issued and take would be avoided or that the project would not be constructed or implemented. The applicant also must explain in this section why these alternatives were not adopted.

Again, as it relates to the alternative requirements under ESA, the VPHCP summarily dismisses a key element of a legally compliant HCP. The Plan considers two alternatives for both the San Diego fairy shrimp and the Riverside fairy shrimp. However, when describing the alternatives considered for Riverside fairy shrimp, the VPHCP states: "The Reduced Take Alternative is effectively equivalent to the Not Take Alternative." As the two alternatives addressed mirror each other, the Plan does not contain a reasonable range of alternatives. Moreover, the Plan does not adequately describe or analyze each alternative. Lastly, the Plan does not adequate explain why the alternatives were not adopted.

Jeanne Krosch Senior Planner, Planning Department April 8, 2015 Page 4

II. Regulatory Taking

The Fifth Amendment to the United States Constitution provides: "nor shall private property be taken for a public use without just compensation." Effectively, this is a reverse statement of the power of eminent domain: the government's ability to take private property for public use, as long as the government pays the owner just compensation. Coincident with the emergence of land use regulation in this country, an accompanying legal theory developed to challenge the government's ability to regulate land use. This concept is known as "regulatory taking." Under this theory, land use regulation affecting private property, including growth control measures, could have essentially the same effect as the government seizing property. Thus, under the regulatory taking theory, the government is required to provide just compensation for its actions.

The United States Supreme Court attempted to articulate when a land use regulation results in a compensable taking in *Penn Coal Co. v. Mahon* (1922) 260 U.S. 393. The Court said: "The general rule ... is, that while property may be regulated to a certain extent, *if regulation goes too far* it will be recognized as a taking." (Emphasis added.) (260 U.S. at 415.)

In determining when a regulation "goes too far," certain general rules have emerged. In *Agins v. City of Tiburon* (1980) 447 U.S. 255, the Supreme Court established a "two-prong" test. The Court held that a regulation results in a taking if either: (i) the regulation does not substantially advance legitimate state interests; or (ii) the regulation denies an owner economically viable use of his land. (*Id.* 447 U.S. at 260.)

Regarding the "economically viable" prong of the Agins test, subsequent cases clarified that this formula requires that the loss is total, denying the owner of all economically viable use of its property. (*Tahoe-Sierra Preservation Council*, *Inc. v. Tahoe Reg'l Planning Agency* (2002) 535 U.S. 302; *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003.) In addition to the *Agins* test, the courts have applied other standards for determining whether a regulatory taking has occurred. In *Penn Cent. Transp. Co. v. New York City* (1978) 438 U.S. 104, 123, the United States Supreme Court held that regulation that leaves some economically beneficial use of the affected property may still be shown, on a case-by-case basis, to go too far and amount to a regulatory taking. Critical inquiries are the economic impact of the regulation on the claimant, the extent to which the regulation has interfered with distinct investment-backed expectations, and the character of the governmental action. (*Penn Cent. Transp. Co.*, 438 U.S. at 123.) Similarly, the California Supreme Court identified thirteen possible considerations, and indicated that there are other valid factors, as well. (*Kavanau v. Santa Monica Rent Control Bd.* (1997) 16 Cal.4th 761, 775.)

As demonstrated by the map provided by Rick Engineering Company, attached hereto as <u>Exhibit A</u>, there is an overlay between the Property and VPHCP area. The overlay includes street within the Project that is the only access point for numerous parcels. Without the ability to develop this street under the VPHCP, these parcels will lack the access necessary to make them economically viable residential units. The City must readjust the VPHCP boundary lines to avoid the previously entitled Project, or pay just compensation for its possession of the land.

Jeanne Krosch Senior Planner, Planning Department April 8, 2015 Page 5

III. Permitted Development

Section 8.2 of the VPHCP assumes that 25% of all private and public lands that have not been conserved and are wholly within the multi-habitat protection area ("MHPA") will be lost (i.e., developed). This section allows development that would make reasonable use of the property. Therefore, property owners within the MHPA are permitted to develop at least 25% of each parcel of affected property. Under this section, Pardee is permitted to develop at least 25% of each parcel in the overlay zone depicted in Exhibit B.

IV. Pardee Has Already Mitigated for Vernal Pools In West Mesa Village Planning Area

The City's proposed preserve configuration within Project includes acreage that would substantially exceed what would typically be required for impacts to vernal pools. As shown in <u>Exhibit A</u>, the Plan shows that approximately 30.54 acres within the Project would be retained as open space for vernal pool mitigation. Preliminary land plans consistent with the adopted Otay Mesa Community Plan have been prepared for the Project and indicate that approximately 0.32 acres of vernal pool surface area would be impacted. Applying mitigation ratios generally accepted by the resource agencies (i.e., 3:1 and 4:1) for vernal pools surface area and the associated watersheds, would require approximately 15.92 acres of vernal pool mitigation for the impacts within the Project. Thus, the VPHCP preserve design represents nearly twice as much acreage than what would likely be required. Pardee's preliminary South Otay Mesa land plans shows approximately 24 acres of vernal pool mitigation open space in two locations. (Exhibit A.)

We propose that the westernmost "wedge" area of habitat that is included in the Plan be removed from the preserve design. (See Exhibit A.) This area is approximately 6.64 acres in size and is not unique from a vernal pool mitigation standpoint. The characteristics are similar to the larger preserve area to the east in terms of soil conditions, slope aspect, vegetative cover, and potential for vernal pool restoration. Removal of this westernmost area from the Plan's preserve configuration would still allow the necessary mitigation requirement to be accommodated on the Project and not jeopardize the biological success of the restoration efforts for this area of the VPHCP

V. Further Notification

Please notify Pardee, as well as this office, when any additional draft and/or final VPHCP, environmental impact statements/environmental impact reports, Implementing Agreements and any other related documents are available for review. Pardee can be notified at the following address:

Jimmy Ayala Pardee Homes 13400 Sabre Springs Parkway, Suite 240 San Diego, CA 92128

Jeanne Krosch Senior Planner, Planning Department April 8, 2015 Page 6

With a copy to:

John E. Ponder Sheppard, Mullin, Richter & Hampton LLP 501 W. Broadway, 19th Floor San Diego, California 92101

VI. Conclusion

For these reasons, Pardee respectfully requests that the City revise the VPHCP to address these issues. Please do not hesitate to contact me with any questions or concerns regarding the information contained herein or attached hereto.

Sincerely, 10m moler

John E. Ponder for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

SMRH:436919806.2 Enclosures

cc: Jimmy Ayala City Clerk Mike While Lee Sheerwood Bobbi Herdes Mark Dodero

EXHIBIT A



VPHCP Conservation Analysis Planning Unit

DRAFT

Date: 3/20/2015 Vernal Pools

symbols on this map have been enlarged to help iden is and are not to scale and do not represent the exac vernal pool basins Vernal pool syn their locations i limits of the ver

Not subject to VPHCP or ESL regulations Municipal Boundary

Baseline Conservation Conservation Level

100 75 - 99

Note: The Baseline Conservation is defined as the MHPA boundary plus conserved lands, approved projects, projects with approved USFWS Biological opinions, and/or pipeline projects(ie, in a stage of project approval where conservation and loss of lands have been determined).

VPHCP Conservation Level

100 75 - 99

Note: The VPHCP Con P Conservation builds on the Baselin on. It includes all areas in Baseline C

Preposed Vernal Pool Preserve Pardee Boundary





Attachment 2 Expanded Conservation Alternative



ATTACHMENT 2 Expanded Conservation Alternative

LETTER L

jackson ·

DEVELOPMENT

VIA E-MAIL

December 1, 2016

Myra Herrmann Environmental Planner City of San Diego Planning Department 1010 Second Avenue, East Tower, Suite 1200 MS 413 San Diego, CA 92101

RE: Vernal Pool HCP, Project Number 441044

To Whom It May Concern:

We appreciate this opportunity to comment on the Draft Environmental Impact Report/ Environmental Impact Statement for the City of San Diego Vernal Pool Habitat Conservation Plan (the "EIR").

By way of background, our firm has an application on file with the County of San Diego for the development of Otay Ranch Village 14 and Planning Areas 16/19 (the "Project"). The Project is located in Proctor Valley, entirely within the County's jurisdiction and immediately to the north of the City's Cornerstone lands owned by the City's Water Utilities Department. The Project will likely be conditioned with the permanent construction of Proctor Valley Road ("PVR"), an approved County of San Diego Mobility Element Road through the City's Cornerstone lands. PVR is currently in a graded and partially paved condition from its southerly paved terminus in the City of Chula Vista to the northerly paved terminus in Jamul – roughly a 4-mile segment of road. PVR was included as a Planned Facility and an Essential Public Project in the San Diego Multiple Species Conservation Program (MSCP), and the City's and County's MSCP Subarea Plans.

L-1

The alignment for the existing, partially improved section of PVR currently bisects two vernal pool complexes within the City's Cornerstone lands. In order to ensure that the Project proposed an alignment for PVR that would either avoid or minimize impacts to these vernal pools, we have been meeting with Nicole McGinnis, Natural Resources Manager with the City of San Diego Water Utilities, on multiple occasions to listen to the City's concerns, keep Water Utilities updated on our plans, and exchange any requested information and analyses. We provided the City with copies of our draft tentative map, including the engineered alignment of proposed PVR through the Cornerstone lands, along with copies of our hydrology and stormwater technical reports. Water Utilities granted access to perform protocol vernal pool studies in 2015 and again in 2016 during the El Niño winter. In addition, we met with Jeff Pasek, Senior Biologist with the City's Utilities Department, and Jeanne Krosch, Senior MSCP Planner at the City.

2245 San Diego Avenue, Suite 223 San Diego, CA 92110 v: (619) 267-4904 f: (619) 267-4914 c: (619) 980-4979 <u>reameron@jacksonpendo.com</u> L-1 This comment provides background information and does not provide any comments related to the adequacy of the EIR/EIS or VPHCP documents.

LETTER L

-2-

December 1, 2016

L-1

cont

L-2

-4

Based on all of the information compiled during these conversations, we cooperatively redesigned and proposed a new alignment of PVR to avoid and minimize vernal pools in the Cornerstone lands while being consistent with the City of San Diego MSCP Subarea Plan, Land Development Code Biology Guidelines, the Cornerstone Lands Conservation Bank Agreement and the policies identified in Section 1.4.2 of the City of San Diego's Subarea Plan. The realignment of the road resulted in a significant loss of previously approved development potential and an increase in the construction costs of PVR.

With this background in mind, we have reviewed the EIR and have the following comments and observations:

- The EIR identifies 126 vernal pools in the Proctor Valley (R1) area. The graphics included in the EIR are not at a scale to clearly identify their specific location; however, the Vernal Pool Interactive Map provided on the City's website: <u>https://www.sandiego.gov/planning/programs/mscp/vphcp</u> identifies many pools on the City's property and our private property as well. The City should <u>only</u> be including vernal pools on its ownership and should exclude all others.
- 2. The Vernal Pool Interactive Map has identified vernal pools in the PVR alignment study area that do not correspond to two years of protocol vernal pool studies performed by our consultant (Dudek) in conjunction with the Project. These two years of data represent the best science available in this area - including one dry season and two wet seasons (one of which was an El Niño season) - were conducted in accordance with federal protocols, and consistent with the City's guidelines, and therefore should be relied upon to define vernal pools. Prior to conducting its own surveys, Dudek reviewed the information that was available for the PVR road alignment area in 2014. They concluded that formal protocol L-3 vernal pool studies meeting the City's requirements had not been performed in the area and that many of the "vernal pools" that had been mapped in the area - and which are now designated as "vernal pools" in the EIR - were not properly designated as such based on protocol studies and City guidelines. Dudek surveyed the Cornerstone lands to update and accurately map the pools so that a realignment of PVR could be designed that would avoid or minimize the road's environmental impacts. The City should revise the accounting of pools in the Proctor Valley area based on Dudek's protocol studies in 2015/2016. Without this change, these documents imply that the pools as represented in the Vernal Pool Interactive Map are "hardlined" and would require mitigation regardless of best available science.
- 3. Note that the construction of re-aligned Proctor Valley Road (including its associated sewer/water utilities and stormwater improvements) through Cornerstone lands meets current criteria of an Essential Public Project pursuant to the City's Land Development Code Biology Guidelines. It should also be noted as such in the VPHCP. Proctor Valley Road has been identified as a Mobility Element Road in the County's General Plan for many years and a "planned facility" pursuant to the South County MSCP Subarea Plan.
- 4. Table 3-7 of the EIR/EIS suggests that the Vernal Pool HCP will add 4 acres of Spreading Navarritia Critical Habitat to the City's HCP. To the extent that we re-align PVR to reduce impacts to the vernal pool complexes in Proctor Valley and the new alignment impacts

L-2 The VPHCP applies to vernal pools within the City's jurisdiction, either owned by the City or on private lands within the City's land use jurisdiction. The interactive map on the City's website shows all vernal pools in the City's inventory, including those not subject to the VPHCP. Each vernal pool includes ownership information.

L-3 Please see response to comments E-3 and H-4.

L-4 Comment noted.

L-5 The VPHCP does not add, remove, or change the location of designated Critical Habitat. Rather, it proposes to include land designated as Critical Habitat to the City's MPHA. The location Critical Habitat for spreading navarretia has not changed as a result of the VPHCP relative to the realignment of Proctor Valley Road. - 3 -

December 1, 2016

L-6

Spreading Navarritia Critical Habitat areas, we should not be penalized. We request that Γ_{L-5} VPHCP acknowledge this.

5. The EIR/EIS, VPHCP, VPMMP does not take into account the approved development and land uses in the County's Otay Ranch Subregional Plan and County's General Plan. Rather it describes the area as undeveloped open space. These documents should acknowledge and reflect the development of our Project, including PVR. We are happy to provide graphics and GIS data to assist the City with such revisions.

If you have any questions, please don't hesitate to call me.

Sincerely,

Rob Cameron

Enclosure (none)

RC:jmj

cc: Greg Mattson - County of San Diego Joe Monaco - Dudek L-6 The EIR/EIS, VPHCP, and VPMMP do not discuss lands adjacent to the VPHCP that are outside the Plan Area.

LETTER M

Friends of Rose Canyon

Friends of Rose Canyon PO Box 221051, San Diego, CA 92192-1051 858-597-0220 * rosecanyon@san.rr.com

Dec. 1, 2016

Jeanne Krosch City of San Diego

Re: Vernal Pool Habitat Conservation Plan - #441044/SCH No. Submitted via email

Dear Ms. Krosch,

in there?

Friends of Rose Canyon has a strong interest in protecting vernal pools in the Rose Creek watershed and elsewhere in the City of San Diego. We have seen destructive impacts from bikes and other human activities on vernal pools in Rose Canyon.

We submit the following comments:

1. Alternatives: The "Expanded Conservation Alternative" (3.7 acres of added basin area) is the only acceptable alternative. Reasons:

 \cdot Vernal pool systems are >95% gone, and the all of the alternatives guarantee both additional and incidental take of the seven species covered by the VPHCP.

In the interests of settling the long-running dispute over vernal pool destruction, we can support the Expanded Conservation Alternative.

• We cannot support the Project alternative, as it results in impacts and take of endangered vernal pool species, and these can be totally and feasibly avoided, as demonstrated by the analysis of alternatives in the EIR/S. The difference between the two is 3.7 acres of vernal pools, but that is a significant amount of pool acreage that does not need to be lost.

2. The City's Vernal Pool Database is still incomplete and inaccurate, despite the City's continued assertions that it is complete and comprehensive. This has been an issue since the 2012 white papers. The database and interactive map

(http://sandiego.maps.arcgis.com/apps/webappviewer/index.html?id=7cfd12d64af8424b986 af45712933b88) contain pools that are non-functional (drained through cracks in the underlying hardpan) and pools that were destroyed through trail closure activities before the VPHCP began. Both of these examples are on Del Mar Mesa. The database and map also do not contain a number of functioning, vernal pools in road ruts on Del Mar Mesa, despite repeated requests to include them, along with data to support the requests. Why has the City failed to act on repeated efforts to make their database correct? How many other errors are

3. The EIR/S fails to adequately disclose the significant adverse impacts of continued

M-1

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M-5

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M-1 The comment provides introduction and background context regarding Friends of Rose Canyon interest in the protection of vernal pools. No further response is required. Note that many of the comments contained in this letter are the same as those from the Conservation Groups and CNPSSD letters; therefore, many of the responses refer back to those letters.

- M-2 Please see response to comment D-2.
- M-3 This comment expresses a lack of support for the Project Alternative. Refer to response to comment D-2.
- M-4 Please see response to comment D-2.

M-5 Please see response to comment C-2.

City of San Diego VPHCP EIR/EIS Response to Comments

Friends of Rose Canyon

M-5

cont

M-6

M-7

M-8

M-9

M-10

2

permitting of take upon the viability of the Recovery Plan for endangered vernal pool species. How does the project and other alternatives specifically impact or fulfill the specific items prescribed in the Recovery Plan?

4. Funding for the VPHCP is unclear. The Executive Summary identifies "Funding and availability of perpetual funding mechanism" [ES-8] as an issue of controversy, but they do not solve it. Chapters in the EIR/S lack certainty with regard to how the needs identified will be specifically funded. Potential funding mechanisms discussed in VPHCP Chapter 10 are not specific enough to determine how the costs identified in VPHCP Appendix E will be covered. Current fund balances and the amount of revenues to be generated should be clearly identified and specified for the line items identified within Appendix E Cost Analysis. Financial reports should be due annually and should accompany the required biological monitoring reports.

5. How do Army Corps rules now under consideration impact the VPHCP and what are the inconsistencies? (http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/996958/2016-dvpgl-draft-vernal-pool-mitigation-andmonitoring-guidelines/)The VPHCP should go beyond Corp minimum standards, but appears deficient in terms of meeting a 100' minimum buffer and annual monitoring for restored pools of 10 years. What current laws, legal standards and plans impact the VPHCP? what are the inconsistencies?

6. The City's discussion of projects impacting vernal pools has issues. The obvious example is on Del Mar Mesa, where the VPHCP discusses "Rhodes Crossing" and the diocese property. In fact, Rhodes Crossing was split into two separate projects, Merge 56 and Rhodes Crossing, both have been in process for years, including lengthy negotiations over the fate of the vernal pools on site, and both have EIRs that were supposed to be out in 2015 (delayed by negotiations over vernal pools, apparently). The Catholics sold their land to a developer, who is planning a ~500,000 square foot office complex on the site, called "The Preserve at Torrey Highlands." The Preserve's proponents claim that at least one pool managed by USFWS is on their land, and they plan to put a parking structure right next to it.

7. Reporting process is not adequate. (VPMMP, Section 5.0, pages 36-37) The "summarized results" due to the Wildlife Agencies by September 30, should be provided to a list of interested non-government individuals and organizations and posted upon the City's vernal pool website. A meeting should be scheduled with the City, the Wildlife Agencies and non-government organizations (NGOs) if an NGO expresses interest prior to December. Financial reports for VPHCP implementation and monitoring should be included that reflect current balances, annual expenditure and projected expenditures with specific funding sources identified. Also, the EIR/S states that the No Project Alternative would involve "status quo monitoring" but doesn't explain what status quo monitoring is, or how effective it is in comparison to the monitoring for the project and alternative.

8. How does the draft VPHCP meet the recovery criteria from the "Recovery Plan for Vernal Pools of Southern California?" If it does not, what is the impact of not doing so?

M-6 Please see response to comment C-3 addressing funding.

M-7 Please see response to comment C-6 addressing USACE requirements.

- M-8 Please see response to comment G-11 related to the Rhodes Crossing and Merge 56 projects. Refer to response to comment D-10 related to the Preserve at Torrey Highlands project.
- M-9 Please see response to comment D-11.

M-10 Please see response to comment D-14.

Friends of Rose Canyon

M-10

M-11

M-11

9. Does the Draft VPHCP provide for the recovery of these species and thus conserve them? The Southwest Center opinion criticized the practice of continued "incidental take" of vernal pool species and certain development in exchange for uncertain mitigation. The VPHCP will allow for continued take of vernal pool species (under "covered" and "Pipeline" projects) in a way that appears to conflict with the Recovery Standard of the law. The real cont driver of this HCP cannot be as a means to continue development by "incidental" destruction of vernal pools. This exact situation was already recognized by the court, and the VPHCP should remedy it.

10. Education and Training

Education and training are important mitigation measures. In the last few years, damage to vernal pools has been caused, among other things, by SDG&E trucks driving into them, Development Services cars driving into them, CalTrans driving through them, mountain bikers riding through them, dogs playing in them, kids jumping in them, City Parks personnel brushing them over, and high school cross country teams running through them, among others. What unites these impacts is that they could all have been avoided through proper outreach, education, and training. No one wants to bog a vehicle in a vernal pool, but every year, someone drives into one unthinkingly. Most mountain bikers avoid pools, simply because they have to clean their bikes after riding through them, and so forth. It's not that hard to get people to police their behavior around pools, even in heavily traveled areas like the trails on Del Mar Mesa. Most of them do it already.

In the VPHCP, education is presented as a public good, and that is fine. Additionally, education, outreach, and training need to be part of active mitigation efforts. CNPS, San Diego Zoo, and San Diego Botanic Garden have discussed creating educational materials for vernal pools. CNPSSD is happy to help the City create, distribute, and curate educational and training materials free of charge. What this requires from the City is an active willingness to permit outreach, education, and training, both within its divisions and to other groups and agencies. To date, City personnel have blocked public education and outreach efforts, and this needs to change. The best way forward is to include outreach, education, and training in the mitigation measures, and to work with us to help make them happen.

Thank you.

Deborah Knight Executive Director Friends of Rose Canyon

Please refer to response to comment D-18.

LETTER N



December 6, 2016

Ms. Myra Hermann, Environmental Planner City of San Diego Planning Department 110 Second Avenue, East Tower, Suite 1200, MS 413 San Diego, CA 92101 PlanningCEQA@sandiego.gov

RE: Vernal Pool Habitat Conservation Plan - #441044 / SCH No. 201111075

Dear Ms. Hermann,

Thank you for the opportunity to comment on the above referenced Plan.

The EIR/EIS fails to adequately discuss the significant adverse impacts of the continual permitting of take upon the viability of the Recovery Plan of the endangered vernal pool species. This type of piecemeal planning does nothing to aid the survival of the endangered vernal pool species. Cumulative impacts across regions have all but wiped out any viability of sustained species recovery.

San Diego's Vernal Habitat Conservation Plan must not continue the haphazard practice of "incidental take" of vernal pool species for uncertain or unproven mitigation. This scenario has no place in a conservation plan.

There is little indication that the proposed Vernal Pool Habitat Conservation Plan meets the Recovery Criteria mandated N-3 in the 1998 Recovery Plan for Vernal Pools of Southern California

Certainty of funding is not addressed in any meaningful way. The funding mechanism discussed in the VPHCP (Chapter 10), are ambiguous and misleading. They lack specificity and as such undermine the sincerity of the proposed Plan.

The idea of mitigating for the endangered vernal pool species is inadequate on its face. However, we concur with the California Chaparral Institute, Save Our Forest And Ranchland, California Native Plant Society, Center for Biological Diversity, Preserve Wild Santee, Cleveland National Forest Foundation, that the only choice is the Biologically Preferred / Reduced Take / Expanded Conservation Alternative.

Thank you for your time.

Sincerely,

Howle Heatheringto

Board of Directors <u>contactecosd@gmail.com</u> 805-835-1833

N-1 Please refer to response to comment D-14 regarding incidental take of covered species. The VPHCP is the opposite of piecemeal planning. Once approved, implementation of the VPHCP would avoid piecemeal planning by providing a coordinated, comprehensive approach based on goals and objectives of the VPHCP. This approach would ensure that project mitigation is directed to those areas most critical to maintenance of ecosystem function and species viability. The goal of the VPHCP is to target the highest quality areas for vernal pool preservation, enhancement, and/or restoration, while allowing some development of lower-quality vernal pool response to comment C-8.

Please see response to comments C-2 and C-10 regarding how the VPHCP is consistent with the Recovery Plan and contributes to recovery of the covered species. Cumulative biological impacts are analyzed in Section 9.3 of the EIR/EIS.

- N-2 The VPHCP does not allow for incidental take in exchange for uncertain mitigation as described in the comment. The VPHCP must ensure adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources within the city. As stated in EIR/EIS Section 3.2, the VPHCP is designed so that "project mitigation is directed to those areas most critical to maintenance of ecosystem function and species viability. The goal of the VPHCP is to target the highest quality areas for vernal pool preservation, enhancement and/or restoration." Please see response to comment D-14.
- N-3 Please see response to comment C-2 regarding consistency with the Recovery Plan.
- N-4 Please see response to comment C-3 regarding funding.

N-2

N-5

N-5 The comment expresses support for the Expanded Conservation Alternative.
LETTER O



San Diego County Archaeological Society, Inc.

Environmental Review Committee

- O-1 The comment provides introductory statements. No further response is required.
- O-2 Comment noted. The text under *Initial Determination* has been revised to include reference to the 1928-29 Tax Factor series of aerial photos. During the *Initial Determination* phase, the environmental planner will review referenced resources, including site photos and other source materials, and consult with qualified staff to determine if a site visit is warranted. In many cases, qualified staff can make a recommendation to survey the property by a qualified archaeologist without the need for the environmental planner to conduct a site visit. A site visit may still be conducted by the environmental planner to familiarize themselves with existing conditions, but not in the context of determining whether the site may or may not contain historical resources.
- O-3 The archaeological research and requirements of Mitigation Measure HIST-1 are considered appropriate for this project.
- O-4 LIDAR was added to the list of innovative survey techniques as requested by comment.
- O-5 The City and Wildlife Agencies concur that cultural resource site analysis should include access routes and staging areas located in previously undisturbed locations. Implementation of the proposed Project would not increase or provide new public access to vernal pool areas with a potential to result in indirect impacts to cultural resources.

will be staged. It also must address potential indirect impacts to sites near areas of direct impacts, such as by enabling or encouraging access to sites where it did not previously exist.

- 5. Due to federal agency involvement in the project, the mitigation process described in Step 3, on page 5.5-28, and Step 5, on page 5.5-29, must comply with the federal requirements and standards. This is not just the case if federal funding is involved but also if any other federal action, such as permits, are involved, and whether or not USFWS delegates any of its authority to the City. As such, any recovered cultural material which is not subject to NAGPRA *must* be curated at an institution meeting the standards of 36CFR79. Repatriation is limited to the material and items defined in NAGPRA. And of course, and as specified in the second paragraph of Step 3 and by Step 5, encountering of any human remains (or material suspected as human remains) initiates the normal PRC and consultation processes to be followed, and appropriate respect is to be shown.
- 6. The Collections Management Plan cited in the last paragraph of Step 4, on page 5.5-29, and also mentioned in the first paragraph of Step 5, addresses the "types of materials to be collected and curated based on a sampling strategy that is acceptable to the City." We believe the curation institution should also be consulted on the strategy, so that it can take into account the possible unique characteristics material likely to be encountered at a particular site. Material which is abundant at one site may be rare or absent in other curated collections, and the curation institution can add that perspective.

Thank you for the opportunity to review and comment upon this DEIR/DEIS.

Sincerely,

James W. Royle, Jr., Chairperson

0-5

cont

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Environmental Review Committee

cc: AECOM SDCAS President File O-6 All applicable federal requirements and standards would be implemented through the mitigation process as described in Mitigation Measure HIST-1.

O-7 The archaeological research and requirements of Mitigation Measure HIST-1 are considered appropriate for this project.

LETTER P

From:	Doug Wescott
To:	"Herrmann, Myra"; "Serra Mesa Planning Group"
Cc:	"Krosch, Jeanne"; Cavallaro, Lindsey; Cindy Moore; scottsherman@sandiego.gov
Subject:	RE: Draft EIR/EIS for the Vernal Pool Habitat Conservation Plan (VPHCP) Project No. 441044
Date:	Sunday, November 13, 2016 2:56:36 PM

Ms. Hermann,

I've skimmed the draft EIR/EIS, and have questions. By the way, it looks like I received the email because I was previously the chair of the Serra Mesa Planning Group. As such, please take my comments as a member of the public. I haven't been part of the planning group for over four years. I've included Bob Crider, current Chair on this email.

P-1

P-2

P-3

I used the Find in Page tool to look for information on the vernal pools at the Kearny Mesa – Serra Mesa Library, and found no reference to those pools, although they are included on a map. Are they covered under this VPHCP project? If not, why not? They are on city property, part of the less than five percent of pools left after development, and should be included under this plan.

I see nothing in the plan about education or interpretation. To me, if there is not a concerted effort at educating the public as a component of the plan, then it is doomed to fail. Objectives of the plan are to conserve and maintain the list pools. Again, unless education is a key component, the objectives cannot be met.

The vernal pools at the library are an ideal place and opportunity to educate the public. I've hated for years the fact that all there is at this location, next to a very busy and popular city library, and a five minute walk through a canyon from the Serra Mesa Recreation Center, are huge signs saying "Stay Out – Trespassing Prohibited," or words to that affect.

While I expect my comments to be included in the final report, I would also like to hear from you on the points of my email.

Best, Doug Wescott

- P-1 Comment noted. This comment provides background context regarding the Serra Mesa Planning Group. No further response is required.
- P-2 The VPHCP Management and Monitoring Plan (MMP) includes a sheet for the vernal pool complex at the Serra Mesa Library property, which is listed as site N7 and can be found listed within the MMP file on-line. The management sheet includes goals, responsibilities, and recommendations for this complex. The goal for the N7 vernal pool complex is to maintain the existing habitat conditions in accordance with the site-specific management actions required in the previously approved project permits and associated Mitigated Negative Declaration. Additionally, the management sheet also includes a recommendation encouraging research studies and environmental education.
- P-3 As noted in Table 3-3 of the EIR/EIS, the VPHCP includes educational components as part of Preserve Management. The VPHCP states that educational projects are currently planned for areas such as Del Mar Mesa, Carmel Mountain, and Otay Mesa, and may be expanded to other areas of the MHPA based upon the success of the current projects.

City of San Diego VPHCP EIR/EIS Response to Comments

LETTER Q

Antonio Blas 2503 L Avenue National City CA 91950

November 29, 2016

City of San Diego Planning Department 1030 Second Ave, East Tower, Suite 1200 MS 413 San Diego, CA 92101

Subject: VPHCP Project # 441044 / SCH No. 2011111075

Attn: Myra Herrmann Environmental Planner

APN 645-075-18-00, 645-075-21-00, 645-076-05-00 (Ownership)

As for your request for comments regarding the Impending approval of EIR/EIS, here are some points that I like to really be included in the final documents:

- Purchasing ASAP All of the private vacant lots identified to be preserved.
- Vacant Lots to have an irrevocable clause that prohibits that said land will never be re-sold or available for any type of development under any branch of government; State, City of Federal ownership or private other than preservation under the intended purpose, or revert to original ownership at the time of approval of the above mentioned VPHCP Project # 441044

Many changes have passed since this Subdivision was under the County Jurisdiction, and is very unfortunate for the multiple owners that had purchased with the intention of one day built a home, today are facing this type of obstacle.

I Antonio Blas have been involved for many years with the Ollander Tract, and when I am requesting this buy out, I am very confident; I am speaking for many of the owners within the tract, who share the same sentiment.

In fact I like to assist you to communicate, many of the owners are Hispanic first generation on this Country and do not understand why people, entities, and branches of government plan and make decisions over private properties with no regard as to the intended purchase of said vacant lots.

I will support the Project because it is going to happen (Can't fight City Hall)

I will pledge my vacant stor sale, under the land mitigation bank or any other vehicle available to you

TonyBla

E. Mail: tonybea2003@yahoo.com

Q-1 Note that the comments contained in the letter pertain to the expansion of the MHPA Preserve Assembly only and not the adequacy of the EIR/EIS. See 3.3.10 of the EIR/EIS; it is anticipated that the expanded MHPA would be assembled through the development entitlement process via application of the ESL Regulations and/or through acquisitions. Additionally, opportunistic acquisitions from willing sellers by the City and/or other entities through grant funds are encouraged. See response to comment E-26 regarding City acquisition of private lands with Section 6 grant funds. The City is in process to acquire Mr. Blas's parcel in the proposed vernal pool preserve area located in the Otay Mesa/Southwest Village area (APN 645-075-100).

Q-2 See Chapter 6 of the VPHCP document. To ensure preservation of the lands added to the MHPA in accordance with VPHCP, a perpetual covenant of easement, dedication to the City, or a deed restriction or other conservation mechanism consistent with California Civil Code Section 815, et seq. and/or Government Code Section 65870 et seq. shall be recorded over the conserved land.

Page RTC-166

Q-1

Q-2

LETTER R

averabas 20 2		
lovember 29, 2	318	
ity of San Diego	Planning Department	
030 Second Ave	e, East Tower, Suite 1200 MS 413	
an Diego, CA 92	101	
ubject: VPHCP	Project # 441044 / SCH No. 2011111075	
ttn: Myra Herr	mann Environmental Planner	
PN 645-074-17	-00 (Ownership)	
s for your requ	est for comments regarding the draft of EIR/EIS,	-
 I like to s want to 	ee that my vacant lot be purchased, if is deemed to be preserved for the VPHCP; I do not continue paying property taxes on a land I will never built anything.	
Many years Dollars on p I try to unde	I have been waiting for the opportunity to build my dream home, I have paid thousands of roperty taxes and is very unfortunate the intention of one day built a home, is fading away as rstand this type of reasoning.	
I have lived of San Diego "UNINCORP	many injustices on the hands of Code enforcers just for the annexation of this area to the City and yet City of San Diego to avoid responsibilities continues calling this area as ORATED".	R-
I will like to identified to	request that in the Project is included some kind of mechanism to buy the many properties be preserved.	
My land is n behalf and t	ot for sale as of today, but I will list it with a Real Estate Agent to negotiate a fair price on my o make it easier for City of San Diego to have the rights to preserved as intended.	
If you have a	ny questions, please do not hesitate and contact me Cell (619) 279-9787	

R-1 This comment does not address the adequacy or accuracy of the EIR/EIS. Parcel (APN 645-074-1700) is located within the Expanded Alternative (see Chapter 6 of the EIR/EIS). Please see response to comment E-26.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

February 22, 2017

Ms. Susan Wynn Fish and Wildlife Biologist U.S. Fish and Wildlife Service 2177 Salk Avenue, Suite 250 Carlsbad, California 92008

Subject: Draft Environmental Impact Statement for the City of San Diego Vernal Pool Habitat Conservation Plan, San Diego County, California (CEQ # 20160312)

Dear Ms. Wynn:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP) pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The EPA commends the U.S. Fish and Wildlife Service (Service) and the City of San Diego on the preparation and release of the draft VPHCP, a conservation plan for seven threatened and endangered vernal pool species that do not currently have federal coverage under the City of San Diego's Multiple Species Conservation Program Subarea Plan. We strongly support many of the core components of the VPHCP, including expanding the City's existing Multi-Habitat Planning Area (MHPA) by adding approximately 275 acres of lands with valuable vernal pool resources, conserving 8 additional vernal pool complexes, and developing a Mitigation Framework that outlines required avoidance, minimization, and compensatory mitigation measures.

S-1

S-3

The DEIS does not identify the Service's preferred alternative. It is EPA's policy to rate each alternative when a preferred alternative is not identified. Based on our review of the DEIS, we have rated each of the alternatives and the document as Lack of Objections - Adequate (LO-1) (see the enclosed "Summary of EPA Rating Definitions"). We concur with the Service's identification of the Expanded Conservation Alternative as the environmentally preferable alternative.

The DEIS states that "minor grading associated with vernal pool restoration is anticipated." Such grading could result in impacts to waters of the U.S., which may require a permit pursuant to Section 404 of the Clean Water Act (CWA). For this reason, we suggest that the Final Environmental Impact Statement (FEIS) provide additional information on the potential interface between the VPHCP and Section 404, including a description of how jurisdictional waters would be identified over the permit term, and how the Service and the City of San Diego would coordinate with the U.S. Army Corps of Engineers to ensure that any development covered by the VPHCP complies with the permit requirements of Section 404 of the CWA.

We also suggest that the Service provide additional information on the tribal consultation that has been conducted for the proposed VPHCP. The DEIS states that the Service sent letters, on March 14, 2016, to

NEPA LETTER S

- S-1 The comment expresses support for the core components of the VPHCP. No additional response is required.
- S-2 The comment states that the EPA has rated each of the alternatives and the document as Lack of Objections (LO-1) per EPA rating policy. The comment expresses concurrence with the identification of the Expanded Conservation Alternative as the environmentally preferable alternative.
- S-3 Vernal pools are generally no longer regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA) (USACE 1997) in light of the Solid Waste Agency of Northern Cook County court decision excluding intrastate wetlands that are isolated from other "waters of the U.S." (531 U.S. 159, 2001). However, during project-level environmental review for proposed vernal pool restoration projects associated with the VPHCP that involve grading, project proponents will determine if vernal pools are isolated from waters of the U.S. If project-level surveys determine waters of the U.S. would be potentially impacted by vernal pool restoration activities, the project proponent would be required to coordinate with USACE to determine if proposed activities would be regulated by USACE and if Section 404 permitting is required. Appropriate permits would be obtained at the project-level, if applicable. This has been clarified in Section 5.6.2 of the EIR/EIS.
- S-4 USFWS sent tribal consultation letters regarding the VPHCP on August 12, 2016, and made a presentation at the quarterly meeting on September 28, 2016, and no additional comments were received.

fourteen local Native American tribes requesting assistance with identifying any tribal cultural resources, including traditional cultural properties, considered significant within the VPHCP Plan Area. The DEIS notes that the Service received five responses to said letters (responses received as of the preparation of the DEIS), but does not describe how the responses may have informed the avoidance and mitigation measures proposed to address potential adverse effects to historic and cultural resources. We suggest that the Service provide an update, in the FEIS, on consultation between the Service and the tribal governments contacted to date. Discuss issues that were raised, how those issues were addressed, and how impacts to tribal or cultural resources would be avoided or mitigated, consistent with Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, Section 106 of the National Historic Preservation Act, and Executive Order 13007, *Indian Sacred Sites*.

We appreciate the opportunity to review this DEIS, and are available to discuss our comments. When the FEIS is released for public review, please send one hard copy and one CD to the address above (mail code: ENF-4-2). If you have any questions, please contact me at 415-972-3521, or contact Jason Gerdes, the lead reviewer for this project. Mr. Gerdes can be reached at 415-947-4221 or gerdes.jason@epa.gov.

2

Sincerely, Kathleen Martyn Goforth, Manager

Environmental Review Section

Enclosure: Summary of EPA Rating Definitions

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment

LETTER T



U.S Department of Transportation Western-Pacific Region Los Angeles Airports District Office P.O. Box 92007 Los Angeles, CA 90009

T-1

T-2

Federal Aviation Administration

February 21, 2017

Field Supervisor U.S. Fish & Wildlife Service Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, California 92008

> City of San Diego Vernal Pool Habitat Conservation Plan San Diego, San Diego County, California Draft EIR/EIS Comments

Dear Field Supervisor

The Federal Aviation Administration (FAA) has reviewed the Draft City of San Diego Vernal Pool Habitat Conservation Plan Environmental Impact Report/Environmental Impact Statement (EIR/EIS). The City of San Diego (City) and U.S. Fish and Wildlife Service (USFWS) are proposing to complete a Habitat Conservation Plan (HCP) covering vernal pool habitats and associated species in open spaces of City owned and/or managed land. The HCP would include land within the boundaries of Brown Field and Montgomery Field airports.

EIR/EIS Specific Comments

On page 3-37, under Section 3.6 DISCRETIONARY ACITONS, PERMITS, AND APPROVALS FOR IMPLEMENTATION OF THE VPHCP, the FAA is not listed in the table. FAA approval is needed to release airport land from a Federally-obligated public-use airport when the land would be used for non-aeronautical purposes. This would include using the land for mitigation. Furthermore, FAA approval is needed for Part 77, form 7460-1, Notice of Proposed Construction or Alteration for any work including mitigation.

On Page 5.1-17, "**ISSUE** 5: Would the project result in incompatible uses as defined in an airport land use plan or inconsistency with an Airport Land Use Compatibility Plan (ALUCP) as adopted by the Airport Authority?" The VPHCP states, "The restoration of vernal pools at locations adjacent to airports would result in conserved areas of open space that would not place sensitive receptors or land uses in incompatible noise or safety areas as defined by an ALUCP." The FAA disagrees with this statement. FAA Land Use Compatibility and Airports, A Guide for Effective Land Use Planning states "Incompatible land uses can include wildlife-attracting land uses such as wetlands and landfills". The FAA Advisory Circular

- T-1 Section 3.6 includes only the discretion actions, permits, and approvals to implement the VPHCP. Any mitigation proposed on airport lands would require FAA approval during the project-level permitting process. This has been clarified in Section 4.1.2 and Table 4-7.
- T-2 The VPHCP has been revised to allow mitigation on airport lands as conditionally compatible. Conditions have been added to Section 4.1.2 and Table 4-7 of the VPHCP for covered airport projects and activities to require mitigation, preservation, and management of vernal pools resources within the MHPA to the maximum extent practicable given FAA safety requirements. In addition, a wildlife hazard study will be conducted and approved by the City and FAA to determine where, if any, mitigation could occur within airport boundaries (Montgomery-Gibbs Field and Brown Field).

(AC) 150/5200-33, Hazardous Wildlife Attractants on or Near Airports, provides guidance on locating certain land uses that have the potential to attract hazardous wildlife. A specific concern is wetlands, ponds, and other uses that attract avian wildlife. FAA AC 150/5200-33 sets recommended separation criteria for hazardous wildlife. The recommended minimum separation distances for airports serving turbine-powered aircraft is 10,000 feet to maintain the airports operation area (AOA). More information of the FAA AC 150/5200-33 is below.

On Page 10-3, Cumulative Effects 10.4 Health and Safety. This section does not mention the possible increase to wildlife hazard as a result of enhancing vernal pools within 10,000 feet of the airport operation area (AOA). Wildlife hazards have been and are an increasing aviation safety hazard.

The VPHCP states that the Metropolitan Airpark project at Brown Field Airport is included as a covered project in the VPHCP. However, this will allow non-aviation related projects to be mitigated on airport. The FAA is adamantly against having vernal pool mitigation on airport property as this could increase wildlife hazard risks to aviation. This would be inconsistent with the airport sponsor's grant assurance listed below.

At Montgomery Field Airport the VPHCP would adjust the MHPA boundary line to remove 27 acres and add 13 acres of vernal pool and surrounding habitat. The boundary line adjustment will remove the runway safety area (RSA) from the MHPA. While the FAA agrees with the designated removal of vernal pools from the MHPA, we are against designating airport property in the VPHCP. The airport land designations should be evaluated based on future airport needs and FAA requirements. FAA would prefer that airport property not be included in the VPHCP. Montgomery Field is a grant obligated airport and therefore, changes to the use, operation, or designation of on-airport property needs to have a request for land release that is approved by FAA.

FAA Advisory Circular 150/5200-33

Listed below are FAA recommendations per the FAA Advisory Circular (AC) 150/5200-33B or public-use airport operators regarding wetlands on or near airports. These recommendations should be considered in the VPHCP.

Section 2-4. WETLANDS. This section states "Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4." For Brown Field and Montgomery Field airports, the recommended minimum separation distances for is 10,000 feet. This section also states, "The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions".

Although this AC provides for an exception to the recommended separation distances, this decision to make this exception should be made by the FAA. The City and USFWS did not include the FAA in this decision to include the airports in the VPCHP let along the decision to make an exception to the recommended separation distances. The EIR/EIS does not guarantee that the following criteria will be meet:

T-2 cont

T-3

T-4

T-5

- T-3 The VPHCP has been revised to not include Metropolitan Airpark as a covered project. Metropolitan Airpark at Brown Field was approved by City Council on October 22, 2013 (Resolution No. 308483). The applicant is currently processing a Biological Opinion with the USFWS. The project description in the VPHCP has been revised to state that the vernal pool mitigation would be located at a site approved by the City, Wildlife Agencies, and FAA. See response to comment T-2 related to the potential for mitigation to occur within the boundaries of Montgomery-Gibbs Field and Brown Field).
- T-4 Comment noted. Please refer to T-1 and T-2 regarding FAA review and approval of land use changes The VPHCP has been revised to include a Minor Amendment Process for future projects and covered airport activities at both Montgomery-Gibbs Executive Airport and Brown Field Municipal Airport as described in Section 8.4.3 of the VPHCP and in the Final PEIR/EIS. The Minor Amendment Process would allow impacts to vernal pool habitat and VPHCP covered species located within the legal boundaries of the airport properties while meeting health and safety requirements of the airports. The City will evaluate whether or not to process future project(s) using the Minor Amendment process based on airport and FAA requirements.

The following features below demonstrate how the VPHCP Minor Amendment process would implement the objectives of Grant Assurance 24 to "make the airport as self-sustaining as possible under the circumstances existing at the particular airport" by streamlining the environmental and permit process for future projects:

- Includes MHPA Boundary Line Adjustment (BLA) that preserves the highest quality vernal pools and removes all Runway Safety Areas (RSAs) and key development areas identified by Airport staff from existing MHPA. BLA has been approved by Wildlife Agencies, analysis completed and included in draft EIR/EIS, and discretionary approval of BLA is part of project;
- Wetland deviation not required for future projects with vernal pool impacts consistent with the VPHCP;
- Mitigation ratios are set to ensure consistent standards;
- Includes Vernal Pool Management and Monitoring Plan;
- Includes all Covered Activities identified by Airport staff; and
- USFWS would issue a one-page consistency letter if a Section 7 consultation is required

Projects not processed through as a Minor Amendment would not be afforded the benefits of the VPHCP and would be processed consistent with existing City, State, and Federal regulations for wetlands not covered by the VPHCP.

T-5 Please see above response to comments T-2 through T-4.

1

- Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations.
- Enhancing such mitigation areas to attract hazardous wildlife must be avoided.
- The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations.
- A wildlife damage management biologist should evaluate any wetland mitigation
 projects that are needed to protect unique wetland functions and that must be located
 in the separation criteria in Sections 1-2 through 1-4 before the mitigation is
 implemented.
- A WHMP should be developed to reduce the wildlife hazards.

FAA Order 5190.6b

The City has contractual obligation to maintaining the airports in accordance of FAA regulations and guidelines. FAA Order 5190.6B covers the grant assurances an airport sponsor shall comply with when receiving a grant from the FAA. The following grant assurances would be impacted for the City of San Diego with the implementation of this VPHCP.

Grant Assurance 19. Operation and Maintenance, requires airport sponsors to operated airports "at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state and local agencies for maintenance and operation."

Grant Assurance 20, Hazard Removal and Mitigation, requires airport sponsors to "take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards." This includes wildlife hazards.

Grant Assurance 21. Compatible Land Use, requires airport sponsors "to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft." Per FAA Order 5190_6b, Section 21.6.f(6). Incompatible Land Uses include, "Introducing a wildlife attractant or failure to take adequate steps to mitigate hazardous wildlife at the airport can also result in an incompatible land use. Incompatible land uses can include wastewater ponds, municipal flood control channels and drainage basins, sanitary landfills, solid waste transfer stations, electrical power substations, water storage tanks, golf courses, and other bird attractants."

Grant Assurance 24, Fee and Rental Structure, requires airport sponsors to "maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport". Restrictions of the VPHCP could make it difficult for the airport to become self-sustaining by limiting new fee and rental structures (hangars, terminals, etc.)

Memorandum of Agreement

A Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes was completed and signed by each of the agencies in 2003. In this agreement, the signatory agencies agreed to "diligently consider the siting criteria and land use practice recommendations stated in FAA AC 150/5200-33. The agencies will make every effort to undertake actions that are consistent with those criteria and recommendations, but recognize that exceptions to the siting criteria may be appropriate".

A copy of the FAA AC 150/5200-33 was sent to USFWS prior to the February 10, 2017 meeting with David Zoutendyk and Susan Wynn from your office, the City of San Diego, and the FAA. The FAA AC 150.5200-33B siting criteria and the exception was discussed. The FAA is not in agreement with using the exception to the siting criteria due to aviation safety concerns. The siting criteria for separation of a hazard and the AOA for Brown Field and Montgomery Field airports are 10,000 feet. The vernal pools proposed for conservation at Montgomery Field are between 50 - 3,000 feet of the AOA. After this meeting, the FAA is still concerned that the mitigation requirements and vernal pool enhancements at the airports would attract wildlife hazards.

FAA Concerns

Aviation safety is the top priority of the FAA. As describe above, the FAA has concerns with the proposed VPHCP including wildlife-attracting land use closer than the recommended minimum separation distances of 10, 000 feet to maintain the airports AOA, the VPHCP hindering airport sponsors ability to comply with the grant assurances and control wildlife hazards. After the meeting on February 10, 2017 the FAA did not feel that our concerns were being taken seriously. Therefore, the Los Angeles Airports District Office has decided to elevate our concerns with the Brown Field and Montgomery Field airports inclusion in the VPHCP through the Western-Pacific Regional Office to the FAA headquarters level.

If you have questions or need more information concerning this matter, please contact me at the address above, by telephone at 310-725-3614, or by e-mail at gail.campos@faa.gov.

Sincerely,

Dail Campos

Gail Campos Environmental Protection Specialist

cc: David Zoutendyk, USFWS Myra Herrmann, City of San Diego Wayne Reiter, City of San Diego, Airports Division

LETTER U

California Native Plant Society

San Diego Chapter of the California Native Plant Society P O Box 121390 San Diego CA 92112-1390 conservation@cnpssd.org | www.cnpssd.org

February 21, 2017

Mendel Stewart Field Supervisor, U.S. Fish and Wildlife Service, 2177 Salk Avenue, Suite 250, Carlsbad, CA 92008

RE: Vernal Pool Habitat Conservation Plan

Dear Mr. Stewart,

Thank you for the opportunity to comment on the draft of the City of San Diego's Vernal Pool Habitat Conservation Plan ("VPHCP") and its associated combined Environmental Impact Report/Statement (EIR/S). Normally I comment on behalf of the California Native Plant Society's San Diego Chapter (CNPSSD), and confine my comments to native plant issues. As I have special knowledge of Del Mar Mesa and its vernal pools, due to research and frequent volunteer work in the area stretching back to 2010, I am addressing non-plant issues as a private citizen. Here I am combining both roles in one letter.

CNPSSD and other groups have sent comment letters on the VPHCP to the City of San Diego. They made critical points about continued take of vernal pools and species in the face of a clear directive to preserve vernal pools and to stabilize or increase populations of the seven species covered by the VPHCP. In the face of greater than 95% loss of vernal pools, the continued planned take of pools and critical habitat misses the point of the USFWS directive. The lack of research on current conditions, outdated and inaccurate maps of vernal pools, ownership, and pending projects, vague and incomplete population descriptions are all issues that need to be fixed before the VPHCP is approved, let alone implemented.

Most of the above quote is a verbatim quote from my comments on the preliminary draft from April 2015. Unfortunately, the City has chosen to denigrate those comments, summarizing them without context or source in an appendix of the current draft. Given the City's checkered history with vernal pools, I had hoped for better, since all of the problems identified need to be fixed to produce a workable VPHCP. I will go over them in order, before moving onto other problems.

Lack of Current Research on Current Conditions

The City has repeatedly asserted, without evidence, that the draft vernal pool database and map¹ are comprehensive and accurate, despite comments dating back to 2012 reviews of the original white papers that said this was not the case.

¹ http://sandiego.maps.arcgis.com/apps/webappviewer/index.html?id=7cfd12d64af8424b986af45712933b88



U-1

U-1

This comment letter1 from the California Native Plant Society of San Diego is duplicative of the comment letter received from the same organization during the CEQA comment period, identified as Letter D in these responses to comments. This letter provides the same general comments that have been responded to in the CEQA responses to comment Letter D. Please see responses to comment Letter D.

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To test this argument, in 2015 and 2016 I did a bit of research on Del Mar Mesa. It was easy to find mapped vernal pools that no longer exist. An unpaved road was closed in (I believe) 2011 or 2012 and brushed, all by City Department of Parks and Recreation. I knew there were pools of water along the road before it was brushed, so over the years I have gone into the area to try to remove branches, to see if the pools will return. Nonetheless, most of these areas have held water or vernal pool plants since before 2012, so by the City's definition,² they are not currently functioning vernal pools, and they were destroyed by City activity. **This loss is not reflected in the database or the map.** Photos and coordinates are shown in Table 1 below (pp. 3-6). Additionally, two of the vernal pools are functionally destroyed, because the bottom of the pool broke through the hard pan and drained into an underlying tunnel (presumably dug by rabbits). This is a fairly common occurrence on Del Mar Mesa. It is a mistake to assume that pools are permanent.

The critical point here is that the City had known vernal pools, they were massively disturbed by City personnel closing trails, and this change in condition is not reflected in the current database. If the database were complete, it would not be possible to find 15 degraded or destroyed vernal pools on City land under City management.

The vernal pool database does not have current data on pool conditions. As a result, pools are disappearing on City-controlled land.

The vernal pool database and maps are incomplete

This comment was made to the City twice before, and each time, the City has blandly asserted as a rebuttal that the database is complete. On what grounds and with what evidence? This matters to USFWS for three reasons:

- Pools that do not officially exist are not protected from damage by trucks and other impacts (after all, if there is no pool there, there is nothing to protect)
- During droughts, the unmapped road pools still generally form, while wild pools do not. The HCP is not designed to protect pools per se, it is designed to protect rare species that occur in them. An HCP that deliberately does not protect species by refusing to acknowledge their existence in a spot is not doing its job.
- Many people use Del Mar Mesa. If some pools are considered protected, while others are
 not, it both makes people confused and cynical about efforts to protect vernal pools, and
 it makes it harder to create education and outreach programs to encourage people to avoid
 and protect the pools. Note that I am not working for novel protections for the pools, I
 am simply trying to make sure that road pools are all protected equally.
 Back to the problem with the City database and maps. In 2015 I recorded data on

seventeen vernal pools (Attachment 1) that had formed from road ruts, which met the City's definition of vernal pools in footnote 2 below. In 2015, I provided coordinates for 28 unmapped pools that met the City's definition of vernal pools. On November 29, 2016, I went up and photographed them again. Several of the 2015 pools are no longer functioning pools, as the

² EIR Page 2-4:" The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species, based on the species fisted in Appendix A of the VPHCP. Consistent with the City's LDM Biology Guidelines Attachment II, A.3, depressions that are man-made, such as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indictor plant species. Road ruts and other seasonal depressions that are not vernal pools may contain wildlife associated with vernal pools, such as San Diego or Riverside fairy shrimp, but will not contain vernal pool plant indicator species (often referred to as road pools). The VPHCP and reference to vernal pools in this EIR/EIS also applies to these man-made road ruts and other seasonal depressions if they contain one or more of the covered species."

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bottoms have the hardpan and the pools now drain. Still, Table 2 (pp. 7-15 below) contain data on 25 unmapped pools that met the City's definition of vernal pools in 2015. If there is more rain, I will start watching for fairy shrimp in those pools in a few weeks. Many of the pools have supported fairy shrimp in the past.

This is the critical, key factor that the City needs to address: **There are vernal pools on City land, containing species covered by the VPHCP that are not in the City database, and** there has been no activity by the City to remedy the situation. Why not?

Please ask the City to update the database and map to include these pools. Additionally, please check all other vernal pool areas to find out the current status of all vernal pools, and to include vegetated road ruts that meet the City's definition of vernal pools.

Table 1. Mapped vernal pools that were brushed over in 2012, and/or no longer exist, as the bottom has broken through the underlying hardpan and the pool no longer holds water. Photos were taken November 29, 2016.



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Table 2. Unmapped vernal pools on Del Mar Mesa. These pools are not mapped in the VPHCP, but they hold water every year, except in extreme droughts. In 2015, the indicator plants and animals listed below each image were found on these pools. Pictures were taken November 29, 2016. When the pictures were taken, it was too early in the rain year for even visible fairy shrimp to be present, but fairy shrimp have been observed in many of them in the past.



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The "Expanded Conservation Alternative" (3.7 acres of added basin area) is the only acceptable alternative

There are two reasons for this statement: Vernal pool systems are >95% gone in San Diego, and the all of the alternatives guarantee both an additional 25% take of total vernal pool area and incidental take of the seven species covered by the VPHCP. All alternatives guarantee that more vernal pools will be taken for development.

However, in the interests of settling the long-running dispute over vernal pool destruction, we (CNPSSD) can support the Expanded Conservation Alternative.

We cannot support the Project alternative, as it results in avoidable impacts and avoidable take of endangered vernal pool species. As the EIR/S analysis demonstrated, these impacts can be totally and feasibly avoided. The difference between the preferred alternative and the Expanded Conservation Alternative is 3.7 acres of vernal pools. Developing this acreage will due effectively nothing to solve the region's housing crisis or to increase its business facilities, but that is a significant amount of pool acreage that does not need to be lost.

The EIR/S fails to adequately disclose the significant adverse impacts of continued permitting of take upon the viability of the Recovery Plan for endangered vernal pool species.

How does the project and other alternatives specifically impact or fulfill the specific criteria prescribed in the Recovery Plan? These recovery criteria are:

"Reclassification to threatened status may be considered for *Eryngium aristulatium* var. *parishii, Pogogyne abramsii, Pogogyne nudiuscula, Orcuttia californica;* San Diego and Riverside fairy shrimp; and the long-term conservation of *Navarretia fossalis*, a species proposed as threatened, will be assured when the following criteria are met:

 The following conditions must be met to maintain the current status of Navarretia fossalis. Eryngium aristulatum var. parishii. Pogogyne abramsii. Pogogyne nudiuscula. Orcuttia californica; San Diego and Riverside fairy shrimp in order to maintain genetic diversity and population stability of the listed species and other sensitive species:

 Existing vernal pools currently occupied by Orcuttia californica. Pogogyne nudiuscula, and Riverside fairy shrimp and their associated watersheds should be secured from further loss and degradation in a configuration that maintains habitat function and species viability;...

 Existing vernal pools and their associated watersheds located on Stockpen soils (Otay Mesa) should be secured from further loss and degradation in a configuration that maintains habitat functions and species viability, to provide for the recovery of species restricted to this soil type (i.e., *Pogogyne nudiuscula*)

 Remaining vernal pools and their associated watersheds contained within the complexes identified... must be secured in a configuration that maintains habitat function and species viability (as determined by prescribed research tasks)

The vernal pools and their associated watersheds contained within the complexes identified... are secured in a configuration that maintains habitat function and species viability (as determined by recommended research).

Secured vernal pools are enhanced or restored such that population levels of existing species are stabilized or increased

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4. Population trends must be shown to be stable or increasing for a minimum of 10 consecutive years prior to consideration for reclassification. Monitoring should continue for a period of at least 10 years following reclassification to ensure population stability. Delisting of each of the species is conditional on the downlisting criteria shown above, improvement (stabilized or increasing population trends) at all currently known sites: restoration protection, and management of the minimum habitat area and configuration needed to ensure long-term viability; and establishing historic but locally extirpated species populations when needed to ensure viability."

Funding for the VPHCP is unclear.

The Executive Summary identifies "Funding and availability of perpetual funding mechanism" [ES-8] as an issue of controversy, but they do not solve it. Chapters in the EIR/S lack certainty with regard to how the needs identified will be specifically funded. Potential funding mechanisms discussed in VPHCP Chapter 10 are not specific enough to determine how the costs identified in VPHCP Appendix E will be covered. Current fund balances and the amount of revenues to be generated should be clearly identified and specified for the line items identified within Appendix E Cost Analysis. Financial reports should be due annually and should accompany the required biological monitoring reports.

How do Army Corps rules now under consideration impact the VPHCP and what are the inconsistencies?

The VPHCP should go beyond Corp minimum standards¹, but appears deficient in terms of meeting a 100 foot minimum buffer and annual monitoring for restored pools of 10 years. What current laws, legal standards and plans impact the VPHCP? What are the inconsistencies?

Current Projects and Ownership are outdated

Again, Del Mar Mesa is the example. According to the VPHCP, the two projects on Del Mar Mesa that affect the vernal pools are Rhodes Crossing and whatever was supposed to go on with land owned by the Roman Catholic Diocese. If the City had consulted their own records, they would have found three active projects that will impact Del Mar Mesa in 2017 and thereafter. These are:

- Rhodes Crossing, which is much smaller than it used to be. Planned development comes within about 10 feet of known San Diego mesa mint populations.
- Merge 56, which contains the northwestern portion of the former Rhodes Crossing development, plus the southward extension of Camino Del Sur and Carmel Mountain Boulevard. My understanding is that their unreleased EIR is in something like the ninth iteration of its biology report, and it is over a year late. This project should be part of the VPHCP, especially considering that the men behind both projects sit on the Del Mar and Rancho Peñasquitos Planning boards, respectively.
- The Catholic Church sold their land in 2016 to a developer, who is currently designing a 500,000 square foot office complex for that site. The project is known as "The Preserve at Torrey Highlands," and presumably Development Services has paperwork on file. Not

³ http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/996958/2016-dvpgldraft-vernal-pool-mitigation-and-monitoring-guidelines/

Does the Draft VPHCP provide for the recovery of these species and thus conserve them?

The Southwest Center opinion criticized the practice of continued "incidental take" of vernal pool species and certain development in exchange for uncertain mitigation. The VPHCP will allow for continued take of vernal pool species (under "covered" and "Pipeline" projects) in a way that appears to conflict with the Recovery Standard of the law. The real driver of this HCP cannot be as a means to continue development by "incidental" destruction of vernal pools. This exact situation was already recognized by the court, and the VPHCP should remedy the problem, not continue the problematic practice.

Three Mitigation Issues

1. Weed control lists are inadequate. Criteria in the EIR/S include (p. 11-8): " Success criteria for weed cover shall be as follows: 0% cover for weed species categorized as High or Moderate in the Cal-IPC Invasive Plant Inventory, and relative cover of all other weed species is no more than 5% and 10% coverage in the pools basins and watersheds, respectively, for other exotic/weed species for all 5 years of the monitoring period." The VPHCP states (p. 9-9) " If the influx of invasive species involves a species included on the California Invasive Plant Council (Cal-IPC) "List A" or state or federal "noxious" weeds, within 30 days of such notice to the Wildlife Agencies, City staff biologists and/or preserve manager(s) will assess...[etc.]"

If one looks at the CAL-IPC lists, there are not any highly invasive, list A species (other than perhaps *Ehrharta*) that are likely to invade vernal pools. Instead, the big threats to vernal pools are species of moderate or limited invasibility, far down the lists. At Del Mar Mesa, the most problematic plants are tocolate (*Centaurea melitensis*, moderate invasibility), stinkweed (*Dittrichia graveolens*, moderate invasibility) and brass buttons (*Cotula coronopifolia*, limited invasibility).

Focusing on highly invasive species is misleading and useless. Please urge the City to change the weed mitigations to focus on whatever invasive species are threatening the pools and their watersheds, no matter how they are ranked by outside groups.

2. Weed control decision loop is too slow. As noted above, weed control decisions have a cycle of months or longer. If this protocol was strictly followed, annual weeds like brass buttons or tocalote will have set seed by the time weed control is started.

The alternative is quite simple: set up and train weed control groups (volunteer or paid) to scout vernal pools, control weeds as they find them, and report regularly on their actions. That is what I do at Del Mar Mesa. By doing this, I pulled the first stinkweed I found and headed off an infestation. Unfortunately, I merely reported the brass buttons infestation when I found it. After two years of agency inaction, I got permission to start hand-pulling it, which I will continue to do so long as I have permission. At this point, the infestation is no longer expanding, but those two years of delay allowed this weed to get



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Figure 1. Figure A on the left is from figure 4-8 in the VPHCP. Figure B on the right is from the VPHCP interactive online map. Note the squarish cutout in purple on the upper left side in A and outlined by green and gray in B. This is the proposed Preserve at Torrey Highlands. The outlines do not agree, which is rather important, since they propose to put a five story parking garage on the southern border, right next to the vernal pools, and their claim of the property outline has those pools on private land, not on USFWS land. Please update the VPHCP to reflect this reality.

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established in the biggest population of San Diego mesa mint on the mesa, and it didn't have to happen.

Please help the City to rewrite the weed control measures to make them proactive, rather than reactive. Identify suitable volunteers and workers, train them appropriately, give them access permission well in advance, require them to report regularly (annually) on their actions, and independently monitor to assure that they are doing a proper job. This is much simpler and more effective. CNPSSD will be glad to aid in such an effort.

3. Fence and Forget is an unfair summation, but that was my impression on reading the mitigation measures. The focus on fencing and exclusion, especially during development, is necessary but inadequate. Fences need to be repaired and maintained, and no agency has showed much interest or budget in keeping fences maintained once they are installed.

Fences, to the extent they are required, need to be respected by the community they serve. This leads to the next point:

4. Education, training, and outreach are critical mitigation measures. In the last few years, damage to vernal pools has been caused, among other things, by SDG&E trucks driving into them. Development Services cars driving into them, CalTrans trucks driving through them, mountain bikers riding through them, dogs playing in them, owners throwing bagged dog feces in them, kids jumping in them, City Parks personnel brushing them over, and high school cross country teams running through them, among others. What unites these impacts is that they could all have been avoided through proper outreach, education, and training. No one wants to bog a vehicle in a vernal pool, but every year, someone drives, rides, or runs into one unthikingly. Most mountain bikers avoid pools, simply because they have to clean their bikes after riding through them, runners avoid the ones that eat shoes, and so forth. It's not that hard to get people to police their behavior around pools, even in heavily traveled areas like the trails on Del Mar Mesa. Most of them do it already.

In the VPHCP, education is presented as a public good, and that is fine. But the focus on kiosks and signage is insufficient. Education, outreach, and training need to be part of active mitigation efforts to keep people out of pools. CNPS, San Diego Zoo, and San Diego Botanic Garden have discussed collaborating to create educational materials for vernal pools, and CNPSSD is happy to help the City create, distribute, and curate educational and training materials free of charge. What this requires from the City is an active willingness to permit and assist outreach, education, and training, both within its divisions and to other groups and agencies. To date, City personnel has slow-rolled public education, and training in the mitigation measures, and to work within the City, across agencies, with NGOs and local communities to help make them happen. It is a lot easier than it sounds, and it will benefit the other mitigation activities.

Climate change is an issue for San Diego fairy shrimp

San Diego fairy shrimp have an unusual reproductive biology that is poorly known. Past research indicates that their their eggs only hatch below 15°C (59°F), although the larvae need

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higher temperatures to reach maturity⁴. In the face of severe climate change, we may stop getting the cold winter storms that apparently trigger their eggs to develop and hatch. If such storms stop for a century or more (possible under the RCP 8.5 of the IPCC5), then the species will go extinct.

While the VPHCP is too small a plan to tackle global climate change, this risk needs to be recognized in the plan. The appropriate route is for the City to follow its own Climate Action Plan, exceed those goals, foster industry that does not contribute to climate change, and to encourage its neighbors and trading partners to do likewise.

Conclusion

Ellen Bauder points out "Given that <5% of the ecosystem remains, and much of this is in terrible shape, it is clear that many large and small compromises have been made in the years since the late 1970's. And pool conservation lost most of them." The most fundamental question regarding the Draft VPHCP is does the plan do enough to address the finding of the court that the previous practice of allowing "incidental take" of vernal pool species violates both the spirit and letter of the law? In essence, does the Draft VPHCP provide for the recovery of these species and thus conserve them? In order to pass muster, this HCP needs to actually conserve the seven species it covers, rather than trying to provide cover for continued development through "incidental" destruction of vernal pools. That approach has already failed.

If the Draft VPHCP gets the benefit of the doubt, if its mitigation and other measures could work, if the plan is followed, recovery is possible or likely, it still needs to be funded completely and implemented effectively. The Draft VPHCP still lacks certainty in this regard.

Despite these uncertainties, this VPHCP is an attempt to reconcile competing interests. I appreciate your efforts in this respect. In recognition of these efforts and in hope that the issues raised in everyone's comment letters will be addressed, I and CNPSSD support the Expanded Conservation Alternative, and plan to work with the City and agencies to insure that vernal pools and the species they contain are protected.

Thank you for taking my comments. Please keep me informed of all developments with this project, at conservation@enpssd.org and franklandis03@yahoo.com.

Sincerely,

Frack Fachs Frank Landis, PhD

Conservation Chair California Native Plant Society, San Diego Chapter

Attachments:

1. CNPSSD 2015 comment letter on Preliminary Draft VPHCP 2. CNPSSD 2012 comment letter on Vernal Pool White Papers

⁴ Eriksen, C. H. and D. Bel. 1999. Fairy Shrimps of California's Puddles, Pools, and Playas. Mad River Press, Eureka, CA.

California Native Plant Society

San Diego Chapter of the California Native Plant Society P O Box 121390 San Diego CA 92112-1390 info@cnpssd.org | www.cnpssd.org

April 10, 2015

Jeanne Krosch City of San Diego Planning Department 1200 Third Avenue, Suite 1400, MS 560 San Diego, California 92101

RE: PRELIMINARY DRAFT, CITY OF SAN DIEGO VERNAL POOL HABITAT CONSERVATION PLAN

Dear Ms. Krosch,

Thank you for the opportunity to comment on the preliminary draft of the City of San Diego's Vernal Pool Habitat Conservation Plan ("VPHCP"). Normally I comment on behalf of the California Native Plant Society's San Diego Chapter (CNPSSD), and confine my comments to native plant issues. As I have special knowledge of Del Mar Mesa and its vernal pools, I am addressing non-plant issues as a private citizen. Here I am combining both roles in one letter.

CNPSSD has also co-signed a letter by other environmental groups that analyzes the text of the VPHCP in detail. They make critical points about continued take of vernal pools and species in the face of a clear directive to preserve vernal pools and to stabilize or increase populations of the seven species covered by the VPHCP. In the face of >95% loss of vernal pools, the continued planned take of pools and critical habitat misses the point of the USFWS directive. The lack of research, outdated maps, vague and incomplete population descriptions are all issues that need to be fixed before the VPHCP is approved, let alone implemented.

Here I address issues not covered by the other letter.

My academic background is that I have a PhD in plant ecology from UW-Madison and an MA in botany from Humboldt State University. I have lived in San Diego since 2008 and I have hiked Del Mar Mesa since 2009. Since 2011, I have worked as a City Parks volunteer on Del Mar Mesa, tending trails, clearing weeds, and talking to people on Del Mar Mesa. Currently, I am working with CNPSSD volunteers and outside botanists to create a flora for Del Mar Mesa. Every year, I have watched the vernal pools form and dry down, and I am quite familiar with their fauna and flora, as well as the way they are treated by human visitors.

Since the process of a preliminary draft in a CEQA context is unclear to me, I hope that these comments and responses to them will be included in the draft CEQA documents to be released later this year. Clarification of the process would be very useful.



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The Preliminary Draft VPHCP as written has several issues.

- It is difficult to evaluate the HCP without the management and monitoring plan attached (Appendix D). The draft needs to contain this document, and I will not comment further on this.
- It is fundamentally flawed in its treatment of road pools, which affects the San Diego fairy shrimp and perhaps other species. The issue is shown by the apparent fact (demonstrated below) that over 40% of the habitat of the San Diego fairy shrimp on Del Mar Mesa, during drought years, is not only not protected, it is not mapped. Logically, it is extremely difficult to say that a habitat conservation plan conserves habitat if it misses that much habitat for a species it is supposed to conserve.
- There are substantial errors in the map, including not mapping a CalTrans inholding whose "maintenance" has caused damage to one of the covered species.

I will deal with these issues in each section below.

Road Pool Issues

According to the VPHCP: "The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species, based on the species identified by the U.S. Army Corps of Engineers (USACE 1997), which are listed in Appendix A. Consistent with the City's Biology Guidelines Attachment II. A.3, depressions which are manmade, such as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indictor plant species. Road ruts and other seasonal depressions which are not vernal pools may contain wildlife associated with vernal pools, such as San Diego or Riverside fairy shrimp, but will not contain vernal pool plant indicator species. The VPHCP also applies to these manmade road ruts and other seasonal depressions if they contain one or more of the covered species." (p. 1-3)

Unfortunately, this criterion was not used to map the road pools on Del Mar Mesa. The map provided by the City⁵ shows the main powerline access road through Del Mar Mesa (in parcels APN #: 3090101800, 3090101500, 3090102200, 3090100200, 3090101800, 3060501200, 3060501100, and 3060502200) as having essentially no vernal pools on it. This is contrary to my experience and the experience of everyone who passes through there in the winter, for the road hosts a plethora of pools, many of which are visible on the City online map even through the overlay. In my experience, most or all of these pools hold fairy shrimp during the winter months. Additionally, as shown on Table 1 on the next page, all of these pools also hold vernal pool indicator plants, while a full dozen of the mapped pools (including Mapped Vernal Pools A and B in Table 1) had no wetland plants currently, and probably held no fairy shrimp last winter, although admittedly I did not check.

To determine whether the road pools meet the criteria for VPHCP-covered vernal pools, I walked the road on April 9, 2015 and simply recorded the plants and animals that were present in each pool. I recorded data in 28 unmapped road pools, and for comparison, in 5 mapped vernal pools that are immediately adjacent to the road pools. The data are presented in Table 1 (next two pages)

All of the road pools on the list contained vernal pool indicator species under the VPHCP's definition. Conversely, mapped vernal pools A and B are part of a complex of approximately a dozen pools in an area where the trail was closed by brushing years ago.

⁵ http://sandiego.maps.arcgis.com/apps/webappviewer/index.html?id=7cfd12d64af8424b986af45712933b88

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Table 1. Road pool and mapped vernal pool data from Del Mar Mesa, collected April 9, 2015. X show presence of organisms (or their remains) at each pool. Although tadpoles are not part of the VPHCP, I recorded them as well. The road pools on Del Mar Mesa are the only breeding areas left for spadefoot toads and Pacific treefrogs. The VPHCP provides an umbrella of protection for many species.

Pool	Location (Lat, Long)	Callitriche marginata	Crassula aquatica	Elatine californica	Lilaea scilloides	Pilularia americana	Psilocarphus brevissimus	Tadpoles
Mapped Vernal Pool A	32.947507,- 117.164116							
Mapped Vernal Pool B	32.947149,- 117.163644							1
Mapped Vernal Pool C	32.945481,- 117.163796				x		х	x
Mapped Vernal Pool D	32.94503,- 117.16523	х			x	х		1
Mapped Vernal Pool E	32.947591,- 117.164655	Х			x	X		
Road Pool 01	32.951586,- 117.168899	x					х	
Road Pool 02	32.951477,- 117.168999						x	
Road Pool 03	32.951574,- 117.168645				Х		х	х
Road Pool 04	32.951476,- 117.16797						x	
Road Pool 05	32.950905,- 117.167471				x	X	х	x
Road Pool 06	32.950449,- 117.16716	x				X	_	1
Road Pool 07	32.950236,- 117.166901				х	х		1.11
Road Pool 08	32.94995,- 117.166622	X			X	X		
Road Pool 09	32.949798,- 117.166455					x		
Road Pool 10	32.949548,- 117.166242				x	X		
Road Pool 11	32.949382,- 117.166092				x	x		
Road Pool 12	32.949216,- 117.165969	х	х		х	x		
Road Pool 13	32.949085,- 117.165861					x		
Road Pool 14	32.948958,- 117.165759					x		
Road Pool 15	32.948654,- 117.166626					x		
Road Pool 16	32.948546,- 117.167023					x		
Road Pool 17	32.948562,- 117.165505	-				x	-	2
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Pool	Location (Lat, Long)	Callitriche marginata	Crassula aquatica	Elatine californica	Lilaea scilloides	Pilularia americana	Psilocarphus brevissimus	Tadpoles
Road Pool 18	32.948302,- 117.16517	x		x	x	x		
Road Pool 19	32.946321,- 117.164033				x			х
Road Pool 20	32.946094,- 117.164006	2.2	Χ		x	x	х	
Road Pool 21	32.945351,- 117.164539	х						
Road Pool 22	32.945164,- 117.164962				х			
Road Pool 23	32.944347,- 117.16553				х	x		
Road Pool 24	32.944293,- 117.165734						х	
Road Pool 25	32.944117,- 117.166583				х	x	х	
Road Pool 26	32.944128,- 117.167273						x	
Road Pool 27	32.944985,- 117.166815						x	
Road Pool 28	32.945166,- 117.167132		I				х	

(continued from page 2) After the trail was brushed, I went through and physically removed the brush from the vernal pools (during the dry season, with ranger approval) since I had observed that tannins leached by dead wood and leaves appear to inhibit pool organisms. Even with these efforts, today, these pools rarely fill, and have not in my experience supported any VPHCP species since the trail was brushed closed.

The critical issue is that, in a low rainfall winter like 2014-2015 or 2013-2014, the Del Mar Mesa vernal pools off the road (with two exceptions) do not fill or support fairy shrimp. Conversely, approximately 66 road pools, both mapped and unmapped, hold water, due to the additional compaction of tire ruts. Most of these pools support fairy shrimp. Of those 66 road pools, 28 are not on the city's maps. Therefore, over 40% of the road pools on Del Mar Mesa are not covered by the VPHCP in its current form. They need to be included in the VPHCP.

I understand from talking with AECOM personnel at the 2012 workshops that road pools are problematic, but that is not a reason to exclude road pools from the VPHCP. While yes, those pools are more heavily impacted, both by public use by hikers, dog walkers, mountain bikers, and equestrians, and by trucks driven by SDG&E. City Parks rangers, police, sheriffs, and CDFW wardens. I can understand why City planners might want to keep such heavily impacted pools out of the VPHCP. Unfortunately, this strategy will backfire rather badly. The road pool problem is one of public legitimacy. Imagine trying to explain to a member of the public that one road pool is not protected and can be disturbed without penalty, while another road pool a few yards away is protected. An uninformed member of the public will be confused, because the two kinds of pools look superficially identical. An informed member such as myself will be frustrated, because the fairy shrimp in the unprotected pools are there for anyone to see, while the protected pools could be empty. When the City imposes an arbitrary rule on what is protected and want is not based on an incomplete map or outdated surveys, the plan loses

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legitimacy in the eyes of the public. All the fences in the world are not going to protect pools if people don't respect them, especially if they think that vandalizing the fences makes some sort of statement. I say that not as someone who tears down fences, but as someone who has tried to repair fences for years on Del Mar Mesa and has spent years trying to find better ways to keep people out of pools. It is essential that the VPHCP be seen to be doing its function in a fair and effective manner. That will encourage public buy-in and participate in protecting San Diego's vernal pools. Haphazard designations based on years-old data may well encourage skepticism and vandalism, as will building fences without public engagement.

The requirement of public participation is far from wishful thinking on my part. In the absence of any official action on vernal pools, I have spent years talking with the people illegally using Del Mar Mesa, working to find ways to informally protect Del Mar Mesa's pools. Most mountain bikers will not ride in the pools anyway, because the mud clogs their chains and gear shifts and they need to clean their bikes afterwards. From my personal observation, most of the damage appears to be caused by teenagers and people new to the mesa. Most mountain bikers consider themselves environmentalists, and even before I began volunteering, many had instituted a word-of-mouth policy of avoiding pools that contained tadpoles. Today, they also avoid most of the pools and plants, including the San Diego button celery shown in Figure 1.



Figure 1. This trail is part of the Del Mar Mesa trails plan. The plants in the foreground are San Diego button celery, and the pool they border is covered by the VPHCP. The trail in the background is where the mountain bikers ride. This is the kind of voluntary protection achieved by informal outreach.

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I strongly urge the City to build on this informal set-up, rather than to destroy it. The process for doing so is straightforward:

- Officially include in the VPHCP all road pools that meet the VPHCP standards. This
 includes pools throughout the VPHCP's jurisdiction, not just on Del Mar Mesa.
- Protect these road pools, through monitoring, invasive species removal, and similar techniques.
- Work with USFWS to allow taking based on official vehicle use (by SDG&E and others) as is already permitted. Also work to permit incidental (accidental) taking as part of recreation and education efforts. This is no more than keeping the status quo. Assuming that utilities and other groups with take permits act responsibly, there is no reason to use the presence of road pools to curtail their activities.
- Include outreach and education as active conservation and management measures in section 5.2 and elsewhere. While the VPHCP does consider impacts of education, it does not consider the benefits of education and outreach for conservation and management. This is a major lapse. People have been engaged with vernal pools in San Diego for decades. This includes not only scientists and environmental groups, but Girl Scouts (who years ago installed the ring of stones around unmapped pools seen in Figure 2 below), grade school students (who are active in protecting Carmel Mountain's pools), mountain biking organizations (who help close trails), rangers, and volunteers like myself who have spent many hours talking with everyone we meet by the pools. Most importantly, it includes all the people who walk or ride around the pools and stay out when the trails are wet. A small minority of the public are causing the vast majority of the problems. The majority of people are positively engaged and trying to leave no impact. The City needs to get this majority on its side to protect the pools if this plan is to have any chance of success. Outreach and education are the tools for this effort.
- Where pools occur in heavily-used trails, do not fence them. This serves multiple purposes. The trails have to be passable by vehicles, so fencing is infeasible. Road fencing gets vandalized, and often the pieces are thrown into the pools. Moreover, the pools are water sources for animals, including deer and coyotes, and fencing them off stresses the animals, forcing them to jump the fence (and potentially get trapped), to depend on polluted urban runoff, or to venture into people's back yards. Fencing pool complexes away from roads is a different issue, but even these fences get vandalized, while fences and k-rails do keep motorized vehicles out of pool complexes, they are not a panacea, and they do not stop mountain bikers or hikers.
- Where people are concerned that road pools will spread and impede development rights, work on education and outreach. Educate people about the activities that form road pools, including truck traffic on wet roads (SDG&E) or high speed turns on dry roads (wardens pursuing a fleeing mountain biker) that gouge and compact the road surface, as well as how vehicular traffic through pools spreads propagules. The City cannot use fencing and enforcement to stop the spread of road pools inhabited by vernal pool species. Indeed, CDFW wardens created an incipient road pool on Del Mar Mesa through their high-speed enforcement activities two years ago. If creation of road pools is considered a problem, the only solution is to follow the conservation and preservation

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measures that environmentalists have advocated for years, and to separate the pools from traffic.



Figure 2. One of the road pools. The partial ring of stones was installed by Girl Scouts to encourage vehicles to miss the pool. Most vehicles now do.

Mapping Errors

In general, the maps included in the document are incomplete and too small. When the legend isn't legible and the pools aren't visible, the map isn't useful. Considering the hurdles I had to overcome to access the online map, I strongly advocate going the old fashioned route and publishing the maps in the forthcoming draft. In that draft, maps of the vernal pool areas, vernal pool complexes and especially maps showing non-conserved and conserved pools need to be included. All maps in the draft need to be larger, to have legible legends and to have all pools visible.

In examining the City's online map, I caught two errors and a major concern. The first error involves parcel APN 3060502600 on Del Mar Mesa. At least part of this parcel belongs to CalTrans, although the map shows it as a City possession. This is problematic, as a CalTrans truck drown through Mapped Vernal pool C on its way to brushing and fencing its property. That brushing activity involved branches cut from a sensitive Nuttall's scrub oak (*Quercus nuttallii*) that were piled atop part of the San Diego button celery population at that location. The button celery is currently trying to grow up through the cut branches, and a CalTrans biologist

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excused their actions on the grounds that they have a take permit. Has CalTrans been contacted about its property on Del Mar Mesa in regards to the VPHCP? Is it willing to comply with the City VPHCP while its vehicles are on City property? What is CalTrans' response?

The second error is Parcel APN 30958101, which is marked as 100% conserved. According to the Merge 56 development proposal, this parcel will be at least half filled if the southern extension of Camino Del Sur is constructed. Has the City taken these impacts into account and proposed proper mitigation for this impact? More generally, why are the pipelined projects not shown on the online map?

While I am not as familiar with Otay and Brown's field and other areas in the VPHCP, in the online map, there appear to be the same kinds of questionable mapping, with missed pools at Brown's field (APN 6460302600), and on Otay Mesa (e.g. APN 6452802300).

Given the number and importance of mapping mistakes on Del Mar Mesa, I very strongly suggest that the City and its consultants go over the map again, review it against active ("pipeline") and proposed developments, double-check the ownership of all parcels, and otherwise insure its accuracy. This is a critical part of legitimizing this program in the eyes of the public.

Final thoughts

Given the vagueness and lack of data in the VPHCP, and especially given the lack of a management and monitoring plan, I am very concerned about how they will be implemented. An image like Figure 1 was sent to the City as part of the comment on the Del Mar Mesa trails plan, to simply point out that there were vernal pools and endangered species present on the trails, and that these needed to be accounted for. While the CNPSSD and USFWS comments on this issue were noted by the City, no change at all was made in the Mitigated Negative Declaration. Thus, when I see 28 pools left out of Del Mar Mesa, I wonder whether the City intends to actually protect those pools, or whether they will be ignored, as happened in the DMM MND.

Hopefully we can work together to not just protect vernal pools, but to make them a normal part of life in San Diego, much as they are in Sacramento County. We are more than willing to help make this happen, provided the City comes up with a workable VPHCP that follows USFWS and court guidelines, and then implements it effectively.

Thank you for taking my comments.

Sincerely,

Frank Frank

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November 1, 2012

Ms. Jeanne Krosch Development Services Department, Planning Division City of San Diego 1222 First Avenue, MS 413 San Diego, CA 92101-4101

RE: Vernal Pool Habitat Conservation Plan White Papers

Dear Ms. Krosch:

We appreciate the opportunity to comment on the recommended finding of a mitigated negative declaration for the City's Vernal Pool Habitat Conservation White Papers. The California Native Plant Society (CNPS) works to protect California's native plant heritage and preserve it for future generations. CNPS promotes sound plant science as the backbone of effective natural areas protection. We work closely with decision-makers, scientists, and local planners to advocate for well informed and environmentally friendly policies, regulations, and land management practices. In regard to the proposed plan, we have two major concerns, focused primarily on white papers three and four, the Adaptive Management and Monitoring Strategy. Based on years of experience with the vernal pools on Del Mar Mesa, we believe that the strategy proposed will not adequately safeguard the most active, most often filled, vernal pools, due to an apparently incomplete database of vernal pools used for the white papers, an inadequate characterization of the threats they face, and inadequate methods for managing them.

Understand, please, that our primary goal is the protection of vernal pools, and our concern is that the plans laid out in the white papers fail to provide adequate protection. It definitely fails to protect the most active pools on Del Mar Mesa, and we are concerned that similar weaknesses show up in other pool complexes which we less regularly visit.

The first problem is that the white papers were created using only an existing database. Because we cooperate closely with the Parks Department to monitor Del Mar Mesa, we were given a copy of the vernal pool map for that area. It is evident from that map that at least nine pools were never mapped, and at least one of those unmapped pools contained fairy shrimp in 2012. The unmapped pools are in roads, and we understand that early workers made a decision that so-called "road rut" pools were not vernal pools, and therefore did not map them. Subsequent workers did map pools in roads elsewhere on Del Mar Mesa, but these nine were never mapped.

We are therefore very concerned that the database used in this project is incomplete. In early sessions, we offered to ground-truth the Del Mar Mesa database free of charge in order to advance this project. Unfortunately, that offer was ignored. Later, we reported the location and contents of these nine pools, without any response. In many scientific fields, it is standard



practice to submit data to outside reviewers, for them to find issues with the data that can be corrected. The City's repeated failure to do this forces us to question how complete and accurate their vernal pool database is. Questions raised by reviewers of the white papers about the completeness and accuracy of surveys only heighten our concern.

The critical problem here is that the HCP is based on the presence of seven focal species, while the maps used in the database rely on data gathered based on pool mapping, where pools were defined by at least two waves of workers using diverging criteria. To be successful, the HCP has to protect the seven focal species where they occur. Depending on maps of pools is therefore insufficient.

The second problem is that the most active pools on Del Mar Mesa are the road-rut pools. The issue is simple: the roads are compacted, and they hold water better. They fill up earlier, with less rain, and last longer before drying down. In 2012, all but one of the active pools on Del Mar Mesa were road rut pools, although many rare plants bloomed in mud that was never inundated. Given that climate change models uniformly predict fewer wet years for the foreseeable future, these road rut pools will be the only pools active in most years.

Unfortunately, the road rut pools are explicitly not covered by the white papers. The authors of the management strategy are correct: most of the pools on Del Mar Mesa are not road rut pools, and the principal threat to these other pools are invasive plants. Unfortunately, these pools only become active in the wettest years. In all the other years, they remain dormant, while the listed species that are the focus of the HCP are concentrated in road-rut pools, in areas that experience substantial human traffic. Because of this situation, in most years, the proposed plan provides no protection to the most active pools on Del Mar Mesa. Therefore, it fails in its fundamental goal of habitat conservation for the seven focus species.

Worse, the plan for dealing with human traffic (fencing and annual sign replacement) is laughably inadequate. On Del Mar Mesa, signs are torn down weekly, and fences are typically breached within three days of closure (this from two years of weekly and biweekly monitoring). The white paper management plan is totally inadequate to deal with this level of vandalism.

There is a solution that was missed by the white papers: education and public involvement. San Diego, unlike Sacramento, has done pitifully little to educate the public about vernal pools. Where Sacramento has SacSplash (www.sacsplash.org) a school science program that incorporates vernal pools into elementary science lessons, San Diego has little but a few articles and a few short videos. This does not have to be the case: Dave Hogan of the Chaparral Lands Conservancy has done a remarkable job of educating the children at Ocean Air Elementary School about the vernal pools on adjacent Carmel Mountain, and he has recruited them to help protect vernal pools. CNPS members such as myself are very active in monitoring Del Mar Mesa, picking up trash, reporting vandalism, and educating the public, all as volunteers. Some members of the mountain biking community are similarly helpful, and even bikers who regularly trespass have created a set of "folk conservation rules" about which pools to avoid and when (for example, they avoid riding through pools with tadpoles). Some bring their children out to watch the tadpoles every spring.

The point is that the City could readily recruit citizens to help monitor and protect every vernal pool complex in the City. The interest is there, and skilled individuals are happy to train



volunteers whenever possible. The two things lacking are public knowledge, and the will of the City to support and expand existing efforts. That knowledge is readily available, both locally and by adapting the freely available SacSplash curriculum. Volunteers are freely available too. Unfortunately, utilizing these free resources and community enthusiasm is not part of the white papers.

From the outside, it appears that the City (and perhaps the agencies) want to treat its vernal pools as white elephants. They are to be locked away from the public, protected to comply with court order, but otherwise to be ignored because they have no intrinsic value. This approach is both sad and short-sighted. While we absolutely agree that vernal pools are fragile and need protection, they are amazing, scientifically interesting and perhaps commercially valuable. Getting the public to value them will make protecting them far easier.

From a scientific perspective, vernal pools are miniature, high-speed ecosystems. From dry mud, they develop into fully functioning miniature ponds in a matter of weeks, then dry down and disappear in another month or two. Moreover, each one is different, and they differ between years in the ecosystems they support. As a trained ecologist, I wish that more people could study vernal pools. They develop so fast that they can readily be studied by scientists who are trying to understand how to restore wetlands on highly degraded sites, as well as by researchers interested in how ecosystems self-assemble. Unfortunately, vernal pools are so rare that we have to spend all our time protecting them from development and careless trespassers.

Vernal pools even have potential commercial applications. Most vernal pool organisms go dormant when the water goes away, and they can stay dormant for decades, if not centuries. If humans could do this, we could travel between stars, as in the movie *Avatar*. More practically, the various dormancy systems used by vernal pool organisms might be used to extend the shelf life of pharmaceuticals, to store live vaccines without refrigeration, and to extend the storage life of transplantable organs. Unfortunately, because vernal pools are so rare, no one can do that research, find out whether there's a million dollar process waiting to be discovered. Instead, we have to spend all our time protecting them from development and careless trespassers.

Whether you believe these ideas or not, the fact is that people value vernal pools. This includes scientists, amateur naturalists, environmentalists, even hikers and mountain bikers who stop and admire them without knowing what they are. Yes, they need to be protected, but public ignorance will not protect them. Silence from the City and the agencies feeds into misleading stories, spread on the internet by vandals who claim that they are increasing public access against idiotic and misguided fencing attempts by clueless bureaucrats. The City could easily counter such silly claims if it chose, and we hope you will.

Ultimately, it is sad that the City has so far chosen to treat vernal pools as a problem. Yes, they are fragile, and they absolutely must be protected. Unfortunately, that protection cannot come from building fences and refusing to educate the public about the value of vernal pools. The solution has to come from engaging San Diegans in protecting a unique treasure. So far, the City has failed to use the palpable interest and enthusiasm around vernal pools. There are volunteers and school children already helping on their own, often against bureaucratic inertia. This is a waste on all fronts.

If the City wants to truly protect vernal pools, it needs to release its database to qualified



researchers and ask whether it is complete, rather than making bland assertions. It needs to document current conditions, especially of the road pools on Del Mar Mesa. The parks department documents this damage, but that information has not made it into the white papers. Finally, the City can only protect vernal pools if it educates the public, both through schools and through the media, about vernal pools and how to protect them. None of this is difficult—Sacramento has done it for years—but it requires thinking of vernal pools as some of San Diego's most unique treasures, rather than as a nuisance.

Thank you for taking our comments.

Sincerely,

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Frank Landis, PhD Conservation Chair California Native Plant Society, San Diego Chapter



Dedicated to the preservation of California native flora

LETTER V

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V-1

V-2

February 21, 2017

Field Supervisor U.S. Fish and Wildlife Service, 2177 Salk Avenue, Suite 250, Carlsbad, CA 92008. fw8cfwocomments@fws.gov

RE: Comments on the Vernal Pool Habitat Conservation Plan

Thank you for the opportunity to review and comment on the Draft City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP). The VPHCP represents an important act of proactive conservation planning on the part of the City of San Diego (City) and U.S. Fish and Wildlife Service (USFWS) and represents significant potential and opportunity to provide crucial and long-promised conservation for critically imperiled vernal pool wetlands and dependent sensitive species. The following comments are offered in the spirit of support and constructive criticism in the hope that the purpose, goals, and ultimate promise of the VPHCP are fully realized.

General Comments

Several properties identified in the VPHCP actually contain far more vernal pools than are described in the VPHCP (see attached maps and GIS data). And some properties contain vernal pools that are not identified in the VPHCP. At least nineteen additional pools are located on the City's Pueblo Lands North property located east of I-805 and north of Eastgate Mall Road in addition to the four pools (or five pools depending on differing VPHCP maps and text) identified on this property in the VPHCP, and three City-mapped pools here are actually much larger than shown in the VPHCP. Pools on this property are damaged but highly suitable and appropriate for restoration. Another twenty-four additional pools are located on the City's Pueblo Lands South properties located east of I-805 and north and south of Nobel Drive. And <u>dozens</u> more vernal pools are located in southwestern Otay Mesa on various private properties than are mapped in the VPHCP.

V-1 This comment letter from the David Hogan is duplicative of the comment letter received from the same individual during the CEQA comment period, identified as Letter E in these responses to comments. Overall, this letter provides the same general comments that have been responded to for Letter E. Please see responses to Letter E. For those new or different comments, responses are provided below for this NEPA letter, identified as Letter V.

V-2 Please see response to comment C-11. Additionally, the number of pools identified on the Pueblo Lands North property as noted in the HCP is based on the 2002-2003 vernal pool inventory. Updated mapping efforts have been conducted and are addressed in a projectlevel Environmental Impact Report (EIR) prepared for the Pure Water San Diego Program, North City Project No. 499621/SCH No. 2016081016. Based on the presence of these additional pools, the City's Pueblo Lands North property is not an appropriate location for the Pure Water San Diego Program and should be included in the expanded MHPA at 100%. The City's Pueblo Lands South property south of Nobel Drive should be included in the expanded MHPA at 75%. And in southwestern Otay Mesa, the expanded MHPA should be reconfigured to include one of the most important <u>existing</u> vernal pool complexes in Otay Mesa (J 13 South; attached maps and GIS data) rather than sacrificed for restoration mitigation on the more conveniently-located, mesa-edge areas bordering Dillon and Finger canyons where few vernal pools were even present.¹

V.F

V4

Clarification should be provided on the ownership/land control status of one particularly important vernal pool property located in northern Kearny Mesa south of SR 52, immediately east of the Sanders property, and immediately west of Magnatron Boulevard. It is unclear from property records whether the property is owned and/or controlled by the City or U.S. Navy. The property supports many pools and was identified by Dr. Ellen Bauder in 1986 as a part of the U 15 Complex. Yet the VPHCP identifies no vernal pools on this property and no expansion of the MHPA is proposed here. This should be clarified in the final VPHCP and included in a the expanded MHPA at 75% if the property is owned, leased, or otherwise controlled by the City.

The VPHCP, EIR, or EIS should provide information on whether all properties containing vernal pool soils or other modelled vernal pool habitat within the City of San Diego have been surveyed for the presence of vernal pools or vernal pool species and whether this information was used as a basis for proposed expansion of the MHPA. If any other properties have not been surveyed but support suitable soils, other modelled vernal pool habitat, or are located within vernal pool complexes previously identified by Bauder or others then the entirety of these properties should be included within the MHCP at a 75% conservation level.

Please provide additional information on the relationship between the duration of the take permit issued under the VPHCP and the goals of the VPHCP to provide management and monitoring in perpetuity. How will the City be obligated to uphold the stated goals of the VPHCP to manage and monitor vernal pools and covered species in perpetuity past the expected 2047 expiration of the City's VPHCP and MSCP Subarea Plan (SAP) permits?

Chapter 2

Please clarify the regulatory relationship between the VPHCP and HCPs prepared by San Diego Gas and Electric (SDG&E) and the San Diego County Water Authority (SDCWA). This issue is of particular concern where conserved lands owned by the City of San Diego seemingly provide

- V-3 Please see response to comment V-2. The Public Utilities Department (PUD) has determined that adding the Pueblo Lands South property to the HCP would not be appropriate at this time because it is not a regulatory requirement of the VPHCP.
- V-4 The proposed re-configuration of the preserve on west Otay Mesa is not consistent with the VPHCP's overall conservation strategy which is to allow impacts to degraded vernal pools with low long-term conservation value in exchange for restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation value in the MHPA. The proposed re-configuration would result in greater edge effects and will be more difficult to manage than the proposed project, therefore no change to the preserve was made.

Only Bouder's small J 13 E complex is located in the VPHCP expanded MHPA at 100%. The numb larger (and still-intact and functional) J 13 S complex is entirely excluded from the VPHCP expanded MHPA except under the unlikely VPHCP "Expansion Alternative".

protection for vernal pools and vernal pool species but where SDG&E claims a right of access and routinely uses roads through vernal pools to reach utility infrastructure on or near City conserved lands. For example, research by the City of San Diego Park and Recreation Department Open Space Division found that legal descriptions of several properties owned by the City in the Carmel Mountain and Del Mar Mesa preserves do not appear to include rights of access by SDG&F (see attached City cease and desist letter). Yet SDG&F asserts (but does not appear to have lawfully obtained) prescriptive easements on these properties and routinely drives through vernal pools supporting listed species in dirt utility access roads. This issue should be reviewed by City and USFWS to determine the true extent to which SDG&E has a legal right to utilize these roads and in turn whether use and maintenance of these roads is a part of the SDG&E HCP or this VPHCP.

Chapter 3

Little mousetail and Western spadefoot toad should be included as covered species under the VPHCP. The justification for excluding little mousetail because "the same species occurs outside of San Diego County"² is also true for several of the other covered vernal pool species yet these are still included in the VPHCP.

Little mousetail should be protected and restored in City of San Diego vernal pools because it is an important element of the biodiversity of these vernal pool ecosystems irrespective of any taxonomic questions. Western spadefoot toads should also be included as a covered species under the VPHCP because they are a highly sensitive vernal pool species in San Diego, because they are a California Species of Special Concern, because providing for protection of this species would help provide important upland buffer preserve areas around protected vernal pools, and because restoration activities could result in significant harm to this species if it is not taken into account as an important target species in vernal pool restoration and management.

Chapter 4

The Saint Jerome's Church campus and covered project vernal pool preserve configuration are out-of-date. The Church is attempting to sell the property and a developer(s) appears to have secured options for development of a shopping center on the property. As such, the covered project and vernal pool preserve configuration previously negotiated for this property are no longer applicable and the entire property should be added to the expanded MHPA at 75% due to the presence of important vernal pools, important vernal pool soils necessary and suitable for restoration, and the location of the property adjacent to the Clayton property that has been purchased for vernal pool preservation and restoration.

V-5

2. VPHCP at 1-1.

V-5 Please see responses to comments on Letter I regarding the St. Jerome's Church property.

For the 5.2 acre Pasatiempo Parks site on the west side of Pasatiempo Avenue, the City should determine whether SDG&E truly has legal rights to utilize the dirt road across this site (see comments under Chapter 2 above). Please include language in the VPHCP that any future trails impacting vernal pools on this site shall be routed to avoid vernal pools and shall include trail fencing and vernal pool interpretive signs.

The loss the City's Pueblo Lands North property north of Eastgate Mall Road for the Pure Water San Diego Program is an unacceptable new addition to the VPHCP since distribution of the preliminary review draft document and would significantly undermine the goals of the VPHCP. This property contains important vernal pools, presents an important opportunity for restoration_ and should be included in the expanded MHPA at 100% with an alternative property identified for the Pure Water San Diego Program.³

The loss of any vernal pool preservation or restoration opportunities on a property already owned by the City of San Diego significantly undermines the purpose and goals of the VPHCP to restore, enhance, and preserve vernal pools with long-term conservation value in the MHPA. On the Pueblo Lands North property, vernal pools have been damaged or lost to various impacts resulting from decades of neglect by the City. Yet the property still supports at least twenty-three functional pools and a relatively significant area of vernal pool soils highly suitable for restoration on a defensible site. But the City is essentially rewarded for neglecting the site with mitigation proposed for just four "road" pools mapped by the City.

In the event that the Pueblo Lands North property is not included in the expanded MHPA, the proposed 2:1 mitigation ratio should be based on the loss of all former and/or potential vernal pool habitat on the Pueblo Lands North property rather than to just the few vernal pools mapped by the City on the site. Dr. Ellen Bauder's mapped 1986 I 12 vernal pool complex or mapped suitable vernal pool soils are a more legitimate basis for determining the extent of vernal pool habitat requiring mitigation for development of this important property.

For the Sanders property, VPHCP map Figure 2-2 should be updated to reflect the proposed 100% hardline vernal pool preserve / mitigation for the Pure Water San Diego Program on the Sanders property rather than the 75% conservation level shown in the current Figure 2-2. If the Sanders property is not used as mitigation for the Pure Water San Diego Program, then all non-landfill portions of the Sanders property should be included in the expanded MHPA at 75%.

The VPHCP should also provide information on whether the proposed Pure Water San Diego Program mitigation on the Sanders property duplicates any required mitigation measures for this property that may have been included in a previous USFWS Section 7 consultation transferring

^{3.} One possible alternative site is the City's Pueblo Lands South property south of Nobel Drive. Another is the westernmost portion of the Sanders property.

this property from the Navy to the City. Additional mitigation vernal pool mitigation should be required for the Pure Water San Diego Program if vernal pool preservation was already required in the Section 7 consultation transferring the Sanders property from the Navy to the City.

Also, vernal pool mitigation in the form of construction of new vernal pool basins on the Sanders property (or for that matter on any other location) should be located only in areas of significant prior land disturbance. For mitigation, vernal pool construction (restoration) in hardpan vernal pool soils is not appropriate (and not likely to succeed) in any area supporting original natural chaparral vegetation or microbiotic soils as these areas did not ever support vernal pool habitat. If the amount of previously disturbed land on the Sanders property is inadequate to accommodate full mitigation for the loss of vernal pool suitable habitat (not just existing pools) on the Pueblo Lands North property, then additional mitigation should be required elsewhere.

For the San Diego City airports, Brown Field Municipal Airport and Montgomery-Gibbs Executive Airport, the VPHCP should include measures to address the possible impacts of airport operations and maintenance activities for the time period between the approval of the vernal pool HCP and the future operation plans⁴ planned to implement requirements of the VPHCP as they relate to airport activities. Plans such as this can take many years to prepare as illustrated by the years required to prepare preserve management plans to implement the City's MSCP Subarea Plan and VPHCP covered species shouldn't suffer harm in the interim. The VPHCP should therefore include a legally binding schedule for preparation of the operation plan. Activities that may harm vernal pools and species should be temporarily barred and no take of vernal pool species should be authorized under the VPHCP at the San Diego City airports until operation plans are complete, circulated for public review, and approved by the USFWS. Take authorization for vernal pool species can be obtained through a separate ESA Section 7 consultation as is currently being conducted for Brown Field Municipal Airport, but take authorization under this separate permitting process also should not be authorized until operation plans are complete, circulated for public review, and approved by the USFWS.

For the Montgomery-Gibbs Executive Airport, VPHCP map Figure 2-3 should be updated to reflect the proposed 100% hardline vernal pool preserve as shown on VPHCP Figure 4-4 rather than the 75 - 100% conservation levels shown in Figure 2-3.

Chapter 5

Section 5.3.2 General Conditions of Compensatory Mitigation conditions appear to be drafted from the perspective of mitigation for development impacts to vernal pools. Please clarify

4. VPHCP Table 4-7.

whether these same conditions would apply to pro-active vernal pool restoration projects that are not conducted as mitigation (e.g. vernal pool restoration projects at Carmel Mountain. Proctor

Valley, and Otay Mesa by The Chaparral Lands Conservancy). This section is for compensatory mitigation so a new section addressing general design criteria for proactive restoration projects may be warranted in the VPHCP.

For section 5.3.2 General Conditions of Compensatory Mitigation conditions 1.f and 1.g, mapping entire restoration sites to 0.5-foot contours and mapping watershed for each vernal pool is probably unnecessary except for extremely degraded sites that will be entirely or nearly entirely re-graded for vernal pool and uplands habitat restoration (e.g. Cal Terraces North). For sites where the majority of original topography is intact and will remain so during restoration grading (e.g. the Clayton property and Proctor Valley ORV Site B), project planning for vernal pool restoration can be accomplished by mapping the location and configuration of perimeters of extant pools, the configuration of perimeters of proposed enhanced extant pools, the location and configuration of perimeters for proposed restored (constructed) pools, and extant and proposed vernal pool hydrology (i.e. flow lines between pools). On these sites, the depths of all restored pools can be estimated with application of standard appropriate slope ratios relative to the size of the pool with final vernal pool locations, configurations, and depths established at the discretion of the vernal pool restoration specialist overseeing restoration grading. Heights for Mima mounds restored using fill excavated from restored vernal pools can be also be estimated with application of standard appropriate slope ratios with final Mima mound configuration and heights established at the discretion of the vernal pool restoration specialist overseeing restoration grading.

Clarification should also be provided on condition 1.g. for required vernal pool restoration/ enhancement/preservation plans that "restored pools and their watersheds shall not impact the watersheds of any extant pools except where needed to establish hydrologic connections." On some degraded vernal pool sites (e.g. Clayton) where original topography is largely intact, restoration (construction) of new vernal pools within the watersheds of existing degraded vernal pools may be warranted to increase appropriate pool density and to restore a higher functioning vernal pool complex and hydrologic system.

For condition 1.h, the introduction of inoculum from donor vernal pools should be routine rather than a last resort, especially for restoration that is not mitigation and where salvaged inoculum is not available from pools to be impacted.

For condition 1.q, please explain the basis for requiring measurements for water quality. Have water quality elements of pH, temperature, total dissolved solids, and salinity been correlated to the needs of particular vernal pool species? This condition may be suitable for a mitigation project but would be an unreasonable and costly burden on proactive vernal pool restoration projects.

Chapter 6

The location of brush management zones for new development in the MHPA is not acceptable including for uplands and buffer areas around vernal pools. All brush management should be located with the 25% (or other allowable) development footprint for private properties located within the MHPA.

Chapter 7

The discussion of "Edge Effects Maintenance" in Table 7-6 should be revised to include specific mention of urban runoff, poorly designed drainage systems from existing development, and other water drainage problems that routinely impact vernal pool hydrology.

Chapter 8

All lands conserved as part of the development entitlement process should be subdivided from developed portions of properties and dedicated in fee title to the City of San Diego Park and Recreation Department Open Space Division, USFWS, or suitable and qualified non-profit conservation organization. Homeowners' associations are not appropriate long-term managers of vernal pool preserves even with retention of qualified contractors due to potential conflicts of interest with resident/homeowners' association board members' desires for conflicting uses of preserves (e.g. predator control, pet walking, mountain biking, etc.).

Chapter 10

The VPHCP appears to compile a thorough list of *potential* funding sources to implement the plan but doesn't appear to specify the actual proposed funding method intended for recommendation to the San Diego City Council alongside adoption of the VPHCP, community plan amendments, and other elements to adopt the VPHCP. Clear and unequivocal funding sources must be included in the final VPHCP as part of the defined project alternative intended for recommendation to City Council.

Management costs shown in VPHCP Appendix E Table 3 appear to significantly underestimate the true cost of necessary vernal pool enhancement, restoration, and management necessary to achieve the goals of the VPHCP. Habitat restoration contractors have provided The Chaparral Lands Conservancy a cost estimate for activities consistent with VPHCP Level 3 for five-acres of vernal pools and uplands on the Clayton property at approximately \$112,000 per acre over a total of five years, VPHCP Appendix E Table 3 appears to significantly underestimate costs when it excludes installation of access control and several important elements of uplands vegetation restoration on vernal pool sites.⁵ Yet access control and restoration of upland vegetation across the entirety of vernal pool sites not suitable for vernal pool restoration are crucial and required elements of Level 3 VPHCP management. Significantly increased cost estimates will also be needed to implement necessary revised VPMMP management and monitoring level categories for a number of currently miscategorized vernal pool sites as discussed in the VP Management and Monitoring Plan section below.

Please disclose the actual balance of funds remaining in the City's Vernal Pool Preservation Program/Fund and identify the City department responsible for administering this fund. To uphold the original mitigation purpose of the Vernal Pool Preservation Program, remaining funds should be spent only on VPHCP Level 3 management activities.

For section 10.7.1 Recurring Annual Costs, the VPHCP states that, "No new funding would be required from the City's General Fund. But judging from current budgets for staff, equipment, and materials, current General Fund levels are totally insufficient to provide for City obligations under the existing MSCP Subarea Plan let alone new and intensive conservation management proposed under the VPHCP. City Park and Recreation Department staff are trained and highly focused on managing recreation use of City open space, not management of the MHPA for special habitats and MSCP covered species. And many additional staff specializing in management of vernal pool resources will be needed to implement the VPHCP. In just one example, just two absolutely dedicated City rangers are currently responsible for the nearimpossible task of maintaining open space recreation trails and other facilities while simultaneously implementing most MSCP SAP obligations on the Carmel Mountain, Del Mar Mesa, Lopez Ridge, and Los Penasquitos Canyon Preserves. Yet major mountain bicycling trespass problems impacting vernal pools persist on the Del Mar Mesa Preserve and many additional staff will be needed to control this one problem of many, to implement important existing MSCP SAP area specific management directives, and to implement VPHCP management levels 1-3 on Carmel Mountain, Del Mar Mesa, and Lopez Ridge. It is highly unlikely that this can be accomplished with current levels of City Park and Recreation Department Funding from the City's General Fund. As such, the VPHCP should specify how the General Fund will provide significant additional funding to implement the VPHCP beyond existing levels or specifically what dedicated funding source(s) will provided additional necessary funding.

Chapter 11

The final VPHCP should include a more realistic and attainable Expanded Conservation Alternative providing for preservation of additional vernal pool habitat for species and

^{5.} According to VPHCP Appendix E Table 3, dethatching, seed collection, seed dispersal, container plant care and installation, and topographic repair are all limited to vernal pool rather than uplands units of measurement.

designated critical habitat other than for just San Diego fairy shrimp. A revised Expanded Conservation Alternative for all VPHCP covered species need not necessarily include all areas identified in the VPHCP Expanded Conservation Alternative for San Diego fairy shrimp, particularly in southwest Otay Mesa. At a minimum, an Expanded Conservation Alternative for all VPHCP species should include the same "Expansion Alternative" areas shown in the VPHCP online interactive map for the Cubic / U 19 Complex and the Otay Mesa La Media Swale.

VPHCP Management & Monitoring Plan

The VPHCP's proposal to exclude conservation management for several private vernal pool preserves established prior to adoption of the San Diego MSCP defies the purpose and need, the conservation goals, and, ultimately, the promise of the VPHCP to provide management for vernal pool sites that did not previously receive adequate accommodation for long-term management through past development entitlements.

This has been the first opportunity for public review of the proposed categorization of particular vernal pool sites in three management levels as described in the Vernal Pool Management and Monitoring Plan (VPMMP). Unfortunately, this document significantly undermines one of the main promises of the VPHCP: That is, in exchange for the continuing loss of isolated or otherwise degraded vernal pools to development, other vernal pools will be permanently preserved in a better conservation configuration and provided with restoration or other conservation management to achieve long-term viability of vernal pool resources. The City, City VPHCP contractors, and USFWS have supported this promise by citing several "orphan" pool preserve sites, typically highly isolated sites located on supposedly protected private property that were preserved as a condition of development prior to adoption of the San Diego MSCP, that would now receive conservation management under the VPHCP in partial exchange for additional vernal pool losses elsewhere. According to the VPMMP Appendix A, six of these orphan sites (Fieldstone, East Ocean Air, Arjons, Ford Leasing, Facilities Development, and Empire Center) support eighty-six vernal pools including forty-eight pools with San Diego mesamint and twenty-eight pools with San Diego button-celery. Yet these sites would receive no conservation management whatsoever under the VPHCP. One particularly glaring exclusion of an orphan site is Arjons where the City mistakenly authorized the property owner to grade a previously preserved site and where resulting damage to important vernal pools and listed species was never remedied or repaired.

The VPHCP doesn't appear to provide any explanation or justification for withholding management of these important orphan vernal pool sites. The sites are all located on private property, but other private preserves and properties are included and subject to preservation and management conditions of the VPHCP. Text in appendices A and B of the VPMMP suggests that the six private preserves are excluded at least in part due to their conservation prior to adoption of the MSCP. But the administrative timing of adoption of the MSCP is practically irrelevant to the promise and goals of this new VPHCP to provide for conservation of vernal pools and covered species. All of the six orphan sites but Fieldstone are identified by the USFWS for conservation and management needed to stabilize and reclassify several listed vernal pool species⁶ so exclusion of these sites would significantly impede if not preclude recovery of these species. And all of these sites are subject to the conservation conditions contained in the City's MSCP Subarea Plan that serves as the basis for continuing coverage of the vernal pool species by the California Department of Fish and Wildlife (CDFW).⁷ "Area specific management directives" required as conditions of coverage for the vernal pool species under the MSCP by CDFW have never been provided for the orphan sites (or for that matter many other vernal pool sites) so these sites must now be included in the management level framework as part of the VPHCP. Otherwise, these sites should be removed from calculations for the number of pools conserved under the VPHCP as well as the number of populations treated as conserved for the three-covered species occupying these sites (San Diego fairy shrimp. San Diego button-celery, and San Diego mesa mint), and CDFW should no longer treat these as covered species under the MSCP.

Appendix A of the VPMMP also lists several vernal pool sites that are identified in mistaken or otherwise inappropriate categories of VPHCP management that will significantly limit or preclude necessary conservation management of vernal pools and covered species. Many of these miscategorized sites should be entirely re-categorized as Level 2 or 3. Several other sites that might include a majority of the site in Level 1 will also require Level 2 or 3 management for a smaller portion of the site (e.g. Del Mar Mesa City and state/federal). The following discussion recommends revised VPHCP management levels for several vernal pool sites or requests elarification of VPMMP recommendations and information:

VPHCP management and monitoring should be provided at Level 2 for Mesa Norte. Offsite urban drainage runoff flows onto the site, eucalyptus trees around portions of the site perimeter deposit significant leaf litter and appear to alter the water chemistry of vernal pools, and an extensive cover of exotic grasses should be dethatched and addressed with Level 2 general weed control.

The Fieldstone site is in need of VPHCP Level 1 management and monitoring to address threats as described and recommended in the VPMMP Appendix B evaluation and management form.⁸

^{6.} Recovery Plan for Vernal Pools of Southern California appendices F. and G.

^{7.} See e.g. discussion of each covered vertile pool species in the MSCP SAP Appendix A which assumes that all vertile pools on conserved land will be preserved and provided "area specific management directives".

^{8. &}quot;Management Level 1 and the following list of tasks are recommended for the sites: Conduct all Management Level 1 recommended activities, including targeting serious invasive problems (plants or animals), trash removal, and other general management activities,"

The proposed exclusion of the Fieldstone site in VPMMP Appendix A defies the promise and goals of the VPHCP to provide management for vernal pool sites that did not receive adequate accommodation for long-term management during the process of past development entitlements,

The 2.56 acre private Menlo KM site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.⁹ The site also appears to be located inside rather than outside of the VPHCP plan area as noted in the VPMMP Appendix A.¹⁰ The 2.56 acre private Menlo KM site should be included in the MHPA with a 100% conservation level in accordance with the complex description included in the VPMMP Appendix B.¹¹

Del Mar Mesa (City and Private) vernal pool sites inside the VPHCP plan area are in need of levels 1-3 VPHCP management and monitoring as described in the VPMMP Appendix B evaluation and management form.¹² Level 1 management would be sufficient for many Del Mar Mesa vernal pools. But serious, ongoing trespass by mountain bicyclists and past damage from off-road vehicles, construction of fire breaks, and past and ongoing utility maintenance activities warrant provision of management and monitoring levels 2 or 3 for many Del Mar Mesa City and private vernal pools.

Please provide an explanation for assigning management level 1 to Del Mar Mesa vernal pools shown as "state/federal" when these are also noted as outside of the VPHCP plan area in VPMMP Appendix A. If the large vernal pool property owned by the California Department of Fish and Wildlife is to be managed as part of the VPHCP then it should be recognized that the same issues described for City parcels on Del Mar Mesa apply to CDFW parcels and warrant provision of management and monitoring levels 2 or 3 for some CDFW Del Mar Mesa vernal pools.

Please identify the location of any Del Mar Mesa vernal pools still owned by Caltrans as shown in VPMMP Appendix A.

- 11. "The site is proposed to be sold for future mitigation and is proposed to be added to the expanded MHPA as 100% conserved."
- 12 "While many of the vertial pools at this complex are protected from topographic disturbance, off- road activity and access for utility maintenance has created topographic disturbance at some pools. In some cases, this topographic disturbance may have impacted the watershed and ponding characteristics of some of the pools."

^{9. &}quot;The vernal pool at this complex has suffered substantial off-road and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

^{10. &}quot;The remaining 2.56 acres of the parcel (APN No. 369-082-3000) continues to be in private ownership within the City's jurisdiction."

The Arjons site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹³ The proposed exclusion of the Arjons site in VPMMP Appendix A defies the promise and goals of the VPHCP to provide management for vernal pool sites that did not receive adequate accommodation for long-term management during the process of past development entitlements. The City has an even greater obligation to provide VPHCP management and monitoring in light of the mistaken grading permit issued in 1999 and resulting impacts to eight vernal pools on approximately one-third of the site that apparently have never been repaired.

The Pueblo Lands South site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁴ There also appears to be discrepancies in descriptions of the number of pools found on the site between the VPMMP appendices A and B, and between the text description and table in Appendix B. Many more vernal pools have been identified on this site than have been mapped by the City and a segment of the Pueblo Lands South properties located south of Nobel Drive supports vernal pools (attachments) and should be included in the VPHCP expanded MHPA at 75%. Three distinct disturbed mesa areas on the Pueblo Lands South property north and south of Nobel Drive appear to provide excellent opportunities for vernal pool restoration.

The Anderprises (City) site is in need of VPHCP Level 3 management and monitoring to address threats as described in the VPMMP Appendix B evaluation and management form.¹⁵

Please provide an explanation for the lack of any assigned management and monitoring level in VPMMP Appendix A for the Brown Field Basins site. No evaluation and management form appears to be provided for this site in VPMMP Appendix B and no VPHCP expanded MHPA areas are shown in VPHCP figures. The source is unknown but at one time information was circulated that Riverside fairy shrimp occupied the "Kelco" seaweed drying beds in large artificial basins on (or possibly near?) Brown Field.

V-6

V-6 Please see response to comment E-2.

^{13 &}quot;... illegal impacts to approximately one-third of the site, including eight vernal pools, has occurred. These impacts resulted in artificial changes to the watershed, ponding characteristics, and flow patterns."

^{14. &}quot;The site is currently unfenced and is at risk from dumping and other trash accumulation. ... There is evidence from aerial mapping of vehicle disturbance so issues may exist with concern to hydrological flow patterns, mundation levels, and general watershed function. ... The site is characterized by nonnative grasses that may be a factor in the lack of sensitive vernal pool plant species.... Conduct a dethatching program..... Conduct topographic reconstruction where appropriate."

^{15. &}quot;The vernal pools at this complex have suffered considerable off-road damage over the years and this damage bas resulted in changes in hydrologic connection, flow patterns, and immidation characteristics."

The Handler site should be included in the MHPA with a 75% conservation level to protect the ecological and hydrological integrity of Goat Mesa.

The Goat Mesa (City and private) and Wruck Canyon sites are in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁶ The Goat Mesa (Private) site should be included in the MHPA with a 75% conservation level to protect the ecological and hydrological integrity of Goat Mesa.

The Clayton site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁷ A pending restoration project by The Chaparral Lands Conservancy is so far limited to just five acres of the Clayton site so Level 3 management and monitoring is needed for the remainder of the site and Level 1 management will be needed upon completion of the TCLC project and completion of Level 3 management of the remainder of the property.

Please provide an explanation for the lack of any assigned management and monitoring level in VPMMP Appendix A for the West Otay A (Private) site. No evaluation and management form appears to be provided for this site in VPMMP Appendix B.

^{16. &}quot;Major impacts have occurred from recreational off-road vehicles, immigrant traffic, and Border Patrol vehicles. ... The vernal pools at this complex have suffered considerable off-road damage over the years and this damage has resulted in changes in hydrologic connection, flow patterns, and inundation characteristics. While most of the pools were topographically repaired at this site as part of restoration conducted in 2008–2009 (AECOM 2010), the remainder of the pools have substantial topographic disturbance. ... Management Level 3: Conduct a dethatching program. ... Conduct a seed collection/bulking program. Conduct cyst collection and inoculation for Riverside fairy shrimp (S. woultant) as needed. Conduct container plant propagation and installation if necessary. Conduct topographic reconstruction where appropriate. Goat Mesa/Wruck Canyon: Continue the dethatching program begun with the *TransNet-*funded restoration where appropriate."

^{17. &}quot;The following list of tasks are recommended for the site: ... Conduct a dethatching program.... Conduct a seed collection/bulking program for *Eryngium aristulatum* and *Navarretia fossalis*. Under Management Level 3, off-site seed collection may be considered. ... Conduct cyst collection and inoculation as needed. ... Conduct container plant propagation and installation. ... Conduct topographic reconstruction where appropriate."

The West Otay C site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁸

The Pasatiempo site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.¹⁹

The Marron Valley site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.²⁰

The Serra Mesa Library site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.²¹ This site appears to be a good candidate for introduction of several covered vernal pool species that are present at the nearby Montgomery Field and presents an excellent opportunity for vernal pool natural history interpretation with its location adjacent to the Serra Mesa Library.

An explanation should be provided for the lack of any assigned required management and monitoring level to Tecolote Canyon in VPMMP Appendix A. No covered species appear to be present but this may be the result of past disturbance rather than any intrinsically lower function or value of these pools. No vernal pools are conserved in this area and the site may provide a unique important opportunity for conservation of vernal pool resources in an otherwise neglected area of the City.

^{18. &}quot;The following list of tasks are recommended for the non-restored portions of the complex: Conduct a dethatching program.... Conduct container plant propagation and installation.... Conduct topographic reconstruction where appropriate on the fill pad area and disturbed readbeds."

^{19. &}quot;The vertial pools at this complex have been impacted by off-road and other damage over the years resulting in potential changes in hydrologic connection, flow patterns, and inundation characteristics,"

^{20. &}quot;This area is frequented by Border Patrol, but the major threat to this area results from the high intensity foot traffic of immigrants. Impacts from trampling of sensitive vegetation, litter, and an unnaturally short fire interval are all visible in Marron Valley as a result of undocumented migrants. In addition, cattle from Mexican lands cross the river to feed in preserved areas in Marron Valley. ... The vernal pools at this complex were impacted by off-road damage over the years, and the basins were topographically reconstructed in 2008. With continued Border Patrol activity, this issue remains a threat."

^{21. &}quot;Prior to fencing of this complex, the vernal pools were impacted by off-road vehicles and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

Proctor Valley sites are in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.²² Proctor Valley sites undergoing restoration by The Chaparral Lands Conservancy on conserved City properties (ORV sites A and B) are appropriately categorized at Level 1. But most if all other vernal pools on City property in Proctor Valley are in need of intensive restoration and other Level 3 management and monitoring.

The Cubic site is in need of VPHCP Level 3 management and monitoring to address threats and provide needed restoration as described and recommended in the VPMMP Appendix B evaluation and management form.²³ Limiting VPHCP management and monitoring to Level 1 in the event of a discretionary development application on this private parcel is inexplicable and unacceptable given the particular conservation importance of this site.

Please clarify the status of the Magnatron vernal pool site under the VPHCP. The site appears to be shown on VPHCP Figure 2-3 as located inside the existing MHPA but does not appear to be identified for preservation or management in VPMMP appendices A and B. Magnatron is mentioned as a related site in the VPMMP Appendix B evaluation and management recommendations for the Menlo KM and Cubic parcels but does not appear to be listed in the VPMMP Appendix A nor have its own evaluation and management form in the VPMMP Appendix B.

Thank you for your consideration.

Sincerely,

15 and liver

David Hogan

^{22. &}quot;Trespass is a major threat, as noted in the Vernal Pool Management Plan (City of San Diego 1996). In particular, off-road vehicles tracks are present in the basins and watershed of several vernal pools. Dumping has also been a continuing problem in this area in spite of increased enforcement activities. ... Dumping and litter are continuing problems in this area in spite of increased enforcement activities. ... The vernal pools at this complex have suffered major off-road and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics. ... historic grazing introduced nonnative grasses and *Erodium* spp. to many areas, and off-road vehicles have denuded large areas within and adjacent to the vernal pools."

^{23. &}quot;The vernal pools at this complex have been affected by off-road vehicles and other physical damage over the years, which may have resulted in changes in hydrologic connection, flow patterns, and inundation characteristics."

Attachments

Map – Pueblo Lands North Vernal Pools Map – Pueblo Lands South Vernal Pools Map – Kearny Mesa Vernal Pools. Map – Proposed Revised VPHCP MHPA Expansion Southwest Otay Mesa City of San Diego SDG&E Cease & Desist Letter GIS data











April 29, 2011

THE CITY OF SAN DIEGO

Mr. Jeff Sykes San Diego Gas and Electric Company 8335 Century Park Court San Diego, CA 92123-1569

Subject: San Diego Gas and Electric Company Access Across City-Owned Parcels

Dear Jeff:

In March I attempted to communicate with you about San Diego Gas and Electric Company (SDG&E) access across the following parcels:

307-072-01(Carmel Mountain)	307-072-28 (Carmel Mountain)
307-071-01 (Carmel Mountain)	307-072-04 (Carmel Mountain)
307-071-21 (Carmel Mountain)	307-071-22 (Carmel Mountain)
307-071-29 (Carmel Mountain)	309-010-02 (Del Mar Mesa)

The City has no record of SDG&E having access casements across these parcels. The purpose of this letter is to request, effective immediately, that SDG&E cease and desist from access across these parcels until legal access is established.

I recognize that this access may be important to SDG&E and will commit to working expeditiously with SDG&E to execute a Right of Entry permit that will facilitate SDG&E access. To that end, I refer you to the boilerplates of potential Right of Entry permits sent to you in conjunction with a similar letter on September 28, 2010 so that you may begin reviewing them immediately.

Thank you for your cooperation.

Sincerely,

Chi Jup Chris Zirkle, Deputy Director

CZ/cz

cc: Adam Wander, Deputy City Attorney Scott Reese, Assistant Director Gina Washington, Senior Ranger Steve Haupt, District Manager



Open Space Division • Park and Recreation 1250 Sixth Avenue, 4th Floor, MS 804A • Son Diago, (A 92101-4215 Tel (&17) 685-1350 Tex (&17) 685-1367

-

LETTER W

NEPA Comment By: Taylor Orr, Audrey Jordan, Parker Sutton, Jackson Boehm

The vernal pools of the city of San Diego are a habitat to several rare and unique species. Under the Endangered Species Act of 1973, the taking of these threatened and endangered species is unlawful. Thus, the Vernal Pool Habitat Conservation Plan (VPHCP) was implemented to protect these species, and others that are not federally protected. This conservation plan will implement incident take permits (ITP) to ensure the reduction of the taking of any of these endangered species due to lawful activities such as increasing developed areas, as well as working to expand the areas of protected habitats.

Some proposed alternatives to this established plan are as follows:

No Action Alternative:

This states that there will be no ESA permit issued, and that activities involving take of a species would require individual permits.

Action Alternative:

Issuance of an ITP by the service for covered species would last a duration of 30 years. ITPs would be issued to permit residential, commercial, and industrial development within the area. Once implemented an expansion of the city's existing Multi-Habitat Planning Area (MHPA) would be established. This would allow for a 9% increase in the area of vernal pool habitats protected.

Expanded Conservation Alternative:

Similar to the Action Alternative, this would allow for an expansion of the city's existing MHPA by adding over 500 acres of land containing vernal pools. The Expanded Conservation Act would ultimately share many similar aspects of the Proposed Action Alternative, and would also utilize the ITP policies stated above.

Biophysical Impacts

All of the stated alternatives do take a "hard look" at the biophysical aspects and impacts because that is the main focus with this NEPA activity. This document is focused around the protection and conservation of endangered and rare species enveloping the San Diego area. All three alternatives to this activity focus on permit types surrounding the idea of giving back land to these endangered species that is taken for human infrastructure. As people obtain permits to build on these lands where these species thrive, they plan to build vernal pools to compensate for the area of habitat loss. The only concern with these alternatives is the transportation of these species. It is talked about how land will be created for them, but no note on weather they will be transferred there or will have to find their way to these pools. This could further the ecosystem causing some areas to have too many of the same species and become overcrowded while other areas remain untouched by any of the endangered species and result in other species (non-endangered) to find the area and make it their home.

W-1 The comment summarizes elements of the VPHCP and does not discuss the adequacy or accuracy of information provided in the EIR/EIS. No further response is required.

W-2

W-1

W-2 As discussed in VPHCP Section 5.3.2, where vernal pools would be restored as mitigation for impacted pools, restored vernal pools would be inoculated with the covered species collected from impacted pools and/or donor vernal pools, based on approval from the City and the Wildlife Agencies.

Social and Cultural Impacts Including Environmental Justice

The impact of The City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP) takes into account more environmental justice approach than a social or cultural approach. The city is trying to expand upon the MHPA that is currently in place which is a cultural impact, but they are more focused on the organisms than the people involved. One action that the document proposed was the Proposed Action Alternative, which aims to protect "residential, commercial, and industrial development; airport operation; road and utility maintenance and construction; trail use; and vernal pool restoration and enhancement." In the document they mention multiple times that they are trying to expand upon the existing MHPA by adding more land, but they fail to mention if they expanding on pre-owned land or public land. This case would be more credible if they took into account the ideas of the community more than focusing solely on the environment.

W-3

Economic Impact

The economic impact of The City of San Diego Vernal Pool Habitat Conservation Plan (VPHCP) does not appear in in the literature. The proposed action alternative does have the potential to limit expansion for the residential, commercial, and industrial development sectors. Those industrial development sectors would include airport operation; road and utility maintenance and construction; and trail use. While the agency does acknowledge that these areas of human activity would be affected, the impact on the economic activity is not discussed. The expanded conservation plan would expand upon an existing vernal pools in the Sand Diego Multi Habitat Planning Area. This alternative would divert funds that could be directed towards more economic impact, is not discussed when the expanded conservation is discussed. In short, this project might have a small negative impact on human economic activity that is not acknowledged. If the economic impact were discussed and analyzed, the conclusion could very well be that the impact is minimal and the benefits would be worth the price that the city of San Diego would be willing to pay. The case for the VPHCP could be much stronger with the inclusion an economic analysis on the costs and benefits of this project.

- W-3 Environmental justice is analyzed in Section 5.7 of the EIR/EIS and fulfills NEPA requirements to evaluate the potential for project components to result in disproportionately high or adverse effects on low-income or minority populations and disproportionate environmental health and safety risks to children. A discussion specific to private land owners is included under Issue 2 in Section 5.7 and discussion related to private landowners is included throughout the document as appropriate. Table 3-1 of the EIR/EIS has been expanded to include a column specifying whether currently unconserved land that would be added to the MHPA is public or private. Land use impacts, including the potential to conflict with the planned land uses as outlined in City and community planning documents is provided in Section 3.1. No significant or adverse impacts were identified regarding these topics. The comment does not explain what ideas of the community need to be considered.
- W-4 The potential effect of the VPHCP on regional economics is provided in Section 8.0, Growth Inducement, of the EIR/EIS. As stated in that section, it is not anticipated that a new restriction on development would cause a substantial change in location, type, or pattern of growth, resulting in the construction of housing or supporting infrastructure in an area not currently planned for such development. Additionally, lands that are generally known to have wetlands and other sensitive biological resources would likely be subject to ESL Regulations and other mitigation that could result in development restrictions. Please see response to comment C-3 regarding funding sources for the VPHCP. Funds allocated for implementation of the VPHCP would not be from sources that would have otherwise been directed to economic development.

References

City of San Diego Vernal Pool Habitat Conservation Plan and Draft Environmental Impact Report/Statement; San Diego County, California, 81 FR 94409, 12/23/2016 This page intentionally left blank.

FINAL CITY OF SAN DIEGO VERNAL POOL HABITAT CONSERVATION PLAN

ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STATEMENT Project No. 441044 SCH# 2011111075

City of San Diego Planning Department 1010 2nd Ave, Suite 1200, East Tower, MS 413 San Diego, California 92101

October 2017
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LIST OF ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
AB	Assembly Bill
ALUCP	Airport Land Use Compatibility Plan
APE	area of potential effects
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
B.P.	before present
BLA	Boundary Line Adjustment
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
City	City of San Diego (governing body)
city	city of San Diego (physical location)
СО	carbon monoxide
CO_2	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRAM	California Rapid Assessment Method
CRHR	California Register of Historical Resources
CWA	Clean Water Act
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency

ESL	Environmentally Sensitive Lands
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FMP	Framework Management Plan
GHG	greenhouse gas
GWP	global warming potential
НСР	habitat conservation plan
HFC	hydrofluorocarbon
HRA	health risk assessment
HU	Hydrologic Unit
IA	Implementing Agreement
INRMP	Integrated Natural Resources Management Plan
IPCC	Intergovernmental Panel on Climate Change
ITP	incidental take permit
JRMP	Jurisdictional Runoff Management Plan
LCFS	low carbon fuel standard
LDC	Land Development Code
LDM	Land Development Manual
LEV	low emission vehicle
MHPA	Multi-Habitat Planning Area
MSCP	Multiple Species Conservation Program
MMRP	mitigation, monitoring and reporting program
MMT	million metric tons
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSCP	Multiple Species Conservation Program
MT	million tons
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards

NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NF ₃	nitrogen trifluoride
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO_2	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO _X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
PFC	perfluorocarbon
PM	particulate matter
PM ₁₀	PM equal to or less than 10 micrometers in diameter
PM _{2.5}	PM equal to or less than 2.5 micrometers in diameter
PRC	Public Resources Code
RAQS	Regional Air Quality Strategy
ROG	reactive organic gases
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SAP	Subarea Plan
SB	Senate Bill
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SFHA	Special Flood Hazard Area
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SO_2	sulfur dioxide

SR SWPPP SWRCB	State Route Storm Water Pollution Prevention Plan State Water Resources Control Board
TAC	toxic air contaminant
TWP	Technical White Paper
U.S.	United States
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
VPHCP	Vernal Pool Habitat Conservation Plan
VPI	Vernal Pool Inventory
VPMMP	Vernal Pool Management and Monitoring Plan
WQIP	Water Quality Improvement Plan

KEY TERMS AND DEFINITIONS

Below are definitions for key terms that are used throughout this EIR/EIS.

Adaptive Management - A method for examining alternative strategies for meeting measurable biological goals and objectives and then, if necessary, adjusting future conservation management actions according to what is learned.

Certificate of Inclusion - A certificate issued by the City of San Diego to a Third Party to ensure compliance with the terms and conditions of the VPHCP and Permit that extends the City's Take coverage to such parties for covered activities carried out in accordance with the Take Authorizations under the Permit and in accordance with the terms and conditions thereof.

Covered Activities - Land use, public infrastructure, and conservation activities that will be specifically compatible with the Vernal Pool Habitat Conservation Plan (VPHCP) and that will be authorized under the VPHCP for take of covered species. Covered activities are actions that generally occur repeatedly in one location or throughout the permit area.

Conserved Lands - Lands with 100% hardline conservation (no development is permitted)

Covered Projects - Projects involving land use development within the city for which hardline Preserve boundaries have been established and any incidental take of covered species would be approved through the VPHCP for covered projects. Lands with covered projects have areas delineated for development and preservation and/or mitigation.

Covered Species - The species to be conserved and managed consistent with the approved VPHCP such that, through approval of the VPHCP, U.S. Fish and Wildlife Service (USFWS) will authorize their impacts (for plant species) or exempt their take under Section 10 (for animal species) of the federal Endangered Species Act (FESA). Those species addressed in the Plan for which conservation measures will be implemented and for which the permittee seeks authorization for impact/take under Section 10 of FESA and Section 2081 of the California Endangered Species Act (CESA).

Critical Habitat - Critical habitat is a term defined and used in FESA. It is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Implementing Agreement - An agreement that legally binds the permittee to the requirements and responsibilities of a habitat conservation plan (HCP) and Section 10 permit. It may assign the responsibility for planning, approving, and implementing the mitigation measures under the HCP.

Incidental Take - Take of any federally listed wildlife species that is incidental to, but not the purpose of, otherwise lawful activities. Any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity (50 CFR 17.3).

Listed Species - Those species designated as candidate, threatened, or endangered pursuant to CESA and or listed as threatened or endangered under FESA.

Multi-Habitat Planning Area (MHPA) - The City's planned habitat preserve within the Multiple Species Conservation Program Subarea. In this document, the MHPA is also referred to as "the Preserve," although not all of the lands with the MHPA will ultimately be preserved. The City's planned MHPA totals 56,831 acres, with 52,727 acres (90%) targeted for preservation (approximately 30% of the planned regional preserve). Implementation of the VPHCP would add additional lands containing vernal pool resources to the MHPA.

Multiple Species Conservation Program (**MSCP**) - A comprehensive, long-term habitat conservation planning program that covers approximately 900 square miles (582,243 acres) in southwestern San Diego County pursuant to FESA and the California Endangered Species Act (CESA) and the California Natural Community Conservation Planning Act. It has been developed cooperatively by participating jurisdictions/special districts in partnership with federal/state Wildlife Agencies, property owners, and representatives of the development industry and environmental groups. The MSCP is the regional program through which the MHPA will be assembled as each participating jurisdiction implements their portion of the MSCP.

Preserve – Areas within the MHPA that have been conserved and existing conservation areas.

Projects - Well-defined actions that occur once in a discrete location.

Planned Projects - Projects involving land use development within the City for which hardline Preserve boundaries have been established and take has been authorized or exempted through a process other than the VPHCP (such as an approved USFWS Biological Opinion [BO]). Planned Projects included in the VPHCP are Castlerock (BO No. 15B0240-15F0536); Candlelight (BO No. 08B0715-08F0817); and Metropolitan Airpark (BO - pending).

Road (Rut) Pool – A man-made depression, such as tire tracks or road ruts, that supports one or more covered species but does not contain vernal pool indicator species. For purposes of the VPHCP and impact analysis, road (rut) pools are considered vernal pools.

Take - Under Section 3(18) of FESA, "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with respect to federally listed endangered species of wildlife. Federal regulations provide the same taking prohibitions for threatened wildlife species. According to CESA (Section 86 of the California Fish and Game Code), take means to hunt, pursue, catch, capture, or kill.

Vernal Pool - Seasonal, depression-type wetlands that result from a unique set of physical parameters and support a specific biological assemblage of plant and animal species. Functional vernal pool ecosystems form under specific physical conditions when small, shallow depressions collect precipitation to create a seasonally perched water table.

Vernal Pool Complex - A collection of vernal pools that occur in proximity on the same soil series and are typically hydrologically connected.

Vernal Pool Watershed – A topographically defined catchment area from which surface water flows to a vernal pool.

Vernal Pool Habitat Conservation Plan (VPHCP) Plan Area - The geographical extent of land that would be included in the VPHCP, for which the protections provided under the VPHCP are afforded to the seven focal species, and also for which the Section 10 permit will apply. The VPHCP Plan Area includes lands subject to the City's jurisdiction within the jurisdictional boundary of the City, as well as three areas owned by the City's Public Utilities Department in the unincorporated portion of San Diego County. The VPHCP Plan Area also includes preserved lands within San Diego that are under the ownership of USFWS or California Department of Fish and Wildlife (CDFW). The VPHCP Plan Area's extent is, by design, the same area covered by the City's MSCP Subarea Plan and, as such, includes lands that are inside and outside the MHPA.

Vernal Pool Management and Monitoring Plan (VPMMP) - The primary purpose of the VPMMP was to expand on the MSCP Framework Management Plan to provide management strategies, directives, and recommendations for all lands containing vernal pools in the City to preserve and restore their physical function and biotic components, and promote the recovery of associated threatened and endangered species. The VPMMP presents management challenges and opportunities for vernal pools at both a general City-wide and a local site-specific scale. The

regulatory requirement to comply with the VPMMP varies according to the status (e.g., ownership) of a given site and is noted in each site-specific discussion. Existing requirements and recommendations at various scales, such as USFWS Biological Opinions (BOs), also are included and referenced in the VPMMP. The VPMMP is intended to guide vernal pool management on public and private, preserved and developable lands within the City. The history, issues, requirements, and goals for each site containing vernal pools are provided. The VPMMP has been reviewed and updated as part of this VPHCP effort but is a stand-alone document.

Wildlife Agencies - A term used for the collective reference to the USFWS and CDFW.

EXECUTIVE SUMMARY

This Environmental Impact Report/Environmental Impact Statement (EIR/EIS) has been prepared for the City of San Diego (City) Vernal Pool Habitat Conservation Plan (VPHCP or Project), located in the southwestern portion of San Diego County. This EIR\EIS analyzes the potential environmental effects associated with implementation of the Project (including direct and indirect impacts, secondary impacts, and cumulative effects). This joint EIR/EIS has been prepared in compliance with the National Environmental Policy Act (NEPA) as implemented by Council on Environmental Quality Regulations (Title 40 Code of Federal Regulations Parts 1500-1508) and the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) as implemented by the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 1500-15387). This document has been prepared as a joint EIR/EIS due to the combined local, state, and federal discretionary actions and permits associated with the Project. Co-lead agencies are the City (CEQA) and the U.S. Fish and Wildlife Service (USFWS) (NEPA). The City and USFWS also coordinated with the California Department of Fish and Wildlife (CDFW) on the scope and analysis of this EIR/EIS for purposes of any subsequent related City and/or state actions that may be necessary to fully implement the VPHCP. The Project includes approval and adoption of the VPHCP and associated amendments to the City Land Development Code, Environmentally Sensitive Lands (ESL) Regulations, and Land Development Manual (LDM) Biology Guidelines;, General Plan;, Otay Mesa Community Plan; Kearny Mesa Community Plan and associated policies; the Local Coastal Program; a Boundary Line Adjustment to the City's Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) on the Montgomery-Gibbs Executive Airport; and the City's existing state Natural Community Conservation Plan (NCCP) (Multiple Species Conservation Program [MSCP]) permits, which are the discretionary actions under CEQA, as well as the issuance of a federal incidental take permit under Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA), which is the federal action under NEPA. The local action requiring CEQA documentation includes the evaluation and processing/state issuance of any required amendments to and/or findings of consistency with the City's incidental take authorization (California Endangered Species Act [CESA]/Permit No. PRT-830421) that was received in 1997 with the adoption of the City's MSCP to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. As an informational document, this EIR/EIS is intended to provide public decision-makers, responsible or other interested agencies, and the general public with an assessment of potential environmental effects of the Project.

ES.1 PROJECT DESCRIPTION

The VPHCP is a conservation plan for vernal pools and seven threatened and endangered vernal pool species (referred to as the covered species herein) that do not currently have federal coverage under the City's MSCP Subarea Plan (SAP). The VPHCP would be compatible with, and would expand upon, the City's existing MSCP SAP to conserve additional lands with vernal pools that are occupied with threatened and endangered vernal pool species.

The VPHCP Plan Area (i.e., the area within the City's jurisdiction for which the VPHCP applies) encompasses 206,124 acres. Once fully implemented, the VPHCP would expand the City's existing Multi-Habitat Planning Area (MHPA) by adding approximately 275 acres of lands with valuable vernal pools resources. This includes adding approximately 191 acres of lands to the MPHA that were not previously conserved, as well as incorporating 84 acres of previously conserved lands into the MHPA boundary. The VPHCP would conserve an additional eight vernal pool complexes within the Plan Area, and conserve an additional 226 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved under the existing conservation.

In this document, the MHPA is also referred to as "the Preserve," although not all of the lands with the MHPA will ultimately be preserved. The City's planned MHPA totals 56,831 acres, with 52,727 acres (90%) targeted for preservation (approximately 30% of the planned regional preserve). Implementation of the VPHCP would add lands containing vernal pool resources to the MHPA. Once adopted, vernal pool lands within the MHPA would be subject to the provisions of the VPHCP, in addition to the City's MSCP SAP and other existing land use and biological resource plans, policies, and regulations, as applicable.

The lands within the VPHCP Plan Area contain valuable vernal pool resources. These vernal pool resources contain species, including the seven listed species proposed for coverage that are protected under CESA and/or FESA. The purpose of the VPHCP is to preserve the network of vernal pool habitat within this matrix of open space; protect the biodiversity of these unique wetlands; and define a formal strategy for the long-term conservation, management, and monitoring of vernal pools and associated species. A Habitat Conservation Plan (HCP) is required under FESA to accompany an application for an incidental take permit (ITP) when associated with nonfederal activities. Under FESA, an ITP is required when activities may result in take of threatened or endangered wildlife. The VPHCP also must ensure adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources within the city. The VPHCP includes a Mitigation Framework that outlines required avoidance, minimization, and compensatory mitigation measures.

The VPHCP would focus on the following seven threatened and endangered vernal pool species included for coverage (covered species):

- San Diego fairy shrimp
- Riverside fairy shrimp
- San Diego button celery
- Spreading navarretia
- San Diego mesa mint
- California Orcutt grass
- Otay Mesa mint

The VPHCP would provide additional conservation (beyond existing conservation) for the following covered species:

- San Diego mesa mint five additional occupied pools conserved (1% increase)
- San Diego button-celery three additional occupied pools conserved (1% increase)
- Riverside fairy shrimp three additional occupied pools conserved (2% increase)
- San Diego fairy shrimp 30 additional occupied pools conserved (6% increase)

ES.2 PROJECT LOCATION AND SETTING

The VPHCP Plan Area is the geographical area for which the protections provided under the VPHCP are afforded to the seven covered species and for which the Section 10 permit applies. The VPHCP Plan Area includes lands subject to the City's jurisdiction within the jurisdictional boundary of the City, as well as three areas owned by the City's Public Utilities Department in the unincorporated portion of San Diego County. The VPHCP Plan Area also includes preserved lands within San Diego that are under the ownership of USFWS or CDFW. The VPHCP Plan Area's extent is, by design, the same area covered by the City's MSCP SAP, and includes lands inside and outside the MHPA.

ES.3 PROJECT OBJECTIVES

The purpose of the VPHCP is to preserve the network of vernal pool habitat within this matrix of open space, protect the biodiversity of these unique wetlands, and define a formal strategy for their long-term conservation, management, and monitoring.

The specific conservation goals of the VPHCP serve as the CEQA project objectives and are as follows:

- 1. Provide for the conservation and management of covered species addressed by the VPHCP;
- 2. Preserve vernal pool resources through conservation partnerships between federal, state, local agencies, and private development partnerships;
- 3. Allow for appropriate and compatible economic growth and development that is consistent with applicable laws;
- 4. Provide a basis for permits necessary for lawful incidental take of vernal pool covered species;
- 5. Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, and NEPA within the VPHCP Plan Area;
- 6. Provide a more efficient project review process that results in greater conservation values than project-by-project, species-by-species review; and
- 7. Provide clear expectations and regulatory predictability for persons carrying out covered activities within the VPHCP Plan Area.

ES.4 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION

Chapter 5.0 of this EIR\EIS presents the environmental analysis of the Project. Table ES-1 summarizes the significant impacts identified in the environmental analysis for each issue area. Table ES-1 also outlines the mitigation measures proposed to reduce and/or avoid the environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance.

Based on the analysis presented in Chapter 5, the Project would result in significant direct and cumulative impacts that can be reduced to below a level of significance with the incorporation of mitigation for the issue area Historical Resources (Project and Expanded Conservation Alternative). No potentially significant impacts were identified for the Existing Conservation/No Project Alternative. No significant and unavoidable impacts were identified for the Project or any of the alternatives. The following issue areas would result in impacts that are below a level of significance without the incorporation of mitigation: Land Use, Biological Resources, Air Quality, Greenhouse Gases, Hydrology and Water Quality, and Environmental Justice. The Project would not result in a cumulatively considerable contribution to a long-term direct or indirect cumulatively considerable adverse impact related to Land Use, Biological Resources, Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, and Environmental Justice.

	_		Level of Significance
Issue Area	Impact	Mitigation Measure	After Mitigation
Historical and Tribal Cultural	Resources		
Would the project result in any	Prehistoric or historic	Mitigation Measure HIST-1 as described in Section 5.5 Historical	Less than
alteration, including adverse	buildings, structures, objects,	Resources.	Significant
physical or aesthetic effects,	or sites could potentially be		
and/or destruction of a	affected by ground-disturbing		
prehistoric or historic building	activities related to restoration		
(including an architecturally	undertaken as part of the		
significant building), structure,	VPHCP (i.e., topographical		
object, or site?	recontouring) or in areas		
	where covered activities will		
	occur		
	This mould be a dimest and		
	This would be a direct and		
	Droject and Expanded		
	Conservation Alternative only		
Would the project result in the	Historical resources and	Mitigation Massura HIST-1 as described in Section 5.5 Historical	Less than
disturbance of any human	unknown human remains	Recourses	Significant
remains including those	would potentially be affected	Kisour ees.	Significant
interred outside of dedicated	by ground-disturbing activities		
cemeteries?	related to restoration		
	undertaken as part of the		
	VPHCP (i.e., topographical		
	recontouring) or in areas		
	where covered activities will		
	occur.		
	This would be a direct and		
	cumulative impact for the		
	Project and Expanded		
	Conservation Alternative only.		

Table ES-1Summary of Environmental Impacts and Mitigation

			Level of Significance
Issue Area	Impact	Mitigation Measure	After Mitigation
Would the project result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.?	Tribal cultural resources could potentially be affected by ground-disturbing activities related to restoration undertaken as part of the VPHCP (i.e., topographical recontouring) or in areas where covered activities will occur. This would be a direct and cumulative impact for the Project and Expanded Conservation Alternative only.	Mitigation Measure HIST-1 as described in Section 5.5 Historical Resources.	Less than Significant
Would the project result in any alteration, directly or indirectly	Historic properties as defined in Section 106 of the NHPA	Mitigation Measure HIST-1 as described in Section 5.5 Historical Resources.	Less than Significant
of any of the characteristics of a	and considered as part of the		Significant
historic property that qualify the	human environment under		
property for inclusion in the	NEPA could potentially be		
National Register in a manner	affected by ground-disturbing		
that would diminish the	activities related to restoration		
integrity of the property's	undertaken as part of the		
location, design, setting,	VPHCP (i.e., topographical		

Issue Area	Impact	Mitigation Measure	Level of Significance After Mitigation
materials, workmanship,	recontouring) or in areas		
feeling, or association?	where covered activities will		
(NEPA).	occur.		
	This would be a direct and cumulative impact for the Project and Expanded Conservation Alternative only.		

The VPHCP Mitigation Framework, included in Chapter 11, would also be adopted as part of the VPHCP under the Project, and would be implemented on a project-by-project basis for covered projects and covered activities, as well as future development that is consistent with the provisions of the VPHCP. The Mitigation Framework includes general avoidance and minimization measures as required by FESA, compensatory mitigation consistent with the City's Environmentally Sensitive Lands (ESL) Regulations, and general requirements for enhancement and restoration plans required as part of compensatory mitigation, which will be consistent with the general requirements outlined in the City's Land Development Manual (LDM) Biology Guidelines.

No significant impacts were found for the issue areas of Agricultural Resources, Energy, Geologic Conditions, Health and Safety, Mineral Resources, Noise, Paleontological Resources, Population and Housing, Public Services and Facilities, Public Utilities, Recreational Resources, Transportation/Circulation/Parking, and Visual Effects/Neighborhood Character.

ES.5 POTENTIAL AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123(b)(2), an EIR/EIS shall identify areas of controversy known to the lead agency, including issues raised by the agencies and the public, and issues to be resolved, including the choice among alternatives and whether and how to mitigate for significant effects. A Notice of Preparation)/Notice of Intent was circulated beginning December 20, 2011, for a 30-day review period to interested public agencies, organizations, community groups, and individuals to receive input on the Project. A public scoping meeting to receive comments on issues of concern to be addressed in the EIR/EIS was held on December 12, 2011. Comments received during the public scoping period expressed concern regarding the following issues:

- Accuracy and completeness of vernal pool data inventory information
- Inclusion of enough area to adequately conserve all important vernal pool resources
- Consideration of other sensitive and indicator vernal pool species
- Development restrictions for land owners
- Funding and availability of perpetual funding mechanism

ES.6 SUMMARY OF PROJECT ALTERNATIVES

CEQA mandates that alternatives to the Project be analyzed. Section 15126.6 of the CEQA Guidelines requires the discussion of "a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project," even if the

alternatives would impede the attainment of the Project objectives to some degree. Section 3.4 of this EIR/EIS details the Project alternatives, and each alternative is analyzed at an equal level of detail throughout the document with Chapter 6 providing a comparison summary of the alternatives impacts. Alternatives included within this analysis are the following:

Expanded Conservation Alternative: The Expanded Conservation Alternative adds additional lands to the MHPA, beyond those conserved under the VPHCP, that include vernal pool resources and/or habitat with potential for vernal pools to be present or restored, generally located in Otay Mesa. The Expanded Conservation Alternative would conserve an additional nine vernal pool complexes within the Plan Area, and conserve an additional 277 pools (11% more), totaling 3.7 acres of basin area, over what is currently conserved under the existing conservation. The Expanded Conservation Alternative would conserve a greater number of pools occupied by San Diego mesa mint (five additional pools), San Diego button-celery (eight additional pools), Riverside fairy shrimp (3 additional pools), and San Diego fairy shrimp (31 additional pools) compared to the Project. The Expanded Conservation Alternative was developed with USFWS to include lands identified with historical vernal pool resources, appropriate soil types for vernal pools, or other factors that could provide quality vernal pool habitat.

Existing Conservation/No Project Alternative: The Existing Conservation/No Project Alternative would result in no approval or implementation of the VPHCP. No new actions, policies, or permits would be issued in association with vernal pool protection beyond those already afforded by the MSCP/MHPA. Under the Existing Conservation/No Project Alternative, a Section 10(a)(1)(B) permit would not be issued to the City. Instead, activities involving take of the covered species normally prohibited under Section 9 of FESA would require individual 10(a) permits or Section 7 consultation if a federal nexus exists under the current FESA regulations. To obtain a permit to take a listed species under Section 10(a)(1)(B) of FESA, the applicant must prepare an adequate site-specific HCP. The Existing Conservation/No Project Alternative would include the City operating under existing state NCCP/MSCP authorizations, which includes coverage and conservation of vernal pool habitat and the seven vernal pool species addressed in the VPHCP.

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CHAPTER 1.0 INTRODUCTION

This joint Environmental Impact Report and Environmental Impact Statement (EIR/EIS) has been prepared for the City of San Diego's (City) Vernal Pool Habitat Conservation Plan (VPHCP or Project). The VPHCP is a comprehensive habitat conservation plan (HCP) designed to protect, enhance, and restore vernal pool resources in specific areas of the city of San Diego (city), while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools.

This document has been prepared as a joint EIR/EIS due to the combined local, state, and federal discretionary actions and permits associated with the Project. Co-lead agencies are the City, pursuant to the California Environmental Quality Act (CEQA), and the U.S. Fish and Wildlife Service (USFWS), pursuant to the National Environmental Policy Act (NEPA), as described in further detail in Section 1.2, Purpose of the EIR/EIS and Intended Uses. The City and USFWS also coordinated with the California Department of Fish and Wildlife (CDFW) on the scope and analysis of this EIR/EIS for purposes of any subsequent related City and/or state actions that may be necessary to fully implement the VPHCP. The Project includes approval and adoption of the VPHCP and associated amendments to the City Land Development Code (LDC),)-Environmentally Sensitive Lands (ESL) Regulations, and Land Development Manual (LDM) Biology Guidelines;, General Plan;, Otay Mesa Community Plan;, Kearny Mesa Community Plan, and associated policies;, the Local Coastal Program;, a Boundary Line Adjustment (BLA) to the City's Multiple Species Conservation Program (MSCP) Multi-Habitat Planning Area (MHPA) on the Montgomery-Gibbs Executive Airport; and the City's existing state Natural Community Conservation Plan (NCCP) (Multiple Species Conservation Program [MSCP]) permits, (which are the discretionary actions under CEQA), as well as the issuance of a federal incidental take permit (ITP) under Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA);, -the federal action under NEPA). It is expected that to fully implement the VPHCP and streamline existing permits already in place, the City and CDFW may use the information in this EIR/EIS as a basis to evaluate and process/issue any necessary amendment(s) to and/or findings of consistency with the City's existing Multiple Species Conservation Program (MSCP) Subarea Plan (SAP), Implementing Agreement, and state 2835 Natural Community Conservation Plan (NCCP) authorization to maintain coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. This joint EIR/EIS has been prepared in compliance with NEPA as implemented by Council on Environmental Quality (CEQ) Regulations (Title 40 Code of Federal Regulations [CFR] Parts 1500–1508) and CEQA (California Public Resources Code [PRC] Section 21000 et seq.) as implemented by the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 1500-15387). Joint environmental documents are permitted and encouraged under both the Council on Environmental Quality (CEQ) Regulations (Section 1506.4) and the CEQA Guidelines (Section 15222). A consistent format has been established for the environmental consequences section of this EIR/EIS to assist the reader in reviewing and understanding the implications for the Project and its alternatives. For this joint document, both CEQA and NEPA terminology is provided, generally with CEQA being listed first. This EIR/EIS evaluates the potential for environmental effects from the Project.

1.1 PROJECT OVERVIEW

The VPHCP is a conservation plan for vernal pools and seven threatened and endangered vernal pool species (referred to as the covered species herein) that do not currently have federal coverage under the City's MSCP_SAP. The VPHCP would be compatible with, and would expand upon, the City's existing MSCP SAP to conserve additional lands with vernal pools that are occupied with threatened and endangered vernal pool species.

The VPHCP addresses vernal pool conservation for 206,124 acres (Figure 1-1, referred to as the VPHCP Plan Area, located in the southwestern portion of San Diego County.

The Project includes approval and adoption of the VPHCP and associated amendments to the City's LDC ESL Regulations and LDM Biology Guidelines, General Plan, Otay Mesa Community Plan, and Kearny Mesa Community Plan, the Local Coastal Program, a BLA to the City's MSCP/MHPA on the Montgomery-Gibbs Executive Airport (the discretionary actions under CEQA), as well as the adoption and implementation of the VPHCP, which includes the issuance of a city-wide incidental take permit (ITP) from USFWS under Section 10(a) of FESA (i.e., proposed action under NEPA) for impact to/incidental take of the following seven listed species (two crustaceans and five plants):

- San Diego fairy shrimp (*Branchinecta sandiegonensis*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- San Diego button-celery (Eryngium aristulatum var. parishii)
- Spreading navarretia (Navarretia fossalis)
- San Diego mesa mint (*Pogogyne abramsii*)
- California Orcutt grass (Orcuttia californica)
- Otay Mesa mint (*Pogogyne nudiuscula*)

San Diego and Riverside fairy shrimp are listed by USFWS as endangered species. With the exception of spreading navarretia, which is listed as a federally threatened species, all of the above plant species are federally listed and state-listed endangered species. The seven listed



City of San Diego VPHCP EIR/EIS

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species are proposed for coverage under the VPHCP and are referred to as "the covered species" throughout this EIR/EIS.

1.2 PURPOSE OF THE EIR/EIS AND INTENDED USES

In addition to federal, state, and local permits and discretionary actions required for implementation of the VPHCP, the environmental consequences associated with the Project must be evaluated pursuant to the requirements of NEPA and CEQA. Due to the need for federal, state, and local approval, adoption, and implementation, a joint EIR/EIS is the appropriate document to consider environmental consequences of the Project, including alternatives that satisfy the requirements of both NEPA and CEQA in one document and through concurrent processing. Approval and implementation of the VPHCP and issuance of the ITP could potentially result in significant environmental impacts or substantial adverse effects; therefore, preparation of an EIR/EIS is necessary.

The federal action requiring NEPA review is the issuance of an ITP for the VPHCP under Section 10(a) of FESA. The local action requiring CEQA documentation includes the evaluation and processing/issuance any required amendments to and/or findings of consistency with the City's incidental take authorization (California Endangered Species Act [CESA]/Permit No. PRT-830421) that was received in 1997 with the adoption of the City's MSCP to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. The VPHCP has been designed to meet the requirements under California Fish and Game Code Section 2800 et seq. for listed and nonlisted species conserved under an NCCP.

The City action requiring CEQA review is adoption of the VPHCP, including funding mechanisms and conditions of coverage, a Vernal Pool Management and Monitoring Plan (VPMMP), amendments to the City's General Plan, Otay Mesa Community Plan, and Kearny Mesa Community Plan, as well as amendments to the LDC Environmentally Sensitive Lands (ESL) Regulations and Land Development Manual (LDM) Biology Guidelines and a BLA to the City's MSCPMHPA on the Montgomery-Gibbs Executive Airport.

It is expected that to fully implement the VPHCP and streamline existing permits already in place, CDFW may use the information in this EIR/EIS as a basis to evaluate and process/issue any necessary amendment(s) to and/or findings of consistency with the City's existing MSCP SAP, Implementing Agreement, and State 2835 NCCP authorization to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. Elements of the VPHCP that could require amending existing state permits include (but are not limited to) replacing the take/impact levels for vernal pool habitat and species; incorporating the covered projects and activities, including hardlined projects identified in Chapter 4 (Covered

Projects and Activities) of the VPHCP; and adopting the adaptive management, monitoring and funding program identified in Chapter 7 (Management, Monitoring, and Reporting) and Chapter 10 (Preserve Management and Funding MechanismsVPHCP Funding) of the VPHCP. The management and monitoring provisions in the VPHCP, which are based on updated vernal pool mapping and surveying information, would replace the older MSCP provisions from the MSCP Framework Management Plan (FMP) for vernal pools and the seven covered species.

This EIR/EIS will be used as an informational document intended to provide public decisionmakers, responsible or other interested agencies, and the general public with an assessment of potential environmental effects of the Project. The joint EIR/EIS will provide and evaluate the following:

- Potential environmental consequences associated with adoption and implementation of the VPHCP;
- The Expanded Conservation Alternative that meets the goals and objectives of the VPHCP;
- Existing Conservation/No Project Alternative;
- Mitigation measures for identified significant environmental effects;
- Cumulative and growth-inducing impacts from the Project; and
- Data for use by decision-makers to make an informed approval decision.

1.3 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

As required by NEPA and CEQA, lead and responsible agencies must be identified that will be responsible for approval, permitting, and review/comment of the environmental document.

The City is identified as the lead agency for the CEQA compliance requirements of the Project, pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The lead agency, as defined by CEQA Guidelines Section 15367, "...is the public agency which has the principal responsibility and authority for carrying out or approving a project."

The agency carrying out the federal action is responsible for complying with the requirements of NEPA. Per NEPA (Section 1508.16), the lead agency is defined as "...the agency or agencies preparing or having taken primary responsibility for preparing the EIS." USFWS is identified as the federal lead agency pursuant to NEPA.

Several other agencies have special roles with respect to the Project and may use this EIR/EIS as the basis for their decisions to issue approvals and/or permits that might be required.

Section 15381 of the CEQA Guidelines defines a responsible agency as follows:

...a public agency which proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or negative declaration. For the purposes of CEQA, the term 'responsible agency' includes all public agencies other than the lead agency which have discretionary approval power over the project.

Additionally, Section 15386 of the CEQA Guidelines defines a trustee agency as follows:

...a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the state of California.

Section 1508.5 of NEPA defines a cooperating agency as follows:

...any Federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major Federal action significantly affecting the quality of the human environment...A State or local agency of similar qualifications or, when the effects are on a reservation, an Indian Tribe, may by agreement with the lead agency become a cooperating agency.

Responsible, trustee, or cooperating federal, state, and local agencies that may rely on this EIR/EIS in a review capacity or as a basis for subsequent necessary related actions, including issuance of findings of consistency with and/or amendment to a permit for implementation of the VPHCP, may include CDFW as trustee agency and responsible agency for determining the VPHCP's consistency with the City's existing NCCP (MSCP) permit requirements and/or any related actions necessary to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP.

1.4 TECHNICAL WHITE PAPERS SUPPORTING THE VPHCP DEVELOPMENT PROCESS

A series of eight Technical White Papers (TWPs) were prepared that provided background research, technical data, and analysis to assist the City with development of the VPHCP (Table 1-1). Although the data and analysis presented in the TWPs are now superseded by the VPHCP, their general concepts, topics, and purposes are relevant to the Project as a whole. Since their publication, the technical data analyses have evolved during the VPHCP development process;

thus, TWPs are not considered a reference for technical data, but rather a resource for the processes and methodologies used to develop the VPHCP. The TWPs were peer reviewed by members of the scientific community (see Chapter 13, List of Preparers). The TWP process was also an opportunity for the City to solicit participation and input from the general public in the VPHCP process. The eight TWPs are summarized in the table below:

Technical White Paper	Title	Primary Author	Brief Description
1	Focal Species Status Update in the City of San Diego	AECOM	Provides a status update on the seven focal (i.e., Covered) vernal pool species including listing status, species description, habitat, life cycle, status and distribution, threats and pressures, propagation and restoration potential, and status in VPHCP Plan Area.
2	Assessment of Focal Species Conservation	AECOM	Presents data related to the conservation of the seven focal species within the City's VPHCP Plan Area ("the Preserve"), as well as two alternative preserve boundaries. The goal of the analysis is to compare the conservation provided for the focal species by each alternative VPHCP boundary, as well as identify the gaps in conservation of each alternative.
3 & 4	Adaptive Management and Monitoring Strategy for the City of San Diego Vernal Pool Habitat Conservation Plan (a combined document)	AECOM	TWP 3 & 4 is a combined document that provides management and monitoring strategies, directives, and recommendations for all lands containing vernal pools in the Preserve to preserve and/or restore their biological components, particularly the seven focal species.
5	Cost Evaluation for Implementation of Management and Monitoring	AECOM	Provides a cost evaluation for implementing the VPHCP monitoring and management program over the 31-year life of the permit.
6	Recommendations for Conditions of Coverage	AECOM	Recommends conditions of coverage for the seven focal species consistent with the goals and objectives of the VPHCP.
7	Conservation Analysis	AECOM	Synthesizes the information and analysis contained in the previous TWPs for use in preparation of the VPHCP, and by USFWS for its Section 7 Biological Opinion for the VPHCP.
8	Preserve Management Funding Mechanisms (SANDAG SB)	SANDAG	Provides an analysis of funding sources as well as options for mechanisms to fund the VPHCP over the life of the permit.

Table 1-1VPHCP Technical White Papers

In 2002, the City received funding from the State of California through a USFWS Traditional Section 6 Grant to complete an inventory and management plan of vernal pools within the City's jurisdiction. Much of the City and private lands had never been surveyed for specific vernal pools and, in many cases, historical maps did not accurately represent the existing basins. The Vernal Pool Inventory (VPI) project used advanced technology to update information on the location of individual vernal pools and complexes, including documentation of changes in vernal pool distribution due to development and restoration efforts. The inventory expanded and

updated existing information and provides the basis for the analysis of vernal pool conservation efforts within San Diego. In 2012, the City, USFWS, CDFW, San Diego Association of Governments (SANDAG), and AECOM gathered additional available vernal pool data from surveys, reports, and the public, resulting in a database that includes the best available information for vernal pools and the seven covered species on private and public lands. The database was analyzed in preparation of the VPHCP to determine the extent of vernal pool protection, as well as preservation and management needs.

1.5 PUBLIC INVOLVEMENT PROCESS

Public participation is a key component of CEQA and NEPA, with opportunities for public participation required throughout the environmental review process. The general purpose of the public outreach is:

- Inform the public and policy makers that the VPHCP and associated environmental analysis are underway.
- Involve representatives of interested groups and individuals in the planning process.
- Build a broad base of understanding and support for the VPHCP.

The CEQA Notice of Preparation (NOP) and NEPA Notice of Intent (NOI) are to provide formal notification to federal, state, and local agencies involved with funding or approval of a project, and to other interested organizations and members of the public, that an EIR/EIS will be prepared. The NOP and NOI are intended to encourage interagency communication concerning a proposed project and provide sufficient background information so that agencies, organizations, and individuals can respond with specific comments and questions on the scope and content of the EIR/EIS prior to its preparation. The NOP and NOI for the Project were issued in December 2011. A copy of the NOP and NOI and the comment letters received on those notices are included as Appendix A.

Public outreach has included affected parties such as City departments and decision-makers, private property owners, environmental groups, developers, special interest groups, and interested individuals. The development of the VPHCP has included numerous opportunities for public input throughout the process, as outlined in Table 1-2.

The City published a preliminary draft VPHCP on its website to provide the public an opportunity to review and provide comments prior to the completion of the public review draft VPHCP. A total of 15 comments were submitted. The City reviewed public comments in coordination with the Wildlife Agencies and made changes to the draft VPHCP. A summary of these comments is provided in Appendix B of this EIR/EIS.

Public Outreach/Input Opportunity	Date
Initial VPHCP Workshop	January 14, 2011
Initial workshop materials posted on City website with email link for comments	January 2011
EIR/EIS Scoping Meeting	December 12, 2011
Notice of Preparation and Scope of Work distributed for 30-day public review	December 20, 2011
Notice of Intent distributed for 30-day public review	December 20, 2011
Otay Mesa Community Planning Meeting	February 15, 2012
Otay Mesa Property Owner's Association meeting	March 1, 2012
Second VPHCP Workshop	March 15, 2012
Second VPHCP Workshop materials posted on City website with email link for comments	March/April 2012
Property Owner's meeting	June 26, 2012
Technical White Papers 1 through 6 posted on City's website with email link for comments	August 2012
Third VPHCP Workshop	August 30, 2012
Third VPHCP Workshop materials posted on City website with email link for comments	September 2012
Vernal Pool Information Workshop	December 12, 2013
Preliminary HCP document and interactive map posted on City website for a 30-day review	March 10, 2015
Wetland Advisory Board Meeting	February 1, 2016
Otay Mesa Community Planning Group Meeting	February 17, 2016
Community Planner's Committee Meeting	February 23, 2016
Otay Mesa Owner's Meeting	May 5, 2016
Code Monitoring Team (CMT) Meeting	May 11, 2016
Technical Advisory Committee (TAC) Meeting	May 11, 2016
Business Industry Association (BIA), Legislative Policy Committee	May 20, 2016
Kearny Mesa Community Planning Group Meeting	September 21, 2016
Draft EIR/EIS released for 60-day CEQA Public Review	September 30, 2016
Otay Mesa Community Planning Group Meeting	December 14, 2016
Draft EIR/EIS released for 60-day NEPA Public Review	December 23, 2016
Kearny Mesa Community Planning Group Meeting	January 18, 2016
Kearny Mesa Community Planning Group Meeting	August 16, 2017

 Table 1-2

 VPHCP Public Outreach/Input Opportunities

1.6 EIR/EIS SCOPE AND CONTENT

EIR/EIS Scope

The scope of analysis and the content for this EIR/EIS were established based on professional judgment regarding the nature of the VPHCP, City EIR and USFWS EIS procedures, Appendix G of the CEQA Guidelines, USFWS Guidelines for Implementing NEPA (USFWS 2003), and comments received during the NOP/NOI review process as detailed in Section 1.5, Public Involvement Process. The City and USFWS also coordinated with CDFW on the scope and

analysis of this EIR/EIS for purposes any subsequent related City and/or state actions that may be necessary to fully implement the VPHCP. As noted in Table 1-2, a public scoping meeting to receive comments on issues of concern to be addressed in the EIR/EIS was held on December 12, 2011. It is important to note that scoping for the EIR/EIS process is focused on the content of the environmental information and analysis to be included in the EIR and not on the components or strategy of the VPHCP itself. The EIR/EIS process is to address environmental effects of the VPHCP as proposed. The key considerations raised during the public scoping process were:

- Need for a comprehensive vernal pool data inventory
- Adequacy of proposed conservation to allow vernal pool species to recover
- Consideration of whether the VPHCP is inclusive enough to adequately conserve all important vernal pool resources
- Development restrictions for private property owners subject to the VPHCP
- Identification of funding sources
- Adequacy of funding availability in perpetuity
- Provision of public access and educational opportunities within the lands included in the VPHCP
- Consideration and coverage of other sensitive and indicator vernal pool species
- Consideration of impacts from emergency situations (i.e., fire response)
- Consideration of impacts from urban runoff and pollution
- Need to clearly define and show Preserve boundaries

EIR/EIS Content

This EIR/EIS evaluates the direct, indirect, permanent, temporary, and cumulative effects of the Project and alternatives, and proposes mitigation measures to minimize those effects, as feasible. The following issues were determined to be potentially significant and adverse and are, therefore, fully evaluated in Chapter 5, Environmental Consequences (Sections 5.1 through 5.7) of this EIR/EIS:

- Land Use
- Biological Resources
- Air Quality
- Greenhouse Gas Emissions
- Historical Resources
- Hydrology and Water Quality
- Environmental Justice
The following 10 issue areas were determined, based on preliminary CEQA and NEPA review, not to have a significant adverse effect on the environment as a result of VPHCP implementation: Agricultural Resources, Geologic Conditions, Health and Safety, Mineral Resources, Noise, Paleontological Resources, Population and Housing, Public Services and Utilities, Transportation/Circulation and Parking, and Visual Effects and Neighborhood Character.

1.7 AVAILABILITY OF THE EIR/EIS FOR PUBLIC REVIEW

The Draft EIR/EIS is distributed for review to the public and interested and affected agencies for a 60-day review period for the purpose of providing comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant and adverse effects of the Project might be avoided and mitigated" (CEQA Guidelines Section 15204). CEQA (PRC Section 21091(a); CEQA Guidelines Section 15105(a)) and NEPA (40 CFR Section 1506.10) require a 45-day public review period for a draft EIR; however, because this document is issued as a joint EIR/EIS, the public review period is extended to 60 days to concurrently meet the federal lead agency (USFWS) public review requirements.

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CHAPTER 2.0 ENVIRONMENTAL SETTING

This chapter presents a description of the location and physical setting of San Diego and describes the current physical environmental conditions within the vicinity of the VPHCP Plan Area.

2.1 REGIONAL CONTEXT

The San Diego region is located in southern California, in the southwest corner of the continental United States. It is bordered on the south by Mexico, on the west by the Pacific Ocean, on the north by Orange and Riverside counties, and on the east by the Colorado Desert and Imperial County. The San Diego area includes 18 cities (SANDAG 2010) and many unincorporated communities within an estimated 4,200 square miles (U.S. Census 2015), with a majority of residents living in the western half of the region. With its substantial military presence, and reputation as a research and economic growth center, the region has experienced considerable development pressure over the years.

The City's corporate limits encompass approximately 343 square miles of land within San Diego County (SANDAG 2010). The San Diego metropolitan area is generally bounded on the north by Escondido and Poway, the foothills of the coastal mountains on the east, the Mexican border on the south, and the Pacific Ocean on the west. Approximately 42% of the region's population, representing an estimated 1.3 million residents (U.S. Census 2015), resides within the City limits. San Diego is the second most populous city in the state of California (City of San Diego 2011b). By 2020, San Diego's population is expected to rise to 1.5 million residents and to 1.69 million by 2030 (City of San Diego 2011b).

2.2 PHYSICAL CHARACTERISTICS OF THE REGION

With its varied topography consisting of coastal bluffs and plains, mesas, inland valleys, and foothills and mountains, and high number of sunny days, the San Diego region supports one of the most biologically diverse environments in the continental United States. While the region's climate and soils support a wide variety of species and habitat types, human activities over time have modified many of the region's plant communities and replaced large tracts of native vegetation, including wetlands with agriculture and urban development, especially in the central and western half of the region where most development is focused. A description of the physical characteristics of the San Diego region is included below, as well as an overview of vernal pools.

<u>Climate</u>

The region's sunny Mediterranean-type climate is strongly influenced by its proximity to the coast, which moderates temperatures and tempers prevailing winds. Nighttime and early morning clouds are characteristic in coastal areas during the spring and summer, and the region experiences relatively cool summers and warmer winters as compared to other areas of similar latitude.

As compared to coastal areas where daily temperature ranges average 15 degrees Fahrenheit (°F), inland daytime temperatures can be noticeably warmer and nighttime temperatures noticeably cooler, with daily temperature ranges of 30° F or more. San Diego rarely experiences freezing temperatures. The average annual high temperature is approximately 70° F; the average annual low is 55° F.

Dry easterly winds occasionally bring temperatures in the 90s and 100s to the eastern sections of the city and outlying suburbs. These winds, also known as "Santa Anas," may last several days and are predominant in the fall.

Topography

The San Diego metropolitan area consists of a broad stream-dissected coastal plain, which transitions 10 to 15 miles inland from the Pacific Ocean to the foothills before ascending to mountain and valley relief in the eastern half of the county. Elevations generally range between sea level and 600 feet. The highest coastal elevations include Mount Soledad in coastal La Jolla at 822 feet. At 1,600 feet, Cowles Mountain, in the eastern part of the city, is the highest peak. Deep canyons separate mesas and provide natural open space and a transition between many of the city's more densely populated communities.

Drainage

Seven watersheds lie within the City's jurisdictional boundary. From north to south, these are the San Dieguito, Peñasquitos, San Diego, Pueblo, Sweetwater, Otay, and Tijuana watersheds. Drainages within these watersheds are generally from east to west and extend from the interior foothills and mountains to the coast, outletting in the coastal lagoons, marshes, bays, or created channels before flowing to the Pacific Ocean. Wetlands associated with the drainages or smaller seasonally wet depressions are located throughout the San Diego area, including foothills and inland valleys, mesas, and coastal areas. Surface streams in these regions are predominantly intermittent, flowing only during periods of high rainfall. In addition, much of the area is steeply sloped, leading to potentially high rainfall runoff rates and flood hazards.

Vernal Pools

Vernal pools are seasonal, depression-type wetlands that result from a unique set of physical parameters and support a specific biological assemblage of plant and animal species. Functional vernal pool ecosystems form under specific physical conditions when small, shallow depressions collect precipitation to create a seasonally perched water table. In San Diego County, these basins are generally oval to circular in shape and one to several hundred square feet in size (Zedler 1987). The features occur most often on level ground and are often associated with hillocks known as mima mounds; however, sometimes these wetlands can occur on former landslide areas and are then referred to as "slump" pools. Vernal pools in the City are primarily associated with Huerhuero, Stockpen, Redding, and Olivenhain soil series, and the basins are sealed either by subsurface layers of impervious hardpan, or clay that expands to seal the basin when saturated. The claypan or the hardpan subsurface creates the perched water table that is required for the presence of ponding (Greenwood and Abbot 1980). Figure 2-1 is a schematic cross-section of a vernal pool that illustrates the perched water table. From a geomorphological level, most of complexes associated with a hardpan are found in the central portions of the City in the Kearny Mesa, Claremont Mesa, and Mira Mesa areas. Claypan pools are mostly associated with Otay Mesa in the southern portion of the City. Vernal pools in the Del Mar Mesa area of the City are a mixture of claypan and hardpan substrates (Bauder and McMillan 1998).



Figure 2-1. Schematic Cross-Section of a Vernal Pool

These ecosystems are defined by seasonal hydrologic extremes: desiccated pool basins during the dry months followed by variable lengths of saturation and inundation during the rainy season. In southern California, the interannual variation in precipitation augments the inconsistent moisture conditions. This drastic change between vegetated wetland and dry basin defines a vernal pool and separates them from other wetland ecosystems (Zedler 1987).

Although seasonal wetlands are found worldwide, vernal pools sharing physical and biological parameters occur within the Mediterranean climate zone of the western United States, from southern Oregon, to northern Baja California, Mexico. In southern California, remnants of historic vernal pools occur on coastal mesas in the counties of Santa Barbara, Los Angeles, Orange, and San Diego, as well as inland in the San Diego foothills and Riverside basalt terraces.

The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species, based on the species listed in Appendix A of the VPHCP. Consistent with the City's LDM Biology Guidelines Attachment II, A.3, depressions that are man-made, such as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indictor plant species. Road ruts and other seasonal depressions that are not vernal pools may contain wildlife associated with vernal pools, such as San Diego or Riverside fairy shrimp, but will not contain vernal pool plant indicator species (often referred to as road pools). The VPHCP and reference to vernal pools in this EIR/EIS also applies to these man-made road ruts and other seasonal depressions if they contain one or more of the covered species.

For convenience of reference, groups of vernal pools are sometimes referred to as vernal pool complexes that may include two to several hundred individual vernal pools (Keeler-Wolf et al. 1998). Vernal pool complexes are defined as a series of vernal pool groups that are hydrologically connected with similar soil types and species compositions. A vernal pool series is a set of complexes located in a geographic area that can be related to a particular mesa top or similar geographic area. For example, the "J" series of vernal pools occur on lands in the Otay Mesa community of San Diego. Within San Diego County, vernal pool complexes were first described and surveyed by Beauchamp and Cass (1979) and subsequently updated in 1986 (Bauder) and 2004 (City of San Diego). The use of series and complexes is a helpful tool for planning and management, but it is recognized that a complex can be subjective. For the VPHCP, all vernal pools have been assigned both a complex identification code and a subcomplex name (e.g., J14, Cal Terraces South).

Local upland vegetation communities associated with vernal pools include needlegrass grassland, annual grassland, coastal sage scrub, maritime succulent scrub, and chaparral (USFWS 1998b). Vernal pool habitat and species are considered sensitive because they have been greatly reduced due to land development, agricultural clearing, and other anthropogenic factors. Within the City, vernal pool complexes are found in the following areas: Del Mar Mesa, Mira Mesa, Carmel Mountain, Rancho Peñasquitos, Torrey Hills, Torrey Highlands, University, Kearny Mesa, Mission Trails Regional Park, East Elliott, Tierrasanta, Serra Mesa, Navajo, Otay Mesa, Otay Lakes, Proctor Valley, and Marron Valley.

2.3 VPHCP PLAN AREA OVERVIEW

The VPHCP Plan Area is the geographical area for which the protections provided under the VPHCP are afforded to the seven covered species, as shown in Figure 1-1 and for which the Section 10 permit applies. The VPHCP Plan Area encompasses 206,124 acres in the southwestern portion of San Diego County. The VPHCP Plan Area includes lands subject to the City's jurisdiction within the jurisdictional boundary of the City, as well as three areas owned by

the City's Public Utilities Department in the unincorporated portion of San Diego County. The VPHCP Plan Area also includes existing conserved lands within San Diego that may be owned by other entities (e.g. not subject to City's land use jurisdiction), where certain covered activities (i.e., restoration, enhancement, management, and/or monitoring activities) may occur if the land owner receives a Certificate of Inclusion. The VPHCP Plan Area's extent is, by design, the same area covered by the City's MSCP SAP; however, the VPHCP is a separate but complementary conservation plan for vernal pools and the seven covered species not covered under the City's federal permit for the MSCP SAP.

In certain areas, the VPHCP Plan Area overlaps with the plan areas for the San Diego Gas & Electric (SDG&E) and/or San Diego County Water Authority (SDCWA) HCPs. Due to the small scale of the SDG&E and SDCWA rights-of-ways (ROWs), the City is unable to identify which vernal pools occur within these utility ROWs and may be covered under the SDG&E or SDCWAHCPs.

The VPHCP Plan Area is characterized by urban land uses covering approximately 55.4% of the area with the remainder as open space/park system or undeveloped vacant land. Because of the large expanse of the VPHCP coverage area, the physical characteristics described in this section are discussed in overall generalities.

Within the VPHCP Plan Area are 54 mapped vernal pool complexes; the majority of these complexes have had some type of restoration and/or enhancement (previously and/or currently). The number of mapped vernal pools within the VPHCP Plan Area is representative of data collected over multiple years from multiple sources and is not necessarily an absolute value during any given year.

For planning and management purposes, the VPHCP Plan Area is divided into three "planning units": North, Central, and South. The planning units were selected for convenience of management due to the proximity of vernal pools within each unit. The planning units are described below and shown in Figures 2-2 through 2-4. Full details of each planning unit can be found in the VPHCP.

North VPHCP Planning Unit

The North VPHCP planning unit includes the City jurisdiction north of State Route (SR) 52 (see Figure 2-2). Mesa tops containing vernal pools in this area include Carmel Mountain, Del Mar Mesa, and Mira Mesa. In addition, a small area of vernal pools is located within the coastal zone. All vernal pool resources in the coastal zone are either conserved or required to be conserved; no impacts to vernal pools within the coastal zone would occur. The vernal pools on private

property are located within designated Preserve areas associated with the Crescent Heights, Salk Institute, and Tierra Alta projects. All of the projects include requirements for conservation and/or covenant of easements, a management plan, and funding for long-term management.

This planning unit contains tracts of interconnected existing and planned open space, interlaced with urban development. This planning unit includes 110,891 acres, or 48%, of the total VPHCP Plan Area. Approximately 43% of the land use within the North VPHCP planning unit is categorized as urban and 57% as open space.

The North VPHCP planning unit contains 933 mapped vernal pools. Vernal pool soils include clay and fine, coarse, sandy, and cobbly loam soil from the, Chesterton, Huerhuero loam, Redding, and Diablo-Olivenhain soil series. Vernal pool resources are present in varying conditions within the North VPHCP planning unit. Carmel Mountain is owned by the City with the exception of two private in holdings. A few vernal pools also occur south of Carmel Mountain near the SDG&E substation. Del Mar Mesa is split among various public agencies, including the City, CDFW, and USFWS. Each of these entities has mandates that direct their management of open space preserves. Del Mar Mesa also is part of the San Diego National Wildlife Refuge Vernal Pool Complex. Mira Mesa is predominately developed, but some vernal pools remain on isolated parcels throughout the mesa. Additional vernal pool areas that occur within the North VPHCP planning unit include pools on the city's eastern boundary (Castlerock project), adjacent to the City of Santee.

Central VPHCP Planning Unit

The Central VPHCP planning unit is located generally south of SR 52 and north of SR 94 (See Figure 2-3). Mesa tops that support vernal pools in this planning unit include Clairemont Mesa, Kearny Mesa, and Serra Mesa. Vernal pools are also found in portions of Mission Trails Regional Park. The Central VPHCP planning unit includes 81,296 acres, or 35%, of the total VPHCP Plan Area. Approximately 70% of the land use within the Central VPHCP planning unit is categorized as urban and 30% as open space. With the exception of Mission Trails Regional Park, the majority of this planning unit is heavily urbanized.

The Central VPHCP planning unit contains 620 mapped vernal pools. Vernal pool soils include clay and fine, coarse, sandy, and cobbly loam soil from the Bosanko, Chesterton, Diablo, Huerhuero, Olivenhain and Redding, series. Vernal pool resources are present in varying conditions within the Central VPHCP planning unit. Mission Trails Regional Park contains high-quality pools in two locations within the park. Several vernal pool series continue to persist in Kearny Mesa south of SR 52 on property owned by the City, and under private ownerships.



City of San Diego VPHCP EIR/EIS

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North VPHCP Planning Unit

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Central VPHCP Planning Unit



1.75 0.875 0 1.75 Miles Figure 2-4 South VPHCP Planning Unit Large concentrations of vernal pools occur on Montgomery-Gibbs Executive Airport and on isolated private parcels near the airport. Smaller locations of vernal pools occur in the Central VPHCP planning unit near Lake Murray and Tecolote Park.

South VPHCP Planning Unit

The South VPHCP planning unit is located generally south of SR 94, and north of the international border between the United States (U.S.) and Mexico (see Figure 2-4). Areas containing vernal pools include Otay Mesa, Proctor Valley, Otay Lakes, and Marron Valley. The South VPHCP planning unit includes 38,742 acres, or 17%, of the total VPHCP Plan Area. Approximately 53% of the land use within the South VPHCP planning unit is categorized as urban and 47% as open space.

The South VPHCP planning unit includes the majority of the vernal pools in the VPHCP Plan Area with 1,038 mapped vernal pool resources. Vernal pool soils include clay and fine, coarse, sandy, and cobbly loam soil from the Diablo, Gravel, Huerhuero, Linne, Olivenhain, Redding, and Stockpen. The Otay Mesa community in this planning unit contains the largest tracts of vernal pools that have been conserved and restored and also the largest area of vernal pool resources that still retains development potential. Multiple private property owners control areas of vernal pool resources, especially south of SR 905 where planned urban development has not yet occurred. Vernal pools located on the mesa to the west of Spring Canyon and along the drainage swale adjacent to La Media Road are notable examples of vernal pool resources. In addition, vernal pool resources are located on Brown Field Municipal Airport, which is owned and operated by the City. This page intentionally left blank.

CHAPTER 3.0 PROJECT DESCRIPTION

This chapter includes the Project background and a history of the VPHCP development process (Section 3.1), the Project purpose and objectives (Section 3.2), a detailed description of the Project (Section 3.3) and the alternatives to the Project (Section 3.4). In addition, as required by FESA, development of the VPHCP included alternatives that were considered but ultimately eliminated for various reasons (Section 3.5). A discussion of the discretionary actions, permits, and approvals required for the Project is included in Section 3.6).

The VPHCP is a comprehensive conservation planning document designed to create, manage, and monitor a vernal pool ecosystem preserve within San Diego. Establishment of the city-wide Preserve through implementation of the VPHCP is intended to protect vernal pool habitat and viable populations of seven listed vernal pool species included for coverage, while accommodating continued economic development and quality of life for San Diego residents.

The Project includes the following discretionary actions under CEQA: City Council approval and adoption of the VPHCP and amendments to the City's LDC ESL Regulations, LDM Biology Guidelines, General Plan, Otay Mesa Community Plan, Kearny Mesa Community, and Local Coastal Program, and a BLA to the City's MSCP MHPA on the Montgomery-Gibbs Executive <u>Airport</u>. The issuance of an ITP under Section 10(a)(1)(B) of FESA is the federal action that requires review under NEPA.

NEPA and CEQA require the objective evaluation of a "reasonable" range of project alternatives. Equal comparison of these reasonable alternatives allows for the advantages and disadvantages of each to be weighed and analyzed. Under NEPA, reasonable alternatives are those that are practical or feasible from a technical and economic perspective, and based on common sense (46 Federal Register 18026, as amended; 51 Federal Register 15618). Section 15126.6 of the CEQA Guidelines requires that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Factors used to determine feasibility include site suitability, economic limitations, availability of infrastructure, consistency with local plans and policies, other plan or regulatory limitations, and jurisdictional boundaries.

The alternatives identified in this document (see Section 3.4, Project Alternatives) are analyzed at an equal level of detail to facilitate the ultimate selection of an alternative that best reflects the desired benefits and outcomes. That alternative will be identified as the Preferred Alternative and the Environmentally Preferable Alternative.

3.1 PROJECT BACKGROUND

The development of the VPHCP is a result of decades of combined local, state, and federal discretionary actions and permits associated with vernal pool conservation in the city. This section summarizes the history of the VPHCP development process as well as the City's historic efforts related to vernal pool conservation, monitoring, and management.

3.1.1 <u>Conservation Planning Context</u>

A wide variety of existing federal, state, and City policies, plans, and regulations form the overall planning context for the VPHCP and drive the process for the development, approval, and implementation of the VPHCP. The VPHCP has been designed to comply with and complement those applicable and guiding federal, state, and City policies.

Federal Endangered Species Act of 1973

FESA, under the authority of USFWS and the National Marine Fisheries Service (NMFS), provides for the protection and conservation of fish, wildlife, and plants that have been federally listed as threatened or endangered. NMFS's jurisdiction under FESA is limited to the protection of marine mammals (with the exception of manatees and sea otters), marine fishes, and anadromous fishes; all other species are subject to USFWS jurisdiction. No species under NMFS jurisdiction are included in the Proposed Plan; therefore, NMFS jurisdiction is not included in the description below.

USFWS can list species as either endangered or threatened. An endangered species is at risk of extinction throughout all or a significant portion of its range (FESA Section 3[6]). A threatened species is likely to become endangered in the foreseeable future (FESA Section 3[19]). Section 9 of FESA prohibits the take of any fish or wildlife species listed under FESA as endangered and most species listed as threatened. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the species, including significant habitat modification." Section 9 prohibits the "take" of listed animal species and the "removal or reduction to possession" of any listed plant species "under federal jurisdiction" (e.g., on federal land). Even though under FESA there is no prohibition of take of plants, the VPHCP covers five

plants, which allows for "no-surprises" assurances for these species. FESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in FESA under Section 7 for federal actions and Section 10 for nonfederal actions. "Take" as applied to covered plant species in the VPHCP means impacts to plant species and their associated habitat.

In cases where federal land, funding, or authorization is not required for an action by a nonfederal entity, the take of listed species must be permitted by USFWS through the Section 10 process. Private landowners, corporations, state agencies, local agencies, and other nonfederal entities must obtain a Section 10(a)(1)(B) ITP for take of federally listed fish and wildlife species "that is incidental to, but not the purpose of, otherwise lawful activities."

The take prohibition under FESA does not apply to listed plants. Under Section 9(a)(2)(B) of FESA, endangered plants are protected from "removal, reduction to possession, and malicious damage or destruction" in areas that are under federal jurisdiction. Section 9(a)(2)(B) of FESA also provides protection to plants from removal, cutting, digging up, damage, or destruction where the action takes place in violation of any state law or regulation or in violation of a state criminal trespass law. Thus, FESA does not prohibit the incidental take of federally listed plants on private or other nonfederal lands unless the take or action resulting in take requires federal authorization or is in violation of state law. Thus, Section 10 ITPs are necessary only for take of wildlife and fish species. The Section 7(a)(2) prohibition against jeopardy, however, applies to plants, and USFWS may not issue a Section 10(a)(1)(B) ITP if the issuance of that permit would result in jeopardy to a listed plant species.

To receive a Section 10(a)(1)(B) ITP, the permit applicant is required to provide the following:

- A complete description of the activity sought to be authorized.
- The common and scientific names of the species to be covered by the permit, as well as the number, age, and sex of such species, if known.
- An HCP.

The HCP must specify the following mandatory elements:

- The impact that will likely result from the taking of covered species.
- The steps the applicant will take to monitor, minimize, and mitigate such impacts; the funding that will be available to implement such steps; the implementation of adaptive management; and the procedures to be used to deal with unforeseen circumstances.
- The alternative actions to taking of covered species the applicant considered and the reasons why such alternatives are not proposed to be utilized.

• Such other measures that the Director [of the Department of Interior or Commerce] may require as being necessary or appropriate for purposes of the Plan (50 CFR 17.22[b]).

The VPHCP is intended to satisfy these requirements.

To receive an ITP, Section 10(a)(2)(B) of FESA requires that the following criteria be met:

- The taking will be incidental to otherwise lawful activities.
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking.
- The applicant will ensure adequate funding for the HCP and procedures to deal with unforeseen circumstances.
- The taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild.
- The applicant will ensure that other measures that USFWS may require as being necessary or appropriate will be provided.
- USFWS has received such other assurances as may be required that the HCP will be implemented.

Prior to the approval of an HCP, USFWS is required to undertake an internal Section 7 consultation because issuance of an ITP is a federal action. (See the discussion of FESA Section 7, above.) Elements specific to the Section 7 process that are not required under the Section 10 process (e.g., analysis of impacts on designated Critical Habitat, analysis of impacts on listed plant species, and analysis of indirect and cumulative impacts on listed species) are included in the Plan to meet the requirements of Section 7.

In June 2000, USFWS adopted a five-point policy initiative designed to clarify elements of the HCP program as they relate to measurable biological goals, adaptive management, monitoring, permit duration, and public participation.

- *Biological Goals and Objectives* HCPs must include biological goals and objectives that set out specific measurable targets that the plan is intended to meet.
- Adaptive Management Adaptive management provides a means to address biological uncertainty and to devise alternative strategies for meeting biological goals and objectives.

- *Monitoring* HCPs must institute a monitoring program to gauge the effectiveness of the plan in meeting the biological goals and objectives and to verify that the minimization and mitigation measures identified in the plan are being properly implemented.
- *Permit Duration* Several factors are used to determine the duration of an ITP, including the timeframe of the proposed activities and the expected positive and negative effects on covered species associated with the proposed duration.
- *Public Participation* Under the five-point policy guidance, USFWS sought to expand public participation in the HCP process to provide greater opportunity for the public to assess, review, and analyze HCPs and associated NEPA documentation. As part of this effort, USFWS has expanded the public review process for most HCPs.

California Endangered Species Act of 1970

CESA provides for the conservation, protection, restoration, and enhancement of any state endangered or threatened species and its habitat while allowing for the lawful take of such species provided that the take is incidental, minimized, fully mitigated for with adequate funding, and does not jeopardize the continued existence of the listed species. Under CESA, incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and "fully mitigates" the impacts of the take.

California Natural Community Conservation Planning Act of 1991

The California Natural Community Conservation Planning Act of 1991 (California Fish and Game Code Section 2800 et seq.) takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity by the State of California, and numerous private and public partners. A Natural Community Conservation Plan (NCCP) identifies and provides for the regional or areawide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity through an agreement between CDFW and the local jurisdiction. Such agreement is described in Section 2810 of the California Fish and Game Code and is as follows:

The department may enter into an agreement with any person or public entity for the purpose of preparing a natural community conservation plan, in cooperation with a local agency that has land use permit authority over the activities proposed to be addressed in the plan, to provide comprehensive management and conservation of multiple wildlife species...

City of San Diego MSCP and SAP

To meet the requirements of the NCCP and FESA, the City participated in preparation of a regional MSCP in conjunction with USFWS and CDFW (the Wildlife Agencies). The MSCP is a long-term comprehensive habitat conservation planning program for southwestern San Diego County that establishes an 187,000-acre preserve system. The main goal of the MSCP is to preserve a network of viable habitat and open space for the purpose of protecting biodiversity and sensitive species while allowing for smart growth. One of the primary objectives of the MSCP is to identify and maintain a preserve system that allows for animals and plants to exist at both the local and regional levels. Local jurisdictions, including the City, implement their portions of the regional MSCP through local SAPs, which describe specific MSCP implementing mechanisms within their respective jurisdictions.

The City prepared its SAP in coordination with the Wildlife Agencies in 1997. The primary goal of the City's MSCP SAP is to conserve and protect the City's rarest species. The preserve system established by the MSCP SAP, the MHPA, was developed by the City in cooperation with the Wildlife Agencies, property owners, and environmental groups. The MHPA is a planning area for core biological resources and corridors targeted for conservation. The existing MHPA encompasses 56,831 acres of which 52,727 acres would be conserved. The type and extent of development allowed within the MHPA are limited. Based on the preparation and approval of the MSCP, the City was granted a permit through USFWS. The City's permit initially covered 85 species, including the seven listed vernal pool species covered in the VPHCP. The City and the Wildlife Agencies signed an Implementing Agreement for the plan in July 1997. The Implementing Agreement, which identifies the roles and responsibilities of the parties to implement the City's MSCP SAP, serves as a binding contract between the City, USFWS, and CDFW and allows the City to issue incidental take authorizations for covered upland species under the provisions of the MSCP SAP without having to obtain separate permits from the state or federal agencies. Applicable state and federal permits are still required for some MSCPcovered listed wetland species and for take of listed species not covered by the MSCP.

3.1.2 <u>History of VPHCP Development</u>

In 1998, the City's SAP was subject to a lawsuit, *Southwest Center v. Bartel*, regarding the seven species included for coverage in the VPHCP. As a response to the lawsuit, in 2006, the U.S. District Court for the Southern District of California prohibited the City from permitting projects that would impact the seven listed vernal pool species under the City's SAP. In October of 2009, the City and USFWS entered into a Planning Agreement for the development of the VPHCP. After almost 2 years of mediation, the City decided in 2010 to relinquish federal coverage of these seven species under the City's SAP, which rendered the injunction moot. The VPHCP

would be adopted in order for the City to obtain an ITP under Section 10(a)(1)(B) of FESA and address the Court's concerns about conservation of the seven vernal pool species in San Diego, thus receiving complete federal coverage of the seven listed pool species.

To obtain an ITP under Section 10(a)(1)(B) of FESA and to address the Court's concerns about conservation of the seven vernal pool species in San Diego, the City has developed the VPHCP. The VPHCP was been developed through a comprehensive planning approach to preserve the seven listed vernal pool species and the vernal pools they occupy within the City's jurisdiction. The VPHCP proposes to create an expanded Preserve for the conservation of vernal pools and covered species as well as a management and monitoring plan, consistent with the City's SAP Framework Management Plan. Funding for the Project has been provided by USFWS and administered through CDFW.

Currently, the City still has state coverage for the seven vernal pool species addressed in the VPHCP under the City's existing MSCP that was issued by CDFW in 1997. Part of the local action associated with the VPHCP includes the evaluation/processing of any required amendments to and/or findings of consistency with the City's state incidental take authorization (California Endangered Species Act [CESA]/Permit No. PRT-830421) to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. The VPHCP has been designed to meet the requirements under California Fish and Game Code Section 2800 *et seq*. for listed and nonlisted species conserved under a Natural Community Conservation Plan (NCCP).

3.2 PROJECT PURPOSE AND OBJECTIVES

This section of the EIR/EIS provides the Project objectives (CEQA) and the purpose and need (NEPA) for the Project.

Section 15124[b] of the CEQA Guidelines requires that the project description contain a statement of objectives, including the underlying purpose of the proposed project. Implementing regulations for NEPA published by CEQ state that the Purpose and Need section in an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action" (40 CFR Section 1502.13).

The lands within the VPHCP Plan Area (Figure 1-1) contain valuable vernal pool resources. These vernal pool resources contain species, including the seven listed species proposed for coverage that are protected under CESA and/or FESA. The purpose of the VPHCP is to preserve the network of vernal pool habitat within this matrix of open space; protect the biodiversity of these unique wetlands; and define a formal strategy for their long-term conservation, management, and monitoring. An HCP is required under FESA to accompany an application for an ITP when associated with nonfederal activities. Under FESA, an ITP is required when activities may result in take of threatened or endangered wildlife. The VPHCP also must ensure adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources within the city.

The City's MSCP provides a structure for the long-term conservation, management, and monitoring of sensitive species and helps to avoid costly delays and uncertainty associated with a project-by-project approach toward vernal pool conservation. The City developed the VPHCP using the requirements of an HCP under Section 10(a)(1)(B) of FESA as the basis for take authorization for the focal vernal pool species, and as a long-term strategic plan for the protection of vernal pool resources within its jurisdiction. The VPHCP would complement, but be distinct from, the HCP prepared and adopted for the City's MSCP SAP.

3.2.1 <u>CEQA Project Objectives</u>

The specific conservation goals of the VPHCP, as defined by the Planning Agreement, serve as the CEQA project objectives and are as follows:

- 1. Provide for the conservation and management of covered species addressed by the VPHCP;
- 2. Preserve vernal pool resources through conservation partnerships between federal, state, local agencies, and private development partnerships;
- 3. Allow for appropriate and compatible economic growth and development that is consistent with applicable laws;
- 4. Provide a basis for permits necessary for lawful incidental take of vernal pool covered species;
- 5. Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, NCCP Act, and NEPA within the VPHCP Plan Area;
- 6. Provide a more efficient project review process that results in greater conservation values than project-by-project, species-by-species review; and
- 7. Provide clear expectations and regulatory predictability for persons carrying out covered activities within the VPHCP Plan Area.

3.2.2 <u>NEPA Purpose and Need</u>

Under FESA, an ITP is required when activities may result in "take" (i.e., killing, harming, or harassing) of threatened or endangered wildlife. An HCP must accompany an application for an ITP when associated with nonfederal activities. The purpose of the habitat conservation planning process associated with the permit is to ensure adequate minimization and mitigation for the effects of the authorized incidental take of state and federal protected vernal pool resources.

The traditional project-by-project process for resolving conflicts between species preservation and development is both costly and time-consuming. Moreover, the piecemeal process results in uncoordinated preservation of scattered and/or isolated vernal pool habitat areas set aside as mitigation for individual project impacts. These generally small, unconnected vernal pool habitat areas do not necessarily guarantee the continued viability of species population or ecosystem functions, which generally depend on interconnected habitat areas designed and managed in a coordinated manner. Thus, the VPHCP is needed to replace this project-by-project approach for approval and mitigation of projects with vernal pool resources to a coordinated, comprehensive approach based on goals and objectives of the VPHCP. This approach would ensure that project mitigation is directed to those areas most critical to maintenance of ecosystem function and species viability. The goal of the VPHCP is to target the highest quality areas for vernal pool preservation, enhancement and/or restoration, while allowing some development of lowerquality vernal pool resources.

3.3 DESCRIPTION OF THE PROJECT

The VPHCP is a conservation plan for vernal pools and the associated seven threatened and endangered species that do not have federal coverage under the City's MSCP. The Project is the adoption and implementation of the VPHCP and associated discretionary actions. Implementation of the VPHCP would provide an effective framework to protect, enhance, and/or restore vernal pool resources in specific areas of the city, while improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools.

3.3.1 Addition of Lands to the MHPA

Once fully implemented, the VPHCP would expand the City's existing MHPA by adding approximately 275 acres of lands with valuable vernal pools resources. This includes adding approximately 191 acres of lands to the MPHA that were not previously conserved (Table 3-1), as well as incorporating 84 acres of previously conserved lands into the MHPA boundary (Table 3-2).

APN	Total Parcel Acreage ¹	New Conserved acreage to <u>B</u> be Added to MHPA ^{1,2}	<u>Community</u> <u>Plan</u>	<u>Land Use</u> Designation	Ownership		
308-040-1300	0.5	0.5	Mira Mesa	Open Space	Private		
356-031-1300	11.4	11.4	Kearny Mesa	Industrial/ Business Park	<u>City</u>		
356-032-0100	5.5	5.5	Kearny Mesa	Industrial/ Business Park	<u>Private</u>		
369-082-3000	2.5	2.5	Kearny Mesa	Industrial/ Business Park	<u>Private</u>		
7 <u>6</u> 73-040-1000	5.0	5.0	<u>Navajo</u>	Open Space	City		
Montgomery-Gibbs Executive Airport (BLA)	42.3	42.3	Kearny Mesa	<u>Airport</u>	<u>City</u>		
645-040-4100	7.3	7.3	Otay Mesa	Community Commercial	Private		
645-081-0300	10.6	10.6	Otay Mesa	Residential	<u>Private</u>		
645-090-4300	4.5	4.5	Otay Mesa	Open Space	Private Private		
667-040-1300	30.9	30.9	Otay Mesa	Village Center	Private		
667-060-2800	15.4	11.6	<u>Otay Mesa</u>	Industrial	Private		
667-060-1200 667-060-1100	9.7	9.7	Otay Mesa	Industrial	<u>Private</u>		
<u>667-060-1000</u> 645-080- 2800	10.1	10.1	<u>Otay Mesa</u>	Industrial	<u>Private</u>		
369-140-2300	11.2	8.43	Kearny Mesa	Industrial/ Business Park	<u>Private</u>		
369-150-2100	3.7	2.79	Kearny Mesa	Industrial /Business Park	Private		
667-060-1601 667-060-1602	10.0	7.5	Otay Mesa	Industrial	<u>Private</u>		
667-060-1500	10.1	7.6	Otay Mesa	<u>Industrial</u>	Private		
645-080-0300	8.0	8.0	Otay Mesa	Village Center	Private		
645-074-0700	0.9	0.7	Otay Mesa	Village Center	Private		
645-074-2000	0.9	0.7	Otay Mesa	Village Center	Private		
645-075-1900	0.9	0.7	Otay Mesa	Village Center	Private		
645-075-1800	0.9	0.7	Otay Mesa	Village Center	Private		
645-076-1800	0.9	0.7	Otay Mesa	Village Center	Private		
645-076-1900	0.9	0.7	Otay Mesa	Village Center	Private		
645-076-0900	0.9	0.7	Otay Mesa	Village Center	Private		
Total	205.0	190.8 ³					

Table 3-1 Currently Unconserved Lands to $\underline{B}\overline{b}e \underline{A}\overline{a}dded$ to the MHPA under the VPHCP

¹ Acreage has been rounded to nearest tenth based on GIS mapping data. Thus, totals may not appear ² Based on 75% Conservation.
³ City Owned: 58.7acres; Private: 132.2 acres

А	PN	Conserved Acreage to be added to MHPA
341-060-9000		8.77
343-252-1800		0.66
343-260-0900		0.99
307-373-1500		1.10
345-260-2000		2.54
309-030-2000		5.0
645-111-3000		6.38
645-040-5000		15.87
645-080-0800		15.48
306-420-0200		17.24
645-074-0600	645-074-1900	10.01
645-074-2100	645-075-0800	
645-075-0600	645-074-0900	
645-075-0700	645-074-1800	
645-075-2000	645-075-0900 ¹	
645-074-0800		
	Total	84.13

 Table 3-2

 Currently Conserved Lands to Bbe Included in the MHPA under the VPHCP²

¹Eleven City owned parcels

 2 Table does not include Caltrans sites that are being restored and will be transferred to the City.

In this document, the MHPA is also referred to as "the Preserve," although not all of the lands with the MHPA will ultimately be preserved. The City's planned MHPA totals 56,831 acres, with 52,727 acres (90%) targeted for preservation (approximately 30% of the planned regional preserve). Implementation of the VPHCP would add lands containing vernal pool resources to the MHPA. Once adopted, vernal pool lands within the MHPA would be subject to the provisions of the VPHCP, in addition to the City's MSCP SAP and other existing land use and biological resource plans, policies, and regulations, as applicable (discussed in Section 3.1.1, Conservation Planning Context and 5.1.2, Regulatory Framework, of this EIR/EIS).

3.3.2 <u>Covered Species</u>

The VPHCP would include coverage for the following seven threatened and endangered vernal pool species (covered species):

- San Diego fairy shrimp
- Riverside fairy shrimp
- San Diego button celery
- Spreading navarretia
- San Diego mesa mint
- California Orcutt grass
- Otay Mesa mint

More information on the covered species is provided in Section 5.2, Biological Resources.

3.3.3 <u>Covered Projects and Covered Activities</u>

The VPHCP includes a Mitigation Framework (summarized in Section 3.3.7, Mitigation Framework, and full text included in Chapter 11, Mitigation, Monitoring and Reporting Program) that requires avoidance, minimization, and compensation (i.e., conservation) for impacts to the seven covered species resulting from covered projects and covered activities identified in the VPHCP. These actions would apply to specific projects and covered activities for which incidental take authorization from USFWS would be obtained. Impacts would be evaluated based on project-level surveys and environmental review to determine consistency with the VPHCP.

The VPHCP covered projects are summarized and discussed below in Table 3-3. Please refer to Chapter 4 of the VPHCP for detailed descriptions of the covered projects and the associated covered activities, as well as their conditions for consistency as determined by the City.

Projects/Activity Type	Description
Projects	
Covered (Hardlined)	The Covered projects listed below involve land use development within the City for
Projects	which hardline Preserve boundaries have been established and any Incidental Take of
-	covered species would be approved through the VPHCP. Conservation measures
	consistent with the VPHCP have been or will be specified as binding conditions of
	approval in such projects' plans and discretionary approvals.
	• Tierra Alta
	• St. Jerome's Church
	Pasatiempo Parks
	Montgomery Gibbs Executive Airport
	Metropolitan Airpark at Brown Field
	Pure Water Program

Table 3-3Projects and Activities Covered under the VPHCP

Projects/Activity Type	Description
Future Development	Private/public development permitted through the City
Projects	• Third-parties receiving take authorization under the City's permit g through a
	Certificate of Inclusion
Planned Development	The Planned Projects below have planned development footprints that have been
Projects	negotiated as take-authorized areas along with associated hardline conserved lands
	within the Preserve. Their conservation areas are identified as 100% conserved and
	will be added to the MHPA (Existing Conservation).
	 Castlerock (BO No. 15B0240-15F0536)
	 Rhodes Crossing1 (BO No. 08B0401-12FC0578)
	• Candlelight (BO No. 08B0715-08F0817)
Activities	
Road Improvements	• Use, maintenance, and repair of existing access roads
	• Expansion of existing roads
	• Development of new roads
	Private roads
Essential Public Projects	Please refer to the San Diego Municipal Code Land Development Code Biology
(EPPs)	Guidelines 2012 for the EPPs list and definitions.
Police and Fire	Homeless or itinerant worker camps abatement
	Brush management and weed abatement
	• Enforce local fire safety laws and protect public health, safety, and welfare as
~	necessary to combat wildfires
Solid Waste	• Cover installation, maintenance, and repair
	• Gas collection and management system installation, maintenance, and repair
	• Use and maintenance of water collection, protection, and drainage structures
	• Installation of vegetation, removal of vegetation, maintenance of vegetation, and
	brush management and other vegetation control
	• Installation, removal, modification, and maintenance of fencing and other barriers
	and signs
	Animal abatement measures
	Waste site abatement and/or remediation
Public Utilities	• Maintenance, inspection, and repair activities for all existing sewer and water
	infrastructure
	• Maintenance and improvements of existing access paths to sewer and water
Progorna Managamant	Initastructure
Preserve Management	• Existing and new fences, signs (denoting conserved area and/or educational), and interpretive penels
	Besteration and onhancement
	Kestoration and emancement
	Education features
	 Education features Monitoring and research
Parks and Recreation	Mointoning and research Mointonence and use of existing trails
Tarks and Recreation	 Maintenance and use of existing trails Development of new trails
	Bruch management and wead abatement
Airport Safety and	Any projects or covered activities on either Montgomery-Gibbs Executive Airport or
Maintenance	Brown Field Municipal Airport would be subject to a Minor Amendment Process
Wantenance	• Maintenance and inspection of existing safety areas object- free areas runway
	protection zones, critical areas, infields, runway and taxiway shoulders, and storm
	water conveyances
	• Maintenance, access, inspection, and operation of all existing equipment and
	infrastructure
	Capital Improvement Program rehabilitation and/or maintenance of existing
	airport infrastructure.
	Maintenance and inspection of existing public right-of-way access

Covered projects with vernal pool resources would be required to analyze their biological impacts, mitigation, and conservation compared to the requirements and conditions of the VPHCP. If the projects are consistent with the VPHCP, they would be granted the authority to impact vernal pools with endangered species through the City's ITP, which would be issued upon the adoption of the VPHCP. Incidental take would be transferred as part of the discretionary approval by the City for the proposed land development activities determined to be consistent with the VPHCP.

Third parties proposing projects not subject to the City's discretionary land use authority (e.g., school district activities), would be required to seek incidental take through some other mechanism (e.g., Section 7 or Section 10[a] of FESA). Applicants not subject to the City discretionary land use authority may elect to utilize the City's land use permitting process to gain incidental take under the VPHCP, provided the City exercises legal control (i.e., Certificate of Inclusion) over the third party and project for purposes of implementing the VPHCP. Federal lands have an ESA Section 7 nexus and would not seek incidental take coverage from the City.

As noted above, the VPHCP includes a Mitigation Framework that requires avoidance, minimization, and mitigation for impacts to the seven covered species resulting from covered projects and covered activities. These avoidance, minimization, and mitigation measures as part of the Mitigation Framework are considered part of the Project and therefore are analyzed as such in Chapter 5, Environmental Consequences, of this EIR/EIS. Adverse effects from implementation of the VPHCP for the various issue areas (i.e., Land Use, Biological Resources, Historical Resources, etc.) will be evaluated based on the assumption that all applicable avoidance, minimization, and mitigation measures identified in the VPHCP would be implemented. Significant adverse impacts are only those that would occur after implementation of the Project. Additional mitigation measures beyond those included as part of the Project would be developed only if significant adverse impacts are identified (refer to Chapter 5).

3.3.4 Montgomery-Gibbs Executive Airport MHPA Boundary Line Adjustment

As part of the Project, an<u>An</u> MHPA Boundary Line Adjustment (BLA) at Montgomery-Gibbs Executive Airport would be processed with adoption and approval of the Project;, see Figure 3-1. While certain areas with vernal pool resources would be removed from the MHPA as part of the BLA, the BLA would result in an overall net gain of higher quality vernal pool acreage, number of pools, and improved biological value. Table 3-4 summarizes the total acreage and number of vernal pools, including pools occupied by the applicable covered species, within the existing MHPA, area to be removed and added to the MPHA, and the new MHPA (following approval of the BLA).



Source: City of San Diego, SANDAG, SanGIS



Figure 3-1 Montgomery-Gibbs Executive Airport Adjusted MHPA (Minor Amendment Area)

			Pools with	Pools with
		Vernal	San Diego	San Diego
Boundary Line Adjustment	Acreage	Pools	Fairy Shrimp	Mesa Mint
Existing MHPA	182	277	117	25
Removed from MHPA	-27	-25	-2	-1
Added to MHPA	+40	+20	+12	+0
Net Change with BLA	+13	-5	+10	-1
Adjusted MHPA	195	272	127	24

Table 3-4MHPA Adjustments Resulting from BLA

Note: Some vernal pools may be occupied by more than one covered species

Adjustments to the MHPA can be made without amending the MSCP Plan or subarea plan<u>SAP</u> if the adjustment would result in the same or higher biological value of the Preserve (City of San Diego 1997). The determination of biological value is made by the City in accordance with the MSCP Plan<u>SAP</u> and the VPHCP, with the concurrence of the Wildlife Agencies. As required, this EIR/EIS provides the biological evaluation (Section 5.2, Biological Resources) of the proposed BLA and also discusses the land use implications (Section 5.1, Land Use) associated with this element of the Project.

Minor Amendments

The Minor Amendment Process has been identified for two airports: Montgomery-Gibbs Executive Airport and Brown Field Municipal Airport. The Minor Amendment Process would allow impacts to vernal pool habitat and VPHCP covered species located within the legal boundaries of the airport properties while meeting health and safety requirements of the airports.

Approval of a Minor Amendment requires a project submittal by the Permittee (Real Estate Assets, Airports Division) to Wildlife Agencies (USFWS Field Office Supervisor and CDFW's NCCP Program Manager) for a consistency determination with the VPHCP. The consistency determination would be based on the VPHCP; the VPMMP; funding for the required management, monitoring, and reporting activities; and the City's ESL Regulations and Biology Guidelines. If a project is consistent with the VPHCP, the Wildlife Agencies will provide a Letter of Concurrence and the project will proceed in accordance with the VPHCP.

<u>Projects processed via a Minor Amendment that are issued a Letter of Conformance would be</u> afforded the VPHCP benefits of a streamlined environmental and permit process including:

- Wetland deviation is not required for impacts outside the MHPA;
- Mitigation ratios are set to ensure consistent standards;
- Includes VPMMP;
- Covered activities include all required airport maintenance and operations activities; and
- If Section 7 consultation is required, USFWS issues a one-page Consistency Letter in lieu of a Biological Opinion.

If a project is determined to be not in conformance, or if the Minor Amendment Process is not used, then the VPHCP benefits of the streamlined environmental and permitting process would not apply. Projects would be evaluated on a case-by-case basis consistent with the existing regulations for wetlands not covered by the VPHCP.

3.3.5 <u>Overview of Conservation</u>

Implementation of the VPHCP would expand the MHPA by 275 acres to include a total of 2,409 vernal pools located within a total of 53 vernal pool complexes, as well as 4,316 acres of modeled vernal pool habitat¹ (Table 3-5). Expansion of the MHPA would result in additional conservation of vernal pools, modeled habitat, covered species, and Critical Habitat for the covered species beyond existing conservation. The VPHCP adds lands to the existing MHPA that include vernal pools, as well as associated watershed, habitat buffers, and adjacent uplands to meet the tenets of appropriate and functional reserve design, as guided by USFWS (USFWS 2000). The protection of vernal pools, modeled vernal pool habitat, and Critical Habitat for the covered species as a function of the VPHCP reserve design through addition of lands to the MPHA is described below. The conservation analysis for the VPHCP is based on whether a vernal pool is located within the Preserve or not. Covered activities (e.g., management, trail use) are not evaluated in the VPHCP conservation analysis, as the location and extent of these future activities are unknown.

	Number of Complex Series in the VPHCP Plan Area	Number of Complex Series Conserved	Total Number of Pools in VPHCP Plan Area	Number of Pools inside Existing Conserved Areas	Number of Pools Conserved Based on Conservation Level ²	% of Total Pools in VPHCP Plan Area Conserved	Acreage of Pools Conserved	Acreage of Modeled Habitat Conserved
Existing Conservation ¹	54	45	2,591	2,199	2,183	84%	34.7	3,797 4,139
MHPA after VPHCP Implementation	54	53	2,591	2,472	2,409	93%	37.5	3,974 4,316
Additional Conservation Resulting from VPHCP Implementation	n/a	8	n/a	273	226	9%	2.8	177

Table 3-5Conservation of Vernal Pools after Implementation of the VPHCP

n/a = not applicable

¹Existing conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects. See Chapter 4 of the VPHCP for more detail.

²Pools and species population conserved is an estimate based on 75% or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area.

1 In recognition that there could be additional pools that have not been mapped, conservation of and potential impacts to modeled vernal pool habitat within the Plan Area from planned, covered, and future projects were assessed. The model included soils that support vernal pools in the plan area, slope (<12%), and undeveloped land within the plan area (see Appendix C of the VPHCP for further details on the model).

Conservation of Vernal Pools

Implementation of the VPHCP would provide additional conservation of vernal pools beyond current conservation within the City's existing MHPA, permitted projects, and planned projects (i.e., existing conservation), by adding lands to the MHPA that contain valuable vernal pool resources. Table 3-5 summarizes the additional conservation of vernal pools that would be provided under implementation of the VPHCP through addition of lands to the MHPA. The VPHCP would conserve an additional eight vernal pool complexes within the Plan Area, and conserve an additional 226 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved under the existing conservation.

In addition to conserving extant vernal pools, implementation of the VPHCP would result in the addition of lands to the MPHA that are suitable for vernal pool restoration (such as the mesa areas on Otay Mesa). Restoration of vernal pools and associated populations of covered species (per the goals and objectives of the VPHCP) would enhance the biological value of the MHPA, creating a more cohesive vernal pool Preserve and minimizing potential fragmentation of vernal pool habitat that could occur under the existing conservation scenario (i.e., piece-mealed or "postage stamp" conservation with no overall Preserve design for vernal pool habitat to the MHPA, representing a 32% increase in modeled conserved habitat from existing conservation (Table 3-5).

Conservation of Covered Species

Table 3-6 summarizes the additional conservation of vernal pools occupied by the covered species (beyond existing conditions) that would be provided under implementation of the VPHCP through addition of lands to the MHPA. As shown, the VPHCP would provide additional conservation (beyond existing conservation) for the following covered species:

- San Diego mesa mint three additional occupied pools conserved (<1% increase)
- San Diego button-celery three additional occupied pools conserved (1% increase)
- Riverside fairy shrimp three additional occupied pools conserved (2% increase)
- San Diego fairy shrimp 31 additional occupied pools conserved (6% increase)

As shown in Table 3-6, the addition of lands to the MHPA through implementation of the VPHCP would result in 100% conservation for one additional species from the existing conservation (Riverside fairy shrimp). In addition, conservation of occupied vernal pools would increase for San Diego mesa mint, San Diego button-celery, and San Diego fairy shrimp.

 Table 3-6

 Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved) after Implementation of the VPHCP

	PONU Total Pools in VPHCP Plan Area	PONU Total Pools Conserved	PONU % Pools Conserved	POAB Total Pools in VPHCP Plan Area	POAB Total Pools Conserved	POAB % Pools Conserved	NAFO Total Pools in VPHCP Plan Area	NAFO Total Pools Conserved	NAFO % Pools Conserved	ERAR Total Pools in VPHCP Plan Area	ERAR Total Pools Conserved	ERAR % Pools Conserved	ORCA Total Pools in VPHCP Plan Area	ORCA Total Pools Conserved	ORCA % Pools Conserved	RFS Total Pools in VPHCP Plan Area	RFS Total Pools Conserved	RFS % Pools Conserved	SDFS Total Pools in VPHCP Plan Area	SDFS Total Pools Conserved	SDFS % Pools Conserved
Existing Conservation ¹	369	369	100%	337	332	99%	95	94	99%	732	719	98%	58	58	100%	131	128	98%	517	431	83%
MHPA after VPHCP Implementation ²	369	369	100%	337	335	99%	95	94	99%	732	722	99%	58	58	100%	131	131	100%	517	462	89
Additional Conservation Resulting from VPHCP Implementation	n/a	0	0	n/a	3	<1%	n/a	0	0	n/a	3	1%	n/a	0	0	n/a	3	2%	n/a	31	6%

n/a= not applicable

¹Existing Conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects.

² Pools and species population conserved is an estimate based on 75% and/or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area. This table does not account for impacts associated with covered activities or Caltrans sites currently being restored and will be transferred to the City. -

PONU = Otay Mesa mint

POAB = San Diego mesa mint

NAFO = Spreading navarretia

ERAR = San Diego button-celery

ORCA = California Orcutt grass RFS = Riverside fairy shrimp SDFS = San Diego fairy shrimp

Conservation of Critical Habitat

Critical Habitat for spreading navarretia, Riverside fairy shrimp, and San Diego fairy shrimp is designated by USFWS throughout the range of occurrence for these species, with only a portion of the total designated Critical Habitat for each species occurring within the City (Table 3-7). Critical Habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection, as determined by USFWS. Critical Habitat may include areas that are currently occupied by a species and unoccupied areas that are essential for the species' conservation. As shown in Table 3-7, additional lands with Critical Habitat would be added to the MHPA through implementation of the VPHCP. The additional areas of Critical Habitat that is suitable for vernal pool restoration, either as restoration associated with the VPHCP objectives, mitigation on a project-specific basis, or as a potential mitigation bank.

Critical Habitat Conservation	Spreading Navarretia Critical Habitat (Acres)	Riverside Fairy Shrimp Critical Habitat (Acres)	San Diego Fairy Shrimp Critical Habitat (Acres)
Total Critical Habitat Designation (for Species Range, occurs within and outside VPHCP Plan Area)	6,720	1,724	2,931
Total Acres in VPHCP Plan Area	628	804	1,801
(% of Total Species Designation)	(9%)	(47%)	(61%)
Existing Critical Habitat Conservation in VPHCP Plan Area	561	724	1,330
(% of Critical Habitat Conserved – Existing)	(89%)	(90%)	(74%)
Critical Habitat Conserved in MHPA through VPHCP	565	740	1,409
(% of Critical Habitat Conserved with VPHCP)	(90%)	(92%)	(78%)
Additional Habitat Conserved with Implementation of the VPHCP	4	16	79
(% of Additional Critical Habitat Conserved)	(1%)	(2%)	(4%)

Table 3-7Summary of Critical Habitat Conservation

As shown in Table 3-7, the VPHCP, when fully implemented, would conserve:

- Approximately 4 additional acres of spreading navarretia Critical Habitat from the existing conservation, to total 565 acres (90% of the total designated spreading navarretia Critical Habitat within the VPHCP Plan Area)
- Approximately 16 additional acres of Riverside fairy shrimp Critical Habitat from the existing conservation, to total 740 acres (92% of the total designated Riverside fairy shrimp Critical Habitat within the VPHCP Plan Area)

• Approximately 79 additional acres of San Diego fairy shrimp Critical Habitat from the existing conservation, to total 1,409 acres (78% of the total San Diego fairy shrimp Critical Habitat designation within the VPHCP Plan Area)

3.3.6 <u>Conservation Strategy</u>

The conservation strategy of the VPHCP was designed to meet the regulatory requirements of FESA and the NCCP Act and to streamline compliance with CEQA, NEPA, and other applicable environmental regulations. The VPHCP's overall conservation strategy for the covered species is to allow impacts to degraded vernal pools with low long-term conservation value in exchange for restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation strategy builds on the existing conservation of the seven vernal pool species and habitat that has occurred under the City's MSCP SAP that includes most (84%) of the extant vernal pools in the City. Implementation of the conservation strategy would ensure the VPHCP's biological goal of contributing to the recovery of the VPHCP covered species; ensuring that continued persistence of the covered vernal pool species populations identified in the VPHCP would be achieved. The conservation strategy is supported by a general approach to the conservation of vernal pools and associated covered species within the VPHCP Plan Area as follows:

- 1. Expand the City's existing MHPA to conserve targeted vernal pool complexes in a configuration that maintains habitat function and viability of the seven covered species within the VPHCP Plan Area, consistent with the Recovery Plan (USFWS 1998a);
- 2. Implement a VPHCP Management and Monitoring Plan to provide for long-term protection, management, and enhancement of vernal pool habitat and the covered species;
- 3. Avoid and minimize impacts to vernal pools and mitigate unavoidable impacts consistent with the VPHCP and the City's Municipal Code;
- 4. Conduct compliance and effectiveness monitoring of vernal pools and covered species to evaluate implementation of the VPHCP and track the status of the vernal pools and seven covered species; and
- 5. Where appropriate, introduce covered species into restoration areas to expand/restore species populations in historically occupied complexes to maintain viability of the seven covered species.

The design of the conservation strategy includes habitat-based and species-specific objectives for conservation, management, and/or restoration of the vernal pools and species covered under the

VPHCP. The habitat-based objectives identify the number of specific vernal pools and complexes that would be conserved, managed, and/or restored through implementation of the VPHCP. The species-specific objectives include conservation, management, and/or restoration and enhancement actions for covered species. The objectives that constitute the conservation strategy, and would ultimately achieve the VPHCP's biological goals, are summarized in Table 3-8.

Objectives	Conserve	Manage ¹	Restore ²
Habitat-Based	Conserve in perpetuity at	Manage in perpetuity 59	Restore 19 vernal pool sites
Objectives	least 2,409 vernal pools	vernal pool sites within the	(within 12 complexes) to a
	(totaling approximately 37.5	MHPA through	"Level 1" (stewardship)
	acres of basin surface area)	implementation of the	management condition within
	at 68 vernal pool sites	VPHCP Vernal Pool	the MHPA through
	(within 53 vernal pool	Management and	implementation of the VPHCP
	complexes) in the MHPA in	Monitoring Plan or Site-	Management and Monitoring
	a configuration that	Specific Management	Plan or Site-Specific
	maintains long-term	Plans (that are consistent	Management Plans (that are
	viability of the VPHCP	with the VPHCP goals and	consistent with the VPHCP goals
	covered species.	objectives).	and objectives).
Species-Specific	Conserve occupied	Manage specific sites	Restore specific complexes
Objectives	complexes identified in	identified in Appendix A	identified in Appendix A of the
	Appendix A of the VPMMP	of the VPMMP to maintain	VPMMP to enhance covered
	to stabilize covered species'	the covered species	species populations to ensure
	populations.	populations consistent with	long-term viability.
		the VPMMP (Appendix	
		D).	
Otay Mesa mint	Conserve 369 vernal pools	Manage all conserved	Establish viable populations of
	occupied by Otay Mesa	complexes/sites consistent	Otay Mesa mint within the J13;
	mint within four sites.	with the VPMMP.	J16–18, J20–21, J27, and J28
			complex series.
San Diego mesa	Conserve 335 vernal pools	Manage 12 sites as	Restoration is not necessary for
mint	occupied by San Diego	identified in Appendix A	this covered species, as the
	mesa mint within 19 sites.	of the VPNINP and	populations of this species are
		Consistent with the	adequately conserved under the
Concerting	<u> </u>	VPMMP.	VPHCP.
Spreading	Conserve 94 vernal pools	Manage all conserved	Establish viable populations of
navarretia	occupied by spreading	complexes/sites consistent	spreading navarretia within
	sites	with the v PivilviP.	J11E, J11W, J12, J15, J10–18,
San Diago hutton	Siles.	Managa 22 sitas as	J20-21, J27, J28, and K1.
san Diego button-	Conserve 722 vernal pools	identified in Appendix A	San Diago button colory within
celely	button colory within 24	of the VPMMP and	112
	sites	consistent with the	J15.
	sites.	VPMMP	
California Orcutt	Conserve 58 vernal pools	Manage all conserved	Establish viable populations of
grass	occupied by California	complexes/sites consistent	California Orcutt grass within
C	Orcutt grass within three	with the VPMMP.	J11E, J11W, J12, J13E, J14,
	sites.		J16-18, J20–21, J21, J27, and
			J28E.

Table 3-8VPHCP Conservation Objectives
Objectives	Conserve	Manage ¹	Restore ²
Riverside fairy	Conserve 131 vernal pools	Manage all conserved sites	Establish viable populations of
shrimp	occupied by Riverside fairy	consistent with the	Riverside fairy shrimp within
	shrimp within 7 sites.	VPMMP.	J11E, J11W, J12, J13E, J14,
	_		J16-18, J20–21, J21, J27, and
			J28E.
San Diego fairy	Conserve 465 vernal pools	Manage 33 sites as	Restoration is not necessary for
shrimp	occupied by San Diego fairy	identified in Appendix A	this covered species, as the
	shrimp within 38 sites.	of the VPMMP and	populations of this species are
	_	consistent with the	adequately conserved under the
		VPMMP.	VPHCP.

¹ In addition to conservation, includes active management of sites at Level 1, as well as sites at Levels 2 and 3. The 9 vernal pool sites that will not be conserved and will not be actively managed under the VPMMP are either privately held (but may seek development entitlement in the future, at which point the City will ensure the property owner implements the recommended management in the VPMMP) or have been developed pursuant to prior approval by City and no management was required at that time, nor is any management being required as part of this VPHCP. ² Restoration would occur at specific vernal pool complexes to establish populations of covered species, consistent with the Recovery Plan (USFWS 1998). Restored populations would also be conserved and managed consistent with the VPHCP objectives listed in this table.

3.3.7 <u>Mitigation Framework</u>

The VPHCP includes compensatory avoidance, minimization, and mitigation measures to avoid or minimize adverse effects to vernal pool resources resulting from covered projects and covered activities. These required measures have been consolidated into a Mitigation Framework in this EIR/EIS document. The Mitigation Framework is considered part of the Project and once the VPHCP is adopted, the compensatory avoidance, minimization, and mitigation requirements are enforceable by the City. The full text and requirements of the Mitigation Framework are included in the Mitigation Monitoring and Report Plan ([MMRP], Chapter 11 of this EIR/EIS) and are briefly characterized below.

- <u>General Avoidance and Minimization Measures</u> would focus on the avoidance or minimize of take of individual covered species (i.e., death or injury) and their high-quality habitat (vernal pools). If avoidance is not feasible through project design, measures may include designing slopes away from vernal pools, temporary and permanent fencing, monitoring biologist during and post-construction, worker training, topsoil salvage, fugitive dust control, among others.
- <u>Compensatory Mitigation</u> would prevent net loss of vernal pool functions and values of impacted vernal pools and result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved.
- <u>General Conditions for Compensatory Mitigation /Enhancement Projects</u> include projectspecific vernal pool restoration and enhancement plans consistent with the City's LDM

Biology Guidelines for submittal to the City and Wildlife Agencies and require implementation of a perpetual long-term management, maintenance, and monitoring plan.

3.3.8 <u>Mitigation Banking</u>

Lands contributed to the MHPA Preserve by public or private owners in excess of the VPHCP mitigation requirements may either be used by such owner as vernal pool mitigation for that owner's subsequent development project(s), or may be "banked" by those owners. Such banked lands can later be used to provide mitigation for future development projects of other owners with lands included in the VPHCP. A vernal pool "Conservation Bank" must comply with the "Conservation and Mitigation Banking Guidelines" issued by the California Natural Resources Agency (August 2014). To set up a vernal pool Conservation Bank, a land owner must prepare a restoration plan consistent with the requirements outlined above, and submit the plan to the City and Wildlife Agencies for approval.

3.3.9 Monitoring and Management Program

A major component of the VPHCP includes the management and monitoring of the vernal pool resources. A detailed adaptive management and monitoring strategy has been developed along with specific requirements and recommendations for all the vernal pool complexes within the City's ownership and land use authority. This section summarizes the VPHCP management and monitoring strategy, which would be implemented by the City through its VPMMP. The VPMMP is a framework plan that outlines site-specific management and monitoring actions for the vernal pool complexes that would be managed to achieve the VPHCP objectives. Site-specific management plans would be prepared by project proponents during their environmental review and/or the City for each complex included in the framework VPMMP, consistent with the requirements and regulations in the VPHCP and City's LDM Biology Guidelines, and must be approved by the City and the Wildlife Agencies. The site-specific management plans will identify the entity responsible for long-term management.

The intent of the VPMMP is to collect data necessary to determine the condition of vernal pools and determine if VPMMP standards have been met, or if a change in management actions is needed. The VPMMP monitoring methodology would allow for time- and cost-effective monitoring and data collection that evaluate and adaptively revise management actions based on the VPMMP standards. The data collected under the VPMMP are intended to efficiently inform management decisions, with the ultimate purpose of achieving the VPHCP objectives. The monitoring methods may change over time and would be coordinated closely with the regional monitoring efforts. Monitoring would be performed on City-owned lands, lands that the City has a legal access to manage and monitor (e.g., the General Dynamics site); and vernal pool sites conserved through the VPHCP. Monitoring would be conducted by City staff, paid consultants, or nonprofits, or other trained individuals that have been approved by the Wildlife Agencies (provided that all follow a standard monitoring protocol consistent with the VPMMP) and coordinated via the City's MSCP program. Monitoring would be coordinated with regional efforts conducted by other entities (e.g., USFWS, San Diego Management and Monitoring Program). Monitoring methods would include documenting observations during annual site visits and incidental observations during management activities, as well as mapping and estimating species cover, population size/density, and presence/absence at each complex.

Monitoring results would determine the appropriate Management Level for each vernal pool complex. The required Management Level 1, 2, or 3 (with 3 requiring the most management) would be determined by selected management triggers. Each Management Level has a unique goal and would result in specific required management actions as summarized below. Chapter 7 of the VPHCP includes a detailed discussion of the monitoring and management program. An overview is provided below.

Management Level 1

The objective of Level 1 (stewardship) is to *maintain* existing habitat conditions and existing covered species population status. Level 1 complexes are deemed functioning at an acceptable to optimal condition. The required management actions are expected to result in maintenance of those conditions. In general, the management can be characterized as stewardship where little maintenance is needed to achieve the habitat and species-level VPHCP objectives. It is assumed that routine access patrol and enforcement would occur at all Level 1 sites. Access patrol visits would occur annually, at a minimum, at each site, or more frequently (e.g., monthly, weekly) as deemed appropriate by the City.

Management Level 2

The objective of Level 2 is to *stabilize* habitat conditions and covered species populations. Level 2 complexes are deemed functioning at an unacceptable condition and are perceived as declining in habitat quality and/or covered species persistence. Management can be characterized as enhancement where maintenance is needed to achieve the habitat and species-level VPHCP objectives. Management Level 2 includes all activities listed for Management Level 1, plus some additional enhancement activities (listed in Table 7-3 of the VPHCP). The required management actions are expected to result in an improvement in those conditions to Level 1.

Management Level 3

The objective of Level 3 is to *restore* habitat conditions and covered species populations. Level 3 complexes are deemed highly degraded and need restoration to meet the habitat and species objectives of the VPHCP. Management Level 3 includes all activities listed for Management Level 1, plus some additional restoration activities, such as topographical recontouring. The required management actions are expected to result in an improvement in those conditions to Level 1.

3.3.10 VPHCP Implementation

The City would fully implement the VPHCP, including responses to changed circumstances. The City would implement the VPHCP through permanent protection of existing City-owned land for the conservation of vernal pools, conservation of private lands through the development entitlement process, the permanent management and monitoring of these lands, and annual reporting to the Wildlife Agencies that accounts for all take authorized, conservation achieved and compliance and effectiveness monitoring. The City would extend take coverage to thirdparties (i.e., private entities that receive coverage under the VPHCP) through development entitlements or a Certificate of Inclusion after confirming that a project within its jurisdiction is eligible for coverage and the project proponent has complied with all application requirements and other relevant terms of the VPHCP. As part of the development entitlement process for approved covered and future projects, owners of private properties and third-parties must submit a site-specific management and monitoring plan that is consistent with the requirements of the VPHCP and the City's LDM Biology Guidelines for approval by the City. The City would report the relevant details of approved covered and future projects to the Wildlife Agencies and for monitoring developer compliance with the VPHCP conservation measures and VPMMP. The Wildlife Agencies intend to manage and monitor their lands within the VPHCP Plan Area consistent with the goals and objectives of the VPHCP. To successfully implement the requirements of the VPHCP, the City would use the following three tools:

- 1. Conservation and/or management of existing open space with vernal pools.
- 2. Obtaining future open space within the MHPA through the development entitlement process.
- 3. Annual reporting on the status of ongoing management and monitoring of conserved vernal pool sites. Implementation of the VPHCP shall be consistent with the City's ESL Regulations.

Amendments to City Land Development Codes

Land development within the City <u>of San Diego</u> is regulated by the LDC (Chapters 11 through 15 of the City's Municipal Code) and technical documents that set forth standards and guidelines established by the City in the <u>Land Development ManualLDM</u>. These regulations, standards, and guidelines currently provide the tools to implement the City's MSCP SAP and would be modified to implement the VPHCP. To implement the VPHCP, the City would amend the Municipal Codes Chapters 11, 12, and 14, and the LDM Biology Guidelines, which are included the Appendix E of the VPHCP.

The ESL Regulations Wetland Deviation process would not be changed and would still apply to vernal pools within the MHPA. The Wetland Deviation includes the three deviations including the biologically superior option, which would allow impacts to low-quality wetland resources, including vernal pools, if the development results in a biologically superior project. The essential public project option allows a deviation for impacts where no feasible alternative to an essential public project exists that would avoid wetland impacts. The economic viability option allows a deviation to preserve economically viable use of a property that would otherwise be deprived by a strict application of the regulations.

MHPA Preserve Assembly

Implementation of the VPHCP would expand the MHPA by 275 acres to include a total of 2,409 vernal pools located within a total of 53 vernal pool complexes. The expanded MHPA would be assembled through the development entitlement process via application of the ESL Regulations and–/or acquisition. Opportunistic acquisition by the City and/or other entities through grant funds is encouraged.

Implementation within Existing MHPA Preserve Lands

The following City departments own lands in the existing MHPA: Park and Recreation Department, Open Space Division; Public Utilities Department, Water/Wastewater Divisions; Environmental Services Department; and <u>the Real Estate Assets Department</u>, Airport Division. The City owns and operates Montgomery-Gibbs Executive Airport in Kearny Mesa and Brown Field Municipal Airport in Otay Mesa. Future development and operational activities at <u>both</u> Montgomery-Gibbs Executive Airport and operational activities at <u>Brown Field Municipal Airport</u> will be covered under the VPHCP. <u>Any projects or covered airport activities on Montgomery-Gibbs Executive Airport or Brown Field Municipal Airport would be subject to a Minor Amendment Process, as described in Section 3.3.4. However, any loss of vernal pool resources at Brown Field Municipal Airport from future development associated with</u>

Metropolitan Airpark <u>at Brown Field</u> will be permitted under a separate Biological Opinion for the Metropolitan Airpark project (Project No. 208889).

The City would continue to manage its lands consistent with the standards and requirements of the MSCP SAP. In addition, for vernal pool complexes within the MHPA, the City would provide management, monitoring, and reporting consistent with the VPHCP and would implement the City's VPMMP. For existing preserves under City control, existing approved management plans will be updated, as applicable, to reflect goals and objectives of the VPHCP, per the schedule included in the VPMMP.

Activities that may impact vernal pools on existing Preserve lands would be limited to those identified in the VPHCP (covered projects and covered activities). Mitigation in accordance with the VPHCP, ESL Regulations, and City's LDM Biology Guidelines would be required.

3.4 **PROJECT ALTERNATIVES**

This section describes the alternatives to the Project that are evaluated in this EIR/EIS, including the Expanded Conservation Alternative (Section 3.4.1) and the Existing Conservation/No Project Alternative (Section 3.4.2). The Existing Conservation/No Project Alternative would include the City operating under existing state NCCP/MSCP authorizations, which cover take/impacts to and conservation of vernal pool habitat and the seven vernal pool species addressed in the VPHCP. Per NEPA requirements, the environmental consequences of the alternatives are equally considered and evaluated at a level equal to the Project.

3.4.1 Expanded Conservation Alternative

The Expanded Conservation Alternative adds additional lands to the MHPA, beyond those conserved under the VPHCP, that include vernal pool resources and/or habitat with potential for vernal pools to be present or restored, generally located in Otay Mesa. The Expanded Conservation Alternative was developed with USFWS to include lands identified with historical vernal pool resources, designated Critical Habitat, appropriate soil types for vernal pools, or other factors that could provide quality vernal pool habitat.

The conservation of vernal pools, covered species, and Critical Habitat under the Expanded Conservation Alternative is described below. All other elements of the VPHCP as described in Section 3.3, Description of the Project, would also be applicable to the Expanded Conservation Alternative, including covered projects and covered activities, conservation strategies, monitoring and management, and implementation.

Conservation of Vernal Pools

Similar to the VPHCP, implementation of the Expanded Conservation Alternative would provide additional conservation of vernal pools beyond existing conservation within the City's existing MHPA, permitted projects, and planned projects (i.e., existing conservation), by adding lands to the MHPA that contain valuable vernal pool resources. The <u>"Expanded Conservation Alternative Acreage"</u> refers to the land area (acreage) associated with this alternative within any given parcel. This acreage is used to calculate the percent of conservation required for a given parcel, resulting in the additional lands that would be acreage added to the MHPA, in addition to the VPHCP under the Expanded Conservation Alternative as summarized in Table 3-9.

APN	Total Parcel Acreage ¹²	Expanded Conservation Alternative Acreage	Percent Conservation Required	Additional acreage to be Added to MHPA ¹²
6670101400	20.4 <u>19.5</u>	<u>19.5</u>	75	<u>14.6</u> 15.3
6670101500*	<u>41.140.5</u>	20.6	75	<u>15.5</u> 30.8
6670101900	6.9 7.7	<u>7.7</u>	75	<u>5.8</u> 5.2
6670102000	6.9 6.7	6.7	75	<u>5.0</u> 5.2
6670102100	6.9 <u>7.2</u>	<u>7.2</u>	75	<u>5.4</u> 5.2
6450761100	0.9	<u>0.9</u>	75	0.7
6450761200	0.9	0.9	75	0.7
6450761300	0.9	0.9	75	0.7
6450761400	0.9	0.9	75	0.7
6450761500	0.9	0.9	75	0.7
6450761600	0.9	0.9	75	0.7
6450730900	0.8	<u>0.8</u>	75	0.6
6450731100	0.8	<u>0.8</u>	75	0.6
6450731300	0.8	<u>0.8</u>	75	0.6
6450731400	0.8	<u>0.8</u>	75	0.6
6450741000	0.9	0.9	75	0.7
6450741100	0.9	0.9	75	0.7
6450741400	0.9	0.9	75	0.7
6450741500	0.9	0.9	75	0.7
6450741600	0.9	0.9	75	0.7
6450751000	0.9	0.9	75	0.7
6450751100	0.9	0.9	75	0.7
6450751200	0.9	0.9	75	0.7
6450751300	0.9	0.9	75	0.7
6450751600	0.9	0.9	75	0.7
6450751700	0.9	0.9	75	0.7

Table 3-9Additional Lands added to the MHPA under the
Expanded Conservation Alternative¹

ADN	Total Parcel	Expanded Conservation Alternative	Percent Conservation Boquired	Additional acreage to be Added to MHPA ⁺²
6450761700	0.9	<u>Acreage</u>	75	0.7
6450800300*	160 6157 3	<u>0.7</u> 8.6	75	120 56 5
6450730800	0.8	0.8	75	0.6
6670100600*	61 661 2	<u>0.8</u> 57.9	75	16 242 4
<u>6450751500</u>	0.0	<u> </u>	75	<u>40.245.4</u>
6450751500	0.9	<u>0.9</u>	/5	0.7
6450761000	0.9	0.9	/5	0.7
6450731000	0.8	0.8	75	0.6
6450741700	0.9	<u>0.9</u>	75	0.7
6450751400	0.9	<u>0.9</u>	75	0.7
6670103100 <u>*</u>	<u>46.045.4</u>	<u>0.23</u>	75	34.5<u>0.2</u>
6450731200	0.8	<u>0.8</u>	75	0.6
6450741300	0.9	<u>0.9</u>	75	0.7
6461100500 <u>*</u>	9.2<u>9.1</u>	<u>5.9</u>	75	<u>6.94.4</u>
6461100600 <u>*</u>	<u>4.774.7</u>	<u>0.6</u>	75	3.6 0.5
6461100700 <u>*</u>	5.0 <u>5.1</u>	<u>5.1</u>	75	3.8
6461100800	17.0		75	12.8
6461100800 <u>*</u>	17.0	<u>9.7</u>	75	12.8 7.3
6461100900 <u>*</u>	2.5 2.7	<u>0.3</u>	75	1.9<u>0.2</u>
6461101000 <u>*</u>	10.0 10.3	0.7	75	7.5 0.5
6461101100 <u>*</u>	19.1<u>19.0</u>	<u>13.6</u>	75	14.3<u>10.2</u>
6670601000	49.4	<u>34.6</u>	75	37.1 26.0
6670601000	4 9.4	<u>4.7</u>	100	<u>49.44.7</u>
6670601000	49.4		100	49.4
3560320100	<u>13.5</u> 13.3	<u>2.0</u>	100	<u>13.52.0</u>
ROW (paper streets)**	<u>3.7</u>	<u>3.7</u>	<u>75</u>	<u>2.7</u>
Total	623.6 507	236		495.7 <u>179</u>

¹Table does not include Caltrans sites that are being restored and will be transferred to the City.

⁴²Acreage has been rounded to nearest tenth based on GIS mapping data. Thus, totals may not appear to add correctly.

*Parcels located partially within existing MHPA.

**Note that the APN ROW is right-of-way area between the 1-acre parcels in Otay Mesa that are included in the Expanded Conservation Alternative.

Table 3-10 summarizes the additional conservation of vernal pools that would be provided under implementation of the Expanded Conservation Alternative through the addition of lands to the MHPA. The Expanded Conservation Alternative would conserve an additional nine vernal pool complexes within the Plan Area, and conserve an additional 277 pools (11% more), totaling 3.3 acres of basin area, over what is currently conserved under the existing conservation. In addition, the Expanded Conservation Alternative would conserve 4,1424,484 acres of modeled vernal pool habitat (45% more than existing conservation).

	Number of Complex Series in the VPHCP Plan Area	Number of Complex Series Conserved	Total Number of Pools in VPHCP Plan Area	Number of Pools Inside Existing Conserved Areas	Number of Pools Conserved Based on Conservation Level ²	% of Total Pools in VPHCP Plan Area Conserved	Acreage of Pools Conserved	Acreage of Modeled Vernal Pool Habitat Conserved
Existing Conservation ¹	54	45	2,591	2,199	2,183	84%	34.7	3,797 <u>4,139</u>
MHPA after Implementation of Expanded Conservation Alternative	54	53	2,591	2,511	2,460	95%	38.0	4,142 <u>4,484</u>
Additional Conservation Resulting from Expanded Conservation Alternative	n/a	8	n/a	312	277	11%	3.3	345

Table 3-10Conservation of Vernal Pools after Implementation of the
Expanded Conservation Alternative

¹Existing conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects. See Chapter 4 of the VPHCP for more detail.

²Pools and species population conserved is an estimate based on 75% or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area.

Conservation of Covered Species

Table 3-11 summarizes the additional conservation of vernal pools occupied by the covered species that would be provided under implementation of the Expanded Conservation Alternative as compared to existing conservation through addition of lands to the MHPA. The Expanded Conservation Alternative would provide additional conservation (beyond existing conservation) for the following covered species:

- San Diego mesa mint three additional occupied pools conserved (<1% increase)
- San Diego button-celery eight additional occupied pools conserved (1% increase)
- Riverside fairy shrimp three additional occupied pools conserved (2% increase)
- San Diego fairy shrimp 33 additional occupied pools conserved (7% increase)

The Expanded Conservation Alternative would conserve the same number of additional occupied pools as the VPHCP for Riverside fairy shrimp, resulting in 100% conservation for this species within the Plan Area. The Expanded Conservation Alternative would conserve an even greater number of pools occupied by San Diego button-celery (additional 5 pools) and San Diego fairy shrimp (additional 2 pools) compared to the VPHCP.

Table 3-11 Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved) after Implementation of the Expanded Conservation Alternative

	PONU Total Pools in VPHCP Plan Area	PONU Total Pools Conserved	PONU % Pools Conserved	POAB Total Pools in VPHCP Plan Area	POAB Total Pools Conserved	POAB % Pools Conserved	NAFO Total Pools in VPHCP Plan Area	NAFO Total Pools Conserved	NAFO % Pools Conserved	ERAR Total Pools in VPHCP Plan Area	ERAR Total Pools Conserved	ERAR % Pools Conserved	ORCA Total Pools in VPHCP Plan Area	ORCA Total Pools Conserved	ORCA % Pools Conserved	RFS Total Pools in VPHCP Plan Area	RFS Total Pools Conserved	RFS % Pools Conserved	SDFS Total Pools in VPHCP Plan Area	SDFS Total Pools Conserved	SDFS % Pools Conserved
Existing Conservation ¹	369	369	100%	337	332	99%	95	94	99%	732	719	98%	58	58	100%	131	128	98%	517	431	83%
MHPA after Implementation of Expanded Conservation Alternative ²	369	369	100%	337	3355	99%	95	94	99%	732	727	99%	58	58	100%	131	131	100%	517	464	90%
Additional Conservation Resulting from Expanded Conservation Alternative	n/a	0	0	n/a	3	<1%	n/a	0	0	n/a	8	1%	n/a	0	0	n/a	3	2%	n/a	33	7%

n/a = not applicable

¹Existing Conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects.

² Pools and species population conserved are an estimate based on 75% and/or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area.

PONU = Otay Mesa mint

ORCA = California Orcutt grass

POAB = San Diego mesa mint NAFO = Spreading navarretia RFS = Riverside fairy shrimp SDFS = San Diego fairy shrimp

ERAR = San Diego button-celery

Conservation of Critical Habitat

Critical Habitat would be conserved under the Expanded Conservation Alternative as compared to existing conservation through the addition of lands to the MHPA following implementation of the VPHCP, as shown in Table 3-12 (similar to the Project). The additional areas of Critical Habitat that would be added to the MHPA have high-quality habitat suitable for vernal pool restoration, either as restoration associated with the VPHCP objectives, mitigation on a project-specific basis, or as a potential mitigation bank. As shown in Table 3-12, the Expanded Conservation Alternative, when fully implemented, would conserve:

- 35 additional acres (6%) of Spreading navarretia Critical Habitat
- 18 additional acres (2%) of Riverside fairy shrimp Critical Habitat
- 195 additional acres (11%) of San Diego fairy shrimp Critical Habitat

Critical Habitat Conservation	Spreading	Riverside	San Diego
	Navarretia	Fairy Shrimp	Fairy Shrimp
	Critical	Critical	Critical
	Habitat	Habitat	Habitat
	(Acres)	(Acres)	(Acres)
Total Critical Habitat Designation (for Species Range, occurs within and outside VPHCP Plan Area)	6,720	1,724	2,931
Total Acres in VPHCP Plan Area	628	804	1,801
(% of Total Species Designation)	(9%)	(47%)	(61%)
Existing Critical Habitat Conservation in VPHCP Plan Area	561	724	1,330
(% of Critical Habitat Conserved – Existing)	(89%)	(90%)	(74%)
Critical Habitat Conserved in MHPA under Expanded Conservation Alternative (% of Critical Habitat Conserved with VPHCP)	596 95%	742 92%	1,526 85%
Additional Habitat Conserved with Implementation of the VPHCP under Expanded Conservation Alternative (% of Additional Critical Habitat Conserved)	35 6%	18 2%	195 11%

Table 3-12Summary of Critical Habitat Conservation after Implementation of
Expanded Conservation Alternative

3.4.2 Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in no approval or implementation of the VPHCP. In the VPHCP, this alternative is called the "Baseline Conservation Alternative." However, in this EIR/EIS the same alternative is called the "Existing Conservation/No Project Alternative" to avoid confusion with CEQA/NEPA terminology related to baseline and baseline conditions used for analysis. No new actions, policies, or permits would be issued in association

with vernal pool protection beyond those already afforded by the MSCP/MHPA. Under the Existing Conservation/No Project Alternative, a Section 10(a)(1)(B) permit would not be issued to the City. Instead, activities involving take of the covered species normally prohibited under Section 9 of FESA would require individual 10(a) permits or Section 7 consultation if a federal nexus exists under the current FESA regulations. To obtain a permit to take a listed species under Section 10(a)(1)(B) of FESA, the applicant must prepare an adequate site-specific HCP. As described in Section 3.1.2, History of VPHCP Development, of this EIR/EIS, the City's state NCCP permit is still valid and covers take/impacts to, and conservation of, vernal pool habitat and the seven vernal pool species addressed in the VPHCP; therefore, the Existing Conservation/No Project Alternative would include the City operating under existing state NCCP/MSCP authorizations for vernal pool habitat and species.

The Existing Conservation/No Project Alternative is a continuation of the existing program for issuing take authorization on a project-by-project basis. This allows for a comparison of the impacts of not implementing a VPHCP and continuing the existing take authorization individually versus preparing a coordinated conservation plan and issuing incidental take authorization to the City. Under the Existing Conservation/No Project Alternative, the existing land use and environmental regulations process described in Chapter 3 of this EIR/EIS would continue and be required for all public and private projects proposed within the VPHCP study area. Existing ESL Regulations and compliance with the City's MSCP require mitigation for impacts to vernal pool resources and the seven covered species resulting in lands being set aside for MHPA/open space preservation. The configuration of the preserved land under the Existing Conservation/No Project Alternative would be implemented on a project-by-project basis instead of within a comprehensive vernal pool Preserve planning effort.

Impacts to vernal pools that are City wetlands could not occur without a wetland deviation. If a wetland deviation is not granted, or a property owner decides to avoid direct impacts to pools, avoided pools will likely be surrounded by development. Pools avoided in this manner would likely be subject to fragmentation/isolation and indirect effects often referred to as "edge effects" (e.g., unauthorized dumping, human and pet intrusion, invasion of nonnative species), and therefore rendered of little to no long-term conservation value.

A total of 2,199-<u>183</u> vernal pools within 45 complexes across 34.7 acres are currently conserved within the MHPA under the existing conservation conditions as defined in Table 3-5. This includes <u>both private and public</u> conserved lands within the City's existing MHPA, permitted projects, and planned projects. These numbers and conservation values would remain the same under the Existing Conservation/No Project Alternative and the approximately 11% increase in conservation of vernal pools from the existing conservation that would result from implementation of the VPHCP would not occur. In addition, no additional conservation of long-

term value for the covered species would be expected beyond the current level of conservation (Table 3-6).

The Existing Conservation/No Project Alternative would involve status quo monitoring and management of currently conserved vernal pool resources based on existing monitoring and management requirements for existing conservation, where applicable. <u>Status quo monitoring refers to monitoring that is currently being conducted on MHPA Preserve lands, either by the City as part of the City's MSCP SAP, or by private entities as part of previously approved project-specific discretionary permit conditions at vernal pool mitigation and/or preserve sites that require long-term management. Monitoring requirements and data collection/analysis varies by individual entity depending on project-specific permit conditions and/or regional monitoring guidance (e.g., MSCP). There is no Preserve-wide monitoring program for vernal pools under the Existing Conditions/No Project scenario. No additional enhancement, restoration, monitoring, or management would occur.</u>

3.5 ALTERNATIVES CONSIDERED BUT REJECTED

3.5.1 Existing MHPA and Conserved Lands with Updated VPMMP Alternative

Similar to the Existing Conservation/No Project Alternative, under this alternative no additional lands would be added to the MHPA. This alternative would differ from the No Project/No Project Alternative by including the adoption of the VPMMP and funding strategy for the existing MHPA Preserve. This alternative was rejected because it would not provide adequate conservation for the covered species (with the exception of California Orcutt grass, which is 100% conserved under existing conditions); therefore, the City would not receive an ITP from USFWS. Specifically, this alternative would not meet the following Project objectives: (1) Provide for the conservation and management of VPHCP covered species and (4) Provide a basis for permits necessary for lawful incidental take of vernal pool covered species. Additionally, this alternative would not be consistent with the USFWS Recovery Plan for stabilizing the covered species (USFWS 1998a). As a result, this alternative would not be consistent with the Project Objectives) and was therefore ultimately rejected.

3.5.2 <u>No Management and Monitoring Alternative</u>

The No Management and Monitoring Alternative was developed to reduce impacts to vernal pools and the covered species resulting from management and monitoring activities associated with the VPMMP. Under this alternative, the VPHCP would still be approved and implemented,

and vernal pools would be conserved within the Preserve as envisioned in the VPHCP. However, the VPMMP would not be adopted as part of the VPHCP.

The driving factor behind development of this alternative is to avoid a small amount of take that is possible as a result of management and monitoring activities prescribed in the VPMMP. To avoid take, the No Management and Monitoring Alternative would not include any management or monitoring of vernal pools. This alternative is rejected as it would not allow management and monitoring of vernal pools and, thus, would not achieve the Project objective (1) Provide for the conservation and management of VPHCP covered species. In addition, this alternative conflicts with the existing requirements of the NCCP permit, which required management and monitoring of covered species.

3.5.3 <u>No Impacts to Vernal Pools or Vernal Pool Species Alternative</u>

Under this alternative, no impacts from development would be allowed to vernal pools or the seven vernal pool species. As future development occurs, vernal pools and depressions with fairy shrimp would be preserved on-site, which would have the potential for conservation within "postage stamp" vernal pool preserves. These Preserve areas could be surrounded by development, resulting in increased risk of decline of the species and reduction of viable vernal pool habitat, creating pockets of Preserve areas with little to no long-term conservation value rather than an interconnected and unified Preserve with long-term conservation value. This would be consistent with the existing approach, which is implemented on a project-by-project basis for identifying individual vernal pool conservation areas instead of a comprehensive vernal pool Preserve area identified and adopted as part of the VPHCP.

Additionally, while this alternative would require a covenant of easement over the Preserve area and management and monitoring would occur, no restoration or enhancement (i.e., mitigation for impacts) would be required. This alternative would not be consistent with the Project objectives and was therefore ultimately rejected. Specifically, this alternative would not meet the following Project objectives: (1) Provide for the conservation and management of VPHCP covered species; (2) Allow for appropriate and compatible growth and development consistent with applicable laws; (3) Provide a basis for permits necessary for lawful incidental take of vernal pool covered species; (4) Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements of FESA, CESA, CEQA, and NEPA within the VPHCP Plan Area; (5) Provide a more efficient project review process that results in greater conservation values than project-by-project, species-by-species review; and (7) Provide clear expectations and regulatory predictability for persons carrying out covered activities within the VPHCP Plan Area.

3.6 DISCRETIONARY ACTIONS, PERMITS, AND APPROVALS FOR IMPLEMENTATION OF THE VPHCP

One of the objectives of the CEQA/NEPA process is to ensure that a proposed project and its alternatives are consistent with relevant regulations, policies, and plans. Various approvals and permits would be necessary for implementation of the VPHCP. Table 3-13 lists the applicable permit or approval requirements, or other regulatory action.

Agency	Permit/Approval/Regulatory Action					
	Certify the EIR, Adopt Findings, Adopt the Mitigation, Monitoring and Reporting Program (MMRP)					
	File Notice of Determination					
	Approve/adopt the VPHCP and Vernal Pool Management and Monitoring Plan (VPMMP), including implementation of funding mechanisms and sources					
	Amend General Plan to add policies related to VPHCP and revise MHPA discussion/maps to include expanded boundaries					
	Amend Otay Mesa Community Plan to revise land use maps to include expanded MHPA boundaries and revise policies related to the protection, preservation, and long-term management of vernal pool resources					
City of San Diego	Amend Kearny Mesa Community Plan to revise land use maps to include expanded MHPA boundaries and add policies related to the protection, preservation, and long- term management of vernal pool resources					
	Amend Land Development Code and LDM Biology Guidelines to implement the VPHCP					
	Amend the City's Local Coastal Program pertaining to regulations related to the VPHCP					
	Approve MHPA Boundary Line Adjustment for Montgomery-Gibbs Executive Airport					
	Authorize any necessary amendment(s) to and/or findings of consistency with the City's existing MSCP SAP, Implementing Agreement, and state 2835 NCCP to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP					
	Issue Record of Decision for EIS					
U.S. Fish and Wildlife Service	Issue Section 10(a)(1)(B) Incidental Take Permit					
Service	Internal Biological Opinion					
California Department of Fish and Wildlife	Approve any necessary amendment(s) to and/or findings of consistency with the City's existing MSCP SAP, Implementing Agreement, and/or state 2835 NCCP to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP.					
State Historic Preservation Office	NHPA Section 106 Consultation					

Table 3-13Permits and Approvals

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CHAPTER 4.0 HISTORY OF PROJECT CHANGES

The history of the Project has included numerous changes since issuance of the NOP (November 28, 2011), based on coordination with the Wildlife Agencies and input from independent scientific advisors and the public. In addition, following release of the VPHCP Preliminary Public Review Draft (released in March 2015), the VPHCP document was further refined based preliminary public comments. Although not required, the City released the VPHCP Preliminary Public Review Draft to solicit public involvement on preparation of the VPHCP. Specific changes are documented in a separate Response to Comments (RTC) table (Appendix B). A summary of the key Project changes since issuance of the NOP is provided below.

- The Project originally included lands exclusively under the jurisdiction of the City. Prior to release of the VPHCP Preliminary Public Review Draft (released in March 2015), the baseline conservation (i.e., "Existing Conservation") was expanded to include currently conserved lands owned and managed CDFW (e.g., Lopez Ridge) and USFWS (e.g., lands on Del Mar Mesa) planned projects (i.e., projects were impacts had been identified and hardline conservation had been established).
- The Project originally envisioned a vernal pool preserve system that was distinct from, but compatible with, the City's MPHA Preserve. The Project now incorporates the vernal pool preserve system as part of the MHPA Preserve (i.e., the vernal pool preserve established by the VPHCP part of, and included within, the MHPA).
- The number of privately-owned parcels within the Otay Mesa Southwest Village proposed to be incorporated into the MHPA as part of the Project has been greatly reduced from 25 parcels to 10 parcels.
- Since issuance of the NOP, hardline conservation areas have been established and/or revised for the following projects:
 - Otay Mesa/Southwest Village
 - o Otay Mesa/1-acres
 - o Hagey Parcel
 - o Crossborder Facility
 - Southview East
 - o Montgomery-Gibbs Executive Airport
 - o Pasatiempo Park
 - o Cubic

- o SANDER
- Menlo KM
- o East Ocean Air
- An analysis of Critical Habitat conservation and loss was added to the VPHCP document.
- Some components from the hydrogeomorphic assessment method and California Rapid Assessment Method (CRAM) were integrated into the monitoring program based on input from scientific advisors.
- While originally included in the Project at the NOP stage, covered projects at Montgomery-Gibbs Executive Airport and Metropolitan Airpark <u>at Brown Field</u> were removed from the Project during the Preliminary Public Review Draft. <u>Subsequently</u>, <u>Hhowever</u>, <u>covered</u> projects at Montgomery-Gibbs Executive Airport and Metropolitan Airpark <u>at Brown Field</u> have <u>since</u> been added back into the Project. In addition, the Project now includes a BLA for Montgomery-Gibbs Executive Airport. <u>Additionally</u>, any projects or covered airport <u>activities on Montgomery-Gibbs Executive Airport or Brown Field Municipal Airport, would be subject to a Minor Amendment Process, as described in Section 3.3.4.
 </u>
- Soil types and vernal pool categories (e.g., hardpan, claypan) were incorporated into the conservation analysis.
- The VPHCP clarifies covered activities and includes an analysis of impacts associated with covered activities.
- The covered and planned projects included <u>in the Preliminary Public Review Draft have been</u> revised based on status of these projects.

CHAPTER 5.0 ENVIRONMENTAL CONSEQUENCES

A total of seven environmental issue areas are evaluated in this chapter. A consistent format has been used for the Environmental Consequences section of this joint EIR/EIS to assist the reader in reviewing and understanding the implications of the Project and alternatives. Each individual topic analysis section is organized by (1) Affected Environment; (2) Regulatory Framework; (3) CEQA Thresholds of Significance; (4) Environmental Consequences; (5) Mitigation Measures; and (6) Level of Impact after Mitigation.

- 1. Affected Environment describes the existing conditions for the VPHCP Plan Area. The Affected Environment provides a description of conditions before project implementation and serves as the general baseline physical conditions for the analysis of project impacts.
- 2. Regulatory Framework provides a summary of plans, policies, regulations, and other regulatory mechanisms applicable to the VPHCP that are relevant to each issues area.
- 3. CEQA Thresholds of Significance defines specific criteria used to determine whether an impact is or is not considered significant under CEQA. CEQA requires that an EIR include a determination of significant effects and identification of feasible mitigation measures to minimize those effects, while NEPA does not. According to NEPA regulations, a finding of whether a proposed action significantly affects the quality of the human environment is determined by considering the context in which it will occur and the intensity of the action (40 CFR Section 1508.27). To facilitate review, each CEQA significance threshold is identified with a number and discussed as an independent issue with conclusions drawn specific to each threshold.
- 4. Environmental Consequences provides independent analyses of the Project and alternatives at an equal level of detail. This approach allows for comparison of the alternatives under each resource area and will facilitate the ultimate selection of an agency-preferred alternative for the Final EIR/EIS.
- 5. Mitigation Measures identify the means by which impacts could be reduced or avoided in cases where the analysis determines such impacts to be significant or substantially adverse under CEQA or NEPA, respectively.
- 6. Level of Impact after Mitigation identifies the impacts that would remain after application of mitigation measures (where applicable), and whether the remaining impacts would or would not be considered significant under CEQA.

One of the primary requirements of NEPA analyses is the evaluation of project alternatives at a level equal with that of the proposed project. For each environmental issue evaluated in Chapter 5, analyses are conducted for the Project as well as the two alternative scenarios (Expanded Conservation Alternative and Existing Conservation/No Project Alternative).

For purposes of the alternatives analysis, it is assumed that the policies and implementing techniques for the VPHCP would be similar for the Project and Expanded Conservation Alternative regardless of the Preserve boundary configuration. The Existing Conservation/No Project Alternative would be subject to existing policies and regulations and would not include any new or additional requirements; therefore, it would include the City operating under existing state NCCP/MSCP authorizations for vernal pool habitat and species. See Section 3.1.2, History of VPHCP Development, of this EIR/EIS.

Approval of the Project, which includes adoption of the VPHCP document and associated amendments to the City's land use planning policies and existing state MSCP permit (as necessary) to maintain state coverage for vernal pool habitat and species, as well as issuance of an ITP by USFWS, would not result in environmental impacts. However, implementation of projects and activities covered under the VPHCP have the potential for impacts to environmental resources and these future actions would be subject to the required measures of the VPHCP Mitigation Framework (summarized in Section 3.3.7 and full text included in Chapter 11, Mitigation Monitoring and Report Program). Projects and activities covered under the VPHCP would require subsequent environmental review to demonstrate consistency with the VPHCP regulations and would be required to implement the VPHCP Mitigation Framework, as applicable, to address potential impacts to environmental resources.

5.1 LAND USE

This section describes existing environmental conditions related to land use within the VPHCP Plan Area. This section also identifies pertinent policies and regulations governing land use associated with the VPHCP and evaluates the impacts and effects associated with implementation of the Project and its alternatives.

5.1.1 Affected Environment

Due to the expansive geographic extent of lands included in the VPHCP, there are a wide variety of land uses and land use planning documents applicable to the Plan Area. The VPHCP Plan Area encompasses 206,124 acres within the City's jurisdictional boundaries. Of those acres, approximately 55% is characterized by developed urban land uses. The remaining 45% is open space, parkland, or undeveloped vacant land. Existing land uses within the VPHCP Plan Area includes MHPA/open space, conserved lands, residential, commercial, industrial, airports, park and recreation, and agricultural.

Section 5.1.2, Regulatory Framework, provides information on the planning documents, policies, and regulations applicable to the VPHCP. Additional information regarding the planning context that drives the VPHCP is provided in Section 3.1.1, Conservation Planning Context. Section 3.1.2, History of VPHCP Development, also provides historic planning background that has shaped the development of the VPHCP, and Chapter 4, History of Project Changes, provides details of how the project has evolved over time.

5.1.2 <u>Regulatory Framework</u>

In addition to the conservation planning policies, plans, and regulations described in Section 3.1.1., the City has land use policies, plans, and regulations that are relevant to implementation of the VPHCP, which are described below.

City of San Diego General Plan

The City's General Plan provides public policy for the distribution of future land use, both public and private. On March 10, 2008, the San Diego City Council unanimously approved a comprehensive update to the City's General Plan. The plan sets out a long-range vision and policy framework for how the City should plan for projected growth and development, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years. The City's General Plan includes a Conservation Element (City of San Diego 2008a) that calls for the City to be a model for sustainable development and conservation. Policies are to conserve natural resources; protect unique landforms; preserve and manage open space and canyon systems, beaches, and watercourses; prevent and reduce pollution; reduce the City's carbon footprint; and promote clean technology industries.

Specific General Plan policies presented in the Conservation Element on Open Space and Landform Preservation, Coastal Resources, and Wetlands that specifically relate to wetlands protection include:

Open Space and Landform Preservation

- CE-B.1. Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.
 - a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands.
 - b. Support the preservation of rural lands and open spaces throughout the region.
 - c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A).
 - d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.
 - e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.
 - f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.
 - g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.
- CE-B.2. Apply the appropriate zoning and Environmentally Sensitive Lands (ESL) regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands.
 - a. Manage watersheds and regulate floodplains to reduce disruption of natural systems, including the flow of sand to the beaches. Where possible and practical,

restore water filtration, flood and erosion control, biodiversity, and sand replenishment benefits.

- b. Limit grading and alterations of steep hillsides, cliffs and shoreline to prevent increased erosion and landform impacts.
- CE-B.4. Limit and control runoff, sedimentation, and erosion both during and after construction activity.

Biological Diversity

- CE-G.1. Preserve natural habitats pursuant to the Multiple Species Conservation Program (MSCP), preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitat to ensure their long-term biological viability.
 - a. Educate the public about the impacts invasive plant species have on open space.
 - b. Remove, avoid, or discourage the planting of invasive plant species.
 - c. Pursue funding for removal of established populations of invasive species within open space.
- CE-G.2. Prioritize, fund, acquire, and manage open spaces that preserve important ecological resources and provide habitat connectivity.
- CE-G.3. Implement the conservation goals/policies of the City's MSCP Subarea Plan, such as providing connectivity between habitats and limiting recreational access and use to appropriate areas.
- CE-G.4. Protect important ecological resources when applying floodplain regulations and development guidelines.
- CE-G.5. Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.

Wetlands

- CE-H.1. Use a watershed planning approach to preserve and enhance wetlands.
- CE-H.2. Facilitate public-private partnerships that improve private, federal, state and local coordination through removal of jurisdictional barriers that limit effective wetland management.
- CE-H.3. Seek state and federal legislation and funding that support efforts to research, classify, and map wetlands including vernal pools and their functions, and improve restoration and mitigation procedures.

- CE-H.4. Support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values.
- CE-H.5. Support research and demonstration projects that use created wetlands to help cleanse urban and storm water runoff, where not detrimental to natural upland and wetland habitats.
- CE-H.6. Support educational and technical assistance programs, for both planning and development professionals, and the general public, on wetlands protection in the land use planning and development process.
- CE-H.7. Encourage site planning that maximizes the potential biological, historic, hydrological and land use benefits of wetlands.
- CE-H.8. Implement a "no net loss" approach to wetlands conservation in accordance with all City, state, and federal regulations.

As part of the Project, the City would amend the General Plan concurrently with adoption of the VPHCP to add policies related to the VPHCP and to revise the existing MHPA discussion and maps/graphics to include the expanded boundaries that encompass the lands conserved under the VPHCP.

City of San Diego Community Plans

As part of the General Plan, the City has developed community plans for each of the individual communities within San Diego. A community plan is a public document that contains specific proposals for future land uses and public improvements in a given community; it is not a regulatory document. Community plans provide tailored policies and a long-range physical development guide for elected officials and citizens engaged in community development. Natural resources are typically addressed within community plans. Most community plans include common policies or goals to preserve natural open space areas and sensitive resource areas, including wetlands. Some plans also include specific goals or recommendations for vernal pool preservation or management, while some do not directly address vernal pools.

The following City communities have lands within the VPHCP Plan Area.

Carmel Valley Del Mar Mesa East Elliott Encanto Neighborhood Kearny Mesa Linda Vista Mira Mesa Navajo Otay Mesa Rancho Peñasquitos Serra Mesa Tierrasanta Torrey Highlands Torrey Hills University As part of the Project, the City would amend the Otay Mesa and Kearny Mesa Community Plans concurrently with adoption of the VPHCP to revise the land use maps to include the expanded MHPA boundaries. Policies related to the protection, preservation, and long-term management of vernal pool resources were added to the Otay Mesa Community Plan as part of the 2014 update process. Similar policies would be added to the Kearny Mesa Community Plan.

Unincorporated Areas/Cornerstone Lands

The following three areas are outside the limits of the City. However, these sites are owned by the City Public Utilities Department, Water Division and are part of the MSCP's Cornerstone Conservation Bank areas.

Otay Lakes (K 5) – The Otay Lakes (K 5) vernal pool site is located on 632 acres owned and managed by the City's Public Utilities Department. Although the area is not currently covered by a covenant of easement, it is obligated to be conserved as part of the MSCP Cornerstone Lands Conservation Bank Agreement prior to sale of any credits within this area. This area is included in the MHPA.

Marron Valley (MM 1) – The Marron Valley vernal pool site (MM 1) is located within 2,644 acres owned and managed by the City's Public Utilities Department. This area is located approximately 25 miles east of the Pacific Ocean along the U.S./Mexican border. This site is part of the MSCP Cornerstone Lands Conservation Bank Agreement and is included in the MHPA. A mitigation bank has been established for this area and credits are currently being overseen by the Public Utilities Department. Consistent with the Cornerstone Lands Conservation Bank Agreement, a conservation easement was recorded as part of the establishment of the bank for this area.

Proctor Valley $(R \ 1)$ – This site $(R \ 1)$ occurs on 157 acres owned and managed by the City Public Utilities Department in Proctor Valley. Although the site is not currently covered by a covenant of easement, it is obligated to be conserved as part of the MSCP Cornerstone Lands Bank Agreement prior to sale of any credits within this area. This area is within the MHPA.

Multiple Species Conservation Program

The City's MSCP SAP, which is discussed in Section 3.1.1 in the context of the VPHCP development process, specifically addresses wetlands and priorities for wetland avoidance. General planning policies and design guidelines identified in Section 1.4.2 of the MSCP SAP address construction and maintenance policies for roads and utilities; fencing, lighting and

signage; materials storage; mining, extraction and processing facilities; and flood control. All wetland restoration/revegetation proposals may be subject to permit authorization by federal and/or state agencies (depending on the resources present).

The City's MSCP SAP allows the City incidental take for federally listed and state-listed species as described in exchange for the preservation, management, and monitoring of large, contiguous open space areas. Thus, the MSCP designated 56,831 acres within the City's boundaries within which a permanent MSCP preserve system, or MHPA, serves as a planning area for core biological resources and corridors targeted for conservation. The type and extent of development allowed within the MHPA are limited as the MSCP requires, overall, 90% conservation (52,715 acres) of the MHPA. Development within the MHPA is limited to low-intensity uses and essential public facilities.

Section 1.4 of the MSCP SAP provides an overview of land use considerations. Conditionally compatible land uses allowed within the MHPA include the following:

- Passive recreation
- Utility lines and roads in compliance with policies in Section 1.4.2 of the MSCP SAP
- Limited water facilities and other essential public facilities
- Limited low-density residential uses
- Brush Management (Zone 2)
- Limited agriculture

General management goals outlined in the MSCP SAP (General Management Directives, Section 1.5.2) require that mitigation be performed in accordance with the ESL Regulations and LDM Biology Guidelines. Where restoration or revegetation is undertaken in the MHPA, directives require that the work be performed in accordance with a prepared plan that addresses financial responsibility, site preparation, planting specifications, maintenance, and monitoring and success criteria, and as remediation and contingency measures. Additionally, the MSCP SAP (Section 4.1.2) includes the MHPA Land Use Adjacency Guidelines to minimize impacts and maintain the function of the MHPA. The guidelines specifically address drainage, toxins, lighting, noise, barriers, invasives, brush management, and grading for projects located within and/or adjacent to the MHPA.

The MSCP, Section 5.4.2, and the SAP, Section 1.1.1 address MHPA boundary adjustments. Adjustments to the MHPA boundaries may be made without the need to amend either the SAP or the MSCP plan in cases where the new MHPA boundary results in an area of equivalent or higher biological value. The SAP further states that the determination of the biological value of a

proposed boundary change will be made by the City in accordance with the MSCP plan and with the concurrence of the Wildlife Agencies. If the adjustment is determined by the City and Wildlife Agencies to result in the same or higher biological value of the MHPA, no further action by the Wildlife Agencies is required. A MHPA boundary adjustment must be disclosed and addressed in the environmental document prepared for the specific project and approved by a discretionary hearing body.

The City's project review process for proposed development requires consideration/evaluation and protection of all environmentally sensitive resources and consistency with the MSCP SAP as part of the ESL Regulations and other related regulations. Some development in floodplains or of wetlands may currently be permitted with appropriate mitigation.

City of San Diego Land Development Code

Land development within the City is regulated by the LDC within Chapters 11 through 15 of the City's Municipal Code. Section 111.0102 of the San Diego Municipal Code defines the purpose of the LDC and is as follows:

The Land Development Code sets forth the procedures used in the application of land use regulations, the types of review of development, and the regulations that apply to the use and development of land in the City of San Diego. The intent of these procedures and regulations is to facilitate fair and effective decision-making and to encourage public participation.

Impacts to sensitive biological resources including wetlands are only allowed per the LDC through a deviation if an applicant obtains a Site Development Permit and the required findings can be made for approval as specified in Sections 126.0504 (a)(b)(c). Specifically, LDC Section 126.0504 (c) requires that two supplemental findings be made to allow for a deviation from the Sensitive Biological Resources regulations:

- 1. There are no feasible measures that can further minimize the potential adverse effects on environmentally sensitive lands.
- 2. The proposed deviation is the minimum necessary to afford relief from special circumstances or conditions applicable to the land and not of the applicant's making.

In addition, the City's <u>Land Development Manual-LDM</u> establishes standards and guidelines through technical documents, including the ESL Regulations and LDM Biology Guidelines. These regulations and guidelines currently provide the tools to implement the City's MSCP SAP.

City of San Diego Environmentally Sensitive Land Regulations

The City's ESL Regulations help protect, preserve, and restore lands containing steep hillsides, sensitive biological resources, coastal beaches, sensitive coastal bluffs, or Special Flood Hazard Areas (SFHAs) and are regulated within Chapter 14, Article 3, Division 1 of the City's Municipal Code. The intent of the ESL Regulations is to ensure that development occurs in a manner that protects the overall quality of the resources, encourages a sensitive form of development, retains biodiversity and interconnected habitats, maximizes physical and visual public access to and along the shoreline, and reduces hazards due to flooding in specific areas while minimizing the need for construction of flood control facilities. The development regulations and guidelines for environmentally sensitive lands also serve to implement the MSCP by placing priority on the preservation of biological resources within the MHPA.

5.1.3 <u>CEQA Thresholds of Significance</u>

The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating potential inconsistencies with any adopted land use plans, regulations, or other land use topics.

Project inconsistency or conflict with a plan does not in and of itself constitute a significant environmental impact. The plan or policy inconsistency would have to result in or relate to a significant environmental impact to be considered significant pursuant to the City's Significance Thresholds Guidelines and CEQA. With respect to land use, a significant impact would occur if the Project would result in:

- 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;
- 3. Development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use;
- 4. Substantial incompatibility with an adopted plan;
- 5. Incompatible uses as defined in an airport land use plan or inconsistency with an airport's Land Use Compatibility Plan (ALUCP) as adopted by the Airport Authority;
- 6. Inconsistency/conflict with adopted environmental plans for an area, including inconsistency with the existing MSCP permit; and/or
- 7. Significantly increase the base flood elevation for upstream properties, or construct in a Special Flood Hazard Area (SFHA) or floodplain/wetland buffer zone.

5.1.4 <u>Environmental Consequences</u>

ISSUE 1: Would the project result in an inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan?

Project

The City's General Plan provides public policy for the distribution of future land use, both public and private. As detailed in Section 5.1.2, Regulatory Framework, many environmental goals and policies are included in the Conservation Element of the General Plan. Most specific to vernal pools, the Open Space and Landform Preservation section includes policies regarding application of appropriate zoning and ESL Regulations to limit development of floodplains and sensitive biological areas including wetlands. Policies of this section also include the management of watersheds and regulation of floodplains to reduce disruption of natural systems and restore water filtration, flood and erosion control, and biodiversity. The Biological Diversity section includes policies specific to the preservation of natural habitats and rare plants and animals and the promotion of aquatic biodiversity and habitat recovery by reducing hydrological alterations. Additionally, the Wetlands section of the Conservation Element includes policies that state the City should seek state and federal legislation and funding that support efforts to research, classify, and map wetlands including vernal pools and their functions, and improve restoration and mitigation procedures; support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values; and encourage site planning that maximizes the potential biological, historic, hydrological, and land use benefits of wetlands.

Implementation of the VPHCP would not conflict with these environmental protection and preservation policies contained within the Conservation Element of the General Plan. The VPHCP contains many elements that would implement and further the ability of the City to achieve conservation goals and policies identified in the General Plan through the management of the vernal pool resources, restored hydrologic function, preservation of the vernal pool habitats and associated sensitive plant and animal species, and the long-term monitoring and reporting of the vernal pool resourcerntly with adoption of the VPHCP to add policies related to the VPHCP and to revise the existing MHPA discussion and maps/graphics to include the expanded boundaries and ensure consistency. Thus, implementation of the VPHCP would not conflict with environmental goals of the General Plan.

Many of the Community Plans that have lands within the VPHCP Plan Area include environmental goals and policies, though many are not specific to vernal pools but are more generalized regarding sensitive natural resources and the preservation of open space areas. In some communities where the occurrence of vernal pools is known to be extensive, the Community Plans contain policies specific to vernal pools. For example, the Mira Mesa Community Plan contains policies stating no encroachment shall be permitted into wetland, including vernal pools; remaining vernal pool habitat in the community shall be preserved and shall be protected from vehicular or other human-caused damage, encroachment in their watersheds and urban runoff; among other preservation and protection policies.

As part of the VPHCP implementation, the City would amend the Otay Mesa and Kearny Mesa Community Plans concurrently with adoption of the VPHCP to revise the land use maps to include the expanded MHPA boundaries. Policies related to the protection, preservation, and long-term management of vernal pool resources were added to the Otay Mesa Community Plan as part of the 2014 community plan update process. Similar policies would be added to the Kearny Mesa Community Plan. Policies that would be added to the Kearny Mesa Community Plan include:

- Require preservation, restoration, management, and monitoring within identified vernal pool preservation areas in accordance with City, state, and federal policies and regulations. The boundaries of vernal pool Preserve areas should be of sufficient size and shape to protect the vernal pool basins, watersheds, functional buffers, and areas necessary to maintain vernal pool ecosystem function and species viability.
- Design, as feasible, the Preserve areas to provide connectivity between vernal pools, surrounding open space, and nearby vernal pool complexes.
- Conduct management and monitoring of preserved and restored vernal pool sites in accordance with the city-wide regulations and LDM Biology Guidelines.

Amendments to the Kearny Mesa Community Plan and the land use map revisions to include the expanded MHPA boundaries would not conflict or be inconsistent with the environmental policies of the Kearny Mesa or Otay Mesa Community Plans. Additionally, implementation of the VPHCP and the preservation, restoration, and monitoring of sensitive vernal pool resources would not conflict with other community plan environmental policies, whether specific to vernal pools or more generally related to the preservation of natural resources and open space. Overall, the VPHCP would serve to implement and be consistent with the general environmental goals of community plans to protect and preserve sensitive resources and open space areas.

For these reasons, the Project would not result in a substantial adverse effect related to an inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the implementation actions associated with the VPHCP would be identical. The additional acreage covered by the Expanded Conservation Alternative would not create inconsistency/conflict with environmental policies or goals of the General Plan or applicable Community Plan. Thus, the analysis provided for the Project is applicable to this alternative. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to an inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Ongoing conservation efforts would continue at the same level and no additional restoration requirements or development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative. No goals, objectives, or guidelines of a community or general plan would require additions or modifications for consistency. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to an inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan, and the impact would be less than significant. However, the Existing Conservation/No Project Alternative would not provide additional restoration or preservation of sensitive vernal pool resources and, thus, would not advance efforts to achieve goals or policies related to protection of sensitive natural resources.

ISSUE 2: Would the project result in an inconsistency/conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts occur?

Project

A wide variety of land use designations are applicable to lands within the MHPA, for which the VPHCP would apply. Existing land use designations over both private and publicly held lands allow for development to occur on the property in accordance with existing development regulations and restrictions, such as ESL Regulations. Implementation of the Project would result in parcels being added to the MHPA (see Figures 2-2 through 2-4 and Tables 3-1 and 3-42). Consistent with ESL Regulations, parcels that would be wholly within the MHPA would be subject to a development restriction over the land requiring 75% conservation, with an allowed

25% for development. The Project would also add additional parcels into the MHPA where hard line Preserve boundaries (i.e., 100% conservation) as well as development areas have been established in coordination with the City and Wildlife Agencies. While lands that would be added to the MHPA under the Project currently do not have automatic development limitations as they would with implementation of the VPHCP (e.g., 75% or 100% conservation), they are generally known to have wetlands and other sensitive biological resources (e.g., nonnative grasslands, burrowing owl habitat) that would be subject to ESL Regulations and other mitigation, which could result in development restrictions.

Implementation of the VPHCP would include addition of new parcels into the MHPA resulting in restrictions on development that could potentially result in an inconsistency with existing land use designations on those parcels that currently allow for higher levels of development and density. However, as noted above, these lands would likely be subject to restrictions under current City, state, and federal regulations, including the ESL Regulations and USFWS permitting. Additionally, the land use designation inconsistencies would not result in an increased intensity or other secondary environmental effects. The VPHCP and MHPA restrictions would limit development requiring 75% and/or hard line conservation to protect and preserve the sensitive biological resources on-site. This required conservation of sensitive resource areas would serve to avoid and reduce potential environmental impacts, while still allowing for reasonable development to occur.

Property rights and capacity for future land development on public and private parcels would be altered due to implementation of the VPHCP, which would add parcels to the MHPA and place development restrictions over those parcels that may be inconsistent with current allowable development per existing land use designations. As described in Section 5.1.2, Regulatory Framework, development on lands with biological resources is currently constrained by federal, state, and local regulations, which generally require development to avoid or minimize impacts to sensitive resources, such as vernal pools, wetlands, or nonnative grasslands. As part of the Project, the City would amend the LDM Biology Guidelines to implement the VPHCP concurrently with adoption of the VPHCP as described in Section 3.3.10. Any modifications to the Biology Guidelines require approval of the Wildlife Agencies (see Section 9.12 of the Implementing Agreement for the MSCP). Under the VPHCP, an applicant that submits a development application to the City would be subject to a land use regulation and environmental review process comparable to the process under the Existing Conservation/No Project Alternative. As discussed above, parcels that would be incorporated into the MHPA with implementation of the VPHCP may have increased levels of conservation, which would result in a reduction of developable area on a given parcel. However, in practice, most parcels that would be incorporated into the VPHCP have existing biological resource constraints, such as vernal pools, wetlands, burrowing owl habitat, and/or nonnative grasslands. Thus, the developable area on a given parcel would be constrained under existing conditions as well as due to the existing development restrictions of ESL Regulations and other state and federal permitting requirements.

Moreover, the potential to encroach further into the MHPA may be pursued consistent with the existing MHPA Boundary Line Adjustment <u>BLA</u> process as allowed per the City's MSCP <u>PlanSAP</u>, Section 5.4.2. Under this process, an applicant may request modifications to the MHPA boundary to remove lands as long as replacement lands of equal or greater biological value are added into the MHPA. Under the Project, public and private property owners would benefit from the issuance of a take permit to the City, which would streamline the permit process and clearly define project mitigation requirements for future projects that could potentially be less than those negotiated independently by landowners through the Section 10 or Section 7 permit process with USFWS. The streamlined process would allow for more timely completion of projects and greater efficiency in land development. Finally, owners of public and private parcels included in the VPHCP may experience advantageous new opportunities to have their lands acquired by purchase or by nonfiscal methods such as land exchanges or private mitigation banks.

For these reasons, the Project would not result in a substantial adverse effect related to an inconsistency/conflict with an adopted land use designation or intensity that would cause indirect or secondary environmental impacts, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the implementation actions and policies associated with the VPHCP would be identical. Thus, the analysis provided for the Project is applicable to this alternative. The increased acreage covered by the Expanded Conservation Alternative would result in additional land being added to the MHPA. Consistent with ESL Regulations, parcels that would be wholly within the MHPA would be subject to a development restriction over the land requiring 75% conservation, with an allowed 25% for development. The Expanded Conservation Alternative would also add additional parcels into the MHPA where hard line Preserve boundaries (i.e., 100% conservation) as well as development areas have been established in coordination with the City and Wildlife Agencies.

However, as discussed for the Project analysis, while the VPHCP development restrictions may result in less developable area than currently allowed by a zoning or land use designation for a parcel of land, many parcels would likely be subject to development restrictions per existing regulatory mechanisms due to existing sensitive biological resources. This required conservation of sensitive resource areas would serve to avoid and reduce potential environmental impacts, while still allowing for some development to occur.

For the same reasons as discussed for the Project, the Expanded Conservation Alternative would not result in a substantial adverse effect related to an inconsistency/conflict with an adopted land use designation or intensity that would cause indirect or secondary environmental impacts, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Ongoing conservation efforts would continue at the same level and no additional restoration requirements or development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative and would remain consistent with current land use plans. As with the Project, the Existing Conservation/No Project Alternative Conservation/No Project Alternative and inconsistency/conflict with an adopted land use designation or intensity that would cause indirect or secondary environmental impacts, and the impact would be less than significant

ISSUE 3: Would the project result in development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use?

Project

Of the existing land to be incorporated into the MHPA with implementation of the VPHCP, approximately 76 acres are currently designated as open space. None of the land to be incorporated into the MHPA is designated as Prime Farmland by the Farmland Mapping and Monitoring Program. Any existing development restrictions currently on the lands would remain. As described above, with implementation of the Project, lands added wholly into the MHPA would be subject to a new development restriction of 75% conservation of parcels with an allowed development in 25% of a parcel (within the least sensitive area). Lands where a hard line designation has been determined would have identified conservation and development areas. Covered projects and covered activities as discussed in Chapter 3 of this EIR/EIS would be allowed. Consistent with the existing MSCP, an additional 5% encroachment may be allowed for essential public facilities (i.e., community circulation element roadways), if it can be demonstrated that no feasible alternative exists. This new development restriction would potentially serve to reduce the development allowed within parcels with sensitive resources and would result in a less intensive land use with increased conservation area. Existing open space

and/or prime farmland land use designations would not be converted to a more intensive land use as a result of the Project.

The Project itself would result in restoration, maintenance, and monitoring of vernal pool resources. With the exception of protective fencing and signage in selected locations, no physical development would occur within the MPHA as a result of implementation. No element of restoration or ongoing maintenance and monitoring activities would induce or result in increased development or conversion of land to other uses.

For these reasons, the Project would not result in a substantial adverse effect related to development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the implementation actions associated with the VPHCP would be identical. Thus, the analysis provided for the Project is applicable to this alternative. The increased acreage covered by the Expanded Conservation Alternative would result in additional land being conserved. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within and outside of the City's existing MHPA, and construction of permitted projects and planned projects. Ongoing conservation efforts would continue at the same level and no additional restoration requirements or development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative. More intensive development on designated open space land or Prime Farmland would not occur as a result of the vernal pool conservation. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to development or conversion of general plan or community plan designated open space or prime farmland to a more intensive land use, and the impact would be less than significant.

ISSUE 4: Would the project result in a substantial incompatibility with an adopted plan?

Project

As detailed in Section 5.1.2, Regulatory Framework, there are a variety of adopted plans applicable to the Project. Issues 1, 2, and 3, discussed previously, address the consistency of the Project with applicable plans, such as the General Plan, community plans, and applicable policies. Issues 5 and 6, following this discussion, address airport land use plans and environmental plans, respectively. No significant conflicts with existing plans were identified. Also, as described throughout the land use analysis, modifications would be made to applicable planning documents to reflect the expanded MHPA boundaries and incorporate VPHCP language and policies. This would help to ensure consistency and eliminate any inconsistent or incompatible language between planning documents.

Private parcels that are incorporated into the MHPA under the VPHCP would be subject to a covenant of easement over the parcel area designated for open space. This could potentially reduce the developable area on a given parcel relative to its existing land use designation or zoning. However, most lands that would be incorporated into the VPHCP have existing biological resource constraints, such as vernal pools, wetlands, and/or native/nonnative grasslands. Thus, the developable area on a given parcel would be constrained under existing conditions due to the existing development restrictions of ESL Regulations as well as federal and state requirements. Thus, while the VPHCP development restrictions may result in less developable area than currently allowed by a zoning or land use designation for a parcel of land, this difference is not considered a substantial incompatibility.

As part of the Project, the MHPA boundary would be adjusted within the Montgomery-Gibbs Executive Airport site via an MHPA BLA, as described in Section 3.3.4 of the Project Description and Section 5.2, Biological Resources. The purpose of the BLA at this location is to incorporate areas of vernal pool resources that have a higher biological value than some existing locations currently within the MHPA at Montgomery-Gibbs Executive Airport. The areas proposed for inclusion through the BLA have more vernal pools, higher-quality vernal pools that support sensitive species, and overall improved connectivity within the vernal pool complex. Per the requirements of the MSCP and SAP, the City and Wildlife Agencies have determined that the lands being added to the MHPA as a result of the BLA have a higher biological value than the existing areas that would be removed from the boundaries. The comparison of biological values is provided in Section 5.2, Biological Resources. In addition, a wildlife hazard assessment study would be conducted and approved by the City and Federal Aviation Administration (FAA) to determine where, if any, mitigation could occur within the boundaries of Montgomery-Gibbs Field. No amendment of the SAP is needed for an approved equivalent exchange (County of San Diego 1998). The BLA would occur in accordance with the requirements of the MSCP, SAP, and MSCP Implementing Agreement and no land use incompatibilities would result.
For these reasons, the Project would not result in a substantial adverse effect related to incompatibility with an adopted plan, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the implementation actions and policies associated with the VPHCP would be identical. Thus, the analysis provided for the Project, including the BLA, is applicable to this alternative. The approximately 89 additional acres of the land that would be incorporated into the MHPA as part of the Expanded Conservation Alternative are currently designated as open space. As with the Project, private parcels that are incorporated into the MHPA under the VPHCP would be subject to a covenant of easement over the parcel area designated for open space. Consistent with the Project, VPHCP development restrictions may potentially result in less developable area than currently allowed by a zoning or land use designation for a parcel of land. However, this difference is not considered a substantial incompatibility because most lands that would be incorporated into the VPHCP have existing biological resource constraints, such as vernal pools, wetlands, and/or native/nonnative grasslands. Thus, the Expanded Conservation Alternative would not result in a substantial adverse effect related to incompatibility with an adopted plan, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Ongoing conservation efforts would continue at the same level and no additional restoration requirements, management, or development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative. There would be no modifications to existing environmental plans and vernal pool conservation efforts would continue within the context of the existing policies. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to incompatibility with an adopted plan and the impact would be less than significant.

ISSUE 5: Would the project result in incompatible uses as defined in an airport land use plan or inconsistency with an Airport Land Use Compatibility Plan (ALUCP) as adopted by the Airport Authority?

Project

Generally, incompatible uses near an airport and as described in airport land use plans are based on safety, airspace protection, and noise within the airport influence area as defined in the ALUCP. Tall structures can be incompatible with height restrictions as an encroachment into airspace can create safety issues for air traffic. For safety reasons, certain land uses or development is also considered incompatible within ALUCP designed safety zones, such as the Runway Protection Zone. Aircraft noise can also be a public health concern dependent on the volume and frequency of aircraft that pass over sensitive land uses, such as residential areas. The nearby or adjacent location of sensitive noise receptors can create land use incompatibilities with airports and associated aircraft overflight.

The VPHCP would include lands adjacent to and near airports including Marine Corps Air Station (MCAS) Miramar, Montgomery-Gibbs Executive Airport, and Brown Field. Proposed activities associated with the VPHCP, such as restoration, maintenance, and monitoring, could occur on these parcels. Additionally, any projects or covered airport activities on Montgomery-Gibbs Executive Airport or Brown Field Municipal Airport would be subject to a Minor Amendment Process, as described in Section 3.3.4. The Project is not proposing construction of any structures. The VPHCP includes safety and maintenance procedures at the City's airports as a covered activity, as described in Table 3-3. The restoration of vernal pools at locations adjacent to airports would result in conserved areas of open space that would not place sensitive receptors or land uses in incompatible noise or safety areas as defined by an ALUCP. Biologists and other workers would occasionally be present on the vernal pool sites for restoration, maintenance, or monitoring activities, but would only be in that location for a short time before moving on to other sites and would not be adversely affected by aircraft noise. Operation and maintenances of an existing use is consistent with the ALUCPs.

Within the vicinity surrounding-Montgomery-Gibbs Executive Airport, an MHPA BLA would be processed as part of the Project, and which would remove some acreage and add in other areas with vernal pools of higher biological value. This adjustment to the MHPA boundary would not alter the airport operations or result in any actions that could compromise safety or be incompatible with the ALUCP.

For these reasons, the Project would not result in a substantial adverse effect related to incompatible uses as defined in an airport land use plan or inconsistency with an ALUCP, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the policies and implementation activities associated with the VPHCP would be identical. Thus, the analysis provided for the Project, including the BLA, is applicable to this alternative. The increased acreage covered by the Expanded Conservation Alternative would not modify the VPHCP implementation. Similar to the Project, the Expanded Conservation Alternative would not result in a substantial adverse effect related to incompatible uses as defined in an airport land use plan or inconsistency with an ALUCP, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Similar to the Project, activities associated with existing conservation efforts would not include construction of tall structures resulting in interference with air traffic and would not place sensitive receptors or land uses in incompatible noise or safety areas as defined by an ALUCP. Thus, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to incompatible uses as defined in an airport land use plan or inconsistency with an ALUCP, and the impact would be less than significant.

ISSUE 6: Would the project result in an inconsistency/conflict with adopted environmental plans for an area?

Project

As detailed in Section 5.1.2, Regulatory Framework, there are a variety of environmental plans applicable to the Project and the lands within the VPHCP Plan Area. The VPHCP has been developed to be consistent with the goals and objectives of the MSCP SAP and would provide further protection for vernal pool resources. The VPHCP Plan Area's extent is, by design, the same area covered by the City's MSCP SAP. The MSCP SAP and MHPA Land Use Adjacency Guidelines would remain in effect for the lands within the MHPA. As discussed in detail in Chapter 3, the VPHCP would have components similar to the MSCP including covered projects and activities, covered species and conditions of coverage, identification of lands for inclusion in the MHPA and allowed uses including limited development, a Mitigation Framework specifying mitigation measures, management and monitoring requirements, and funding requirements. The City would continue to manage their lands consistent with the standards and requirements of the

MSCP SAP. For areas with vernal pool resources, management would also occur consistent with the VPMMP.

The VPHCP would provide complete coverage of the seven vernal pool species that do not currently have federal coverage under the MSCP SAP, regardless of whether they are in areas that are inside or outside of U.S. Army Corps of Engineers (USACE) jurisdiction. The City's state NCCP permit is still valid and addresses conservation and take of vernal pool species.

The VPHCP would expand upon the MHPA to conserve additional lands with vernal pools that are occupied with the vernal pool covered species. The VPMMP would apply within the existing and expanded MHPA. Compared to existing conditions, the VPHCP would conserve an additional eight vernal pool complexes within the Plan Area, and conserve an additional 273 pools (approximately 9% more), totaling 2.8 acres of basin area, over what is currently conserved. Thus, the Project would complement and expand upon existing conservation, protection, and regulation of vernal pool resources and would not be in conflict with, or create inconsistencies with, related environmental plans.

The modifications to the LDC ESL Regulations and LDM Biology Guidelines (as detailed in Section 3.3.10) would not substantially alter or change the overall goals and purpose of those regulations; rather, they would accurately reflect the expanded boundaries of the MHPA and ensure consistency and standardization between the applicable policies. None of the proposed changes, such as provision of conservation strategies, consistent requirements, and inclusion of VPHCP definitions, would create conflicts with existing environmental regulations. Most lands that would be incorporated into the VPHCP have existing biological resource constraints, such as vernal pools, wetlands, and/or native/nonnative grasslands.

As described under Issue 4 above, the BLA that would occur at Montgomery-Gibbs Executive Airport to incorporate areas of vernal pool resources that have a higher biological value than some existing locations currently within the MHPA, would be in accordance with the requirements of the MSCP, SAP, and MSCP Implementing Agreement and no inconsistencies or conflicts would result.

For these reasons, the Project would not result in a substantial adverse effect related to an inconsistency/conflict with adopted environmental plans for an area, and the impact would be less than significant.

Consistency with Adopted State NCCP (MSCP) Permit

As further discussed in Section 3.1.2 of this EIR/EIS, in 1998 the City's MSCP SAP was subject to a federal lawsuit and, after almost 2 years of mediation, the City decided in 2010 to relinquish federal coverage of these seven species under the City's SAP. During this time, the City's state NCCP permit remained intact, and is still valid, for all 85 species. The City's existing MSCP SAP provides an FMP that includes management considerations and specific directives regarding vernal pool habitat and the seven covered vernal pool species that the state NCCP permit currently operates under. The VPHCP would replace the existing MSCP FMP for the seven vernal pool species. The five vernal pool plant species covered under the VPHCP were previously covered as Narrow Endemic species in the State's MSCP SAP NCCP authorization. The City's LDM Biology Guidelines have been updated to clarify that conservation measures for the five vernal pool plant species are now covered under the VPHCP, which supersede the requirements in the MSCP SAP for vernal pool species and result in higher levels of conservation of these five Narrow Endemic species (refer to Appendix E of the VPHCP).

General and Community Plans

When the original MSCP was adopted in 1997, several areas of the City were undergoing extensive development. Since that time, those areas have been effectively planned/built out and the remaining area left to undergo large-scale planning and development is Otay Mesa. The VPHCP presents a unique opportunity to not only incorporate information on new vernal pool discoveries, science, and restoration since the MSCP was adopted, but also addresses Otay Mesa and other areas throughout the City, which contain important vernal pool resources and to guide development in these areas.

Proposed VPHCP

The City's VPHCP is intended to meet or exceed the conservation requirements under the NCCP Act (1991). The federal VPHCP will complement, but be distinct from, the federal HCP that was prepared and adopted for the City's MSCP SAP. The VPHCP would expand the City's existing MHPA to conserve additional lands with vernal pools that are occupied with the seven vernal pool species. As described in Chapter 5 of the VPHCP, the overall approach to conservation of vernal pool habitat and species within the VPHCP Plan Area is as follows:

1. Expand the City's existing MHPA to conserve targeted vernal pool complexes in a configuration that maintains habitat function and viability of the seven covered species within the VPHCP Plan Area, consistent with the Recovery Plan (USFWS 1998a);

- 2. Implement a VPHCP Management and Monitoring Plan to provide for long-term protection, management, and enhancement of vernal pool habitat and the seven covered species;
- 3. Avoid and minimize impacts to vernal pools and mitigate unavoidable impacts consistent with the VPHCP and the City's Municipal Code;
- 4. Conduct compliance and effectiveness monitoring of vernal pools and covered species to evaluate implementation of the VPHCP and track the status of the vernal pools and seven covered species; and
- 5. Where appropriate, introduce covered species into restoration plans to expand/restore species populations in historically occupied complexes to maintain viability of the seven covered species.

The VPHCP EIR/EIS contains sufficient supporting information/analysis on how the proposed VPHCP would affect the state's existing NCCP coverage requirements for the seven vernal pool species including analyzing how the proposed VPHCP would affect the state's existing NCCP coverage requirements for the seven vernal pool species under the City's MSCP SAP. To evaluate consistency with the state's existing NCCP permit at the programmatic level, changes to any of the following six issues were considered:

- 1. Take/conservation of vernal pool habitat
- 2. Take/conservation of the seven vernal pool species
- 3. Preserve design and function
- 4. Take/conservation from management and monitoring activities
- 5. General Plan and Community Plan policies
- 6. City's MSCP SAP Implementing Regulations (i.e., ESL Regulations and LDM Biology Guidelines)

For the purpose of EIR/EIS analysis with the City's existing state NCCP permit, the baseline analysis represents existing conditions under which the City still operates under its valid state NCCP (MSCP) permit. Accordingly, where "existing conservation" is shown in the various tables throughout the EIR/EIS, it also represents the City's operating under its valid NCCP (MSCP) permit and, therefore, serves as the basis for the quantitative aspects of this programmatic-level analysis. Additional detailed biological information specific to consistency with the NCCP permit is provided in Section 5.2, Biological Resources under Issue 5.

1. Take/Conservation of Vernal Pool Habitat

As described further in Section 5.2, Biological Resources, of this EIR/EIS and Table 3-5, Conservation of Vernal Pools after Implementation of the VPHCP, the VPHCP would result in a net benefit to the existing MSCP for vernal pool habitat and species by conserving an additional 273 pools (98% more), totaling 2.8 acres of basin area, over what is currently conserved under the existing conservation (i.e., existing City MSCP permit), increasing the conservation levels for two of the vernal pool species (San Diego mesa mint and Riverside fairy shrimp), and adding 275 acres of land to the City's existing MHPA. Where complexes occupied by covered species are not conserved under the VPHCP, or where the covered species population within a complex is not conserved, compensatory mitigation would be required under the VPHCP.

2. Take/Conservation of the Seven Vernal Pool Species

As described further in Section 5.2, Biological Resources, of this EIR/EIS and Table 3-6, Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved) after Implementation of the VPHCP, the VPHCP would provide additional conservation (beyond existing conservation) for the following covered species:

- San Diego mesa mint three additional occupied pools conserved (<1% increase)
- San Diego button-celery three additional occupied pools conserved (1% increase)
- Riverside fairy shrimp three additional occupied pools conserved (2% increase)
- San Diego fairy shrimp 31 additional occupied pools conserved (6% increase)

The VPHCP requires avoidance, minimization, and mitigation for impacts to the seven covered species resulting from covered projects and covered activities (see the Mitigation Framework in Chapter 11.0 of this EIR/EIS). To conserve the existing population at impacted occurrences, salvage of unique genetic material and in-kind restoration would be required as part of the VPHCP for spreading navarretia in the one pool at vernal pool complex NDU 1&2 (Otay Mesa) and the J13 San Diego button-celery population (Appendix C of the VPHCP).

3. Preserve Design and Function

As described above, the VPHCP would result in the addition of lands (275 acres) to the MPHA over existing conservation conditions and include conserved vernal pool areas to the Preserve design. Adding these land to the MHPA would improve the function and overall biological value of the City's existing NCCP (MSCP) preserve by creating a more cohesive vernal pool preserve and minimizing potential fragmentation of vernal pool habitat, including lands suitable for vernal pool restoration (such as the mesa areas on Otay Mesa) into the MHPA Preserve design, and

protecting these conserved and potentially restorable areas with long-term management and monitoring guided by the VPHCP for vernal pool habitat and species and the City's existing MSCP for other habitat and species. For lands currently included in the City's MHPA, the management and monitoring requirements in the VPHCP for vernal pool habitat and species would replace those in the City's existing MSCP. The vernal pool management and monitoring would be based on current science and information, including updated location and species distribution information and an adaptive management and monitoring program supported by a secured funding source.

4. Take/Conservation from Management and Monitoring

Overall, the VPHCP would result in no change or an increase in conservation levels for vernal pool habitat and the seven vernal pool species currently covered under the state's NCCP permit.

Where no change occurs, improved management and monitoring (see Chapter 7, Management, Monitoring, and Reporting of the VPHCP) with secured funding (see Chapter 10, <u>VPHCP</u> <u>FundingPreserve Management and Funding Mechanisms of the VCHCP</u>) would be provided by the City. The management and monitoring program in the VPHCP would replace the Vernal Pool FMP and subsequent policies/regulations that the City has been operating under since the MSCP was approved in 1997 (see Section 3.1.1 of this EIR/EIS). The VPHCP's funding program is considered to be an improvement compared to the existing MSCP, in that resources would be specifically dedicated for management and monitoring of vernal pool habitat and species and would complement existing MSCP requirements for other non-vernal pool species (see VPHCP Section 10.<u>2</u>4, <u>Total Amount RequiredVPHVP Forecasted Costs</u>, and Table 10-3) of the VPHCP.

As described in Chapter 7 of the VPHCP, the VPHCP management and monitoring program is based on updated/current location information and adaptive management principles, and is secured by a dedicated funding source. In addition, because the VPHCP is based on a more current inventory and knowledge of vernal pools compared to when the MSCP was approved in 1997, it is not expected that implementation of the VPHCP would result in greater impacts to vernal pool habitat and species from management and monitoring activities than the City's existing NCCP (MSCP) permit.

5. Consistency with City's General Plan and Community Plans

As described above under Issue 1, the VPHCP would not result in a conflict with the City's General Plan. Moreover, as described in Section 8.2.3, Discretionary Actions Required to Implement the VPHCP, of the VPHCP, the City would also amend the Otay Mesa and Kearny

Mesa Community Plans to revise the land use maps to include the expanded MHPA boundaries included in the VPHCP. Policies related to the protection, preservation, and long-term management of vernal pool resources consistent with the VPHCP were added to the Otay Mesa Community Plan as part of the 2014 community plan update process. Similar policies that will require consistency with the VPHCP would be added to the Kearny Mesa Community Plan and other relevant community plans as necessary. Specific projects within communities that have been hardlined for development/conservation and are included in the VPHCP and this EIR/EIS analysis are provided in Section 4.1 of the VPHCP. For these reasons, the VPHCP would not result in an inconsistency/conflict with the City's existing state NCCP (MSCP) permits, and the impact would be less than significant.

6. City's MSCP SAP Implementing Regulations (i.e., ESL Regulations and LDM Biology Guidelines)

The VPHCP would provide for the same or better total conservation level for the five vernal pool plants that are currently identified as MSCP Narrow Endemic species compared to the conservation estimates in Table 3-5 of the City's existing MSCP SAP. The City's updated ESL ordinance and wetland deviation process (biologically superior alternative) and Biology Guidelines would be updated to implement the VPHCP. The VPHCP would also replace the existing MSCP FMP and management guidelines for the seven vernal pool species with the management and monitoring program identified in Section 7.0 of the VPHCP. Therefore, even if even these five species would no longer be categorized as MSCP Narrow Endemics, the VPHCP and its implementing regulations would provide the same or better total conservation (beyond existing conservation). As shown in Table 3-6 [Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved), after Implementation of the VPHCP], the overall conservation levels afforded to these five vernal pool plant species through the VPHCP would be the same or greater than the City's MSCP:

- San Diego mesa mint: 3 additional occupied pools conserved (1% increase)
- San Diego button-celery: 3 additional occupied pools conserved (1% increase)
- Otay Mesa mint: No change
- Spreading navarretia: No change
- California Orcutt grass: No change

Under the City's existing MSCP and implementing regulations (e.g., ESL and Biology Guidelines), the narrow endemic policy requires that impacts to these five vernal pool plant species outside the MHPA be avoided, managed or enhanced and/or transplanted to areas identified for preservation if they cannot be avoided. Unavoidable impacts associated with

reasonable use or essential public facilities would need to be minimized and mitigated. Inside the MHPA, the City's MSCP currently requires that narrow endemic species be avoided.

Under the VPCHP, these species could be impacted outside the MHPA, but only if it results in a biologically superior alternative pursuant to wetland deviation process in ESL and required findings, which includes approval by the Wildlife Agencies. The City's existing MSCP requires that they first be avoided, but if unavoidable, then they must be mitigated, which includes transplanting to areas identified for preservation. Therefore, the requirement to avoid these five vernal pool plant species (unless demonstrated to be infeasible) would remain under the VPHCP. Inside the MHPA, these species would have to be avoided as well (unless part of a biologically superior alternative) under the VPHCP; therefore, the avoidance requirement (unless infeasible) would remain.

The five vernal pool plant species covered under the VPHCP that are currently identified as narrow endemic species in the City's MSCP and implementing regulations (e.g., Biology Guidelines) would be replaced with the standards set forth in the VPHCP and its related implementing regulations (e.g., ESL Wetland Deviations) and required findings that must be made, including approval by the Wildlife Agencies. A biologically superior alternative that includes equivalent or better species overall conservation level would be demonstrated through subsequent environmental review and analysis associated with the specific project that proposes any such wetland deviation. As part of the actions related to the VPHCP, the City's LDM Biology Guidelines have been updated to clarify that conservation measures for the five vernal pool plant species (refer to Appendix E of the VPHCP). Therefore, removing the MSCP Narrow Endemic designation from these five vernal pool plant species would not reduce the conservation standard or increase the level of take allowed compared to the City's existing MSCP, and the land use impact would be less than significant.

In conclusion, the VPHCP would result in a net benefit to the existing MSCP for vernal pool habitat and species by expanding the MHPA, providing an increase of vernal pools over existing conditions, increasing the conservation levels for San Diego mesa mint and Riverside fairy shrimp, adding 275 acres to the City's existing MHPA, requiring compensatory mitigation as part of the Mitigation Framework, and providing dedicated/secured funding for VPHCP implementation that is superior to the existing FMP and SAP Section 1.5.11 guidelines. To ensure consistency with local land use plans, the City's community plans would be amended (as necessary) to include VPHCP requirements. It will be necessary for CDFW to approve any required amendment(s) to and/or findings of consistency with the City's existing MSCP SAP, Implementing Agreement, and/or State 2835 NCCP to maintain state coverage for vernal pool habitat and the seven covered vernal pool species addressed in the VPHCP. Replacing the MSCP

Narrow Endemic designation for the five vernal plant species with the standards in the VPHCP and ESL Wetland Deviation process (e.g., biological superior alternative) would not reduce the conservation standard or increase the level of take allowed compared to the City's existing MSCP. For these reasons, the VPHCP would not result in an inconsistency/conflict with the City's existing state NCCP (MSCP) permits, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the policies and regulations associated with the VPHCP would be identical. Thus, the analysis provided for the Project is applicable to this alternative. The increased acreage covered by the Expanded Conservation Alternative would not modify the VPHCP or the policies and regulations associated with implementation. Additionally, acreage added under the Expanded Alternative would be subject to restrictions of the VPHCP; however, most lands that would be incorporated into the VPHCP have existing biological resource constraints, such as vernal pools, wetlands, and/or nonnative grasslands, and would be subject to some level of restriction due to existing environmental regulations, such as the ESL Regulations and wildlife agency permitting under the current scenario. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to an inconsistency/conflict with adopted environmental plans for an area, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Ongoing conservation efforts would continue at the same level and no additional restoration requirements or development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative. There would be no modifications to existing environmental plans and vernal pool conservation efforts would continue within the context of the existing policies. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to an inconsistency/conflict with adopted environmental plans for an area, and the impact would be less than significant.

ISSUE 7: Would the project significantly increase the base flood elevation for upstream properties, or construct in a Special Flood Hazard Area (SFHA) or floodplain/ wetland buffer zone?

Project

While the Project would not result in the development of buildings or other permanent structures, vernal pool restoration carried out under the VPHCP could potentially involve relatively minor grading of basins and surrounding watershed area to restore the natural topographic and hydrologic functions of the vernal pools (average of grading depth between 3 to 6 inches). Any landform modification would be relatively minor in the overall site drainage patterns and topography of the area and would not be of the magnitude to modify or increase base flood elevations for the site or surrounding areas (see Section 5.6, Hydrology and Water Quality, for more detail regarding flooding).

The recontouring of vernal pool basins and surrounding watersheds would necessitate grading to occur near vernal pool sites, which are commonly within wetland buffer zones. While some construction activities would occur within wetland buffer areas, the purpose of the work would restore proper hydrologic function for the vernal pool system and serve to improve the overall wetland hydrology within the vernal pool basin. Maintenance and monitoring, as well as adaptive management, as required by the VPHCP would ensure the restoration efforts were successful. For these reasons, even though the Project may construct within wetland buffer zones, implementation would not result in a substantial adverse effect related to an increase in the base flood elevation for upstream properties, or to SFHA or floodplain/wetland buffer zone, and the impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would encompass more acreage than the Project; however, all of the implementation actions associated with the VPHCP would be identical. Thus, the analysis provided for the Project is applicable to this alternative. Similar to the Project, grading for restoration may occur within wetland buffer zones. The increased acreage and vernal pools covered by the Expanded Conservation Alternative may result in more work occurring within wetland buffer areas than the Project. The purpose of work within wetland buffer zones would restore proper hydrologic function for the vernal pool system and serve to improve the overall wetland hydrology within the vernal pool basin. For this reason, even though the Expanded Conservation Alternative may construct within wetland buffer zones, implementation would not result in a substantial adverse effect related to an increase in the base flood elevation for upstream properties, or to an SFHA or floodplain/wetland buffer zone, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing policies. Ongoing conservation efforts would continue at the same level and in the same manner. Similar to the Project, grading for restoration may occur within wetland buffer zones. Thus, the analysis provided for the Project is applicable to this alternative. The purpose of work within wetland buffer zones would restore proper hydrologic function for the vernal pool system and serve to improve the overall wetland hydrology within the vernal pool basin. For this reason, even though the Existing Conservation/No Project Alternative may construct within wetland buffer zones, implementation would not result in a substantial adverse effect related to an increase in the base flood elevation for upstream properties, or to an SFHA or floodplain/wetland buffer zone, and the impact would be less than significant.

5.1.5 <u>Mitigation Measures</u>

No significant adverse land use impacts were identified and no mitigation measures are required.

5.1.6 <u>Level of Impact after Mitigation</u>

Project

No significant adverse land use impacts would result from implementation of the Project. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Expanded Conservation Alternative

No significant adverse land use impacts would result from implementation of the Expanded Conservation Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

No significant adverse land use impacts would result from implementation of the Existing Conservation/No Project Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

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5.2 **BIOLOGICAL RESOURCES**

This section describes existing biological resources relevant to this analysis (i.e., vernal pools and covered vernal pool species) and associated biological conditions within the VPHCP Plan Area. This section also identifies pertinent biological policies and regulations, and evaluates the potential impacts and effects associated with implementation of the VPHCP and its alternatives. The evaluation presented in this section is based on the biological analysis of vernal pools and covered species included in the VPHCP. The vernal pool data included in this section are consistent with the data presented in the VPHCP, which were derived from a review of historical and recent vernal pool data within the VPHCP Plan Area. Baseline data consist of Beauchamp and Cass (1979), Bauder (1986), City of San Diego (2004), EDAW (2007), 5-year review of species status reports from USFWS (various dates), designated Critical Habitat and the Recovery Plan (USFWS 1998a), review of the City's vernal pool geodatabase (SANDAG 2012) and key ancillary data on species that would contribute to knowledge of its status, and additional data from USFWS and the City since 2004. Citations of source data (e.g., survey reports) for the VPHCP vernal pool database (SANDAG 2012) is available on the Vernal Pool Interactive Map on the City's website, which can be accessed at http://www.sandiego.gov/planning/ programs/mscp/vphcp.shtml. The vernal pool data analysis contained within the VPHCP is hereby incorporated by reference.

5.2.1 Affected Environment

Biological Resources Analyzed in the EIR/EIS

Before a determination of the significance of an impact can be made, the presence and relevance of biological resources in the context of the VPHCP must be established. Thus, significance determination for biological resources proceeds in two steps. The first step consists of determining what sensitive biological resources are present and should be evaluated in relation to implementation of the VPHCP. The second step is to determine the sensitivity of identified biological resources in terms of direct and indirect impacts that would result from implementation of the VPHCP.

Pursuant to the Significance Determination Thresholds, existence of any of the following may indicate the presence of sensitive biological resources:

- Lands that have been included in the MHPA as identified in the City MSCP SAP (City of San Diego 1997);
- Wetlands (as defined by the Municipal Code, Section 113.0103);
- Lands outside the MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB Habitats as identified in the City's LDM Biology Guidelines (2012a);

- Lands supporting species or subspecies listed as rare, endangered, or threatened;
- Lands with modeled vernal pool habitat (refer to Appendix C of the VPHCP for details);
- Lands containing habitats with narrow endemic species as listed in the City's LDM Biology Guidelines; and
- Lands containing habitats of covered species as listed in the City's LDM Biology Guidelines and included in the City's MSCP SAP.

Wetlands are a sensitive biological habitat regulated at the federal, state, and local levels. The City's LDM Biology Guidelines defines wetlands as areas characterized by any of the following:

- 1. All areas persistently or periodically containing naturally occurring *wetland* vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools.
- 2. Areas that have hydric soils or *wetland* hydrology and lack naturally occurring *wetland* vegetation communities because human activities have removed the historic *wetland* vegetation or catastrophic or recurring natural events or processes have acted to preclude the establishment of *wetland* vegetation as in the case of saltpan and mudflats.
- 3. Areas lacking *wetland* vegetation communities, hydric soils and *wetland* hydrology due to nonpermitted filling of previously existing *wetlands*.
- 4. Areas mapped as *wetlands* on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

This definition is intended to apply to naturally occurring wetlands, wetlands created to provide wetland habitat, or from human actions creating open water bodies or altered natural stream courses. Other artificial wetlands created in historically nonwetland areas are not considered wetlands.

Various habitat types are defined as wetlands by the City's LDM Biology Guidelines. Using existing Geographic Information System (GIS) data, it is estimated that approximately 3,500 acres of wetland habitat types are present within San Diego, which includes rivers and streams. The Project proposes development of a comprehensive conservation plan for vernal pools within the VPHCP Plan Area. Chapter 2 provides a discussion of the affected environment within the VPHCP Plan Area as it relates to vernal pool resources. As part of the adoption of the VPHCP, the City would be granted incidental take of vernal pool species. The VPHCP would not include any other wetland habitats or species. Therefore, the following discussion and analysis focuses only on vernal pool habitat and the seven covered species within the VPHCP Plan Area that would be affected by implementation of the VPHCP.

Summary of Vernal Pools within the VPHCP Plan Area

There are 54 vernal complexes within the VPHCP Plan Area. There are a total of 2,591 mapped vernal pools, including 933 vernal pools within the North VPHCP planning unit, 620 vernal pools in the Central VPHCP planning unit, and 1,038 vernal pool resources in the South VPHCP planning unit (see Figures 2-2 through 2-4). For further information on vernal pools within the VPHCP Plan Area, refer to Chapter 2 of this EIR/EIS.

With the VPHCP Plan Area, there is an estimated 6,726 acres of modeled vernal pool habitat. In recognition that there could be additional pools that have not been mapped, conservation of and potential impacts to modeled vernal pool habitat within the Plan Area from planned, covered, and future projects were assessed. The model included soils that support vernal pools in the plan area, slope (<12%), and undeveloped land within the plan area (see Appendix C of the VPHCP for further details on the model).

Summary of Covered Species Occurrence within the VPHCP Plan Area

Table 5.2-1 summarizes the total number of vernal pools occupied with each of the seven covered species within the VPHCP Plan Area. The locations of vernal pools occupied by the covered species within the VPHCP Plan Area are illustrated in Figures 5.2-1 through 5.2-7.

Covered Species	Total Occupied	Number of Complexes with Occupied Pools
San Diego fairy shrimp	517	35
Riverside fairy shrimp	131	06
San Diego button-celery	732	20
Spreading payarretia	95	08
San Diego mesa mint	337	16
California Orcutt grass	058	03
Otav Mesa mint	369	04

Table 5.2-1Vernal Pools Occupied with Covered Species in VPHCP Plan Area

Note: Vernal pools within the VPHCP Plan Area may be occupied by one or more of the covered species.

Table 5.2-2 provides key information for the seven covered species, including the name, listing status, summary of Critical Habitat (if applicable), species description, habitat, lifecycle, distribution, and status within the VPHCP Plan Area. A more detailed depiction of the location of covered species is available on the Vernal Pool Interactive Map on the City's website, which can be accessed at http://www.sandiego.gov/planning/programs/mscp/vphcp.shtml.



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C I	Federal and	Critical Habitat					Status in
Covered Species	State Listing Status	In VPHCP Plan Area	Information	Habitat	Life Cycle	Distribution	Area
San Diego fairy shrimp	Federally Endangered	Approximately 1,801 acres	 Small aquatic crustacean Feeds on algae, diatoms, and particulate organic matter 	Occurs in vernal pools and other nonvegetated ephemeral (short- lived) pools from 2 to 12 inches in depth in coastal areas of San Diego County, Orange County, and northwestern Baja	 Usually observed January through March Individuals hatch, mature, and reproduce within 7 to 14 days of rainfall filling a pool, depending on water temperature 	Coastal areas of San Diego County, Orange County, and northwestern Baja	Occurs in 517 vernal pools within 35 vernal pool complexes
Riverside fairy shrimp	Federally Endangered	Approximately 804 acres	 Small aquatic crustacean Feeds on algae and particulate organic matter 	Restricted to vernal pools and other nonvegetated ephemeral (short- lived) pools greater than 12 inches in depth in Riverside, Orange, and San Diego counties	 Usually observed January through March Individuals hatch, mature, and reproduce within 7 to 8 weeks of rainfall filling a pool, depending on water temperature Cysts (eggs) can withstand temperature extremes and prolonged drying 	Riverside, San Diego, and Orange counties	Identified in 131 vernal pools within six vernal pool complexes
San Diego button- celery	Federally Endangered California State Endangered	No designated Critical Habitat	Perennial gray- green herb	Found in almost every type of southern California vernal pool	 Vernal pool obligate and relies on ephemerally wet conditions to reproduce, blooming from April through June Seems more tolerant of a wider range of vernal pool habitat than most obligate vernal pool species Can tolerate disturbance factors better than most endemic species 	San Diego County at Otay Mesa, Kearny Mesa, Del Mar Mesa, MCAS Miramar, and MCB Camp Pendleton, and in northern Baja California, Mexico	Occurs in 732 vernal pools within 20 vernal pool complexes

Table 5.2-2Summary of Covered Species Key Information

Covered Species	Federal and State Listing Status	Critical Habitat in VPHCP Plan Area	Key Description Information	Habitat	Life Cvcle	Distribution	Status in VPHCP Plan Area
Spreading navarretia	Federally Threatened	Approximately 628 acres	Annual herb	Known from hardpan, claypan, alkali playas, and alluvial terrace pool complexes	 Pollination and dispersal mechanisms not well known Blooms in May and June through summer months 	Widely disjointed and restricted vernal pool complexes extending from the Santa Clarita region of Los Angeles County, to the western lowlands of Riverside County, through coastal and foothill San Diego County, and south to San Quintin, Baja	Occurs in 95 vernal pools within eight complexes
San Diego mesa mint	Federally Endangered California State Endangered	No designated Critical Habitat	Annual herb	Known from hardpan-type vernal pools in San Diego County	 Dependent on saturated soils of vernal pools Blooms from May or June through early July Primarily bee pollinated 	Mesas of western San Diego County including Del Mar Mesa, Mira Mesa, Marine Corps Air Station Miramar, Kearny Mesa, and western Tierrasanta	Occurs in 337 vernal pools within 16 vernal pool complexes
California Orcutt grass	Federally Endangered California State Endangered	No designated Critical Habitat	Annual bright gray-green grass	Restricted to vernal pools in southern California	 Flowers from April through July and then sets seed Adapted to conditions in the wettest, longest lasting portion of vernal pools Believed to be wind pollinated 	Ventura, Los Angeles, Riverside, and San Diego counties	Occurs in 58 vernal pools within three vernal pool complexes
Otay Mesa mint	Federally Endangered California State Endangered	No designated Critical Habitat	Annual herb	Known from claypan-type vernal pools on Otay Mesa	 Dependent on saturated soils of vernal pools Blooms from May or June through early July Primarily bee pollinated 	Found only in southern San Diego County vernal pools on Otay Mesa	Occurs in 369 vernal pools within four vernal pool complexes All but one of the pools have had some habitat restoration

5.2.2 <u>Regulatory Framework</u>

In addition to the federal, state, and City conservation planning policies, plans, and regulations described in Section 3.1.1, discussion of policies and plans on lands within the City's jurisdiction is provided in Section 5.1, Land Use, including those related to regulation of biological resources (i.e., the MSCP, MHPA Land Use Adjacency Guidelines, LDM Biology Guidelines, and ESL Regulations). Consistency with federal, state, and City plans and policies regarding potential effects to biological resources from implementation of the VPHCP is described in Section 5.2.4, Environmental Consequences, below.

5.2.3 <u>CEQA Thresholds of Significance</u>

The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating potential impacts to biological resources. It is important to note that a biological resource, such as vernal pools, may be more vulnerable to some kinds of development than to others. Sensitivity and/or significance of impacts must be appropriately considered in the context of a proposed project. A significant CEQA impact would occur if the Project would result in:

- 1. A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or USFWS;
- 2. A substantial impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Code or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- 3. A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filing, hydrological interruption, or other means;
- 4. Interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites;
- 5. A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- 6. Introduction of a land use within an area adjacent to the MHPA that would result in adverse edge effects;

- 7. A conflict with any local policies or ordinances protecting biological resources;
- 8. An introduction of invasive species of plants into a natural open space; and/or
- 9. A biological condition, policy, or natural resource management plan that cannot persist into the long term due to pressures caused by anticipated climate change.

5.2.4 <u>Environmental Consequences</u>

This section analyzes the adequacy of the Project and alternatives with respect to environmental consequences resulting from implementation of the VPHCP pursuant to the issuance of Section 10(a) of FESA and Section 2835 of the California Fish and Game Code.

This section identifies potential environmental consequences to vernal pools and covered species resulting from covered projects, future projects, and/or covered activities consistent with the VPHCP. It also discusses loss of Critical Habitat for the three species for which USFWS has designated Critical Habitat: spreading navarretia, San Diego fairy shrimp, and Riverside fairy shrimp. The analysis is based on whether a vernal pool or modeled habitat is located within the Preserve or not and does not account for potential impacts from covered activities. There could be minor impacts to individual vernal pools (known or unknown) and/or species from covered activities (e.g., management, trail use) that are not accounted for here because the locations of potential future covered activities are not known at this time.

Direct impacts are assessed quantitatively, while indirect impacts are assessed qualitatively; permanent and temporary impacts are also evaluated based on the definitions below. The biological resources analysis in the VPHCP includes a detailed conservation analysis for vernal pools and covered species from implementation of the VPHCP. A consistency analysis of the VPHCP with the USFWS Recovery Plan for vernal pools (1998b) is also included.

Impacts are results of actions affecting vernal pools and covered species in the VPHCP Plan Area. Impacts can be direct or indirect.

Direct impacts are defined as the removal or alteration of vernal pools and/or covered species populations or occurrences (or portions thereof) as a result of covered projects and future projects or covered activities. Direct impacts are a result of land development and occur at the time and place of project implementation (e.g., grading, ground disturbance, trampling of plants). Direct impacts can be either permanent or temporary (see below).

Indirect impacts are defined by USFWS as "those that are caused by the proposed action and are later in time, but are still reasonably certain to occur" (50 CFR 402.02). Indirect impacts in the context of the VPHCP also include those impacts that occur at the time of the proposed action but beyond the footprint of a project or activity (i.e., beyond the area of direct disturbance). While more difficult to detect and track, indirect impacts can undermine species viability or habitat quality, especially if multiple indirect or direct impacts work cumulatively to impair the species or to degrade the habitat. Indirect impacts can be either temporary or permanent.

Permanent impacts are direct impacts that permanently remove or alter vernal pools as a result of covered projects or covered activities (e.g., land development). Permanent impacts also include indirect impacts to vernal pools that result in a permanent change to vernal pool functions (e.g., development around a vernal pool complex that reduces watershed). Impacts that result in reduction of long-term viability of a covered species occurrence are also considered permanent.

Temporary impacts are impacts resulting from covered projects or covered activities that cause temporary habitat disruption but do not permanently alter landforms, and do not result in permanent habitat loss or negative impacts to vernal pool watersheds (e.g., recontoured vernal pool basins that would be restored).

Given the restriction that development must occur within the least sensitive portion of the site, there is high likelihood that impacts would be significantly less than the "worst-case scenario," which has been provided in this analysis. Public and private parcels that would be added to the MHPA under the VPHCP would retain their development rights. Consistent with the MSCP, City's ESL Regulations, and the Biology guidelines, lands wholly within the MHPA would be allowed 25% development in the least sensitive area and the remainder of the parcel would be conserved via a covenant of easement or dedication to the City (see Section 5.1, Land Use, for more detail). Several of the parcels that would be added to the MHPA have been "hard lined" and have defined conservation and development footprints.

As summarized in Section 3.3.7, the VPHCP includes a Mitigation Framework that provides specific mitigation measures required for implementation of the VPHCP and covered projects and covered activities. Because these measures are required as part of the project, the analysis of potential impacts assumes implementation of the measures specified in the Mitigation Framework.

Implementation of the VPHCP does not override the necessity for further environmental review for, and impact analysis of, individual actions at the project level (i.e., covered projects, covered activities, and future projects, as described in Chapter 3 of this EIR/EIS). Take authorization for vernal pools would not automatically be granted to individual projects; rather, each discretionary

action would be subject to further environmental review and discretionary approval by the City based on a consistency determination with the VPHCP and other state and federal policies, plans, and regulations.

The biological resources impact analysis for the VPHCP was conducted based on the best available data at the time of preparation. Data were compiled from a variety of sources that include the City's 2004 VPI, site-specific vernal pool reports, restoration and enhancement plans, biological reports submitted to the City, and digital geographic information from USFWS. Public input on vernal pool data was also solicited during the public outreach process (see Chapter 1 of this EIR/EIS).

Local site conditions, such as rainfall, likely influence numbers of standing plants and their local distribution (Schiller et al. 2000; Bauder 2000). Annual variability in rainfall can also alter the proportion of ponding in each pool, which can result in variability in species distribution within and among pools given the species' narrow habitat preferences (Bauder 2005). Despite seasonal fluctuations, the potential for finding additional pools with covered plant species within the city is considered low. Therefore, distributional information for the covered plant species within the city is considered accurate and completesufficient for purposes of this impact analysis.

In contrast to the covered plant species, $t_{\rm T}$ he distributional information for San Diego fairy shrimp may be lessis not nearly as accurate and complete than covered plant species for many of the complexes in the city. For some sites where development has been proposed and extensive surveys have been conducted (such as the J13 and J34 complexes in the Otay Mesa area), existing data for shrimp species are relatively accurate. On other sites, surveys for fairy shrimp (protocol or otherwise) have not occurred or data are incomplete. For example, protocol surveys have not been conducted in over 75 pools at Otay Lakes (K5). However, San Diego fairy shrimp are fairly common within nearby vernal pools in San Diego County; therefore, it is likely that San Diego fairy shrimp could occur in some of these pools. Riverside fairy shrimp are much rarer; therefore, the same conclusion cannot be assumed for this species. For purposes of the VPHCP impact analysis, data for Riverside fairy shrimp are considered accurate sufficient (i.e., the VPHCP is likely not underestimating the number of vernal pools occupied by Riverside fairy shrimp within the Plan Area). Seasonal variability in ponding as a result of varying rainfall amounts and patterns can also affect shrimp occupancy in vernal pools from year to year (Bauder 2005; Simovich and Riley 2008). This variability can result in substantial differences in fairy shrimp occupancy data at a site between years. For example, protocol surveys conducted by RECON in 1997 and 1998 on Marine Corps Base Camp Pendleton identified 216 vernal pools on the base as occupied by fairy shrimp (RECON 1998). Base-wide protocol surveys in 2005 identified 279 occupied vernal pools (USFWS 2008a), which is a 29% increase in observed occupancy.

These examples, as well as qualitative assessments and general observations, suggest the possibility that additional San Diego fairy shrimp occurrences are possible in the city and, therefore, distributional data for San Diego fairy shrimp are likely incomplete. It is possible that additional vernal pools with San Diego fairy shrimp may be impacted or conserved within the MHPA than is currently estimated. However, it is likely that more comprehensive surveys have been conducted for vernal pools that would be impacted by development compared to pools that are already conserved or planned for conservation. Detailed surveys (see City Biology Guidelines) are required for development projects to determine impacts and, therefore, more data are available for pools that would be impacted as a result of proposed development projects. For this reason, it is assumed that data related to the impact analysis for San Diego fairy shrimp are generally accurate and completesufficient. Conversely, the conservation of pools occupied by San Diego fairy shrimp within the VPHCP Plan Area is to be underestimated because many pools conserved under existing conditions have not been surveyed. If and when conserved pools are surveyed, it is likely that it would be determined that a higher number of vernal pools occupied with fairy shrimp are conserved under the VPHCP (i.e., conservation of vernal pools occupied by San Diego fairy shrimp is likely higher than estimated in the VPHCP conservation analysis).

ISSUE 1: Would the project result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the CDFW or USFWS?

Project

This section addresses the potential impacts to the seven covered species resulting from implementation of the VPHCP. This includes potential impacts to occupied pools resulting from development of lands outside the MHPA, as well as impacts to occupied pools inside the MHPA resulting from covered projects and covered activities (described in Chapter 4 of the VPHCP). Both direct and indirect impacts to covered species are possible, as discussed below. Implementation of the measures required by the Mitigation Framework is assumed as part of the impact analysis.

Fragmentation and Isolation of Vernal Pool Habitat

The continued existence of the covered species is dependent upon the long-term survival of a functioning vernal pool ecosystem. Although ecological processes in vernal pools may be viewed at relatively small temporal (e.g., weeks to months during wetting and drying cycle) and

spatial (e.g., tens of square meters) scales, they are greatly influenced by large landscape scale processes (e.g., hydrology, plant and animal dispersal) (Leidy and White 1998).

Fragmentation and isolation of vernal pools can threaten the important ecological and mutualistic processes that link vernal pools to each other and the surrounding uplands (USFWS 1998). Such ecological and mutualistic processes involve insects that pollinate the vernal pool plants; mammals and birds that disperse flora and fauna between vernal pools; and amphibians that reproduce in vernal pools. Specialized plant-pollinator relationships can be threatened by fragmentation of vernal pools from the surrounding uplands. For example, some solitary bees from the Andrenidae family focus on vernal pool annuals (e.g., *Blennosperma, Downingia, Lasthenia, Limnanthes*) for collecting pollen (Thorp 1990). Except during the blooming period of their host plants, these bees spend most of their lives nesting underground in the adjacent uplands. These bees have a limited range of foraging, which is not surprising since they are small, have limited flight ability, and tend to remain near their natal site (Thorp 1990; Thorp and Leong 1995).

General fragmentation of plant-pollinator systems can have detrimental effects on the visitation rates by pollinators and, ultimately, the seed set produced by the plants (Jennersten 1988). Although few empirical studies exist for southern California, similar plant-insect specialization is likely and may be essential to successful reproduction of certain species (USFWS 1998). Therefore, plants in vernal pools that are isolated from other natural ecosystems may experience reduced pollination and thus produce less seed. Habitat fragmentation further threatens pollination systems by reducing population sizes and thus potentially increasing occurrences of genetic drift, inbreeding depression, and extinction due to demographic stochasticity.

Watershed contiguity augments gene flow in populations already naturally low in variability (Davies 1996) by allowing flooding between pools. Vernal pool organisms are typically defined by the complex in which they occur, in part because gene flow between complexes appears to be extremely low (Fugate 1993; Davies 1996). Isolation of pools, or modification of the natural watershed, potentially compromises gene flow, resulting in a loss of genetic variability and an increased susceptibility to extinction and reduced fitness (Bohonak 2005; Soule 1986).

Similarly, the proximity of vernal pools to upland habitats influences the dispersal of seeds between vernal pools by herbivores, such as rabbits, that can be important vectors of seed dispersal (Zedler and Black 1992). As they become fragmented and isolated, vernal pools can become unsuitable for avian species that consume and disperse vernal pool fairy shrimp species, which could in turn negatively affect the genetic stability of vernal pool fairy shrimp (Proctor 1964; Krapu 1974; Swanson et al. 1974). Vernal pool preserves should provide adequate upland

habitat and/or habitat linkages adjacent to vernal pools to support pollinators, herbivores, and their predators, to prevent overgrazing of vernal pool flora, and avian species.

Preserving small, isolated, fragmented preserves may not sustain the multiscale ecological processes associated with vernal pools (Leidy and White 1998). As such, the scientific community recommends that conservation of vernal pools include the surrounding upland habitats (Bauder 1987; Thorp and Leong 1995, 1998; Hanes and Stromberg 1998; Leidy and White 1998; USFWS 1998). These surrounding upland habitats influence vernal pool hydrology, species composition, and essential interactions between the species that inhabit them. Fragmenting vernal pools from each other can disrupt dispersal and gene flow between populations of vernal pool flora and fauna, increase their vulnerability to stochastic events, and hinder their ability to reestablish after local extinctions. Elimination of predators, which could lead to population increases of herbivores such as burrowing rodents, rabbits, and quail, is an indirect effect resulting from the fragmentation and isolation of vernal pools (USFWS 1998).

The VPHCP, in conjunction with the biologically superior wetland deviation for lands within the MHPA, will allow limited impacts to disturbed, unmanaged vernal pools in exchange for preservation, restoration, and management of vernal pools in a biologically defensible configuration (e.g., substantial connection to biological open space) that helps ensure their long-term viability and supports recovery of the species. Impacts that would occur outside the MHPA would not require a wetland deviation; however, impacts that occur within the MHPA would require a wetland deviation. Therefore, new vernal pool Preserve areas will be designed to have a substantial connection to the MHPA that is expected to minimize the negative effects of fragmentation/isolation by allowing important ecological and mutualistic processes that link vernal pools to each other and the surrounding uplands (USFWS 1998) to continue.

Direct Impacts to Covered Species

A summary of potential direct impacts to covered species is provided in Table 5.2-3. A discussion of impacts for each species is provided below.

	Total Occupied Pools in VPHCP Plan Area	Total and % Impacted Occupied	Total and % Occupied Pools Impacted outside	Total and % Occupied Pools Impacted inside
Covered Species ¹		Pools	MHPA	MHPA
Otay Mesa mint	369	0 (0%)	0 (0%)	0 (0%)
San Diego mesa mint	337	2 <u>(</u> 1%)	2 (1%)	0 (0%)
Spreading navarretia	095	1 (1%)	1 (1%)	0 (0%)
San Diego button-celery	732	10 (1%)	10 (1%)	0 (0%)
California Orcutt grass	058	0 (0%)	0 (0%)	0 (0%)
Riverside fairy shrimp	131	0 (0%)	0 (0%)	0 (0%)
San Diego fairy shrimp	517	55 (11%)	52 (10%)	3 (<1%)

 Table 5.2-3

 Summary of Covered Species Impacts inside and outside MHPA from Development

¹ Some vernal pools are occupied by more than one covered species. This table does not include impacts from covered activities.

Overall, most of the vernal pools that would be potentially impacted by development both inside and outside the MHPA are low-quality pools, the majority of which occur in disturbed areas and do not support sensitive species. However, some vernal pools that would not be conserved are occupied by one or more covered species (Table 5.2-2). The majority of the occupied pools that would be potentially impacted by development occur outside the MHPA. Three vernal pools occupied by San Diego fairy shrimp would potentially be impacted by development within the MHPA due to the 25% development encroachment allowed per the ESL Regulations. The direct loss of vernal pools that support covered species would require compensatory mitigation as outlined in the Mitigation Framework, to ensure the viability and continued persistence of covered species. A discussion on impacts to, and conservation of, each covered species is provided below.

Land preservation is an important component of the VPHCP; specifically for lands with vernal pool resources that are not currently conserved. A gap analysis for vernal pools was conducted to identify the areas within the VPHCP Plan Area where vernal pools were not adequately protected. Determining the additional areas to add to the MHPA through implementation of the VPHCP, the following approach for conserving vernal pool complexes and covered species populations was considered:

• Conserve complexes occupied with the covered species (75% or 100% conservation level).²

² The City has designated conservation levels (75 or 100%) for each parcel within the MHPA. The conservation level denotes the portion of a parcel that would be conserved. For example, for a parcel designated with a 75% conservation level, 25% of the parcel is available for development. Development would occur on the least environmentally sensitive area of the parcel, as determined by the City environmental review process.

- Conserve complexes (75% or 100% conservation level) identified in the Recovery Plan (USFWS 1998a) and/or complexes with historical occurrences of the covered species in a configuration as necessary to maintain the viability of covered species populations.
- Conserve areas designated as Critical Habitat for the covered species.

Table 5.2-4 summarizes the conservation of covered species under the VPHCP once additional lands are added to the MHPA, including the total conservation of known occupied pools, as well as the percentage of occupied pools conserved. The increase in conservation of occupied vernal pools from the existing conservation is also shown. Addition of lands to the MHPA through implementation of the VPHCP would result in conservation of 100% of known occupied pools for three of the seven covered species: Otay Mesa mint, San California Orcutt grass, and Riverside fairy shrimp. Therefore, 100% conservation of known occupied pools is afforded to one additional species from the existing conservation (Riverside fairy shrimp). In addition, conservation of occupied vernal pools would increase for three covered species: three additional pools occupied by San Diego button-celery would be conserved (an increase of 1% from the existing conservation), three additional pools occupied by San Diego fairy shrimp would be conserved (an increase of <1%), and 30 additional pools occupied by San Diego fairy shrimp would be conserved (an increase of 6% from the existing conservation).

Some restoration and enhancement activities (e.g., rut removal and recontouring of vernal pools, soil replacement, removal of nonnative invasive plant species, and planting container plants) in occupied habitat have potential to damage or destroy a small number of covered species. Under these types of activities, there is not only potential for changes in the basic micro-habitat provided in each pool, but it is also possible that cysts and/or seeds could be damaged or destroyed by personnel conducting restoration and enhancement activities. For example, cysts and/or seeds could be covered too deeply by soil when vernal pools are recontoured. To minimize this potential impact, disturbance will be limited to the area that is being enhanced, and soil within areas that are being recontoured will be salvaged and reintroduced to the pool where they were collected following contouring. Additional measures to ensure that temporary impacts associated with restoration and enhancement activities are minimized are included in the VPHCP Mitigation Framework.

	PONU Total Pools in VPHCP Plan Area	PONU Total Pools Conserved	PONU % Pools Conserved	POAB Total Pools in VPHCP Plan Area	POAB Total Pools Conserved	POAB % Pools Conserved	NAFO Total Pools in VPHCP Plan Area	NAFO Total Pools Conserved	NAFO % Pools Conserved	ERAR Total Pools in VPHCP Plan Area	ERAR Total Pools Conserved	ERAR % Pools Conserved	ORCA Total Pools in VPHCP Plan Area	ORCA Total Pools Conserved	ORCA % Pools Conserved	RFS Total Pools in VPHCP Plan Area	RFS Total Pools Conserved	RFS % Pools Conserved	SDFS Total Pools in VPHCP Plan Area	SDFS Total Pools Conserved	SDFS % Pools Conserved
Existing Conservation ¹	369	369	100%	337	332	99%	95	94	99%	732	719	98%	58	58	100%	131	128	98%	517	431	83%
MHPA after VPHCP Implementation	369	369	100%	337	335	99%	95	94	99%	732	722	99%	58	58	100%	131	131	100%	517	462	89%
Additional Conservation Resulting from VPHCP Implementation	n/a	0	0	n/a	3	<1%	n/a	0	0	n/a	3	1%	n/a	0	0	n/a	3	2%	n/a	31	6%

 Table 5.2-4

 Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved)¹

n/a= Not applicable

¹ The existing conservation includes existing conserved lands within the City's MHPA, permitted projects, and planned projects.

² Pools and species population conserved is an estimate based on 75% and/or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area. This table does not include impacts from covered activities.

ERAR = San Diego button-celery

NAFO = Spreading navarretia

ORCA = California Orcutt grass

POAB = San Diego mesa mint

PONU = Otay Mesa mint RFS = Riverside fairy shrimp

SDFS = San Diego fairy shrimp
Overall, the VPHCP would result in conservation of additional covered species beyond the existing conservation (for species that are not already 100% conserved under the existing conservation), resulting in a net benefit to these covered species populations. A summary of conservation for each covered species is provided below. Where complexes occupied by covered species are not conserved under the VPHCP, or where the covered species population within a complex is not conserved, compensatory mitigation would be required as part of the Mitigation Framework. To conserve the existing population at impacted occurrences, salvage of unique genetic material and in-kind restoration would be required.

Otay Mesa Mint

There would be no direct impacts to any of the 369 vernal pools known to be occupied by Otay Mesa mint that occur within the VPHCP Plan Area as a result of covered projects and future projects (Table 5.2-3). All of the 369 vernal pools occupied with Otay Mesa mint (100%) within the VPHCP Plan Area would be conserved in the Preserve through implementation of the VPHCP (Table 5.2-4). In addition, potential habitat that will be restored (as identified in Table 3-8) on Otay Mesa will be added to the Preserve. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

San Diego Mesa Mint

There would be potential for direct impacts to two of the vernal pools known to be occupied with San Diego mesa mint that occur within the VPHCP Plan Area at Montgomery-Gibbs Executive Airport (Table 5.2-3). Mitigation is required for any direct impact to San Diego mesa mint, and must also include the salvage of seed or plants to preserve the population genetics, consistent with the Mitigation Framework (see Chapter 11). Mitigation also would occur in accordance with FAA regulations for Runaway Safety Areas. Three additional vernal pools occupied by San Diego mesa mint would be conserved in the MHPA as a result of implementation of the VPHCP compared to the existing conservation, thereby conserving 335 vernal pools (99%) that are known to support San Diego mesa mint in the VPHCP Plan Area (Table 5.2-4). In addition, potential habitat that could be restored with mitigation or grant funding on Kearny Mesa will be added to the Preserve. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

Spreading Navarretia

One of the 95 vernal pools known to be occupied by spreading navarretia could be directly impacted at the NDU 1&2 site on Otay Mesa (Table 5.2-3). In addition, potential habitat that will

be restored (as identified in Table 3-8) on Otay Mesa and Kearny Mesa will be added to the Preserve through implementation of the VPHCP. Although one vernal pool that supports spreading navarretia would be impacted at the NDU 1&2 site within the J13 complex series on Otay Mesa, two pools are known to support spreading navarretia within this historically recognized J13 population. The other occupied pool would be conserved under the VPHCP. This means that the existing population would be protected at this occurrence (i.e., protection of at least 50% of the population in the complex). Therefore, the potentially unique genetics of spreading navarretia at the J13 complex would be preserved. The remaining 94 vernal pools occupied by spreading navarretia would be conserved under the Project (Table 5.2-4).

Mitigation is required for direct impact to the one pool at the NDU 1&2 complex that supports spreading navarretia, including salvage of potentially impacted spreading navarretia individuals to preserve the population genetics. A restoration plan consistent with the Mitigation Framework that is a part of the Project, which includes restoring vernal pools with the salvaged spreading navarretia (i.e., in-kind restoration), would be required to mitigate for the one impacted pool that supports spreading navarretia. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

San Diego Button-Celery

A maximum of nine of the 732 vernal pools known to be occupied with San Diego button-celery would potentially be directly impacted within the J13 complex series (Table 5.2-3). Three additional vernal pools that support San Diego button-celery would be conserved in the MHPA as a result of implementation of the VPHCP compared to the existing conservation, thereby conserving 722 vernal pools (99%) that support San Diego button-celery in the VPHCP Plan Area (Table 5.2-4). However, of the 11 pools known to support San Diego button-celery within the J13 complex series, only three would be conserved. Because less than 50% of the occupied pools at the J13 complex are conserved, the existing population has not been conserved. In addition, potential habitat that will be restored (as identified in Table 3-8) on Otay Mesa and Kearny Mesa will be added to the Preserve through implementation of the VPHCP. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

To prevent the loss of the unique genetics of the J13 San Diego button-celery population, mitigation for impacted pools would occur consistent with the Mitigation Framework requirements that are part of the Project, including salvage of impacted San Diego button-celery individuals and in-kind restoration. The lands added to the MHPA under the VPHCP are included to accommodate restoration, establishment, and conservation of new populations of San

Diego button-celery in a more biologically defensible configuration (e.g., substantial connection to biological open space) than avoiding them and surrounding them with development. A VPHCP conservation objective is to establish a viable population of San Diego button-celery within J13.

California Orcutt Grass

There would be no direct impacts to any of the 58 vernal pools known to be occupied with California Orcutt grass that occur within the VPHCP Plan Area as a result of covered projects or covered activities (Table 5.2-3). All of the vernal pools occupied with California Orcutt grass within the VPHCP Plan Area would be conserved through implementation of the VPHCP (Table 5.2-4). In addition, potential habitat that will be restored (as identified in Table 3-8) on Otay Mesa will be added to the Preserve through implementation of the VPHCP. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

Riverside Fairy Shrimp

There would be no direct impacts to any of the 131 vernal pools known to be occupied with Riverside fairy shrimp that occur within the VPHCP Plan Area as a result of covered projects or covered activities (Table 5.2-3). All of the vernal pools occupied with Riverside fairy shrimp within the VPHCP Plan Area would be conserved through implementation of the VPHCP. An unquantified number of Riverside fairy shrimp may be harmed during restoration, management, and monitoring activities.

Three additional vernal pools occupied by Riverside fairy shrimp would be conserved in the MHPA as a result of implementation of the VPHCP compared to the existing conservation, thereby conserving all 131 vernal pools (100%) that support Riverside fairy shrimp in the VPHCP Plan Area (Table 5.2-4). In addition, potential habitat that will be restored (as identified in Table 3-8) on Otay Mesa will be added to the Preserve. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

San Diego Fairy Shrimp

Within the VPHCP Plan Area, a total of 517 pools are known to be occupied by San Diego fairy shrimp within 35 complexes. As a result of implementation of the VPHCP, a maximum of 55 vernal pools that support San Diego fairy shrimp would potentially be directly impacted at nine vernal pool complexes (Table 5.2-3).

Thirty-one additional vernal pools that support San Diego fairy shrimp would be conserved in the MHPA as a result of implementation of the VPHCP compared to the existing conservation, thereby conserving 462 vernal pools (89%) known to support San Diego fairy shrimp in the VPHCP Plan Area (Table 5.2-4). The sites where vernal pools occupied by San Diego fairy shrimp would be lost due to development include: Rhodes, Pueblo Lands, NDU 1&2, Bachman, Brown Field, Montgomery-Gibbs Executive Airport, Southview East (Airway Road), and Magnatron. At four complexes with impacted sites (Rhodes, Bachman, Montgomery-Gibbs Executive Airport, Southview East (Airway Road), and Magnatron, Southview East (Airway Road), and Magnatron), more that 50% of the pools occupied by San Diego fairy shrimp are conserved; therefore, the existing population would be conserved at these three complexes. However, at the complexes where the other sites are impacted (Pueblo Lands, NDU 1&2, and Brown Field), fewer than 50% of the pools supporting San Diego fairy shrimp would be conserved. In addition, an unquantified number of San Diego fairy shrimp may be harmed during restoration, management, and monitoring activities.

To conserve the existing population at these occurrences, salvage of unique genetic material (if salvage site is free of versatile fairy shrimp [*Branchinecta lindahli*]) and in-kind restoration would be required. Compensatory mitigation for impacted pools that support San Diego fairy shrimp would occur consistent with the Mitigation Framework requirements that are part of the Project. In addition, potential habitat that could be restored with mitigation or grant funding on Otay Mesa and Kearny Mesa will be added to the Preserve through implementation of the VPHCP. The VPHCP will also provide additional management and monitoring for this species, beyond existing conservation conditions, through implementation of the VPMMP.

For these reasons, the Project would not result in a substantial direct adverse effect on any species identified as a candidate, sensitive, or special-status species, and the direct impact would be less than significant.

Indirect Impacts to Covered Species

A primary potential indirect impact likely to affect covered species is degradation of habitat quality resulting from "edge effects." Edge effects occur at the interface of conserved and developed lands and may include (but are not limited to) trampling or disturbance from human traffic (foot, bike, vehicle, or equestrian), damage or harassment from pets, spread of invasive exotic plants and/or wildlife, loss of pollinators, increased risk of wildfires, increased runoff, pollution, or other hydrological changes. Edge effects can reduce vernal pool functions and degrade the quality of habitat that supports covered species.

New development projects would require a fuel modification zone (Brush Management Zones 1 and 2) consistent with the City's Municipal Code Brush Management requirements (Section (142.0412). For new development, Brush Management Zone 2 would not be allowed within the MHPA containing vernal pool basins, but may be considered on a case-by-case basis within the associated watershed and buffer with approval from the Wildlife Agencies. The potential for other edge effects from new development would be identified during the development review process and addressed through implementation of the MHPA Land Use Adjacency Guidelines as well as other measures required by the Mitigation Framework. In addition, annual monitoring of the vernal pool Preserve network, as required under the VPHCP, would identify potential edge effects from existing development, such as trespass or invasion of exotic species. Stewardship management and maintenance (i.e., Level 1, as described in Chapter 3 of this EIR/EIS) would address potential edge effects, for example through targeted weed control to eradicate an invasive weed infestation or installing fencing to prevent trespass.

As discussed above, indirect impacts (and potential incidental take), are those that would occur later in time with reasonable certainty. Indirect impacts can be detrimental to vernal pool habitat and covered indirect impacts are much more difficult to track and quantify. Indirect impacts from covered projects and covered activities would be avoided and reduced to the extent feasible through implementation of avoidance and minimization measures as well as the compensatory mitigation measures outlined in the Mitigation Framework. The VPHCP monitoring and management program (summarized in Section 3.3.9 of this EIR/EIS) has been designed to identify indirect impacts so decisions can be made on the appropriate mitigation measures to implement over time.

Through implementation of the mitigation measures identified in the Mitigation Framework, indirect impacts to covered species associated with implementation of the VPHCP would be below a level of significance. Thus, the Project would not result in a substantial indirect adverse effect on any species identified as a candidate, sensitive, or special-status species, and the indirect impact would be less than significant.

Impacts from Restoration, Long-Term Management, and Monitoring

Management and monitoring prescribed under the VPHCP (as summarized in Chapter 3 of this EIR/EIS and discussed in detail in Chapter 7 of the VPHCP) would result in potential direct impacts (e.g., incidental take of covered species) and indirect impacts (e.g., habitat disturbance and trampling from sign and fence installation and repair, use of access trails and roads, monitoring activities, and weed control). Potential direct impacts from maintenance and monitoring are expected to be avoided to the extent feasible through implementation of the VPHCP required avoidance measures that are included as part of the Project (summarized in

Section 3.3.7 and full text included in Chapter 11, Mitigation, Monitoring and Report Program). Direct and indirect impacts to habitat from maintenance and monitoring are expected to be minimal.

Some restoration and enhancement activities (e.g., rut removal and recontouring of vernal pools, soil replacement, removal of nonnative invasive plant species, and planting container plants) in occupied habitat have potential to damage or destroy a small number of covered species. Under these types of activities, there is not only potential for changes in the basic micro-habitat provided in each pool, but it is also possible that cysts and/or seeds could be damaged or destroyed by personnel conducting restoration and enhancement activities. For example, cysts and/or seeds could be covered too deeply by soil when vernal pools are recontoured. To minimize this potential impact, disturbance would be limited to the area that is being enhanced, and soil within areas that are being recontoured would be salvaged and reintroduced to the pool from where they were collected following contouring. Additional measures to ensure that temporary impacts associated with restoration and enhancement activities are minimized are included in the Mitigation Framework.

Consistent with the Vernal Pool Recovery Plan and the VPHCP's overall conservation strategy, impacts to the covered species described above are expected to be to degraded vernal pools with low long-term conservation value and these impacts will be mitigated through restoration, enhancement, preservation, and long-term management and monitoring of vernal pools with long-term conservation value in the MHPA. This conservation strategy will implement specific recovery criteria for covered species identified in Vernal Pool Recovery Plan. Vernal pool restoration and enhancement is expected to reestablish the physical and biotic characteristics of vernal pool habitat such that critical functions are restored. Based on positive data from ongoing monitoring programs, it appears that restoration and enhancement can provide self-sustaining vernal pool ecosystems with clear and significant benefits to vernal pool species, including the seven covered species, especially when seed and cysts translocation occurs from existing (conserved) occupied pools (RECON 2005, EDAW 2010). These benefits, when supplemented by long-term monitoring and management, will reduce threats to the seven covered species and maintain and improve their habitat quality and regional distribution. Overall, implementation of the VPHCP is expected to support the recovery of the seven covered species.

Temporary habitat disturbance during restoration and enhancement activities would ultimately improve ecological function of the site from conditions prior to ground disturbance. Vernal pool management and monitoring activities are expected to stabilize and, in some cases, enhance or restore populations of covered species, resulting in a net biological benefit. For these reasons, the restoration, long-term management, or monitoring associated with the Project would not result in a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species, and the impact would be less than significant.

Expanded Conservation Alternative

As with the Project, most of the vernal pools that would be potentially impacted by development both inside and outside the MHPA under the Expanded Conservation Alternative are low-quality pools, the majority of which occur in disturbed areas and do not support sensitive species. However, some of the pools do support one or more of the covered species. A summary of potential direct impacts to covered species under the Expanded Conservation Alternative compared to the Project is provided in Table 5.2-5.

Similar to the Project, the Expanded Conservation Alternative would not result in any direct impacts to vernal pools known to support Otay Mesa mint, California Orcutt grass, or Riverside fairy shrimp, and would impact one vernal pool occupied by spreading navarretia and two vernal pools occupied by San Diego mesa mint (Table 5.2-5). The Expanded Conservation Alternative would potentially result in fewer direct impacts to occupied vernal pools than the Project for the following covered species: San Diego button-celery (five fewer occupied pools) and San Diego fairy shrimp (two fewer occupied pools). As with the Project, the Expanded Conservation Alternative would result in overall positive benefits for the covered species by reducing the potential for habitat fragmentation and providing a more comprehensive and cohesive Preserve design, more potentially restorable habitat, and increased conservation of buffer areas.

	Total and % Pools Occupied Pools Impacted													
Alternative	PONU # of Pools	PONU %	POAB # of Pools	POAB %	NAFO # of Pools	NAFO %	ERAR # of Pools	ERAR %	ORCA # of Pools	ORCA %	RFS # of Pools	RFS %	SDFS # of Pools	SDFS %
Project	0	0%	2	1%	1	1%	10	1%	0	0%	0	0%	53	11%
Expanded Conservation Alternative	0	0%	2	1%	1	1%	5	1%	0	0%	0	0%	51	10%

Table 5.2-5Comparison of Covered Species Impacts

ERAR = San Diego button-celery NAFO = Spreading navarretia

ORCA = California Orcutt grass POAB = San Diego mesa mint PONU = Otay Mesa mint RFS = Riverside fairy shrimp SDFS = San Diego fairy shrimp The majority of the occupied pools that would be potentially impacted by development occur outside the MHPA. Seven vernal pools occupied by San Diego fairy shrimp would potentially be impacted by development within the MHPA due to the 25% development potential of parcels that contain those occupied pools. The direct loss of vernal pools that support covered species would require compensatory mitigation, as required by the Mitigation Framework, to ensure the viability and continued persistence of covered species.

Overall, as with the Project, the Expanded Conservation Alternative would result in conservation of additional covered species beyond existing conservation and the Project (for species that are not already 100% conserved under existing conservation), resulting in a net benefit to these covered species populations. Where complexes occupied by covered species are not conserved under the VPHCP, or where the existing population within a complex is not conserved (see Chapter 5 of the VPHCP for details), compensatory mitigation would be required as part of the Project Mitigation Framework. To conserve the existing population at impacted occurrences, salvage of unique genetic material and in-kind restoration would be required. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse direct effect on any species identified as a candidate, sensitive, or special-status species, and the impact would be less than significant.

Indirect Impacts to Covered Species

The approach for addressing edge effects under the Expanded Conservation Alternative would be the same as for the Project; thus, the analysis for indirect impacts is the same. This alternative would not result in substantial adverse indirect impacts to species identified as a candidate, sensitive, or special-status species, and the impact would be less than significant.

Impacts from Restoration, Long-Term Management, and Monitoring

The approach for management and monitoring of vernal pools and covered species under the Expanded Conservation Alternative would be the same as for the Project; thus, the analysis for impacts from restoration, long-term management, and monitoring is the same. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the City would not have authorization to issue take of vernal pools or vernal pool covered species. The City's existing permit with CDFW under NCCP requires avoidance of vernal pools. Impacts to vernal pools and species would be evaluated on a project-by-project basis and avoidance, minimization, and

compensatory mitigation would be required through the Section 7 or Section 10 process. Existing development restrictions in accordance with the ESL Regulations and mitigation requirements for vernal pools within the MHPA would still apply (i.e., development allowed in 25% of the site in the least sensitive area).

Avoidance, minimization, and compensatory mitigation measures implemented on a project-byproject basis would likely be similar to those required under the Project; however, they would be done in a piece-meal fashion and may preserve areas with little to no long-term conservation value. In addition, projects may choose to avoid all direct impacts to vernal pools. Although the Existing Conservation/No Project Alternative scenario would avoid occupied vernal pools, isolated "postage stamp" vernal pool mitigation sites would not allow for a more cohesive and comprehensive preserve area, as proposed under the Project. Avoided vernal pools may be isolated and surrounded by development, subject to significant edge effects, and render little to no long-term conservation value. In addition, the management and monitoring program included as part of implementation of the VPHCP would not exist₂, <u>Under the status quo monitoring</u>, as described in Section 3.4.2, there is no consistent method of vernal pool monitoring, and data are not being analyzed and reported in a comprehensive way; therefore, a comprehensive understanding of the City's vernal pool resources is difficult to ascertain and many lands are not being monitored at all. and tThere would be no city-wide management of vernal pools, likely resulting in more severe indirect impacts, such as edge effects from surrounding development.

Under the Existing Conservation/No Project Alternative, direct impacts to vernal pools and covered species would be avoided, as required by the City's existing permits and regulations. Therefore, no substantial or adverse effects would occur. However, the benefits to the covered species of a cohesive Preserve and comprehensive management and monitoring program would not be achieved under the Existing Conservation/No Project Alternative.

ISSUE 2: Would the project result in a substantial impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Code or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Project

<u>Tier I, II, or III Habitat</u>

No sensitive upland habitats (i.e., Tier I through Tier IIIB Habitats) as identified in the City's LDM Biology Guidelines would be impacted by the Project, as the VPHCP only includes

conservation for vernal pools and would not affect sensitive upland vegetation communities. Individual vernal pool restoration projects implemented under the VPHCP could involve restoration of upland watershed buffers, including enhancement or restoration of sensitive upland vegetation communities. Vernal pool restoration projects would avoid impacting intact sensitive upland habitats that may occur within restored watersheds areas, and would ultimately result in a net benefit to upland habitats through the management, maintenance, and monitoring program prescribed under the VPHCP.

USFWS Critical Habitat

Sensitive habitat that would be affected by implementation of the VPHCP includes USFWSdesignated Critical Habitat for the covered species. Critical Habitat is specific geographic area(s) that contain features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical Habitat has been designated for three of the seven covered species (spreading navarretia, Riverside fairy shrimp, and San Diego fairy shrimp). Table 5.2-6 summarizes the acreage of Critical Habitat for each of the three species that would be conserved within the MHPA under implementation of the VPHCP, as well as acreage that would potentially be impacted by development. Critical Habitat designations within and outside the MHPA are shown for the three species in Figures 5.2-8 (spreading navarretia), 5.2-9 (Riverside fairy shrimp), and 5.2-10 (San Diego fairy shrimp).

As shown in Table 5.2-6, there is a total 6,720 acres of spreading navarretia Critical Habitat, 1,724 acres of Riverside fairy shrimp Critical Habitat, and 2,931 acres of San Diego fairy shrimp Critical Habitat designated for each of these species over the range in which they occur (i.e., there are known occurrences of these species outside the VPHCP Plan Area). Of these acreages, the following amounts of Critical Habitat occur within the VPHCP Plan Area: 628 acres (9% of total designation) of spreading navarretia Critical Habitat, 804 acres (47% of total designation) of Riverside fairy shrimp Critical Habitat, and 1,801 acres (61% of total designation) of San Diego fairy shrimp Critical Habitat. Additional lands containing Critical Habitat would be added to the MHPA through implementation of the VPHCP, when compared to conservation under existing conditions. Once fully implemented, the VPHCP would conserve approximately 4 additional acres of spreading navarretia Critical Habitat from existing conservation, to total 565 acres (90% of the spreading navarretia Critical Habitat within the VPHCP Plan Area). Approximately 16 additional acres of Riverside fairy shrimp Critical Habitat would be conserved over the existing condition, for a total of 740 acres (92% of the Riverside fairy shrimp Critical Habitat within the VPHCP Plan Area). The VPHCP, once fully implemented, would conserve approximately 79 additional acres of San Diego fairy shrimp Critical Habitat over the existing condition, for a total of 1,409 acres (78% of the San Diego fairy shrimp Critical Habitat within the VPHCP Plan Area).



City of San Diego VPHCP EIR/EIS

Path: P:\2013\60309570_CitySD_VPHCP\900-CAD-GIS\920 GIS\922_Maps\ReportFigs\Fig5_2_8_SpreadingNav_crithab.mxd, 7/5/2016, daniel_arellano



City of San Diego VPHCP EIR/EIS

Path: P:\2013\60309570_CitySD_VPHCP(900-CAD-GIS\920 GIS\922_Maps\ReportFigs\Fig5_2_9_RIVfairyshrimp_crithab.mxd, 7/5/2016, daniel_arellano



City of San Diego VPHCP EIR/EIS

Path: P:\2013\60309570_CitySD_VPHCP\900-CAD-GIS\920 GIS\922_Maps\ReportFigs\Fig5_2_10_SDfairyshrimp_crithab.mxd, 7/5/2016, daniel_arellano

	Spreading Navarretia Critical Habitat (Acres)	Riverside Fairy Shrimp Critical Habitat (Acres)	San Diego Fairy Shrimp Critical Habitat (Acres)
Total Critical Habitat Designation (for Species			
Range, occurs within and outside VPHCP Plan	6,720	1,724	2,931
Area)			
Total Acres in VPHCP Plan Area	628	804	1,801
(% of Total Species Designation)	(9%)	(47%)	(61%)
Existing Critical Habitat Conservation in VPHCP	561	724	1,330
Plan Area (% of Critical Habitat Conserved)	(89%)	(90%)	(74%)
Critical Habitat Conserved in MHPA through	565	740	1,409
VPHCP (% of Critical Habitat Conserved)	(90%)	(92%)	(78%)
Additional Habitat Conserved with	4	16	70
Implementation of the VPHCP (% of Additional	4 (1%)	(2%)	(404)
Critical Habitat Conserved)	(170)	(270)	(470)
Total Acres Not Conserved (Inside and Outside	62	61	202
MHPA)	05	04	592
Acres Inside MHPA ¹	1	53	77
Acres Outside MHPA	62	11	315
% Total Designation Not Conserved	<1%	4%	13%

Table 5.2-6
Summary of Designated Critical Habitat Conservation
with Implementation of the VPHCP

¹Based on conservation level of each vernal pool complex with designated Critical Habitat (75% or 100%).

Note: Acreages are rounded so individual acreages may not equal sum of total acreages.

Overall, although some potential loss of Critical Habitat would occur for each of the three covered species (Table 5.2-6), the additional lands to be added to the MHPA are of higher biological value and have more potential for restoration compared to the existing Critical Habitat that would potentially be impacted by development (analyzed on a project-by-project basis). The conserved Critical Habitat within the MHPA would be in a configuration that maintains long-term viability of the VPHCP covered species. Management, maintenance, enhancement, and/or restoration of conserved vernal pool complexes containing Critical Habitat, as described in the VPMMP (see Chapter 7 of the VPHCP), would result in a net biological benefit for all three species and their Critical Habitats.

Consistency with the USFWS Recovery Plan

Consistency with the USFWS Recovery Plan (USFWS 1998a) was analyzed in the VPHCP (see Appendix C of the VPHCP). Appendix F of the USFWS Recovery Plan identifies complexes that are necessary to stabilize the covered species populations. Appendix G of the USFWS Recovery Plan identifies complexes that are necessary to reclassify the covered species populations. It should be noted that additional complexes from those identified in the USFWS Recovery Plan are now known to be occupied by covered species, and the complexes identified in the USFWS Recovery Plan may not be currently occupied by the covered species, based on the information in the City's vernal pool database (SANDAG 2012). However, USFWS selected these complexes as important for the covered species because the complexes were historically occupied. The Project would provide conservation of vernal pools within the complexes identified in the USFWS Recovery Plan as important to stabilize and reclassify each of the covered species populations. Therefore, the Project is consistent with the USFWS Recovery Plan.

For these reasons, the Project would not result in a substantial adverse effect related to Tier I through Tier IIIB Habitats or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. The impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, no sensitive upland habitats (i.e., Tier I through Tier IIIB Habitats) as identified in the City's LDM Biology Guidelines would be impacted under the Expanded Conservation Alternative.

USFWS Critical Habitat

As with the Project, the Expanded Conservation Alternative would conserve additional lands containing Critical Habitat beyond existing conservation conditions, as shown in Table 5.2-7. Under the Expanded Conservation Alternative, 596 acres of spreading navarretia Critical Habitat within the VPHCP Plan Area would be conserved (35 more acres than existing conservation). The Expanded Conservation Alternative would also conserve an additional 18 acres of Riverside fairy shrimp Critical Habitat and 195 acres of San Diego fairy shrimp Critical Habitat (all within the MHPA) beyond the conservation under existing conditions.

As with the Project, although there would be some potential loss of Critical Habitat for each of the three covered species, the additional lands to be added to the MHPA are of higher biological value and potential for restoration compared to the existing Critical Habitat that would potentially be impacted by development. The conserved Critical Habitat within the MHPA would be in a configuration that maintains long-term viability of the VPHCP covered species. Management, maintenance, enhancement, and/or restoration of conserved vernal pool complexes containing Critical Habitat, as described in the VPMMP (see Chapter 7 of the VPHCP), would result in a net biological benefit for all three species and their Critical Habitats.

	Spreading Navarretia Critical Habitat (Acres)	Riverside Fairy Shrimp Critical Habitat (Acres)	San Diego Fairy Shrimp Critical Habitat (Acres)
Critical Habitat Conserved in MHPA through VPHCP	561	724	1,330
Critical Habitat Conserved in MHPA through Expanded Conservation Alternative	596	742	1,526
Additional Total Acres Conserved through Expanded Conservation Alternative	35	18	195

Table 5.2-7Comparison of Designated Critical Habitat Conservationbetween VPHCP and Expanded Conservation Alternative1

¹ Based on conservation level of each vernal pool complex with designated Critical Habitat (75% or 100%). Note: Acreages are rounded so individual acreages may not equal sum of total acreages.

Consistency with the USFWS Recovery Plan

The Expanded Conservation Alternative conserves the same complexes as the Project, which are identified in the USFWS Recovery Plan as important to stabilize and reclassify each of the covered species populations (see Appendix C of the VPHCP). Therefore, the Expanded Conservation Alternative is consistent with the USFWS Recovery Plan.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to Tier I through Tier IIIB Habitats or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. The impact would be less than significant.

Existing Conservation/No Project Alternative

Similar to the Project, no sensitive upland habitats (i.e., Tier I through Tier IIIB Habitats) as identified in the City's LDM Biology Guidelines would be impacted under the Existing Conservation/No Project Alternative, as development in the city would proceed under existing conditions.

USFWS Critical Habitat

Table 5.2-6 shows the total acres of Critical Habitat conserved under the Existing Conservation/No Project Alternative (i.e., existing conservation), as well as the percentage of Critical Habitat acres within the overall VPHCP Plan Area that is conserved. Under this alternative, any additional conservation of Critical Habitat for the three covered species with designated Critical Habitat would occur on a project by project basis, which could result in

fragmentation and isolated areas of Critical Habitat, rather than a cohesive Preserve that would be established under the Project.

Consistency with the USFWS Recovery Plan

The USFWS Recovery Plan is intended to protect vernal pools by conserving complexes that are necessary to stabilize the covered species populations (i.e., complexes that are either currently or historically occupied). Under the Existing Conservation/No Project Alternative, not all complexes identified in the USFWS Recovery Plan as important to stabilize and reclassify each of the covered species populations (see Appendix C of the VPHCP) are currently conserved. However, during project-specific consultation with USFWS (Section 7 or Section 10), USFWS would evaluate consistency with the objectives of the Recovery Plan to ensure that vernal pool complexes with current or historic occurrence of the covered species are avoided. Therefore, the Expanded Conservation Alternative is consistent with the objectives of the USFWS Recovery Plan. However, while impacts to complexes occupied by the covered species would be avoided, this alternative does not provide for the net benefit of conservation of additional areas of habitat suitable for restoration of the covered species.

For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to Tier I through Tier IIIB Habitats or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. The impact would be less than significant.

ISSUE 3: Would the project result in a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filing, hydrological interruption, or other means?

Project

This section evaluates the potential impacts to vernal pools as a result of VPHCP implementation. Specifically, it analyzes the potential loss of vernal pools resulting from development of lands outside the MHPA, as well as potential loss of vernal pools inside the MHPA resulting from covered projects and covered activities (described in Chapter 4 of the VPHCP). Both direct and indirect impacts to vernal pools are possible, as discussed below. Impacts to covered species that occupy vernal pools within the VPHCP Plan Area are analyzed under Issue 1 above.

Under the VPHCP, each vernal pool site within a complex has a designated conservation level depending on preservation status (i.e., lands within the MHPA are designated 75% conserved

unless a 100% hardline conservation boundary has been established). Impacts to vernal pools were evaluated based a conservative assumption that maximum development would occur consistent with the conservation levels (e.g., for a parcel wholly within the MHPA that would be 75% conserved, the remaining 25% was assumed impacted by development and 25% of the vernal pool resources on the site were assumed impacted). However, future development within the MHPA would be limited to a 25% encroachment into the least sensitive portion of the parcel and would be required to avoid vernal pools to the maximum extent practicable. Therefore, impacts would most likely be less once the VPHCP is fully implemented. The 100% conservation level has been applied to existing conserved vernal pool sites, as well as hardline conservation areas associated with covered projects.

As shown in Table 5.2-8, a total of 182 pools would potentially be directly impacted by development, including 120 pools impacted outside the MHPA (due to complexes that are 0% conserved) and 62 pools impacted inside the MHPA as a result of covered projects, covered activities, and/or future development necessary to allow reasonable use of property in the MHPA (i.e., within a 75% conservation level area). In addition, approximately 2,303 acres (37%) of modeled vernal pool habitat not be conserved within the VPHCP Plan Area under the Project.

Only one vernal pool complex, KK1 Lake Murray, would not be included in the MHPA. This complex contains one isolated vernal pool and is not occupied by any covered species. The pool is surrounded by active park uses (i.e., ball fields and tennis courts), roads, and single-family homes. No impacts are proposed at this location. However, due to the low quality and isolated nature of the pool, along with the high potential for edge effects, no active management and monitoring activities are proposed for this site. The direct impact to vernal pools resulting from implementation of the VPHCP represents an approximate 7% loss of the total number of vernal pools within the VPHCP Plan Area, totaling 0.6 acres of basin surface area.

Impact to vernal pools and/or modeled habitat from covered activities is expected be minimal (e.g. small in size) and predominately occur within disturbed areas. Maintenance and use of roads, easements, and trails that cross the Preserve as well as inspection and repair of utility corridors could have small impacts to modeled vernal pool habitat. The VPHCP includes avoidance and minimization measures that should further limit potential impacts to individual basins from these activities.

Maintenance and monitoring prescribed in the VPMMP (Chapter 7 and Appendix D of the VPMMP) could also result in potential direct impacts (e.g., incidental take of covered species) and indirect impacts (e.g., habitat disturbance and trampling from sign and fence installation and repair, use of access trails and roads, monitoring activities, and weed control). Potential direct

	Total Number of Complexes in VPHCP Plan Ar ea	Number of Complexes N ot in MHPA	Total Number of Pools in VPH CP Plan Area	Total Pools Im pacted by Developme nt Based on Conservation Level ¹	Pools Impacted by Development outside MHPA (0% Conservati on)	Pools Impacted by Development insi de MHPA (Based on Conservation Level) ¹	Total Surface Area of Pools Impacted B ased on Conservation Level ¹ (Acres)	Total Acreage of Modeled Vernal Pool Habitat Not Conserved
Project	54	1	2,591	182	120	62	7.6	3,974 <u>4,316</u>
Existing Conservation	54	9	2,591	408	392	16	10.4	3,797 <u>4,139</u>

 Table 5.2-8

 Summary of Vernal Pools Impacts in VPHCP Plan Area (Project vs Existing)

¹Pools and species population conserved is based on 75% or 100% conservation level by vernal pool complex. The conservation level denotes the portion of a parcel that would be conserved. For example, for a parcel designated with a 75% conservation level, 25% of the parcel is available for development. Development would occur on the least environmentally sensitive area of the parcel, as determined by the City environmental review process. This tables does not include impacts from covered activities.

impacts from maintenance and monitoring are expected to be avoided to the extent feasible through implementation of the avoidance measures identified in Chapter 5. Direct and indirect impacts to habitat from maintenance and monitoring are expected to be minimal. Temporary habitat disturbance during management, monitoring, restoration and enhancement activities will be minimal and these activities will ultimately improve ecological function of the site from conditions prior to ground disturbance. Therefore, no permanent impacts from restoration, longterm management, or monitoring are anticipated.

While the total loss of vernal pools is a relatively low percentage, with only 7% of vernal pools impacted within the VPHCP Plan Area (182 total pools; 120 outside the MHPA and 62 inside the MHPA) and only approximately one-third of those occupied with covered species (as discussed under Issue 1 above), the loss is substantial with respect to the remaining vernal pool habitat in the southern California region. It is estimated that over 90% of the pools that once occurred in southern California have already been lost, so any loss of vernal pool habitat must be evaluated in that context.

The City's ESL Regulations and LDM Biology Guidelines require no net loss of vernal pool habitat (i.e., all impacts will be offset with restoration and enhancement of an equal or greater acreage of habitat). Therefore, any direct impacts to vernal pools within the VPHCP Plan Area would be mitigated consistent with these regulations. A wetland deviation would only be required for impacts to vernal pools that occur inside the MHPA. If impacts occur outside the MHPA and the project is consistent with the VPHCP, a wetland deviation would not be required. Compensatory mitigation for all impacts, inside and outside the MHPA, would be required as part of the VPHCP Mitigation Framework implementation.

The VPHCP would add additional public and private lands to the City's existing MHPA to meet the goals and objectives for the covered species. Specifically, additional lands would be added in the following community planning areas: Otay Mesa, Kearny Mesa, Mira Mesa, and Navajo. Once these additional lands are added, the MHPA would conserve a total of 2,472 vernal pools within 53 vernal pool complexes (Table 5.2-9). Approximately 93% of the vernal pools within the VPHCP Plan Area would be conserved under implementation of the VPHCP. In addition, 3,9744,316 acres of modeled vernal pool habitat would be conserved.

Implementation of the VPHCP would increase conservation from existing conservation conditions by adding 273 vernal pools (2.8 additional acres of basin area) within nine additional complexes, as well as 177 acres of modeled vernal pool habitat, to the MHPA. This is an approximately 9% increase in conservation of vernal pools and 32% increase in modeled vernal pool habitat from existing conservation.

	Number of Complex Series in the VPHCP Plan Area	Number of Complex Series Conserved	Total Number of Pools in VPHCP Plan Area	Number of Pools inside Existing Conserved Areas	Number of Pools Conserved Based on Conservation Level ²	% of Total Pools in VPHCP Plan Area Conserved	Acreage of Pools Conserved	Acreage of Modeled Vernal Pool Habitat Conserved
Existing Conservation ¹	54	45	2,591	2,199	2,183	84%	34.7	3,797 <u>4,139</u>
MHPA after VPHCP Implementation	54	53	2,591	2,472	2,409	93%	37.5	3,974 <u>4.316</u>
Additional Conservation Resulting from VPHCP Implementation	N/A	8	N/A	273	226	9%	2.8	177

 Table 5.2-9

 Additional Conservation from Implementation of the VPHCP

N/A = not applicable

¹The existing conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects.

²Pools and species population conserved is an estimate based on 75% or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area.

Indirect impacts to vernal pools may also occur as a result of development of upland watersheds surrounding vernal pool habitat. Modification of upland watersheds, such as altering topography by removing or filling soil, can disrupt natural hydrologic flow necessary for vernal pools to fill and pond. Altering watershed hydrology can impact covered species that occupy vernal pools (e.g., by reducing the ponding capacity of the basins). The VPHPC Mitigation Framework requires that impacts to upland watershed associated with vernal pools be avoided to maintain natural hydrological flows. Project-specific environmental review would include evaluation of impacts to watersheds and associated vernal pool resources and demonstrate consistency with the avoidance and minimization measures identified in the VPHPC Mitigation Framework.

In summary, direct impacts to mostly low-quality vernal pools as well as impacts to associated upland watershed would be mitigated through compliance with the City's ESL Regulations and compensatory mitigation that would be required by the VPHCP Mitigation Framework. Implementation of the VPHCP would conserve more vernal pools than are currently conserved under existing conditions, and would create a more cohesive and comprehensive Preserve area for vernal pools than currently exists. The preservation, maintenance, management, and (where needed) enhancement or restoration of vernal pools and associated watershed, as prescribed under the VPHCP, would provide an overall net benefit to the City's vernal pool resources.

A key component of the VPHCP is the restoration of degraded vernal pools throughout the Plan Area. Vernal pool restoration would involve relatively minor grading for recontouring or restoration of vernal basins to a more natural state, thus benefiting sensitive vernal pool habitat and associated covered species by improving hydrological and ecological function.

For these reasons, the Project would not result in a substantial adverse effect related to wetlands through direct removal, filling, hydrological interruption, or other means, and the impact would be less than significant.

Expanded Conservation Alternative

Table 5.2-10 shows the potential direct impacts to vernal pools under the Expanded Conservation Alternative. As shown, a total of 131 pools would potentially be directly impacted by development, and 2,135 acres of modeled vernal pool habitat would not be conserved. While 51 vernal pools would potentially be impacted by development inside the MHPA, 80 vernal pools would be impacted outside the MHPA under the Expanded Conservation Alternative as a result of the addition of lands to the Preserve (shown in Figures 2-2 through 2-4). As with the Project, only one vernal pool complex, KK1 Lake Murray, would not be included in the MHPA. This complex contains one isolated vernal pool and is not occupied by any covered species. The pool

Table 5.2-10
Summary of Vernal Pools Impacts (Expanded Conservation Alternative vs Existing Conservation)

	Total	Number of	Total		Pools Impacted by			Total Acreage of
	Number of	Complexes	Number of	Total Pools	Development	Pools Impacted by	Total Surface	Modeled Vernal
	Complexes	Not in the	Pools	Impacted by	outside Preserve	Development	Area of Pools	Pool Habitat Not
Alternative	Conserved	MHPA	Conserved ¹	Development ¹	(0% Conservation)	inside Preserve ¹	Impacted (Acres)	Conserved
Expanded Conservation Alternative	54	1	2,460	131	80	51	7.1	2,135
Existing Conservation	45	9	2,183	408	392	16	10.4	2,479

¹Pool conservation and impacts are estimated based on 75% or 100% conservation level by vernal pool complex. This table does not include impacts from covered activities.

is surrounded by active park uses (i.e., ball fields and tennis courts), roads, and single-family homes. No impacts are proposed at this location. However, due to the low quality and isolated nature of the pool, along with the high potential for edge effects, no active management and monitoring activities are proposed for this site. This complex has only one vernal pool, which is not occupied by any covered species. The direct impact to vernal pools resulting from implementation of the Expanded Conservation Alternative represents an approximate 5% loss of the total number of vernal pools within the VPHCP Plan Area, totaling 7.1 acres of basin surface area. In addition, 2,135 acres of modeled vernal pool habitat would not be conserved.

Compared to existing conservation conditions, the Expanded Conservation Alternative would conserve 2,460 vernal pools, which is 277 more vernal pools (11%) than conserved under existing conservation (and 3.3 additional acres of basin area) as shown in Table 5.2-11. The Expanded Conservation Alternative would also conserve an addition 345 acres of modeled vernal pool habitat (54% increase), compared to existing conservation.

In summary, direct impacts under the Expanded Conservation Alternative would occur to mostly low-quality vernal pools and would be mitigated through compliance with the City's ESL Regulations, as well as through compensatory mitigation that would be required by the VPHCP Mitigation Framework. Implementation of the VPHCP under the Expanded Conservation Alternative would conserve more vernal pools and modeled vernal pool habitat than currently conserved under existing conditions. The Expanded Conservation Alternative would create a more cohesive and comprehensive Preserve area for vernal pools than existing conservation. The preservation, maintenance, management, and (where needed) enhancement or restoration of vernal pools, as prescribed under the VPHCP, would provide an overall net benefit to the City's vernal pool resources.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to wetlands through direct removal, filling, hydrological interruption, or other means, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, development projects would require an individual take permit from USFWS for potential impacts to vernal pools and covered species (either Section 7 or Section 10, depending on if a federal nexus exists). Impacts to vernal pools would be mitigated on a project-by-project basis. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to wetlands through direct removal, filling, hydrological interruption, or other means, and the impact would be less than significant.

	Number of Complex Series in the VPHCP Plan Area	Number of Complex Series Conserved	Total Number of Pools in VPHCP Plan Area	Number of Pools inside Existing Conserved Areas	Number of Pools Conserved Based on Conservation Level ²	% of Total Pools in VPHCP Plan Area Conserved	Acreage of Pools Conserved	Acreage of Modeled Vernal Pool Habitat Conserved
Existing Conservation ¹	54	45	2,591	2,199	2,183	84%	34.7	3,797 <u>4,139</u>
MHPA after Expanded Conservation Alternative	54	53	2,591	2,511	2,460	95%	38.0	4,142 4,484
Additional Conservation Resulting from Expanded Conservation Alternative	N/A	8	n/a	312	277	11%	3.3	345

 Table 5.2-11

 Additional Conservation from Implementation of the Expanded Conservation Alternative

N/A = not applicable

¹ The existing conservation includes conserved lands within the City's existing MHPA, permitted projects, and planned projects.

² Pools and species population conserved is an estimate based on 75% or 100% conservation level by vernal pool complex. See Appendix C of the VPHCP for more detail on the conservation analysis for each vernal pool complex in the VPHCP Plan Area. This table does not include impacts from covered activities.

However, the Existing Conservation/No Project Alternative scenario would likely result in isolated vernal pool mitigation sites, and would not allow for creation of a more cohesive and comprehensive Preserve area as proposed under the Project. In addition, the management and monitoring program included as part of implementation of the VPHCP would not exist, and there would be no city-wide management of vernal pools.

ISSUE 4: Would the project interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

Project

One of the primary objectives of the City's MSCP SAP is to identify and maintain a preserve system that allows for animals and plants to exist at both the local and regional levels. The MSCP SAP has identified large blocks of native habitat having the ability to support a diversity of plant and animal life known as "core biological resource areas." "Linkages" between these core areas provide for wildlife movement. These lands have been determined to provide the necessary habitat quality, quantity, and connectivity to sustain the unique biodiversity of the San Diego region.

Wildlife corridors have been identified within some locations containing vernal pool resources, such as Del Mar Mesa, Carmel Mountain, Mission Trails Regional Park, and Lopez Ridge. These locations are within the MHPA and are owned and managed by the City. The additional lands that would be added to the MHPA would further enhance opportunity for wildlife movement within these areas.

The VPHCP would be compatible with the MSCP SAP, and would provide for increased management and monitoring within the vernal pool complexes located in the MHPA, including where wildlife corridors occur. Management would also include weeding and restoration activities (if needed), which would provide for restored hydrological function and increased quality of habitat. Management and restoration of vernal pools would also increase ponding opportunities for resident and migratory wildlife species.

For these reasons, the Project would not result in a substantial adverse effect related to interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites. The impact would be less than significant.

Expanded Conservation Alternative

While the Expanded Conservation Alternative would add additional lands to the MHPA beyond what would be added under the Project, these lands do not occur within known wildlife corridors. However, the additional lands would improve opportunity for wildlife movement within conserved habitat. As with the Project, the Expanded Conservation Alternative would be compatible with the MSCP SAP, and would provide for increased management and monitoring within the vernal pool complexes located in the MHPA, including where wildlife corridors occur. Management would also include weeding and restoration activities (if needed), which would provide for restored hydrological function and increased quality of habitat. Management and migratory wildlife species.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites. The impact would be less than significant.

Existing Conservation/No Project Alternative

While the Existing Conservation/No Project Alternative would not add additional lands to the MHPA, conservation of lands where existing wildlife corridors and linkage occur would remain. Wildlife movement identified in the MSCP SAP would continue to be maintained and no element of the alternative would interfere with or restrict wildlife movement or corridor functions. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites. The impact would be less than significant.

ISSUE 5: Would the project result in a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Project

<u>MSCP</u>

For the purpose of EIR/EIS analysis with the City's existing state NCCP permit, the existing conservation analysis represents existing conditions under which the City's still operates under its valid state NCCP (MSCP) permit (see Sections 1.2 and 3.1.1) and, therefore, serves as the basis for the quantitative aspects of this programmatic-level analysis. Land use considerations specific to the MSCP and NCCP permit are evaluated in Section 5.1, Land Use, under Issue 6.

To evaluate consistency with the state's existing NCCP permit at the programmatic level, changes to any of the following four issues were considered:

- 1. Take/conservation of vernal pool habitat;
- 2. Take/conservation of the seven vernal pool species;
- 3. Preserve design and function; and,
- 4. Take/conservation from management and monitoring activities

1. Take/Conservation of Vernal Pool Habitat

Implementation of the VPHCP would provide additional conservation of vernal pools beyond current conservation within the City's existing MHPA, permitted projects, and planned projects (i.e., existing conservation), by adding lands to the MHPA that contain valuable vernal pool resources. A shown in Table 3-5 (Conservation of Vernal Pools after Implementation of the VPHCP), the VPHCP would result in an overall increase in vernal pool acreage compared to the existing MSCP. The VPHCP would conserve an additional eight vernal pool complexes within the Plan Area through addition of lands to the MHPA, and conserve an additional 273 pools (9% more), totaling 2.8 acres of basin area, over what is currently conserved under the existing conservation (i.e., existing City MSCP permit). Expansion of the MHPA would result in additional conservation of vernal pools, covered species, and critical habitat for the covered species beyond existing conservation (for a total of 2,591 vernal pools located within a total of 54 vernal pool complexes, see Table 5.2-11). The VPHCP adds lands to the existing MHPA that include vernal pools, as well as associated watershed, habitat buffers, and adjacent uplands to meet the tenets of appropriate and functional reserve design, as guided by USFWS (USFWS 2000). In addition to conserving extant vernal pools, implementation of the VPHCP would result in the addition of lands to the MPHA that are suitable for vernal pool restoration (such as the mesa areas on Otay Mesa). The VPHCP would expand the MHPA by 275 acres to include restoration of vernal pools and associated populations of covered species (per the goals and

objectives of the VPHCP) to enhance the biological value of the MHPA and create a more cohesive vernal pool Preserve that minimizes potential fragmentation of vernal pool habitat.

As shown in Table 5.2-8, a total of 182 pools would potentially be directly impacted by development, including 120 pools impacted outside the MHPA (due to complexes that are 0% conserved) and 62 pools impacted inside the MHPA as a result of covered projects, covered activities, and/or future development necessary to allow reasonable use of private property in the MHPA (i.e., within a 75% conservation level area). One complex, KK1 Lake Murray, would be completely impacted by development. This complex has only one vernal pool, which is not occupied by any covered species. The direct impact to vernal pools resulting from implementation of the VPHCP represents an approximate 7% loss of the total number of vernal pools within the VPHCP Plan Area, totaling 2.8 acres of basin surface area. However, most of the vernal pools that would be impacted both inside and outside the MHPA are low quality pools, the majority of which occur in disturbed areas, such as roads and ditches. Some are moderate quality with relatively high diversity, and 67 occurrences of one or more of the covered species would be potentially impacted by development. The direct loss of moderate quality vernal pools that support covered species would, to a limited degree, negatively affect the persistence of the affected covered species. Direct impacts to low quality pools would not affect the continued persistence of covered species, because the low quality habitat in disturbed pools is unlikely to support covered species. In addition, Table 5.2-8 [Summary of Vernal Pool Impacts in VPHCP Plan Area (Project vs. Existing)] shows that the overall loss of vernal pool surface areas would be reduced from 10.4 to 7.6 acres and the total pools impacted by development would be reduced from 16% to 7% compared to the existing MSCP.

Since the MSCP was adopted in 1997, over 400 new pools have been found within the City (both inside and outside the MHPA). The Project would result in the addition of 273 vernal pools, totaling 2.8 acres of additional basin area, to the MHPA (Table 3-5). Table 5.2-8 shows that the VPHCP would potentially allow more impacts to vernal pools within the MHPA (62 pools) than compared to the existing conservation (16 pools) on a proportional basis because more vernal pools would be included in the MHPA (within a 75% conservation level, unless they occur on a hardline 100% conservation area). Of the 273 pools that would be added to the MHPA, 31 vernal pools (11%) are occupied with San Diego fairy shrimp. Further, the overall impacts to vernal pool surface area and percent of pools impacted would decrease compared to existing conservation (Table 3-5). Impacts to vernal pools found since the MSCP was adopted would be mitigated consistent with the VPHCP Mitigation Framework to ensure the long-term conservation of the seven vernal pool species. The level of impact to vernal pools under the VPHCP (93% conservation or 7% impacted) would be less than that anticipated for all vernal pools under the original MSCP (88% conservation or %12 impacted). The impacts and corresponding mitigation for each of the vernal pools that would be lost to development under the VPHCP have been

specifically reviewed by the Wildlife Agencies. If vernal pool restoration and/or enhancement are required by a covered project as compensatory mitigation to offset impacts to lower quality resources, it would be guided by the Mitigation Framework (See Section 5.3 of the VPHCP).

2. Take/Conservation of the Seven Vernal Pool Species

As shown in Table 3-6 [Conservation of Vernal Pools Occupied with Covered Species (Total and % Pools Conserved), after Implementation of the VPHCP], the VPHCP would result in conservation of 100% of occupied pools for three of the seven covered species, including Otay Mesa mint, California, Orcutt grass, and Riverside fairy shrimp. Therefore, 100% conservation is afforded to one additional species from existing conservation (Riverside fairy shrimp). The VPHCP would provide additional conservation (beyond existing conservation) for the seven vernal pool species as follows:

- Otay Mesa mint: No change.
- *San Diego mesa mint*: 3 additional occupied pools conserved (<1% increase)
- *Spreading navarretia*: No change.
- San Diego button-celery: 3 additional occupied pools conserved (1% increase)
- California Orcutt grass: No change.
- *Riverside fairy shrimp*: 3 additional occupied pools conserved (2% increase)
- *San Diego fairy shrimp*: 31 additional occupied pools conserved (6% increase)

The addition of lands to the MHPA through implementation of the VPHCP would result in 100% conservation for Riverside fairy shrimp, which would be an increase compared to the existing MSCP. In addition, conservation of occupied vernal pools would increase for San Diego button-celery, San Diego mesa mint, and San Diego fairy shrimp over the existing MSCP, as noted above. For San Diego button-celery, the VPHCP includes a requirement that the J13 population in Otay Mesa (near the Handler site) would be successfully relocated (under a Wildlife Agency-approved restoration plan) prior to any impact to retain genetics, be consistent with the existing MSCP anticipated loss of this species (2%) and effectively achieve a no-net loss of this species on Otay Mesa.

Table 3-6 of the EIR/EIS provides a summary of potential direct impacts to covered species from implementation of the VPHCP, which is summarized below.

• *Otay Mesa mint*: No direct impacts to any of the 369 vernal pools occupied by Otay Mesa mint that occur within the VPHCP Plan Area.

- San Diego mesa mint: Direct impacts to two of the 337 vernal pools occupied with San Diego Mesa mint (less than 1%) that occur within the VPHCP Plan Area at Montgomery-Gibbs Executive Airport. Mitigation is required for any direct impact to San Diego mesa mint, and must also include the salvage of seed or plants to preserve the population genetics.
- *Spreading navarretia*: One of the 95 vernal pools that support spreading navarretia could be directly impacted at the NDU 1&2 site on Otay Mesa. The NDU 1&2 site is part of the J13 complex that was historically recognized as a single spreading navarretia population (Bauder 1986). Mitigation is required for any direct impact to spreading navarretia, and must also include the salvage of seed or plants to preserve the population genetics.
- San Diego button-celery: A maximum of ten of the 732 vernal pools supporting San Diego button-celery (1.4%) will potentially be directly impacted within the J complex series, located at the J 13 within the NDU 1&2 site (two occupied pools impacted) and South Otay J13 South complex (seven occupied pools impacted), and J35 complex within the Brown Field site (one occupied pool impacted). The population of San Diego button-celery in the J13 complex series was historically recognized as a single population (Bauder 1986). Mitigation for any direct impacts to San Diego button-celery, and must also include the salvage of seed or plants to preserve the population genetics. As described above, the VPHCP includes a requirement that the impacted populations of San Diego button-celery at complexes J13 and J35 population in Otay Mesa be successfully relocated prior to any impact to retain genetics, be consistent with the existing MSCP anticipated loss of this species (2%), and effectively achieve a no-net loss of this species on Otay Mesa.
- *California Orcutt grass*: No direct impacts to any of the 58 vernal pools occupied with California Orcutt grass that occur within the VPHCP Plan Area.
- *Riverside fairy shrimp*: No direct impacts to any of the 131 vernal pools occupied with Riverside fairy shrimp that occur within the VPHCP Plan Area.
- *San Diego fairy shrimp*: A maximum of 55 vernal pools that support San Diego fairy shrimp will potentially be directly impacted. Mitigation is required for any direct impacts to San Diego fairy shrimp. Where appropriate, the salvage of shrimp cysts may also be required to conserve the potentially unique genetics of impacted populations.

As described in Section 3.3.3 (Covered Projects and Covered Activities), the VPHCP includes a Mitigation Framework that requires avoidance, minimization, and mitigation for impacts to the seven covered species resulting from covered projects and covered activities. Where complexes occupied by covered species are not conserved under the VPHCP, or where the covered species

population within a complex is not conserved, compensatory mitigation would be required as part of the Mitigation Framework. To conserve the existing population at impacted occurrences, salvage of unique genetic material and in-kind restoration would be required as part of the VPHCP as follows:

- *Spreading Navarretia:* As part of the VPHCP, mitigation is required for direct impact to the one pool at the NDU 1&2 complex that supports spreading navarretia, including salvage of potentially impacted spreading navarretia individuals to preserve the population genetics. A restoration plan consistent with the Mitigation Framework that is a part of the Project, which includes restoring vernal pools with the salvaged spreading navarretia (i.e., in-kind restoration), would be required to mitigate for the one impacted pool that supports spreading navarretia.
- San Diego Button-Celery: As part of the VPHCP, to prevent the loss of the unique genetics of the San Diego button-celery populations in Otay Mesa within the J13 and J35 complexes, and to be consistent with the existing MSCP anticipated loss of this species (2%), mitigation for impacted pools would occur consistent with the Mitigation Framework requirements that are part of the Project, including salvage of impacted San Diego button-celery individuals and in-kind restoration (under a Wildlife Agency-approved restoration plan). The lands added to the MHPA under the VPHCP are included to accommodate restoration, establishment, and conservation of new populations of San Diego button-celery within J13.

3. Preserve Design and Function

As described above, the VPHCP would result in the addition of lands (275 acres) to the MPHA over existing conditions. Adding this land to the MHPA would improve the function of the City's existing NCCP (MSCP) preserve by now including conserved vernal pool areas to the MSCP preserve design, providing lands that are suitable for vernal pool restoration (such as the mesa areas on Otay Mesa) into the Preserve design, and protecting these conserved and potentially restorable areas with long-term management and monitoring guided by the VPHCP for vernal pool habitat and species and the City's existing MSCP for other habitat and species. For lands that are currently included in the City's MHPA, the management and monitoring requirements in the VPHCP for vernal pool habitat and species for lands currently in the MHPA and for the 275 acres to be added to the MHPA would enhance the biological value of the overall MHPA by creating a more cohesive vernal pool preserve, minimizing potential fragmentation of vernal pool habitat and providing better connections to increase genetic flow of organisms. This larger vernal pool-inclusive MHPA and management

and monitoring would be based on current science and information, including updated location and species distribution information and an adaptive management and monitoring program supported by a secured funding source.

If vernal pool restoration and/or enhancement is required by a covered project as compensatory mitigation to offset impacts to lower quality resources, it would be guided by the Mitigation Framework (See Section 5.3 of the VPHCP), which includes a requirement that the project proponent posts a performance bond or letter of credit with the City for grading, planting, irrigation, and 5 years of maintenance and monitoring of vernal pool mitigation (including a 20% contingency to be added to the total costs). At the end of the 5-year restoration/enhancement period, the mitigation site must be at a Level 1 status. The bond or letter of credit is to guarantee the successful implementation of the mitigation construction, maintenance and monitoring. As described in Section 8.2 (MHPA Preserve Assembly) of the VPHCP, project proponents will be required to fund permanent management and monitoring of conserved lands consistent with Chapter 7 (Management, Monitoring, and Reporting) of the VPHCP and the City's Draft VPMMP (Appendix D of the VPHCP) that will ensure that the site is maintained in Level 1 status. In addition, all lands conserved as part of the development entitlement process would be dedicated in fee to the City or placed within a Covenant of Easement with the Wildlife Agencies named as third-party beneficiaries. As described in Section 8.2.2 (Implementation within Existing Conserved Lands) of the VPHCP, the City will continue to manage their lands consistent with the standards and requirements of the MSCP SAP. In addition, for the vernal pool complexes within the MHPA, the City will provide management, monitoring, and reporting consistent with Chapter 7 of the VPHCP and will implement the City's VPMMP (Appendix D of the VPHCP). Existing resource/land management plans will be updated to reflect the vernal pool management and monitoring requirements per the schedule included in the VPMMP.

In summary, the VPHCP would result in no overall change or increase in conservation levels for the seven vernal pool species currently covered under the state's permit. Where no change occurs, improved management with secured /committed funding would be provided by the City as part of the VPHCP would be provided by the City (See Chapter 7, Management, Monitoring, and Reporting and Chapter 10, <u>VPHCP FundingPreserve Management and Funding Mechanisms, of the VPHCP</u>). Compared to the existing MSCP, this would be an improvement in that funding would be specifically allocated and tied to vernal pools and the subject seven species. Moreover, the VPHCP would result in a net benefit even if there would be no increase in conservation levels or acreage due to better, improved monitoring and management with dedicated/secured funding.

4. Take/Conservation from Management and Monitoring

The management and monitoring program in the VPHCP would replace the Vernal Pool Framework Management Plan and subsequent policies/regulations that the City has been operating under since the MSCP was approved in 1997 (See Section 3.1.1 of this EIR/EIS). As described in Chapter 7.0 of the VPHCP, the VPHCP management and monitoring program is based on updated/current location information, adaptive management principles, and is secured by a dedicated funding source. In addition, because the VPHCP is based on a more current inventory and knowledge of vernal pools compared to when the MSCP was approved in 1997, it is not expected that implementation of the VPHCP would result in greater impacts to vernal pool habitat and species from management and monitoring activities than the City's existing NCCP (MSCP) permit.

Overall, the VPHCP would result in no change or an increase in conservation levels for vernal pool habitat and the seven vernal pool species currently covered under the state's NCCP permit.

Where no change occurs, improved management and monitoring (See Chapter 7, Management, Monitoring, and Reporting of the VPHCP) with secured funding (See Chapter 10, <u>VPHCP</u> <u>FundingPreserve Management and Funding Mechanisms of the VPHCP</u>) would be provided by the City. The VPHCP's funding program is considered to be an improvement compared to the existing MSCP, in that resources would be specifically dedicated for management and monitoring of vernal pool habitat and species and would complement existing MSCP requirements for other non-vernal pool species [See VPHCP Section 10.24, Total Amount RequiredVPHCP Forecasted Costs, and Table 10-3, Total One-Time and Annual Ongoing Costs (2014 dollars) for Vernal Pool Complexes within the VPHCP-VPMMP Implementation Costs (\$2014) for Life of the Project (31 Years); Total One-Time Costs and Annual Ongoing Costs] of the VPHCP.

In conclusion, the VPHCP would result in a net benefit to the existing MSCP for vernal pool habitat and species by expanding the MHPA, providing an increase of 273 pools (totaling 2.8 acres of basin area) over existing conditions by increasing the conservation levels for two of the vernal pool species (San Diego mesa mint and Riverside fairy shrimp); adding 275 acres to the City's existing MHPA to improve preserve design and function; providing improved monitoring and adaptive management measures for vernal pools based on improved science; and, including dedicated/secured funding for VPHCP implementation. In addition, specific requirements for the J13 and J35 San Diego button-celery populations in Otay Mesa and spreading navarretia at the NDU 1&2 complex to ensure no net loss of acreage and maintenance of current population size and genetics have been included as a requirement of the VPHCP. As also discussed in Section 5.1, Land Use, the VPHCP is consistent and compatible with the City's MSCP SAP and also

provides additional conservation by adding lands to the MHPA and funding a more specific and comprehensive management and monitoring plan. Approval of the Project or alternatives would continue to ensure project consistency with the MSCP SAP as future requests for development are proposed. All future development projects would be subject to CEQA review and would be required to comply with the regulations, policies, and standards outlined in the MSCP SAP, LDC, and the City's Biology Guidelines. Future projects would also be required to comply with the VPHCP, VPHCP Mitigation Framework, VPMMP, funding requirements, and MSCP Implementing Agreement. Where complexes occupied by covered species are not conserved under the VPHCP, or where the covered species population within a complex is not conserved, compensatory mitigation would be required as part of the Mitigation Framework.

For these reasons, the Project would not result in a substantial adverse effect related to a conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP, either within the MSCP SAP area or in the surrounding region, and impacts to the City's existing MSCP and related state NCCP (MSCP) authorizations for vernal pool species would be less than significant.

Expanded Conservation Alternative

Under the Expanded Conservation Alternative, the VPHCP document would be essentially the same, with the exception of the additional MHPA lands that would conserve additional vernal pool resources. Due to the similarities, the analysis above for the Project applies. As with the Project, the Expanded Conservation Alternative would be consistent and compatible with the City's MSCP SAP.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP, either within the MSCP plan area or in the surrounding region, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the VPHCP would not be implemented so the MSCP SAP would remain the primary city-wide conservation plan.

For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to a conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP, either within the MSCP plan area or in the surrounding region, and the impact would be less than significant.

ISSUE 6: Would the project result in the introduction of a land use within an area adjacent to the MHPA that would result in adverse edge effects?

Project 1997

The VPHCP would be a city-wide comprehensive plan for the preservation, restoration, management, and monitoring of vernal pool resources, including the seven covered species. The Project would add additional sensitive vernal pool resource land to the MHPA. The VPHCP would not introduce new or additional land uses adjacent to the MHPA beyond those already contemplated under the City's existing MSCP SAP. The VPHCP would increase conserved areas within the MHPA.

Development projects within or adjacent to the MHPA would be required to demonstrate consistency with existing land use plans and policies, including the existing MSCP SAP, through a project-level environmental review. This interface between development and native habitat, including vernal pools, may cause indirect impacts associated with drainage, toxics, lighting, noise, barriers/access, invasives, brush management, and grading/land development.

The VPHCP would require inclusion of the following modifications to the MSCP Land Use Adjacency Guidelines for projects within and adjacent to the areas preserved under the VPHCP:

- Drainage: All new areas of development within and adjacent to the MHPA must not drain into the Preserve. All development 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 or ecosystem processes within the MHPA. This can be accomplished through a variety of methods, including natural detention basins, grass swales, or mechanical trapping devices.
- Toxics: Land uses, such as recreational and agricultural, that use chemicals or generate by-products such as manure, that are potentially toxic or would impact wildlife, sensitive species, habitats, or water quality, need to incorporate measures to reduce impacts caused by the application or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with noninvasive grasses or wetland-type vegetation to filter out toxic materials.
- Herbicide: All herbicide and pesticide use shall be under the direction of a licensed pest control advisor and shall be applied by a licensed applicator, under the supervision of a vernal pool restoration specialist. Glyphosate-based herbicides, such as RoundUp or Aquamaster, shall be applied on all areas that have been dethatched. Herbicide shall only
be applied when wind speed is less than 5 miles per hour, and spray nozzles shall be of a design to maximize the size of droplets, to reduce the potential for drift of herbicide to nontarget plants. A 10-foot buffer shall be maintained between concentrations of any sensitive plant species. Application of herbicide shall not occur if rain is projected within 24 hours of the scheduled application. When vernal pools are ponding or close to saturation, only hand herbicide application (i.e., saturated glove technique) shall be used in and around the edges of pools by specially trained herbicide applicators under the direct supervision of the vernal pool restoration specialist. When vernal pools are not ponding or close to saturation, herbicide may be sprayed but applicators must stay at least 3 feet from the edge of the pools.

- Barriers: New development adjacent to the MHPA would be required to provide barriers along the Preserve boundaries to direct public access to appropriate locations.
- Invasives: No invasive, nonnative plant species shall be introduced into the MHPA.
- Brush Management: Brush Management Zone 1 activities would be considered an impact and such activities would be limited to a project's development footprint. Brush Management Zone 2 activities would be allowed within the MHPA, <u>but not within the vernal pool basins.</u>
- Grading/Land Development: Manufactured slopes associated with land development shall be included within the development footprint for projects within and adjacent to the MHPA.

Implementation of the MHPA Land Use Adjacency Guidelines would be required to address potential indirect impacts on land development within or adjacent to the additional lands added to the MHPA via the VPHCP. No new mitigation measures and/or permit conditions for indirect impacts would be required with adoption of the VPHCP. If mitigation occurs within the hardline preserve areas, no additional buffer beyond the hardline would be required.

For these reasons, the Project would not result in a substantial adverse effect related to the introduction of a land use within an area adjacent to the MHPA that would result in adverse edge effects, and the impact would be less than significant.

Expanded Conservation Alternative

Under the Expanded Conservation Alternative, implementation of the VPHCP document would be essentially the same, with the exception of the additional lands that would be added to the MHPA to conserve additional vernal pool resources. Due to the similarities, the analysis above for the Project applies. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to the introduction of a land use within an area adjacent to the MHPA that would result in adverse edge effects, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the MHPA would remain the same and no additional land uses would be introduced beyond those already contemplated under the City's existing MSCP SAP. Due to the similarities, the analysis above for the Project applies. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to the introduction of a land use within an area adjacent to the MHPA that would result in adverse edge effects, and the impact would be less than significant.

ISSUE 7: Would the project conflict with any local policies or ordinances protecting biological resources?

Project 1997

The purpose of the ESL Regulations is to protect and preserve environmentally sensitive lands and the viability of the species supported by those lands. The regulations are intended to ensure that development occurs in a manner that protects the overall quality of the resources and the natural and topographic character of the area. See Section 5.1, Land Use, of this EIR/EIS for an expanded discussion on the City's ESL Regulations and LDM Biology Guidelines.

The Project includes an amendment to the City's ESL Regulations and the LDM Biology Guidelines to include the VPHCP and to add specific direction on vernal pool mitigation, such as directing mitigation to occur within the MHPA, which would provide clarification and consistency within the documents and would not conflict with local policies or ordinances protecting biological resources. The amended ESL Regulations and LDM Biology Guidelines are included as Appendix E of the VPHCP.

In this case, the Project is the biologically superior option because it would conserve additional significant vernal pool resources and would include the adoption of the VPMMP and associated necessary funding. In addition, the VPHCP would establish a cohesive vernal pool Preserve that is managed and monitored programmatically and comprehensively, maintaining the genetic integrity of key populations. The VPHCP would conserve interconnected, high-quality vernal pool habitat city-wide, rather than a fragmented, "postage stamp" preserve system that could result from addressing vernal pool impacts on a project-by-project basis. For these reasons, the

Project would be considered biologically superior per the ESL Regulations and impacts to lowquality wetland resources would be allowable.

The VPHCP would be consistent with the purpose of the ESL Regulations to protect and preserve environmentally sensitive lands and the viability of the species.

For these reasons, the Project would not result in a substantial adverse effect related to a conflict with local policies or ordinances protecting biological resources, and the impact would be less than significant.

As part of the Project, the MHPA boundary would be adjusted in select locations within Montgomery-Gibbs Executive Airport, as described in Section 3.4 and shown in Figure 3-1. The purpose of the BLA would be to adjust the MHPA to include locations of vernal pools with higher habitat value and additional pools that support endangered vernal pool species. While certain areas with vernal pool resources would be removed from the MHPA as part of the BLA, the BLA would result in an overall net gain of higher-quality vernal pool acreage, number of pools occupied with San Diego fairy shrimp, and improved biological value. In addition, a wildlife hazard assessment study would be conducted and approved by the City and FAA to determine where, if any, mitigation could occur within the boundaries of Montgomery-Gibbs Field. Additionally, any project or covered airport activities on Montgomery-Gibbs Executive Airport or Brown Field Municipal Airport would be subject to a Minor Amendment Process, as described in Section 3.3.4.

Adjustments to the MHPA boundaries can be made without amending the MSCP or SAP if the adjustment would result in the same or higher biological value of the Preserve. The determination of the biological value of the proposed boundary line change is to be made by the City in concurrence with the Wildlife Agencies. Section 5.4.2 of the MSCP Plan provides six factors for the comparison of biological value. Those factors are listed below with discussion of how the Project BLA would result in biologically increased value.

• Effects on significantly and sufficiently conserved habitat (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly or sufficiently conserved habitats)

The BLA would result in removal of five vernal pools from the MHPA (Table 3-4). However, the BLA would add vernal pools and surrounding habitat into the MHPA that have increased occupation by sensitive vernal pool resources and a higher habitat value. The net result of the BLA would be an additional 13 acres of habitat and 10 vernal pools occupied by San Diego fairy shrimp added to the MHPA (Table 3-4). The acreage proposed for addition in the MHPA through the BLA would include vernal pools with

better hydrologic function and provide increased connectivity and better configuration of the vernal pool habitat located within the MHPA. While some lower quality vernal pools would be excluded from the MHPA, the addition of higher-quality pools would result in a net increase of high-quality conserved habitat and resources and allow for improved ability to restore, enhance, and maintain this high-quality vernal pool habitat and effects would be beneficial. Compensatory mitigation for impacts to the five vernal pools excluded from the MHPA would be required as part of the VPHCP Mitigation Framework. Mitigation in the form of restoration and/or enhancement would occur within the reconfigured MHPA Preserve.

• Effects to covered species (i.e., the exchange maintains or increases the conservation of covered species)

The proposed BLA would add into the MHPA a total of 10 vernal pools occupied with San Diego fairy shrimp as shown in Table 3-4. While one vernal pool occupied with San Diego mesa mint would be excluded from the MHPA, there would be a net gain of 13 acres of habitat suitable for restoration and enhancement of vernal pools, including establishment of additional pools with San Diego mesa mint. The overall net gain of conservation of pools occupied with covered species would be a beneficial effect of the BLA. Further, the improved configuration of the adjusted MHPA provides a more cohesive Preserve design at Montgomery-Gibbs Executive Airport. Compensatory mitigation for impacts to the five vernal pools excluded from the MHPA, including one pool occupied with San Diego mesa mint, would be required as part of the VPHCP Mitigation Framework. Mitigation in the form of restoration and/or enhancement would occur within the reconfigured MHPA Preserve.

• Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves habitat linkages or wildlife corridor).

The MHPA BLA would not affect habitat linkages or wildlife corridors. In fact, the acreage proposed for addition in the MHPA through the BLA would include vernal pools with better hydrologic function and providing increased connectivity and better configuration of the vernal pool habitat located within the MHPA. The vernal pool acreage that would be conserved within the MHPA boundaries as part of the BLA would be subject to restoration, enhancement, and maintenance, but these activities would not modify or interfere with wildlife movement throughout the local area.

• Effects on preserve configuration and management (i.e., the exchange results in similar or improvement management efficiency and/or protection for biological resources).

The increased acreage that would be included within the MHPA as a result of the BLA would be subject to the VPHCP VPMMP. The preservation, maintenance, management, and enhancement or restoration of vernal pools, as prescribed under the VPHCP, are designed to restore, enhance, and maintain vernal basins to a more natural state, thus benefiting sensitive vernal pool habitat and associated covered species by improving hydrological and ecological function. This would provide an overall net benefit to the City's vernal pool resources.

• Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the Preserve)

The increased acreage that would be included within the MHPA as a result of the BLA includes a net increase of pools occupied with sensitive vernal pool species (i.e., San Diego fairy shrimp) and their conservation would aid in maintaining species diversity of vernal pool resources in the region. The increased acreage would also be subject to the VPHCP Management and Monitoring Program, which would work to improve biological function and quality of the vernal pools that could lead to an increase in native flora and fauna diversity. Thus, conditions affecting species diversity would be maintained and improved by the BLA.

• Effects to species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either federal or state Endangered Species Acts)

The inclusion of selected high-quality vernal pool resources in exchange for the exclusion of lower-quality acreage in the MHPA would not result in adverse effects to non-covered species in the area. As described throughout this section, impacts to other species are not anticipated and would not decrease the likelihood of a non-covered species' survival. The improved habitat connectivity would provide a net benefit to the overall ecosystem, including non-covered species.

Based on the analysis of the six factors for the comparison of biological value of the land that would be exchanged as part of the BLA, it is concluded that the adjustment would result in a higher biological value of the Preserve. Thus, there is no requirement to amend the MSCP or SAP and the BLA would not conflict with the regulations and requirements of the MSCP, SAP, MSCP Implementing Agreement, or MHPA.

Expanded Conservation Alternative

Under the Expanded Conservation Alternative, the VPHCP document would be essentially the same as under the Project, with the exception of the additional MHPA lands that would conserve additional vernal pool resources. Due to the similarities, the analysis above for the Project applies. The Expanded Conservation Alternative would be consistent with the purpose of the ESL Regulations to protect and preserve environmentally sensitive lands and the viability of the species supported by those lands.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a conflict with local policies or ordinances protecting biological resources, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would not require any amendments, but future projects would be required to demonstrate compliance with the City's ESL Regulations and LDM Biology Guidelines. These projects would also require take authorization through an individual Section 7 or Section 10(a) permit. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to a conflict with local policies or ordinances protecting biological resources, and the impact would be less than significant.

ISSUE 8: Would the project result in an introduction of invasive species of plants into a natural open space?

Project

Implementation of the VPHCP includes adoption of the VPMMP, which requires control of invasive plants within the vernal pool complexes managed within the Plan Area. Therefore, implementation of the VPHCP would help prevent the spread of invasive plant species within the MHPA through strict compliance with, and implementation of, the MHPA Land Use Adjacency Guidelines, which requires that no invasive, nonnative plant species shall be introduced into the MHPA. With implementation of the MHPA Land Use Adjacency Guidelines, introduction of invasive species or plants into or adjacent to the MHPA would be precluded.

For these reasons, the Project would not result in a substantial adverse effect related to the introduction of invasive species of plants into a natural open space, and the impact would be less than significant.

Expanded Conservation Alternative

As with the Project, introduction of invasive species or plants into or adjacent to the MHPA would be precluded under the Expanded Conservation Alternative due to the requirements of the MHPA Land Use Adjacency Guidelines and invasive species control required under implementation of the VPMMP. The Expanded Conservation Alternative would conserve more area than the Project, and thus would have a beneficial effect on control of invasive species due to management and monitoring requirements for the additional preserved land.

Due to the similarities, the analysis above for the Project applies. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to the introduction of invasive species of plants into a natural open space, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, no new vernal pool lands would be added to the MHPA and existing conserved lands would continue to be managed consistent with the MSCP. Any new development would be required to implement the MHPA Land Use Adjacency Guidelines. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to the introduction of invasive species of plants into a natural open space, and the impact would be less than significant.

ISSUE 9: Would the project result in a biological condition, policy, or natural resource management plan that cannot persist into the long term due to pressures caused by anticipated climate change?

Project

The VPHCP acknowledges that climate change is a scenario that could affect how vernal pools and the associated covered species persist over time. The VPHCP conservation measures and management directives take into account pressures anticipated by climate change; accordingly, the VPHCP incudes preventative measures and planned responses to address future conditions that may result from climate change. This approach is referred to as robust decision making and focuses on managing for a range of future conditions. A robust decision-making approach is more useful when considering climate change as it may result in a range of various conditions, rather than an adaptive management approach, which tends to focus on meeting specific conditions that can be difficult to approach or may not happen (Stein et al. 2014).The VPHCP anticipates that the following pressures are the mostly likely to affect vernal pools and covered species resulting from climate change:

- Drought
- Increased fire (frequency and/or area burned)
- Weed invasion

Drought is a cyclical weather phenomenon that is beyond human control. Drought is not uncommon in southern California, and it is a phenomenon to which vernal pool habitats and vernal pool species have, of necessity, adapted over time through development of seed and cyst banks.

Indirect impacts to covered species from drought may include a reduction in basin ponding time and/or frequency, thereby reducing species viability and reproduction potential. The potential for drought to impact vernal pool plant and crustacean species increases with the length of a drought.

To address drought, in coordination with the Wildlife Agencies, conservation of existing species populations will be implemented through collection of seed and shrimp cysts for storage and possible future reintroduction at a time deemed appropriate by the City and the Wildlife Agencies.

Climate change could also influence fire frequency within the VPHCP Plan Area. Fire occurrence in California has been correlated with drought, moisture availability, and biomass (fuel) accumulation (Lenihan et al. 2003). Although climate change models predict different climate scenarios, many predict a drier and warmer climate, which would result in more frequent or longer drought periods. An increase in drought frequency or longevity has the potential to increase fire frequency. For purposes of addressing changed circumstances in the VPHCP, it is assumed that fire occurrence frequency and area burned will increase by 25% by 2050.

Drought induced by climate change may also indirectly result in increased weed invasion in native habitats, including vernal pools and surrounding watersheds. Weed invasion is likely following a fire event. A reduction in native plant populations as a result of drought could lead to invasion of drought-tolerant invasive plant species.

Conservation measures in the VPHCP are not sufficient and comprehensive enough on their own to prevent the effects of climate change on vernal pool resources. However, certain risks associated with climate change can be minimized with preventative measures, which are summarized below.

The City's LDC has adopted Fire Safety and Brush Management Guidelines to reduce the risk of fire and create defensible space between structures and potential fuel sources (e.g., native vegetation). This defensible space slows down the fire, giving fire safety personnel time to stage and protect structures. In addition, during major wildfires, fuel breaks and backfires are often used to proactively fight fires. Preventative measures to reduce the likelihood of and harm from a single fire in the Preserve are included in the adaptive management provisions in the VPMMP. In addition, such measures would be more specifically identified in the site-specific Resource Management Plans (that would be developed for each vernal pool site under the VPMMP framework), which would include a comprehensive strategy for reducing risks of negative effects wildfire, including preventative actions and planning for fire suppression activities in advance.

The VPHCP contains extensive preventative actions to monitor and manage exotic species both within the vernal pool basin areas and in the surrounding uplands. In addition, as site-specific Resource Management Plans are developed, they would identify specific actions to monitor, reduce, and/or eliminate such species. Invasive species would be monitored annually along with the conditions of the complex and the status of the covered plant species. Methods to promote native species cover (thereby reducing potential for invasion of nonnatives) include weed control, seed bank enhancement and/or restoration, and installation of container plants.

Because the VPHCP adequately identifies the threats and pressures on vernal pool resources associated with anticipated climate change and provides minimization and preventative measures to alleviate the risks to vernal pool resources to the extent feasible (as summarized above), the Project would not result in a substantial adverse effect related to a biological condition, policy, or natural resource management plan that cannot persist into the long term due to pressures caused by anticipated climate change. The impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative would include the same minimization and preventative measures as the Project to address potential risks to vernal pool resources resulting from anticipated climate change. Due to the similarities, the analysis above for the Project applies. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a biological condition, policy, or natural resource management plan that cannot persist into the long term due to pressures caused by anticipated climate change. The impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation /No Project Alternative, no measures would be implemented to address potential risks to vernal pool resources associated with climate change. It is assumed that

risks to vernal pool resources would potentially be addressed on a project-by-project basis, as applicable, as part of the future development review process. Therefore, the Existing Conservation /No Project Alternative would not result in a substantial adverse effect related to a biological condition, policy, or natural resource management plan that cannot persist into the long term due to pressures caused by anticipated climate change. The impact would be less than significant.

5.2.5 <u>Mitigation Measures</u>

Project 1997

The VPHCP includes covered activities and covered projects (see Chapter 3 of this EIR/EIS) that would be allowed in accordance with the Section 10(a) permit issued as part of the Project. The Project's Mitigation Framework includes avoidance and minimization measures that would be implemented, as applicable, under the VPHCP. Any impacts to vernal pool resources associated with the covered activities and covered projects, including incidental take of listed species, would be mitigated in accordance with the VPHCP Mitigation Framework compensatory mitigation requirements.

After implementation of the VPHCP, including the required avoidance, minimization, and compensatory mitigation measures in the Mitigation Framework, no significant adverse impacts to biological resources are anticipated and therefore no mitigation measures are required.

Expanded Conservation Alternative

As with the Project, no significant adverse impacts to biological resources have been identified under the Expanded Conservation Alternative and no mitigation measures are required.

Existing Conservation /No Project Alternative

As with the Project, no significant adverse impacts to biological resources have been identified under the Existing Conservation/No Project Alternative and no mitigation measures are required.

5.2.6 Level of Impact after Mitigation

Project 1997

No significant adverse biological impacts would result from implementation of the VPHCP.

Expanded Conservation Alternative

No significant adverse biological impacts would result from implementation of the Expanded Conservation Alternative.

Existing Conservation/No Project Alternative

No significant adverse biological impacts would result from implementation of the Existing Conservation/No Project Alternative.

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5.3 AIR QUALITY

This section describes existing air quality conditions in the Project area. This section also summarizes applicable air quality regulations, and analyzes potential short-term construction and long-term operational air quality impacts of the Project and alternatives. Model calculations are included in Appendix C.

5.3.1 Affected Environment

Air quality is defined by the concentration of pollutants in relation to their impact on human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, and sunlight. Therefore, ambient air quality conditions within the local air basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

Climate, topography, and meteorology influence regional and local ambient air quality. Southern California is characterized as a semiarid climate, although it contains three distinct zones of rainfall that coincide with the coast, mountain, and desert. The Project is located in San Diego in the south coastal portion of San Diego County, and within the San Diego Air Basin (SDAB). The SDAB is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountain ranges to the east. The topography in the SDAB region varies greatly, from beaches on the west, to mountains and then desert to the east.

The climate of the SDAB is characterized by warm, dry summers and mild winters. One of the main determinants of its climatology is a semipermanent high-pressure area in the eastern Pacific Ocean. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low-pressure storms are brought into the region, causing widespread precipitation. During fall, the region often experiences dry, warm easterly winds, locally referred to as Santa Ana winds, which raise temperatures and lower humidity, often to less than 20%.

A dominant characteristic of spring and summer is night and early morning cloudiness, locally known as the marine layer. Low clouds form regularly, frequently extending inland over the coastal foothills and valleys. These clouds usually dissipate during the morning, and afternoons are generally clear.

A common atmospheric condition known as a temperature inversion affects air quality in the SDAB. During an inversion, air temperatures get warmer rather than cooler with increasing height. Inversion layers are important for local air quality, because they inhibit the dispersion of pollutants and result in a temporary degradation of air quality. The pollution potential of an area is largely dependent on a combination of winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low-level inversions produces the greatest concentration of air pollutants. On days without inversions, or on days of winds averaging over 15 miles per hour, the atmospheric pollution potential is greatly reduced.

Criteria Pollutants

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern both on a nation-wide and statewide level: ozone; carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); lead; and particulate matter (PM), which is subdivided into two classes based on particle size: PM equal to or less than 10 micrometers in diameter (PM₁₀) and PM equal to or less than 2.5 micrometers in diameter (PM_{2.5}). Because the air quality standards for these air pollutants are regulated using human health and environmentally based criteria, they are commonly referred to as "criteria air pollutants."

Ozone

Ozone is the principal component of smog and is formed in the atmosphere through a series of reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_X) in the presence of sunlight. ROG and NO_X are called precursors of ozone. NO_X includes various combinations of nitrogen and oxygen, including nitric oxide (NO), NO₂, and others. Ozone is a principal cause of lung and eye irritation in the urban environment. Significant ozone concentrations are usually produced only in the summer, when atmospheric inversions are greatest and temperatures are high. ROG and NO_X emissions are both considered critical in ozone formation.

Carbon Monoxide

CO is a colorless and odorless gas that, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. Relatively high concentrations are typically found near crowded intersections and along heavily used roadways carrying slow-moving traffic. Even under most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet)

of heavily traveled roadways. Vehicle traffic emissions can cause localized CO impacts, and severe vehicle congestion at major signalized intersections can generate elevated CO levels, called "hot spots," which can be hazardous to human receptors adjacent to the intersections.

Nitrogen Dioxide

 NO_2 is a product of combustion and is generated in vehicles and in stationary sources, such as power plants and boilers. It is also formed when ozone reacts with NO in the atmosphere. As noted above, NO_2 is part of the NO_X family and is a principal contributor to ozone and smog generation.

Sulfur Dioxide

 SO_2 is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. SO_2 is also a product of diesel engine combustion. SO_2 in the atmosphere contributes to the formation of acid rain.

Lead

Lead is a highly toxic metal that may cause a range of human health effects. Previously, the lead used in gasoline anti-knock additives represented a major source of lead emissions to the atmosphere. EPA began working to reduce lead emissions soon after its inception, issuing the first reduction standards in 1973. Lead emissions have significantly decreased due to the near elimination of leaded gasoline use.

Particulate Matter

PM is a complex mixture of extremely small particles and liquid droplets. PM is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Natural sources of PM include windblown dust and ocean spray. The size of PM is directly linked to the potential for causing health problems. EPA is concerned about particles that are 10 micrometers in diameter or smaller because these particles generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Health studies have shown a significant association between exposure to PM and premature death. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems, such as heart attacks and irregular heartbeat (EPA 2007). Individuals particularly sensitive to fine particle exposure include older adults,

people with heart and lung disease, and children. As previously discussed, EPA groups PM into two categories, which are described below.

<u> $PM_{2.5.}$ </u> Fine particles, such as those found in smoke and haze, are $PM_{2.5.}$ Sources of fine particles include all types of combustion activities (motor vehicles, power plants, wood burning, etc.) and certain industrial processes. $PM_{2.5}$ is also formed through reactions of gases, such as SO₂ and NO_x, in the atmosphere. $PM_{2.5.}$ is the major cause of reduced visibility (haze) in California.

<u> PM_{10} </u> PM₁₀ includes both fine and coarse dust particles; the fine particles are PM_{2.5}. Coarse particles, such as those found near roadways and dusty industries, are larger than 2.5 micrometers and smaller than 10 micrometers in diameter. Sources of coarse particles include crushing or grinding operations and dust from paved or unpaved roads. Control of PM₁₀ is primarily achieved through the control of dust at construction and industrial sites, the cleaning of paved roads, and the wetting or paving of frequently used unpaved roads.

Toxic Air Contaminants

In addition to criteria pollutants, both federal and state air quality regulations also focus on toxic air contaminants (TACs), also known as hazardous air pollutants. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in ambient air; however, their high toxicity may pose a threat to public health even at low concentrations. Most TACs originate from human-made sources, including on-road mobile sources, off-road mobile sources (e.g., construction equipment), area sources (e.g., dry cleaners), and stationary sources (e.g., factories and refineries).

TACs can be separated into carcinogens and noncarcinogens based on the nature of the effects associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Any exposure to a carcinogen poses some risk of contracting cancer. Noncarcinogens differ in that a safe level of exposure is assumed below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as a TAC by ARB in 1998. Diesel engines tend to produce a much higher ratio of fine particulates than other types of internal combustion engines. The fine particles that make up diesel PM tend to penetrate deep into the lungs and the rough surfaces of these particles makes it easy for them to bind with other toxins within the exhaust, thus increasing the hazards of particle inhalation. Long-term exposure to diesel PM is known to lead to chronic, serious health problems, including

cardiovascular disease, cardiopulmonary disease, and lung cancer. The majority of the estimated local health risk from TACs is from diesel PM.

Ambient Air Quality Standards

Health-based air quality standards have been established for these criteria pollutants by EPA at the national level and by ARB at the state level. These standards were established to protect the public with a margin of safety from adverse health impacts due to exposure to air pollution. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. A brief description of each criteria air pollutant is provided below along with the most current monitoring station data and attainment designations for the Project study areas. Table 5.3-1 presents the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS).

Both EPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. An "attainment" designation for an area signifies that pollutant concentrations did not exceed the established standard. In contrast to attainment, a "nonattainment" designation indicates that a pollutant concentration has exceeded the established standard. Finally, an unclassified designation indicates that insufficient data exist to determine attainment or nonattainment. In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment.

The SDAB is an attainment area for the NAAQS for all criteria air pollutants except ozone, and meets the CAAQS for all criteria air pollutants except ozone, PM_{10} , and $PM_{2.5}$ (ARB 2015). The SDAB is currently classified as a state nonattainment area for ozone, PM_{10} , and $PM_{2.5}$ (ARB 2015).

5.3.2 <u>Regulatory Framework</u>

EPA, under the provisions of the Clean Air Act (CAA), requires each state with regions that have not attained the NAAQS to prepare a State Implementation Plan (SIP), detailing how these standards are to be met in each local area. The SIP is a legal agreement between each state and the federal government to commit resources to improving air quality. It serves as the template for conducting regional and project-level air quality analysis. The SIP is not a single document, but a compilation of new and previously submitted attainment plans, emissions reduction programs, district rules, state regulations, and federal controls.

		California Standards ^a	National Standards ^b		
Pollutant	Averaging Time	Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}	
Orana	1 hour	0.09 ppm (180 μg/m ³) –		Same as	
Ozone	8 hours	$0.070 \text{ ppm} (137 \text{µg/m}^3)$ $0.075 \text{ ppm} (147 \text{µg/m}^3)$		primary standard	
Respirable particulate	24 hours	50 μg/m ³	150 μg/m ³	Sama ag	
	Annual arithmetic	$20 \mu g/m^3$		Same as	
	mean	20 µg/m		primary standard	
Fine particulate matter (PM _{2.5}) ^f	24 hours	-	35 µg/m ³	Same as primary standard	
	Annual arithmetic mean	$12 \ \mu g/m^3$	$12 \ \mu g/m^3$	15 μg/m	
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None	
Carbon monoxide (CO)	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	none	
	8 hours (Lake Tahoe)	6 ppm (7 mg/m ³)	_	-	
Nitrogen dioxide (NO ₂) ^g	Annual arithmetic	$0.030 \text{ ppm} (57 \text{ µg/m}^3)$	$0.053 \text{ ppm} (100 \text{ µg/m}^3)$	Same as	
	mean	0.050 ppm (57 µg/m)	0.000 ppm (100 µg/m)	primary standard	
	1 hour	0.18 ppm (339 μg/m ³)	100 ppb (188 μg/m ³)	None	
	Annual Arithmetic	_	0.030 ppm	_	
	Mean		(for certain areas)"		
Sulfur dioxide $(SO_2)^h$	24 hours	$0.04 \text{ ppm} (105 \text{ µg/m}^3)$	0.14 ppm	-	
	0.1	FF (FB)	(for certain areas)"		
	3 hours				
	1 hour	0.25 ppm (655 μg/m ³)	75 ppb (196 μg/m ³)	-	
Lead ^{i,j}	30-day average	1.5 μg/m ³		—	
	Calendar quarter	_	1.5 μg/m ³		
			(for certain areas) ¹	Same as	
	Rolling 3-month	_	$0.15 \mu g/m^3$	primary standard	
	average				
Visibility-reducing particles ^k	8 hours	See footnote j			
Sulfates	24 hours	$25 \ \mu g/m^3$	No nationa	l standards	
Hydrogen sulfide	1 hour	$0.03 \text{ ppm} (42 \ \mu\text{g/m}^3)$			
Vinyl chloride ⁱ	24 hours	$0.01 \text{ ppm} (26 \mu \text{g/m}^3)$			

Table 5.3-1 National and California Ambient Air Quality Standards

Notes: $mg/m^3 = milligrams$ per cubic meter; ppb = parts per billion; ppm = parts per million; $\mu g/m^3 = micrograms$ per cubic meter

- ^a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility-reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ^b National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μ g/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standards.
- Concentration expressed first in the units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and reference pressure of 760 torr; (ppm) in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ^e National Secondary Standards: The levels of air quality necessary to protect
- ^f public welfare from any known or anticipated adverse effects of a pollutant. ^f On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

- ^g To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from 100 ppb to 0.100 ppm.
- ^h On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards are approved. To directly compare the 1-hour national standard to the California standard, the units can be converted to ppm. In the standard to the California standard.
- this case, the national standard of 75 ppb is identical of 0.075 ppm. ARB has identified lead and vinyl chloride as contaminants with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard $(1.5 \ \mu g/m^3$ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.
- ^k In 1989, ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and the "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: ARB 2013

General Conformity Rule

General conformity requirements were adopted by Congress as part of the CAA Amendments and were implemented by EPA regulations in the November 30, 1993, Federal Register (40 CFR Sections 6, 51, and 93: "Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule"). General conformity requires that all federal actions conform to the SIP as approved or promulgated by EPA, by either determining that the action is exempt from the General Conformity Rule requirements, or subject to a formal conformity determination.

The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine state or local efforts to achieve and maintain NAAQS. Before a federal action is taken, it must be evaluated for conformity with the SIP. All reasonably foreseeable emissions, both direct and indirect, predicted to result from the action are taken into consideration and must be identified with respect to location and quantity. Direct emissions occur at the same time and place as the action. Indirect emissions are reasonably foreseeable emissions that may occur later in time and/or are farther removed from the action; they are subject to conformity if the federal agency can practicably control them and maintain control through a continuing program responsibility.

The process to evaluate General Conformity for a proposed federal action involves an applicability analysis, conformity determination, and review. According to EPA guidance, the federal agency must apply the applicability requirements found at 40 CFR Section 93.153(b) to the federal action to evaluate whether, on a pollutant-by-pollutant basis, a determination of General Conformity is required. If the regulating federal agency determines that the General Conformity regulations do not apply to the federal action, no further analysis or documentation is required.

Analysis required by the General Conformity Rule focuses on the net increase in emissions compared to ongoing historical conditions. Existing SIPs are presumed to have accounted for routine, ongoing federal agency activities. Conformity analyses are further limited to those direct and indirect emissions over which the federal agency has responsibility and control. General Conformity analyses are not required to analyze emissions sources that are beyond the responsibility and control of the federal agency. Conformity determinations are not required to address emissions that are not reasonably foreseeable or reasonably quantifiable.

State Standards

ARB is the lead agency for developing the SIP in California. Local air districts and other agencies prepare Air Quality Attainment Plans or Air Quality Management Plans (AQMPs), and

submit them to ARB for review, approval, and incorporation into the applicable SIP. ARB also maintains air quality monitoring stations throughout the state in conjunction with local air districts. Data collected at these stations are used by ARB to classify air basins as being in attainment or nonattainment with respect to each pollutant and to monitor progress in attaining air quality standards.

The California CAA requires that each area exceeding the CAAQS for ozone, CO, SO₂, and NO₂ must develop a plan aimed at achieving those standards. The California Health and Safety Code Section 40914 requires air districts to design a plan that achieves an annual reduction in district-wide emissions of 5% or more, averaged every consecutive 3-year period. To satisfy this requirement, the local air districts have to develop and implement air pollution reduction measures, which are described in their AQMPs, and outline strategies for achieving the CAAQS for any criteria pollutants for which the region is classified as nonattainment.

ARB has established emission standards for vehicles sold in California and for various types of equipment. California gasoline specifications are governed by both state and federal agencies. During the past decade, federal and state agencies have imposed numerous requirements on the production and sale of gasoline in California. ARB has also adopted control measures for diesel PM and more stringent emissions standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators).

TACs in California are regulated primarily through the Tanner Air Toxics Act (Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act (Chapter 1252, Statutes of 1987). Assembly Bill (AB) 1807 sets forth a formal procedure for ARB to designate substances as TACs. Research, public participation, and scientific peer review must occur before ARB can designate a substance as a TAC. The Air Toxics Hot Spots Information and Assessment Act requires that TAC emissions from stationary sources be quantified and compiled into an inventory according to criteria and guidelines developed by ARB, and if directed to do so by the local air district, a health risk assessment (HRA) must be prepared to determine the potential health impacts of such emissions.

Local Standards

In San Diego County, the San Diego Air Pollution Control District (SDAPCD) is the agency responsible for the administration of federal and state air quality laws, regulations, and policies. Included in SDAPCD's tasks are monitoring of air pollution, preparation of the SIP for the SDAB, and promulgation of rules and regulations. The SIP includes strategies and tactics to be used to attain the federal ozone standard in the county. The SIP elements are taken from the Regional Air Quality Strategy (RAQS), the SDAPCD plan for attaining the state ozone standard,

which is more stringent than the federal ozone standard. The rules and regulations include procedures and requirements to control the emission of pollutants and to prevent adverse impacts.

SDAPCD rules relevant to the Project include:

- Regulation IV: Prohibitions; Rule 50: Visible Emissions. Prohibits the generation of particulate matter emissions that exceed the visible emissions threshold.
- Regulation IV: Prohibitions; Rule 51: Nuisance. Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.
- Regulation IV: Prohibitions; Rule 55: Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.

The Project is required to demonstrate compliance with the above rules by incorporating reduction measures into project specifications and field procedures.

5.3.3 <u>CEQA Thresholds of Significance</u>

The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating potential air quality impacts, which are based primarily on achieving regulatory compliance. A significant impact would occur if the Project would:

- 1. Conflict with or obstruct implementation of the applicable air quality plan;
- 2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- 4. Expose sensitive receptors to substantial pollutant concentrations;
- 5. Exceed 100 pounds per day of PM₁₀ dust; or
- 6. Create objectionable odors affecting a substantial number of people.

SDAPCD has not developed quantitative significance thresholds for CEQA projects. However, the City has established recommended thresholds of significance for regional pollutant emissions as shown in Table 5.3-2 and these were used to analyze the impacts of the Project.

 Table 5.3-2

 Regional Pollutant Emission Screening Level Thresholds of Significance

	ROG	NO _X	CO	SOx	PM_{10}	$PM_{2.5}^{1}$	Lead
Pounds per hour	_	25	100	25	_	_	_
Pounds per day	137	250	550	250	100	55	3.2
Tons per year	15	40	100	40	15	10	0.6

¹Threshold for PM_{2.5} from South Coast Air Quality Management District

ROG = reactive organic gases; NO_X = oxides of nitrogen; SO_X = sulfur oxides; CO = carbon monoxide; PM = particulate matter; PM₁₀ = PM equal to or less than 10 micrometers in diameter; PM_{2.5} = PM equal to or less than 2.5 micrometers in diameter - = No threshold proposed

Source: City of San Diego 2011a

General conformity *de minimis* thresholds are appropriate thresholds to be used for determining NEPA significance. The total annual emissions of attainment pollutants, as well as the emissions of nonattainment/maintenance pollutants (analyzed for General Conformity) from project maintenance and restoration activities, would be compared against the *de minimis* levels for the attainment status of these pollutants. The applicable *de minimis* thresholds for the Project emissions generated in the SDAB are shown in Table 5.3-3.

	De minimis Emission		
Pollutant	Threshold (tons/year)		
CO	100		
NO _X	100		
ROG	100		
SO _X	100		
PM_{10}	100		
PM _{2.5}	100		

 Table 5.3-3

 Applicable General Conformity/NEPA Significance Thresholds

CO = carbon monoxide; ROG = reactive organic gases; NO_X = oxides of nitrogen; SO_X = sulfur oxides; PM₁₀ = PM equal to or less than 10 micrometers in diameter; PM_{2.5} = PM equal to or less than 2.5 micrometers in diameter Source: 40 CFR Part 93

Project impact significance under CEQA and NEPA, respectively, was determined by comparing the daily emissions for the Project and each alternative to the City's significance thresholds identified above and the annual emissions to the General Conformity *de minimis* thresholds. Project alternatives with the potential to generate emissions exceeding the thresholds would have a significant impact or adverse effect on air quality. If the Project alternative's emissions exceed the significance criteria, mitigation measures are available, depending on the nature of the air quality impact.

5.3.4 <u>Environmental Consequences</u>

ISSUE 1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

Project

Air quality plans describe air pollution control strategies to be implemented by a city, county, or regional air district. The primary purpose of an air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the CAA and California CAA.

Air quality planning efforts are based on analysis and forecasts of air pollutant emissions throughout the entire region. The regional air quality plan for San Diego County is SDAPCD's RAQS, which is also the applicable portion of the SIP (SDAPCD 2009). The RAQS was developed pursuant to California CAA requirements and identifies feasible emissions control measures to provide expeditious progress toward attaining the state ozone standard in San Diego County.

Projects that are consistent with the assumptions used in development of the applicable air quality plan are considered to not conflict with or obstruct the attainment of the air quality levels identified in the plan. Emission forecasts rely on projections of vehicle miles traveled by the Metropolitan Planning Organizations (MPOs), such as SANDAG, and population, employment, and land use projections made by local jurisdictions during development of the area and general plans.

The Project would comply with all SDAPCD rules and regulations and would not develop a land use that would result in a net increase in long-term operational emissions. For these reasons, the Project would not result in a substantial adverse effect related to a conflict with or obstruction of implementation of the applicable air quality plan, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, the Expanded Conservation Alternative would comply with all SDAPCD rules and regulations and would not develop a land use that would result in a net increase in long-term operational emissions. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a conflict with or obstruction of implementation of the applicable air quality plan, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Since no increase in activities would occur, the Existing Conservation/No Project Alternative would be consistent with the assumptions used in development of the RAQS. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to a conflict with or obstruction of implementation of the applicable air quality plan, and the impact would be less than significant.

ISSUE 2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Project

Monitoring, maintenance, and restoration activities associated with implementation of the VPHCP could result in criteria pollutant emissions generated by sources such as off-road equipment and construction worker commutes. Annual monitoring results would determine the appropriate Management Level (e.g., Level 1, 2, or 3) for each vernal pool complex that is managed under the VPMMP. Each Management Level would result in specific required management actions (see Chapter 3 of this EIR/EIS for a summary and Chapter 7 of the VPHCP for more detail). Level 1 maintains existing habitat conditions and assumes that access patrol visits would occur annually, at a minimum, at each site, or more frequently (e.g., monthly, weekly) as deemed appropriate by the City and Wildlife Agencies. Level 2 stabilizes habitat conditions and includes all Level 1 activities, plus some additional enhancement activities such as topographic reconstruction; dethatching; focal vernal pool weed control; and seed collection, bulking, and redistribution. Level 3 restores habitat conditions and includes all Level 1 activities, such as pool restoration, topographic reconstruction, dethatching, focal vernal pool weed control, and seed reintroduction container plant production/installation.

It is not possible to accurately estimate the specific daily or annual activity that would occur with monitoring and restoration activities. However, for informational purposes only, this analysis provides a conservative estimate of criteria pollutant emissions associated with the additional acreage that would be conserved with the VPHCP. This conservative scenario assumes that management and monitoring would occur at all Level 1, 2, and 3 complexes simultaneously in a given year. In reality, activities at Level 2 and Level 3 complexes would only occur for a 3- or 5-year period, respectively, and would most likely not be performed within the same time frame (i.e., implementation priority would be based on availability of funding and resources). Once all

complexes reach a Level 1 status, construction equipment would generally not be utilized (unless a vernal pool complex becomes degraded over time and requires further enhancement or restoration). The only emissions associated with Level 1 activities would be from field vehicles used during monitoring and small equipment used for maintenance, such as a line trimmer (i.e., weed whacker).

Construction-related emissions associated with typical construction activities were modeled using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2. CalEEMod allows the user to enter project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. Vehicle fleet characteristics and data specific to San Diego County or specific to the Project were used in place of CalEEMod defaults, where available.

Daily activity was assumed to involve driving and small equipment used for monitoring of Level 1 complexes, as well as off-road equipment and construction workers performing enhancement and restoration activities at Level 2 and 3 locations. Given that exhaust emissions rates of the construction equipment fleet in California are expected to decrease over time as stricter standards take effect, construction emissions were estimated using the earliest calendar year when monitoring and restoration activities could occur (i.e., 2016) to generate conservative estimates. If construction were to occur in later years, advancements in engine technology, retrofits, and turnover in the equipment fleet would be anticipated to result in lower levels of emissions. Therefore, using the earliest year of construction provides the most conservative estimate of construction emissions.

As shown in Table 5.3-4, construction emissions for the Project would result in maximum daily emissions of approximately 0.33 pounds of ROG, 3 pounds of NO_X , 2 pounds of CO, 0.003 pounds of SO_2 , 0.27 pounds of PM_{10} , and 0.22 pounds of $PM_{2.5}$. Additional modeling assumptions and details are provided in Appendix C.

As shown in Table 5.3-4, construction-generated emissions of ROG, NO_X , CO, SO_2 , PM_{10} , and $PM_{2.5}$ would not exceed applicable daily thresholds established by the City. In addition, the estimated annual emissions associated with the Project would be less than the General Conformity *de minimis* thresholds. Restoration activities would be required to follow the SDAPCD Rules and Regulations.

	ROG	NO _X	СО	SO ₂	$\mathbf{PM_{10}}^1$	$PM_{2.5}^{1}$
Maximum Daily Emissions (lbs/day)		3.02	2.27	0.003	0.27	0.22
Threshold of Significance (lbs/day)		250	550	250	100	55
Significant Impact?		No	No	No	No	No
Maximum Annual Construction Emissions (tons/year)		0.39	0.30	0.0004	0.04	0.03
General Conformity de minimis Threshold (tons/year)		100	100	100	100	100
Significant Impact?	No	No	No	No	No	No

Table 5.3-4Estimated Daily and Annual Maintenance and Restoration Emissions

ROG = reactive organic gases; NO_X = oxides of nitrogen; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = PM equal to or less than 10 micrometers in diameter; $PM_{2.5}$ = PM equal to or less than 2.5 micrometers in diameter

 1 PM₁₀ emissions shown include the sum of PM with aerodynamic diameter 0 to 2.5 microns and PM with aerodynamic diameter 2.5 to 10 microns.

Source: Estimated by AECOM in 2015

The VPHCP does not authorize covered projects and covered activities; rather, it provides avoidance, minimization, and compensatory mitigation requirements as part of the VPHCP Mitigation Framework for covered projects and covered activities that would result in incidental take of vernal pool resources. Conservation and mitigation measures for covered projects consistent with the VPHCP have been or would be specified as conditions of approvals. In addition, development projects not included on the covered projects list would be required to analyze their biological impacts and conservation compared to the requirements and conditions of the VPHCP. The Project does not include City approval of planned development projects; rather, subsequent environmental is review is necessary for individual development projects. Emissions associated with covered projects and future development projects (and associated mitigation measures, where applicable) would be required to be analyzed during the subsequent project-level CEQA and NEPA (where applicable) environmental review process (including demonstrating consistency with emissions projections and mitigation identified in the current City General Plan).

At the time of that analysis, the impact of the future projects on criteria pollutant emissions would be determined. The Programmatic EIR (City of San Diego 2008b) for the City's General Plan states that the City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. The Programmatic EIR found that, in general, implementation of federal, state, and local regulations as well as General Plan policies would preclude or reduce air quality impacts. However, it was possible that, for certain projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. The Programmatic EIR contains a Mitigation Framework, which states that, for projects that may exceed daily construction emissions established by the City, Best Available Control Measures would be incorporated to reduce construction emissions to below daily emission standards established by the City and future projects may be required to buffer sensitive receptors from air pollution sources through the use of landscaping, open space, and other separation techniques. See General Plan policies CE-F.1 through CE-F.7.

As demonstrated above, the emissions-producing activities associated with the Project are primarily limited to restoration required in the VPHCP. Because of the scale of restoration activities (i.e., typically requiring one light-duty vehicle and/or a few pieces of off-road equipment), it is unlikely that the significance thresholds would be exceeded. For these reasons, the Project would not result in a substantial adverse effect related to a violation of any air quality standard or contribute substantially to an existing or projected air quality violation, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, monitoring and restoration activities for the Expanded Conservation Alternative would result in criteria pollutant emissions generated by sources such as off-road equipment and construction worker commutes. Emissions associated with covered projects and future development projects (and associated mitigation measures, where applicable) would require subsequent project-level CEQA and NEPA (where applicable) analysis.

As discussed above with the Project, a typical year of activities would not exceed the City's CEQA thresholds and would be less than the General Conformity *de minimis* thresholds under NEPA. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a violation of any air quality standard or contribute substantially to an existing or projected air quality violation, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Since no increase in activities would occur under the No Project Alternative, criteria pollutant emissions would also not increase. Due to improved emission standards, emissions would be anticipated to be lower in future years. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to a violation of any air quality standard or contribute substantially to an existing or projected air quality violation, and the impact would be less than significant.

ISSUE 3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable

federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Project 1997

The cumulative analysis focuses on whether a specific project would result in a cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The thresholds of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable incremental contribution to the existing cumulative air quality conditions. If a project's emissions would be less than established threshold levels, the project would not be expected to result in a considerable incremental contribution to the significant cumulative impact. As discussed above, the net increase in emissions from the Project, compared to existing conditions would not result in the generation of criteria air pollutant emissions that exceed the City's CEQA thresholds or the General Conformity *de minimis* thresholds under NEPA. For these reasons, the Project would not result in a substantial adverse effect related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, monitoring and restoration activities for the Expanded Conservation Alternative could result in criteria pollutant emissions generated by sources such as off-road equipment and construction worker commutes. As discussed above, the net increase in emissions over existing conditions would not result in the generation of criteria air pollutant emissions that exceed any of the City thresholds or the General Conformity *de minimis* thresholds under NEPA. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Since no increase in activities would occur under the Existing Conservation/No Project Alternative, criteria pollutant emissions would also not increase. It is anticipated that emissions would be lower in future years due to improved emissions standards. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard, and the impact would be less than significant.

ISSUE 4: Would the project expose sensitive receptors to substantial pollutant concentrations?

Project

The greatest potential for TAC emissions would originate from diesel PM emissions associated with off-road equipment operations. The only emissions associated with Level 1 activities would be from field vehicles used during monitoring and small equipment used for maintenance, such as a line trimmer (i.e., weed whacker). In addition, Level 2 or 3 restoration activities would usually require one light-duty vehicle and/or a few pieces of off-road equipment.

According to the Office of Environmental Health Hazard Assessment (OEHHA), HRAs that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 30-year exposure period (CSPB 2015). However, HRAs should be limited to the period/duration of activities associated with the emissions activity. Monitoring and restoration activities would likely occur at a location for days or weeks. Because the Project would only require a few pieces of off-road equipment that would be used for a relatively short time period, monitoring and restoration activities would not be anticipated to expose sensitive receptors to substantial TAC concentrations. For these reasons, the Project would not result in a substantial adverse effect related to the exposure of sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, the Expanded Conservation Alternative would only require a few pieces of off-road equipment that would be used for a relatively short time period. Therefore, monitoring and restoration activities would not be anticipated to expose sensitive receptors to substantial TAC concentrations. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to the exposure of sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Since no increase in activities would occur under the Existing Conservation/No Project Alternative, TAC

emissions would also not increase. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to the exposure of sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

ISSUE 5: Would the project exceed 100 pounds per day of PM_{10} dust?

Project

Construction grading and demolition dust accounts for 30% of all PM_{10} emissions in the SDAB (City of San Diego 2011a). Road dust from paved and unpaved roads, accounts for 47% of all PM_{10} emissions (City of San Diego 2011a). The Project would generate PM_{10} emissions from monitoring and restoration activities, including on-road motor vehicles. As indicated in Table 5.3-4, PM_{10} emissions were estimated at 0.27 pounds per day. In addition, the Project would comply with SDAPCD Regulation IV, Rule 55 for Fugitive Dust emissions. For these reasons, the Project would not exceed 100 pounds per day of PM_{10} dust, and the impact would be less than significant.

Expanded Conservation Alternative

 PM_{10} emissions for the Expanded Conservation Alternative were estimated at a maximum of 0.27 pounds per day, as the scale and type of restoration activities would be similar as under the Project scenario. In addition, the Expanded Conservation Alternative would comply with SDAPCD Regulation IV, Rule 55 for Fugitive Dust emissions. For these reasons, the Expanded Conservation Alternative would not exceed 100 pounds per day of PM_{10} dust, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's MHPA, permitted projects, and planned projects. Since no increase in activities would occur under the No Project Alternative, PM_{10} emissions would also not increase. For these reasons, the Existing Conservation/No Project Alternative would not exceed 100 pounds per day of PM_{10} dust, and the impact would be less than significant.

ISSUE 6: Would the project create objectionable odors affecting a substantial number of people?

Project

Sources that may emit odors during maintenance and restoration activities include exhaust from diesel construction equipment, which could be considered offensive to some individuals. Odors from these sources would be localized and generally confined to the immediate area surrounding the Project site. The Project would use typical construction techniques. Odors from off-road equipment and on-road vehicles would be typical of most construction sites and would be temporary in nature. For these reasons, the Project would not result in a substantial adverse effect related to the creation of objectionable odors affecting a substantial number of people, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, the Expanded Conservation Alternative may emit odors from diesel construction equipment during maintenance and restoration activities. The Expanded Conservation Alternative would use typical construction techniques. Odors from off-road equipment and on-road vehicles would be typical of most construction sites and would be temporary in nature. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to the creation of objectionable odors affecting a substantial number of people, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's MHPA, permitted projects, and planned projects. Since no increase in activities would occur under the Existing Conservation/No Project Alternative, odors would also not increase. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to the creation of objectionable odors affecting a substantial number of people, and the impact would be less than significant.

5.3.5 <u>Mitigation Measures</u>

No significant adverse air quality impacts were identified and no mitigation measures are required.

5.3.6 Level of Impact after Mitigation

Project

No significant adverse air quality impacts would result from implementation of the Project. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Expanded Conservation Alternative

No significant adverse air quality impacts would result from implementation of the Expanded Conservation Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

No significant adverse air quality impacts would result from implementation of the Existing Conservation/No Project Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

5.4 GREENHOUSE GAS (GHG) EMISSIONS

This section provides background information, affected environment, and regulatory context that apply to the key issues pertaining to GHG emissions for the Project. The GHG emissions calculations are provided in Appendix C.

5.4.1 <u>Affected Environment</u>

The City of San Diego is currently a source of anthropogenic GHG emissions, with emissions generated by vehicular traffic and by energy use, water use, and solid waste disposal practices of existing development. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)

Emissions of CO_2 are byproducts of fossil fuel combustion. CH_4 is the main component of natural gas and is associated with agricultural practices and landfills. N_2O is a colorless GHG that results from industrial processes, vehicle emissions, and agricultural practices.

GHG Emission Sources

GHG emissions contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, electric utility, residential, commercial, and agricultural categories. Emissions of CO_2 are byproducts of fossil fuel combustion, and CH_4 , a highly potent GHG, is the primary component in natural gas and is associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management.

For purposes of accounting for and regulating GHG emissions, sources of GHG emissions are grouped into emission categories. ARB identifies the following main GHG emission categories that account for most anthropogenic GHG emissions generated within California:

- Transportation: On-road motor vehicles, recreational vehicles, aviation, ships, and rail
- *Electric Power:* Use and production of electrical energy
- *Industrial:* Mainly stationary sources (e.g., boilers and engines) associated with process emissions

- *Commercial and Residential:* Area sources, such as landscape maintenance equipment, fireplaces, and consumption of natural gas for space and water heating
- *Agriculture:* Agricultural sources that include off-road farm equipment; irrigation pumps; crop residue burning (CO₂); and emissions from flooded soils, livestock waste, crop residue decomposition, and fertilizer volatilization (CH₄ and N₂O)
- *High Global Warming Potential (GWP):* Refrigerants for stationary and mobile-source air conditioning and refrigeration, electrical insulation (e.g., SF₆), and various consumer products that use pressurized containers
- *Recycling and Waste:* Waste management facilities and landfills; primary emissions are CO₂ from combustion and CH₄ from landfills and wastewater treatment

GHG Emissions Inventory

California

California produced 459 million metric tons (MMT) of CO_2e in 2012. Combustion of fossil fuel in the transportation category was the single largest source of California's GHG emissions in 2012, accounting for 36% of total GHG emissions in the state. The transportation category was followed by the electric power category (including in-state and out-of-state sources), which accounts for 21% of total GHG emissions in California, and the industrial category, which accounts for 19% of the state's total GHG emissions (ARB 2014b).

City of San Diego

The City of San Diego Climate Action Plan (CAP) includes a quantitative inventory of GHG emissions for the baseline year of 2010 and a projection of emissions for 2020 and 2035. The most recent GHG inventory for the year 2010 estimated the total emissions at 13.0 MMT CO₂e per year (City of San Diego 2015). Transportation is the largest emissions sector, accounting for approximately 55% of total emissions. Energy consumption is the next largest source of emissions, at 40% of the total. Accounting for future population and economic growth, the City estimates that GHG emissions will increase to approximately 14.1 MMT CO₂e in 2020 and 16.7 MMT CO₂e in 2035.

The CAP includes City-specific targets to reduce GHGs by 2020 and 2035, helping to achieve statewide 2020 and 2030 targets, and putting the City on the trajectory of meeting its share of the 2050 statewide target. The City's reduction targets are 11.0 MMT CO2e in 2020, 7.8 MMT of CO2e in 2030, and 6.5 MMT of CO2e in 2035.

5.4.2 <u>Regulatory Framework</u>

<u>Federal</u>

EPA is the federal agency responsible for implementing the federal CAA. The Supreme Court of the United States ruled on April 2, 2007, that CO_2 is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs.

Greenhouse Gas Findings under the Federal Clean Air Act

On December 7, 2009, EPA signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases— CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF_6 —in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industries or other entities, this action was a prerequisite to finalizing EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles. On May 7, 2010, the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards were published in the Federal Register. The emissions standards will require model year 2016 vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile, which is equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO₂ level solely through fuel economy improvements. On August 28, 2012, the National Highway Traffic Safety Administration (NHTSA) and EPA issued a joint Final Rulemaking requiring additional federal GHG and fuel economy standards for model year 2017 through 2025 passenger cars and light-duty trucks.

In addition to the standards for light-duty vehicles, NHTSA and EPA adopted complementary standards to reduce GHG emissions and improve the fuel efficiency of heavy-duty trucks and buses on September 15, 2011. These standards together form a comprehensive heavy-duty

national program for all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds for model years 2014 through 2018 (EPA 2011). The standards will phase in with increasing stringency in each model year from 2014 through 2018. The President has directed the NHTSA and EPA to develop and issue the next phase of heavy-duty vehicle fuel efficiency and GHG standards by March 2016.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, EPA published the Final Mandatory Greenhouse Gas Reporting Rule (Reporting Rule) in the Federal Register. The Reporting Rule requires reporting of GHG data and other relevant information from fossil fuel and industrial GHG suppliers, vehicle and engine manufacturers, and all facilities that would emit 25,000 million tons (MT) or more of CO₂e per year. Facility owners are required to submit an annual report with detailed calculations of facility GHG emissions on March 31 for emissions from the previous calendar year. The Reporting Rule also mandates recordkeeping and administrative requirements to enable EPA to verify the annual GHG emissions reports.

Council on Environmental Quality Guidance

On August 1, 2016, the Council on Environmental Quality (CEQ) released final guidance for federal agencies on considering the impacts of GHG emissions in NEPA reviews. This guidance supersedes the draft GHG and climate change guidance released by CEQ in 2010 and 2014. The final guidance applies to all proposed federal agency actions, including land and resource management actions. This guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance recommends that agencies quantify a proposed agency action's projected direct and indirect GHG emissions, taking into account available data and GHG quantification tools that are suitable for the proposed agency action.

<u>State</u>

ARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California CAA.

Assembly Bill 1493 and Advanced Clean Car Program

AB 1493 (Pavley) required ARB to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to
automobiles and light trucks beginning with model year 2009. In June 2009, the EPA Administrator granted a CAA waiver of preemption to California. This waiver allowed California to implement its own GHG emissions standards for motor vehicles beginning with model year 2009 through 2016.

ARB's Advanced Clean Cars Program builds on efforts to improve fuel economy and reduce GHG emissions for passenger vehicles and light-duty trucks. The standards were developed in coordination with the federal government and combine fuel economy and GHG emissions. In January 2012, ARB approved a new fuel economy and emissions-control program for model years 2017 through 2025 (Pavley II). On August 28, 2012, NHTSA and EPA issued a final rulemaking for fuel-economy and GHG standards for model year 2017 through 2025 passenger vehicles and light-duty trucks. The federal standards adopted are considered appropriate for California and create a single national program for manufacturers that addresses both fuel economy standards and GHG emissions. The Advanced Clean Cars Program also includes the low emission vehicle (LEV) III amendments to the LEV regulations and Zero Emission Vehicle Program. The Zero Emission Vehicle Program is designed to achieve California's long-term emission reduction goals by requiring manufacturers to offer for sale specific numbers of the very cleanest cars available.

Executive Order S-3-05

Executive Order (EO) S-3-05, signed in June 2005, proclaimed that California is vulnerable to the impacts of climate change. EO S-3-05 declared that increased temperatures could reduce the Sierra Nevada's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emissions targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80% below the 1990 level by 2050.

Assembly Bill 32

In 2006, California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500, et seq.). AB 32 further details and puts into law the mid-term GHG reduction target established in EO S-3-05: reduce GHG emissions to 1990 levels by 2020. AB 32 also identifies ARB as the state agency responsible for the design and implementation of emissions limits, regulations, and other measures to meet the target.

In December 2008, ARB adopted its *Climate Change Scoping Plan* (Scoping Plan), which contains the main strategies California will implement to achieve the required GHG reductions

required by AB 32 (ARB 2008). The Scoping Plan also includes ARB-recommended GHG reductions for each emissions sector of California's GHG inventory. ARB further acknowledges that decisions about how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors.

ARB is required to update the Scoping Plan at least once every 5 years to evaluate progress and develop future inventories that may guide this process. ARB approved the first update to the Climate Change Scoping Plan: Building on the Framework in June 2014 (ARB 2014a). The Scoping Plan update includes a status of the 2008 Scoping Plan measures and other federal, state, and local efforts to reduce GHG emissions in California, and potential actions to further reduce GHG emissions by 2020.

Executive Order S-1-07

EO S-1-07, signed in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, at more than 40% of statewide emissions. EO S-1-07 establishes a goal that the carbon intensity of transportation fuels sold in California should be reduced by a minimum of 10% by 2020. ARB adopted the low carbon fuel standard (LCFS) on April 23, 2009. ARB approved the re-adoption and updated LCFS in 2015, effective January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted.

Senate Bill 97

Senate Bill (SB) 97 required the Governor's Office of Planning and Research to develop recommended amendments to the CEQA Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires MPOs to adopt a Sustainable Communities Strategy or an Alternative Planning Strategy, which will prescribe land use allocation in that MPO's Regional Transportation Plan. On September 23, 2010, ARB adopted regional GHG targets for passenger vehicles and light trucks for 2020 and 2035 for the 18 MPOs in California. If MPOs do not meet the GHG reduction targets, transportation projects would not be eligible for funding programmed after January 1, 2012.

ARB is required to update the regional GHG targets at least every 8 years and may revise them every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is planning to revise the 2035 GHG targets for the four largest MPOs, including SANDAG, San Diego's MPO.

Local Standards

San Diego Air Pollution Control District

In San Diego County, SDAPCD is the agency responsible for protecting public health and welfare through the administration of federal and state air quality laws and policies. SDAPCD currently has no regulations relative to GHG emissions. However, some rules and regulations that address criteria pollutants may also have a benefit for GHG emissions.

City of San Diego

General Plan

The City adopted an updated General Plan in 2008. The following policies contained in the Conservation Element of the General Plan are applicable to the Project:

- CE-A.2. Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
 - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
 - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
 - Improve energy efficiency, especially in the transportation sector and buildings and appliances;
 - Reduce the Urban Heat Island effect through sustainable design and building practices;
 - Reduce waste by improving management and recycling programs.
- CE-A.8. Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-I.2, or by renovating or adding on to existing buildings, rather than constructing new buildings.
- CE-A.11. Implement sustainable landscape design and maintenance.

- Strategically plant deciduous shade trees, evergreen trees, and drought tolerant native vegetation, as appropriate, to contribute to sustainable development goals.
- Reduce use of lawn types that require high levels of irrigation.
- Minimize the use of landscape equipment powered by fossil fuels.
- Implement water conservation measures in site/building design and landscaping.
- Encourage the use of high efficiency irrigation technology, and recycled site water to reduce the use of potable water for irrigation. Use recycled water to meet the needs of development projects to the maximum extent feasible.

Climate Action Plan

As discussed above, the City of San Diego adopted a CAP in December 2015 (City of San Diego 2015). The CAP quantifies GHG emissions; establishes reduction targets for 2020 and 2035; identifies strategies and measures to reduce GHG levels; and provides guidance for monitoring progress on an annual basis. The City of San Diego CAP identifies a comprehensive set of goals and actions, including ordinances, policies, resolutions, programs, and incentives, that the City can use to reduce GHG emissions.

5.4.3 <u>CEQA Thresholds of Significance</u>

The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating potential impacts to greenhouse gas emissions. A significant CEQA impact would occur if the Project would:

- 1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment; or
- 2. Conflict with the Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City's CAP was adopted in December 2015, and in July 2016, the City adopted the CAP Consistency Checklist (Checklist) to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The Checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. If a project is determined, through the use of the Checklist, to be in compliance with the CAP, the project may rely on the CAP for the cumulative impacts analysis of GHG emissions, and is not required to perform further analysis.

The CEQ guidance explains that agencies should consider both the estimated GHG emissions and the implications of climate change for the environmental effects of a proposed action. According to CEQ guidance, agencies should not limit themselves to calculating a proposed action's emissions as a percentage of sector, nationwide, or global emissions in deciding whether or to what extent to consider climate change impacts under NEPA. When considering GHG emissions and their significance, agencies should use appropriate tools and methodologies for quantifying GHG emissions and comparing GHG quantities across alternative scenarios (CEQ (2016). Therefore, the NEPA analysis is based on the emissions reporting limit as required by the Mandatory Greenhouse Gas Reporting Rule. If the Project exceeds 25,000 MT CO₂e per year, the Project would have a substantial adverse effect on the environment.

5.4.4 <u>Environmental Consequences</u>

ISSUE 1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?

Project 1997

The VPHCP is a comprehensive planning program designed to create, manage, and monitor a vernal pool ecosystem Preserve within the city. Because there is no physical development associated with the VPHCP, its implementation would not result in direct climate change impacts. Covered projects and covered activities would require separate project-level environmental review. The VPHCP does not authorize covered projects and covered activities; rather, it provides avoidance, minimization, and compensatory mitigation requirements through the Mitigation Framework for covered projects and covered activities that would result in incidental take of vernal pool resources.

Conservation measures for covered projects consistent with the VPHCP have been or would be included as conditions of project approval. In addition, development projects not included on the covered projects list would be required to analyze their biological impacts and conservation compared to the requirements and conditions of the VPHCP. Emissions associated with those projects and conservation measures would be required to be analyzed during the CEQA and NEPA (where applicable) environmental review process. At the time of that analysis, the impact of the future projects on GHG emissions would be determined.

However, monitoring, maintenance, and restoration activities associated with implementation of the VPHCP could result in GHG exhaust emissions generated by sources such as off-road equipment, haul trucks, and construction worker commutes.

Annual monitoring results would determine the appropriate Management Level (e.g., Level 1, 2, or 3) for each vernal pool complex that is managed under the VPMMP. Each Management Level would result in specific required management. Level 1 maintains existing habitat conditions and assumes that access patrol visits would occur annually, at a minimum, at each site, or more frequently (e.g., monthly, weekly) as deemed appropriate by the City and Wildlife Agencies. Level 2 stabilizes habitat conditions and includes all Level 1 activities, plus some additional enhancement activities such as topographic reconstruction; dethatching; focal vernal pool weed control; and seed collection, bulking, and redistribution. Level 3 restores habitat conditions and includes all Level 1 activities, such as pool restoration, topographic reconstruction, dethatching, focal vernal pool weed control, general weed control, and seed reintroduction container plant production/installation.

Because it is not possible to accurately estimate the specific activity that would occur with future monitoring and restoration activities each year of VPHCP implementation, for informational purposes only, this analysis provides a conservative estimate of GHG emissions for a year of activities associated with the additional acreage that would be conserved with the VPHCP. This conservative scenario assumes that management and monitoring would occur at all Level 1, 2, and 3 complexes simultaneously in a given year. In reality, activities at Level 2 and Level 3 complexes would only occur for a 3- or 5-year period, respectively, and would most likely not be performed within the same time frame (i.e., implementation priority would be based on availability of funding and resources). Once all complexes reach a Level 1 status, construction equipment would generally not be utilized (unless a vernal pool complex becomes degraded over time and requires further enhancement or restoration). The only emissions associated with Level 1 activities would be from field vehicles used during monitoring and small equipment used for maintenance, such as a line trimmer (i.e., weed whacker).

Construction-related emissions associated with typical construction activities were modeled using CalEEMod, Version 2013.2.2. CalEEMod allows the user to enter project-specific construction information, such as types, number, and horsepower of construction equipment, and number and length of off-site motor vehicle trips. Vehicle fleet characteristics and data specific to San Diego County or specific to the Project were used in place of CalEEMod defaults, where available.

Daily activity was assumed to involve driving and small equipment used for monitoring of Level 1 complexes, as well as off-road equipment and construction workers performing enhancement and restoration activities at Level 2 and 3 locations. Assuming that the level of activity occurred for 5 days per week for an entire year, the annual GHG emissions for the additional conservation activities associated with the VPHCP would be approximately 37 MT CO₂e per year. The total GHG emissions would not exceed the NEPA threshold of 25,000 MTCO₂e per year.

Restoration activities would be required to follow the SDAPCD Rules and Regulations. At this time, the City has not adopted policies or recommended performance measures to address specific GHG emission reductions related to construction or restoration activities. Because of the scale of these restoration activities (e.g., usually requiring one light-duty vehicle and/or a few pieces of off-road equipment), it is unlikely that GHG emissions would be significant.

For these reasons, the Project would not result in a substantial adverse effect related to the generation of GHG emissions, either directly or indirectly, that may have a significant effect on the environment, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, monitoring and restoration activities for the Expanded Conservation Alternative could result in GHG exhaust emissions generated by sources such as off-road equipment, haul trucks, and construction worker commutes. Emissions associated with development projects and conservation measures would be required to be analyzed during the CEQA and NEPA (where applicable) environmental review process. At the time of that analysis, the impact of the future projects on GHG emissions would be determined.

As discussed above with the Project, a typical year of activities (approximately 37 MT CO₂e per year) would be well below the NEPA threshold of 25,000 MT CO₂e per year even with the additional pools and acreage included in the Expanded Conservation Alternative (Appendix C). Restoration activities would be required to follow the SDAPCD Rules and Regulations. Because of the scale of these restoration activities (e.g., usually requiring one light-duty vehicle and/or a few pieces of off-road equipment), it is unlikely any thresholds or screening criteria would be exceeded.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to the generation of GHG emissions, either directly or indirectly, that may have a significant effect on the environment, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. The conservation values would remain the same under the Existing Conservation/No Project Alternative. Since no increase in activities would occur under the No Project Alternative, GHG emissions would also not increase. Due to improved emission standards, emissions would be

anticipated to be lower in future years. For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to the generation of GHG emissions, either directly or indirectly, that may have a significant effect on the environment, and the impact would be less than significant.

ISSUE 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Project

The City adopted a CAP in December 2015. The CAP quantifies GHG emissions; establishes reduction targets for 2020 and 2035; identifies strategies and measures to reduce GHG levels; and provides guidance for monitoring progress on an annual basis. The CAP identified strategies and measures to meet GHG reduction targets of 15% below a 2010 baseline for 2020 and 50% below baseline in 2035. The City subsequently adopted the Checklist to provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA.

Step 1 of the CAP Consistency Checklist requires the project, in this case the VPHCP, to assess its consistency with existing General Plan and Community Plan land use and zoning designations. As discussed in Section 5.1, Land Use, the VPHCP is consistent with the environmental goals and policies of the General Plan, Community Plan, and MSCP. Step 2 of the CAP Consistency Checklist only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures. Conservation of open space areas does not require a certificate of occupancy, and thus, by demonstrating land use consistency, the VPHCP has demonstrated consistency with the CAP through the CAP Consistency Checklist.

Furthermore, the VPHCP would be consistent with relevant CAP strategies, specifically Strategy 5: Climate Resiliency. Climate Resiliency is defined as the ability of a system to absorb disturbance while undergoing change and still retain essentially the same function and identify as before. The intent of the strategy is to develop flexible programs, policies, and processes to accommodate unexpected events and shocks and continue to function effectively (City of San Diego 2015). The VPHCP is consistent with Strategy 5, Climate Resiliency and implements this strategy by first restoring or maintaining the proper hydrologic and ecologic function of the vernal pools so that they have improved ability to withstand or adapt to climate change disturbance, such as increased drought. By improving the overall health and function of the individual vernal pools and the larger interconnected vernal pool complexes, those resources

would be better equipped to tolerate and recover from potential climate-related disturbance such as prolonged drought or increased wildland fires. Then, ongoing monitoring, maintenance, and mitigation designed for flexibility dependent on the specific conditions and needs of each site would allow adaptive actions as needed in the future for long-term success.

The CEQ guidance states that agencies should consider the implications of climate change for the environmental effects of a proposed action. Climate change can affect the environment of a proposed action in a variety of ways. Climate change can increase the vulnerability of a resource, ecosystem, human community, or structure, which would then be more susceptible to climate change and other effects and result in a proposed action's effects being more environmentally damaging. Drought, increased fire, and weed invasion associated with climate change could increase risks to vernal pools and covered species. However, the VPHCP (Chapter 9) includes preventative measures and planned responses to minimize certain risks associated with climate change.

As discussed earlier, the Project has demonstrated consistency with the CAP through the CAP Consistency Checklist and would not conflict with existing California legislation that has been adopted to reduce statewide GHG emissions. For these reasons, the Project would not result in a substantial adverse effect related to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the impact would be less than significant.

Expanded Conservation Alternative

Similar to the Project, the Expanded Conservation Alternative would be required to comply with applicable regulations, including the City's CAP. The VPHCP includes preventative measures and planned responses to minimize certain risks associated with climate change. For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the impact would be less than significant.

Existing Conservation/No Project Alternative

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's existing MHPA, permitted projects, and planned projects. Applicable regulations, including those developed as measures in the ARB Scoping Plan update and the City's CAP, would continue to apply to the No Project Alternative. Since no increase in activities would occur under the Existing Conservation/No Project Alternative, GHG emissions would also not increase. For these reasons, the Existing Conservation/No Project Alternative

would not result in a substantial adverse effect related to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the impact would be less than significant.

5.4.5 <u>Mitigation Measures</u>

No significant adverse GHG emission impacts were identified and no mitigation measures are required.

5.4.6 Level of Impact after Mitigation

Project

No significant adverse GHG emission impacts would result from implementation of the Project. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Expanded Conservation Alternative

No significant adverse GHG emission impacts would result from implementation of the Expanded Conservation Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

No significant adverse GHG emission impacts would result from implementation of the Existing Conservation/No Project Alternative. Therefore, no mitigation is required, and the impacts would remain less than significant under CEQA and would not be substantially adverse under NEPA.

5.5 HISTORICAL AND TRIBAL CULTURAL RESOURCES

This section describes historical <u>and tribal cultural</u> resources within the VPHCP Plan Area's area of potential effects (APE). This section also identifies pertinent policies and regulations governing historical <u>and tribal cultural</u> resources and evaluates the impacts and effects associated with implementation of the Project and its alternatives on such resources. This evaluation is based on archival research and data on-file at the South Coastal Information Center (SCIC) at San Diego State University, information from the Native American Contact Program, and analysis of regional environmental factors.

5.5.1 Affected Environment

Prehistory

The prehistoric cultural sequence in San Diego County is generally thought of in three basic periods: the Paleoindian, locally characterized by the San Dieguito complex; the Archaic, characterized by the cobble and core technology of the La Jollan and Pauma complexes; and the Late Prehistoric, marked by the appearance of ceramics, small arrow points, and cremation burial practices. Late Prehistoric materials found in southern San Diego County, known as Yuman I and Yuman II, are believed to represent the ancestral Kumeyaay.

Paleoindian Period

In San Diego County, the Paleoindian period is represented by the San Dieguito complex, as identified by Rogers (1929, 1939, 1945) and Warren (1966, 1968; Warren et al. 1993). The earliest well-documented sites in the San Diego area belonging to the San Dieguito complex are thought to be older than 9,000 years (Warren 1967). Related materials, sometimes called the Lake Mojave complex, have been found in the Mojave Desert and in the Great Basin (e.g., Campbell et al. 1937; Warren and Ore 1978). Diagnostic artifact types and categories associated with the San Dieguito complex include scraper planes, choppers, scraping tools, crescentics, and elongated bifacial knives, as well as Silver Lake, Lake Mojave, and leaf-shaped projectile points (Rogers 1939; Warren 1967). Like the Lake Mojave complex, the San Dieguito complex is thought to represent an early emphasis on generalized hunting. There are few or no milling implements in most San Dieguito components. In areas adjacent to the coast, many Paleoindian period sites have probably been covered by rising sea levels since the end of the Pleistocene. In more inland regions, alluvial sedimentation in valley areas may have covered these materials. The stable mesa landforms in the region, the abundance of appropriate lithic material, and soil column exposures along areas such as the San Dieguito River have made the foothills an important area for Paleoindian research.

Archaic Period

The Archaic period (8000 to 1500 years before present [B.P.]) brought a shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic period are called the La Jollan complex along the coast and the Pauma complex inland (True 1958). Pauma complex sites lack the shell that dominates many La Jollan complex site assemblages. The La Jollan tool assemblage is dominated by rough, cobble-based choppers and scrapers, as well as slab and basin metates. There has been considerable debate about whether San Dieguito and La Jollan patterns might represent the same people using different environments and subsistence techniques, or whether they are separate cultural patterns (e.g., Bull 1983; Gallegos 1987; Warren et al. 1993). However, there seems to have been some reorientation in settlement from coastal sites to inland settings during the latter portion of this period in what is now northern San Diego County. This appears at approximately 4,000 years ago and is thought to relate to the final phases of Holocene sea level rise and resultant siltation of the formerly productive coastal lagoons in what is now northern San Diego County. Conversely, there appears to be no significant silting in Mission Bay and San Diego Bay, and no reduction in settlement along the coast south of Mission Bay (Gallegos 1987; Warren et al. 1993).

Late Prehistoric Period

The Late Prehistoric period (1500 B.P. to 200 B.P.) is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive but effective technological innovations. Subsistence is thought to have focused on acorns and grass seeds, with small game serving as a primary protein resource and big game as a secondary resource. Fish and shellfish were also secondary resources, except in areas immediately adjacent to the coast where they assumed primary importance (Bean and Shipek 1978; Sparkman 1908). The settlement system was characterized by seasonal villages where people used a central-based collecting subsistence strategy. Artifactual material is characterized by the presence of arrow shaft straighteners, pendants, *comales* (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes," ceramic rattles, miniature pottery vessels, various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, and mortars and pestles. The arrow-point assemblage is dominated by the Desert Side-notched series, but the Cottonwood series and the Dos Cabazas Serrated type also occur. Late Prehistoric materials found in southern San Diego County, known as Yuman I and Yuman II, are believed to represent the ancestral Kumeyaay.

Ethnohistory

The Ethnohistoric period, sometimes referred to as the ethnographic present, commences with the earliest European arrival in what is now San Diego and continued through the Spanish and Mexican periods and into the American period. The founding of Mission San Diego de Alcalá in 1769 brought about profound changes in the lives of the Kumeyaay. The coastal Kumeyaay died from introduced diseases or were brought into the mission system. Earliest accounts of Native American life in what is now San Diego were recorded as a means to salvage scientific knowledge of native lifeways. These accounts were often based on limited interviews or biased data collection techniques. Later researchers and local Native Americans began to uncover and make public significant contributions in the understanding of native culture and language. These studies have continued to the present day, and involve archaeologists and ethnographers working in conjunction with Native Americans to address the continued cultural significance of sites and landscapes across San Diego County. The Kumeyaay are the identified Most Likely Descendants for all Native American human remains found within San Diego.

The Kumeyaay had a hunting and gathering economy based primarily on various plant resources. Grass seeds were probably the primary food, supplemented by various other seeds such as sage (*Salvia* spp.), sagebrush (*Artemisia californica*), lamb's quarters (*Chenopodium album*), and pine nuts (Pinus sp.). Small game was a major source of protein, but deer were hunted as well. Coastal bands ate a great deal of fish, taking them with lines, nets, and bows and arrows. Balsas or reed boats were used (Kroeber 1925; Luomala 1978). Shellfish and other littoral resources also were important to coastal people. Settlements were moved to areas where wild foods were in season. For example, inland bands might move into desert areas in the spring to gather agave (*Agave deserti*), then to higher-altitude areas in the fall to gather acorns (Cline 1984). Coastal bands lived in semipermanent villages focused on more seasonally stable inshore and littoral resources. However, they still often travelled to what is now Torrey Pines and La Rumarosa (in northern Baja California) to harvest pine nuts, and to Cuyamaca and Mount Laguna for acorns (Shipek 1970).

Villages and campsites were generally located in areas where water was readily available, preferably on a year-round basis. The San Diego, Tijuana, and Otay Rivers provided important resources for local inhabitants, not only as a reliable source of water, but also as a major transportation corridor through the region. *Kosaii* (also known as *Cosoy* or *Kosa'aay*) was a major coastal village located near the mouth of the San Diego River (Gallegos et al. 1998; Kroeber 1925). Although the actual location of the village is unknown, Bancroft (1884) reported that a site called *Cosoy/Kosaii/Kosa'aay* by the Native Americans was in the vicinity of what is now Presidio Hill and Old Town. Several investigations have identified possible locations for the

village of *Cosoy/Kosaii/Kosa'aay* (Clement and Van Bueren 1993), but the actual site has never been found.

The village of *La Rinconada* was located near Mission Bay and Rose Creek. It is believed to have been occupied for over 3,000 years, from the Archaic period until historic times (Garcia-Herbst 2009). Recorded as CA-SDI-5017, *La Rinconada* was originally documented by Malcom Rogers in 1929 as two sites: SDM-W-150 and SDM-W-152. Rogers excavated four trenches at the site and encountered a subsurface midden that ranged in thickness from 30 to 91 centimeters. He also documented several cobble hearths and house pits in the site.

In southeast San Diego, the village of *Las Choyas* (CA-SDI-17203) has been identified through ethnographic and archaeological studies. The village is visible both on a map created by Don Juan Pantoja in 1782 and on a sketch map of the port of San Diego in 1849 (Vargas 2000; AECOM 2015). CA-SDI-17203, a CRHR-eligible site, was originally recorded as site SDM-W-193 near the mouth of Las Chollas Creek and the surrounding area by Malcolm Rogers in the 1930s (Rogers n.d.). The site contained hearth features and a shell midden at a depth of 7 feet. Radiocarbon dates from the shell samples ranged from 2100 to 950 +/-220 B.P., indicating a Late Prehistoric occupation of the site.

Ystagua (CA-SDI-4513, CA-SDI-4609, CA-SDI-5443), a NRHP-listed site, is located just inland from the coast near the mouth of Peñasquitos Creek in present-day Sorrento Valley. The site today has been impacted by construction of homes and the railroad, but extensive intact midden deposits are known to exist throughout the site. Lithic tools, ceramics, shell beads, trade beads, bone tools, faunal bone, are just some of the artifacts that have been documented at *Ystagua*. Human remains have also been encountered and the site has a high level of cultural sensitivity (RBF Consulting 2009).

Kroeber (1925) and Trafzer and Carrico (Trafzer and Carrico 1992) indicate that a native village, *Millejo*, was located somewhere inland from the coast in the vicinity of the lower San Tijuana River Valley. The village of *Millejo*, possibly recorded as CA-SDI-10669, has not been clearly documented and no surface evidence of the site exists; however, numerous smaller sites have been documented within the river valley (Gross and Robbins-Wade 2008). Shipek believes that the village site could possibly be buried by alluvial soils deposited by the flooding episodes in 1895 and 1916 (Shipek 1976).

Several additional large villages have been documented in San Diego through ethnographic accounts and archaeological investigations in the area. These include *Nipaquay*, located near present-day Mission San Diego de Alcala (Kyle 1996); *El Corral*, located near present-day

Mission Gorge; Santee Greens, located in present-day eastern Santee (Berryman 1981); and El Capitan, now covered by the El Capitan Reservoir (Pourade 1961).

History

Cultural activities within San Diego County between the late 1700s and the present can be divided into three major periods: the Spanish Period (1769–1821), the Mexican Period (1821–1848), and the American Period (1848–present). Each historic period is discussed below.

Spanish Period (1769–1821)

The Spanish period represents a time of European exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the Mission San Diego de Alcala. The mission system used Native American labor to build the infrastructure needed for European settlement. By about 1821, the traditional lifeways were disrupted and Native American populations were tied economically to the missions. In addition to providing new construction methods and architectural styles, the mission system introduced horses, cattle, and other agricultural goods and implements to the area. The cultural systems and institutions established by the Spanish continued to influence the region beyond 1821, when California came under Mexican rule.

Mexican Period (1821–1848)

The Mexican period retained many of the Spanish institutions and laws; however, in 1834, the mission system was secularized. This allowed for increased Mexican settlement, but it also meant that many Native Americans were dispossessed. After secularization, large tracts of land were granted to individuals and families, and a rancho system was established. The land was used primarily for grazing cattle (Pourade 1961). Cattle ranching dominated the agricultural activities and the development of the hide and tallow trade within the United States increased during the early part of this period. The Pueblo of San Diego was established at this time, and Native American influence greatly declined. The Mexican period ended when Mexico ceded California to the United States after the Mexican-American War (1846–1848).

American Period (1848–present)

Very early in the American period, gold was discovered in California. Few Mexican ranchos remained intact because of land claim disputes. Development of the railroads opened up much of the country to settlement. The homestead system encouraged American settlement beyond the coastal plain. The growth and decline of communities occurred in response to an increasing and

shifting population, fostering a "boom and bust" cycle. As early as 1868, San Diego was promoted as a natural sanitarium, and many people suffering from tuberculosis came to the area seeking a cure in the moderate climate.

Cultural, Historical, and Tribal Cultural Resources Definitions

Cultural resources are districts, buildings, sites, structures, areas of traditional use, or objects that represent the physical evidence of human activities. According to the City's Historical Resources Guidelines, cultural resources can be divided into three categories: archaeological resources (prehistoric and historic), architectural resources, and traditional cultural resources (herein after referred to as tribal cultural resources).

- Archaeological resources include prehistoric and historic locations or sites where human actions have resulted in detectable changes to the area. This can include changes in the soil, as well as the presence of physical cultural remains. Prehistoric site types expected within the Project area include lithic scatters, habitation sites, and ceramic scatters. Historic archaeological resources are those that are more than 50 years old and post-date European contact. These resources may include refuse scatters and dumps, remnants of farms or ranches, camps or temporary settlements, cairns, transportation routes, and utility or water conveyance features.
- Architectural resources are elements of the environment constructed by humans and that are over 50 years of age. Included are standing buildings; dams; bridges; and other residential, commercial, and industrial structures.
- Traditional cultural properties are resources associated with beliefs and cultural practices of a living culture, subculture, or community. These beliefs and practices must be rooted in the group's history and be important in maintaining the cultural identity of the group. Archaeological sites; locations of events; sacred places; and resource areas, including hunting or gathering areas, may be traditional cultural properties.

Cultural resources in the State of California are recognized as non-renewable resources that require management to assure their benefit to present and future Californians. The CEQA Guidelines Section §15064.5 designates significant cultural resources as "historical resources". The CEQA, Public Resources Code 21084.1 and CEQA Guidelines, California Code of Regulations Title 14 Section 15064.5 specifically define a "historical resource" as follows:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CRHR (14 CCR Section 15064.5[a][1]).

- 2. A resource included in a local register of historical resources or identified as significant in a historical resources survey shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant (14 CCR Section 15064.5[a][2]).
- 3. Any object, building, structure, site area, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record (14 CCR Section 15064.5[a][3]). Generally, a cultural resource shall be considered by the lead agency to be "historically significant" if the resource meets the eligibility criteria for listing on the CRHR, including the following:
 - a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b. Is associated with the lives of persons important in our past;
 - c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - d. Has yielded, or may be likely to yield, information important in prehistory or history.

Under 14 CCR Section 15064.5(a)(4), a resource may also be considered a "historical resource" at the discretion of the lead agency.

Additionally, a significant archaeological resource may be a "unique archaeological resource," defined in PRC §21083.2(g) as:

An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type, or

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In 2015, Assembly Bill 52 established a new category of resources in CEQA called Tribal cultural resources (Public Resources Code § 21074) which are further defined as either of the following:

- 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
 - (a) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
 - (b) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Section 106 (54 USC 306108) of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations (36 CFR Part 800) require Federal agencies to take into account the effects of their undertakings on NRHP-eligible cultural resources, designated "historic properties". To be eligible for the NRHP, a historic property must be significant at the local, state, or national level under one or more of the following four lettered criteria. Eligible properties are those:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history;
- B. That are associated with the lives of persons significant in our past;

- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
- D. That have yielded or may be likely to yield, information important in prehistory or history.

All historical <u>and tribal cultural resources</u>, or historic properties eligible for listing in either the CRHR or NRHP must retain integrity, which is the authenticity of a historical <u>and tribal cultural</u> resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical <u>and tribal cultural</u> resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association. It must also be judged with reference to the particular criteria under which a resource is proposed for nomination.

Area of Potential Effects

The APE for the VPHCP Plan Area was defined based upon the direct and indirect effects that could occur as a result of implementation of the Project and/or Project alternatives. Typically, the APE for archaeological resources is defined by the proposed ground disturbance area(s), or areas of potential direct effects. For architectural resources, the APE is often defined more broadly to include areas of potential indirect visual, auditory, or atmospheric effects. Therefore, the VPHCP Plan Area APE includes the preserved vernal pool complexes and areas where covered activities will occur within the VPHCP Plan Area with a ¹/₄-mile buffer, to ensure that direct effects on archaeological or tribal cultural resources, as well as indirect effects on architectural resources, are addressed.

Archaeological Resources Analyzed in the EIR/EIS

The archival records search of cultural resources on file at the SCIC identified a total of 47 previously recorded archaeological resources within the APE, 46 are prehistoric resources and one is a multicomponent site with both prehistoric and historic components (Table 5.5-1). No architectural resources were identified in the APE. Of the 47 archaeological resources, only six overlap with vernal pools with restoration potential and may be directly impacted by Project activities. These six archaeological resources, are P-37-006941, -007604, -008645, -009541, -014292, and -026734, are discussed below.

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Table 5.5-1Archaeological Resources within or adjacent to VPHCP Plan Area APE*

Site Number	Age	Туре	Description	Location
P-37-011283	Prehistoric	Lithic scatter	30 by 15 meter scatter of lithic tools and debitage	Adjacent
P-37-014257	Prehistoric	Lithic scatter	80 by 35 meter sparse scatter of debitage and	Adjacent
			cores	
P-37-014286	Multicomp	Refuse	70 by 70 meter site with both historic and	Adjacent
	onent	scatter/lithic scatter	prehistoric components. Historic aspect is	
			location of Dillon Ranch Complex and consists	
			of a scatter of wood, metal, bone, brick, plaster,	
			ceramics, and glass. The prehistoric aspect of site	
			is a sparse scatter of flakes and cores	
P-37-014340	Prehistoric	Artifact scatter	20 by 75 meter scatter of groundstone and lithic	Adjacent
			artifacts	
P-37-014343	Prehistoric	Lithic scatter	60 by 10 meter sparse scatter of flakes and cores	Adjacent
			with a dense concentration at the north end of	
			site.	
P-37-014350	Prehistoric	Lithic scatter	10 by 10 meter flaking station/lithic raw material	Adjacent
			prospect	
P-37-014351	Prehistoric	Lithic scatter	50 by 10 meter sparse scatter of flaked stone	Adjacent
			tools and debitage	
P-37-014354	Prehistoric	Lithic scatter	45 by 15 meter lithic raw material prospect that	Adjacent
			consists of a sparse scatter of flakes and cores	
P-37-014355	Prehistoric	Lithic scatter	5 by 7.5 meter raw material prospect that consists	Adjacent
			of a single core and five flakes	
P-37-014138	Prehistoric	Isolate	One quartzite flake	Adjacent
P-37-014516	Prehistoric	Isolate	Two flakes; quartzite and metasedimentary	Adjacent
P-37-014518	Prehistoric	Isolate	Two quartzite cores	Adjacent
P-37-014662	Prehistoric	Lithic scatter	20 by 5 meter scatter of tested cobbles and a core	Adjacent
P-37-014926	Prehistoric	Isolate	One core and one unifacial scraper	Adjacent
P-37-014970	Prehistoric	Isolate	Informal metavolcanic test core and a bifacial	Adjacent
			shaped granite mano	
P-37-014972	Prehistoric	Isolate	One quartzite flake	Adjacent
P-37-014980	Prehistoric	Isolate	One metavolcanic flake	Adjacent
P-37-014981	Prehistoric	Isolate	One core and a quartzite flake	Adjacent
P-37-019277	Prehistoric	Lithic and shell	85 by 125 meter scatter of flaked stone tools and	Adjacent
		scatter	debitage with a 2 by 2 meter shell scatter	
P-37-025213	Prehistoric	Artifact scatter	30 by 66 meter moderate-density scatter of	Adjacent
			groundstone and flaked stone tools and debitage	
P-37-025214	Prehistoric	Lithic scatter	44 by 16 meter scatter of debitage	Adjacent
P-37-026729	Prehistoric	Lithic scatter	30 by 12 meter scatter of flaked stone tools and	Adjacent
			debitage	
P-37-026730	Prehistoric	Lithic scatter	150 by 90 meter scatter of flaked stone tools,	Adjacent
			debitage, and a single mano	
P-37-026731	Prehistoric	Lithic scatter	50 by 35 meter scatter of flaked stone tools and	Adjacent
			debitage	
P-37-026732	Prehistoric	Lithic scatter	160 by 45 meter scatter of flaked stone tools and	Adjacent
			debitage	
P-37-026736	Prehistoric	Lithic scatter	60 by 25 meter scatter of flaked stone tools and	Adjacent
			debitage	

*Note: subject to Native American consultation, some archaeological resources may also be considered tribal cultural resources.

<u>P-37-006941</u>

Site P-37-006941 was originally recorded by Carillo in 1979 as a series of thin lithic scatters (Loci A, C, D, and E; Locus B was recorded as a single flake). In 1983, RBR & Associates revisited the site for the California Terrace Project. Loci B, C, and E were not relocated; however, dense artifact concentrations containing groundstone, flaked stone tools, cores, debitage, bone, and shell/midden were found at Loci A and D, and two new loci were discovered (F and G) (Van Wormer 1983). RBR & Associates conducted testing at Loci A, D, and F in 1987, after which Loci A and F were identified as not significant and a data recovery program was conducted for Locus D (Robbins-Wade et al. 1987). As part of the Otay Mesa Road Widening Project, seventeen more loci (Locus H through X) were located in 1995 and testing was conducted at Locus H. Although a large number and variety of artifacts were recovered, the area was thoroughly disturbed by agricultural use and Locus H was determined not significant (Kyle et al. 1996). Lastly, Locus G and Y were determined not significant as a result of the Route 905 testing program of 1996 (Kyle et al. 1997). In summary: Loci A, D, F, G, H, and Y have been determined not significant, Locus B, C, and E were never relocated, and the remaining loci were recommended not eligible based on surface observations. This site has not been evaluated for the NRHP.

<u>P-37-007604</u>

Site P-37-007604 was first recorded by Riggan in 1979 as an isolated hammerstone/chopper. During the 1983 California Terraces Project survey, RBR & Associates revisited the area and observed a large temporary camp with five discrete loci (A through E) containing flakes, cores, scrapers, choppers, manos, hammerstones, and midden deposits (Winterrowd and Van Wormer 1983). RBR & Associates returned in 1987 to conduct testing at Loci A, B, D, and E, and determined that all four loci were not significant (Robbins-Wade et al 1987). The most recent site update occurred in 1995, during which lithics and historic material were observed south of Locus E and a light lithic scatter was observed 100 meters east of Locus E; the recorders suggested that these resources may be an extension of site P-37-007604 (Kyle and Tift 1995). Site P-37-007604 has not been formally evaluated for the NRHP.

P-37-008645

Site P-37-008645 was originally recorded in 1980 as a sparse 20-by-20 meter artifact scatter (Apple 1980). ASM Affiliates revisited the site in 1990 and relocated a low density surface scatter consisting of a chopper, core, and five flakes. A testing program resulted in the recovery of a single flake subsurface and the site was evaluated as not significant (Cook 1990). Gallegos

& Associates revisited P-37-008645 in 2003 and observed no change in site conditions. This site has not been formally evaluated for the NRHP.

<u>P-37-009541</u>

Site P-37-009541 was recorded in 1982 as a temporary campsite consisting of groundstone and flaked-stone artifacts scattered over a 200-by-100 meter area (Theskem 1982). Over one-hundred flakes and debitage, ten cores, three hammerstones, two scrapers, one chopping tool, eight bifacial manos, and one possible metate fragment were observed. Agricultural disturbance of approximately 40% percent of the site was noted. Site P-37-009541 has not been formally evaluated for the CRHR or the NRHP.

<u>P-37-014292</u>

Site P-37-14292 was recorded in 1995 as a probable habitation site, possessing both groundstone and lithic artifacts. Two cores, five core/tools, 13 pieces of debitage, and a single semi-portable metate were recorded in an area of heavy off-road vehicle activity. Most of the site components were noted in trails and it is likely the area had experienced agricultural use in the past (Tift et. al. 1995). Site P-37-014292 has not been formally evaluated for the CRHR or the NRHP.

<u>P-37-026734</u>

P-37-026734 was first noted in December 2004 at the intersection of two unnamed dirt roads. Six tools, one edge-modified flake, three split cobble cores, and 14 pieces of debitage were observed over a 60-by-40 meter area. The site was flagged and gridded in preparation for a follow-up testing program. The testing program did not occur until February 2005, and much of the southern portion of the site could not be relocated during attempted surface collection. Testing, however, resulted in numerous positive shovel test pits (STPs), several of which in the southern portion of the site contained artifacts at a depth greater than ten centimeters. Because of the inability to relocate the additional surface artifacts, the site boundaries officially recorded for P-37-026734 encompass only the northernmost 25-by-15 meter area and do not include the subsurface deposits (Bouscaren 2005). P-37-026734 was evaluated as not significant (Mason and Bouscaren 2005). This site has not been formally evaluated for the NRHP.

Native American Contact Program

In addition to analyzing archival data on file at the SCIC, a Native American Contact Program has been initiated with local tribes and tribal representatives to identify any tribal cultural resources, including traditional cultural properties, considered significant to the local Native American community. On March 14, 2016, letters were mailed to 14 individuals as shown in the communications log presented in Table 5.5-2. Five responses have been received to date and are summarized in Table 5.5-2.

Affiliation	Name/Title	Date of Contact	Discussion
Native American		3/7/2016	Request letter sent via email.
Heritage Commission			•
(NAHC)		3/9/2016	Received results of Sacred Lands search and
<u> </u>	~		Native American contact list via fax.
Sycuan Band of the	Cody Martinez,	3/14/2016	Initial letter sent via USPS.
Kumeyaay Nation	Chairperson		
Viejas Band of	Robert Welch, Sr.,	3/14/2016	Initial letter sent via USPS.
Kumeyaay Indians	Chairperson	4/5/2016	Response letter received via email requesting the cultural report.
		4/14/2016	Email reply sent informing Tribe a cultural report
			has not been completed and directed them to City
			for questions and concerns.
Campo Band of Mission	Ralph Goff,	3/14/2016	Initial letter sent via USPS.
Indians	Chairperson		
Jamul Indian Village	Erica Pinto.	3/14/2016	Initial letter sent via USPS.
8-	Chairperson		
	r		
Pala Band of Mission	Shasta Gaughen,	3/14/2016	Initial letter sent via USPS.
Indians	THPO	4/21/2016	Response letter received indicating that the
			project is within Pala's Traditional Use Area and
			the Tribe would like to be kept in the
Pauma Band of Luiseno	Randall Maiel	3/14/2016	Initial letter sent via USPS
Indians	Chairperson	3/29/2016	Response email received indicating that the San
manuno	Chanperson		Pasqual Valley is their area of concern. The Tribe
			is aware of cultural resources in the Valley and
			recommends additional studies to identify the
			locations of the sites. They also request that sites
Soboba Band of	Rosemary Morillo	3/1//2016	Initial letter sent via USPS
Luiseno Indians	Chairperson	5/14/2010	linuar letter sent via USI 5.
	Champerson		
Kwaaymii Laguna Band	Carmen Lucas	3/14/2016	Initial letter sent via USPS.
of Mission Indians			
Rincon Band of Mission	Bo Mazzetti,	3/14/2016	Initial letter sent via USPS.
Indians	Chairperson	3/28/2016	Response letter received indicating the Project
			Territory: however, the Tribe has concerns for
			impacts to historic and cultural resources and
			recommends contacting closer tribes.

 Table 5.5-2

 Native American Contact Program Communications Log

		Date of	
Affiliation	Name/Title	Contact	Discussion
San Luis Rey Band of	Tribal Council	3/14/2016	Initial letter sent via USPS.
Mission Indians			
Pechanga Band of	Mark Macarro,	3/14/2016	Initial letter sent via USPS.
Mission Indians	Chairperson		
La Jolla Band of	Thomas Rodrigues,	3/14/2016	Initial letter sent via USPS.
Luiseno Indians	Chairperson		
Iipay Nation of Santa	Virgil Perez,	3/14/2016	Initial letter sent via USPS.
Ysabel	Chairperson		
	Clinton Linton,	3/14/2016	Initial letter sent via USPS.
	Director of Cultural	3/22/2016	Response letter received requesting a follow-up
	Resources		call to discuss the many resources Mr. Linton is
			aware of in the Project area.
		4/28/2016	Mr. Linton indicated that future consultation with
			the City will be required to ensure protection of
			the many resources within the Project area. He
			also requested that Native American monitors are
			present for subsequent investigations, and to be
			kept in the informational loop.

The Pala Band of Mission Indians indicated that the Project is within Pala's Traditional Use Area and that they would like to be kept informed about the project. The Pauma Band of Luiseno Indians responded that the San Pasqual Valley is their area of concern and that they are aware of many resources in the Valley. Pauma recommends additional studies to identify the resources and also requests that sites located are protected as the Project moves forward. Clinton Linton, Director of Cultural Resources for the lipay Nation of Santa Ysabel, indicated that numerous resources are located within the Project area. Upon further discussion, Mr. Linton understands that individual restoration activities are unknown at this time and that future consultation with the City will be required to ensure the protection of cultural resources within the Project area. Mr. Linton requested that Native American monitors be present for subsequent surveys and would like to be notified with Project updates and information as it becomes available. The Rincon Band of Mission Indians indicated that the Project area is not within their Traditional Territory; however, they have concerns for impacts to cultural resources and recommend contacting tribes closer to the area. Finally, the Viejas Band of the Kumeyaay Nation requested the Project's Cultural Report to make appropriate recommendations. The Tribe was informed that a technical report has not been completed to date; however, if they have specific questions or concerns they may contact the City through formal consultation efforts as required by Senate Bill 18.

5.5.2 <u>Regulatory Framework</u>

Federal

Federal regulations applicable to historic properties include NEPA, Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (16 United States Code [U.S.C.] 470 et seq., 36 CFR Part 800); the Archaeological Resources Protection Act, as amended (16 U.S.C. 470aa et seq.); Protection and Enhancement of the Cultural Environment (EO 11593); Indian Sacred Sites (EO 13007); Consultation and Coordination with Indian Tribal Governments (EO 13175); and the Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001).

Section 106 of the NHPA, as amended (16 U.S.C. 470 et seq.), requires federal agencies to take into account the effects of their actions proposed on historic properties eligible for inclusion in the NRHP and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. An undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal permit, license, or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency. The issuance of an ITP is an undertaking subject to Section 106 of the NHPA. Federal agencies are responsible for initiating Section 106 review and completing the steps in the process that are outlined in the regulations. Under Code of Federal Regulations (36 CFR) Part 800.8, all federal agencies are specifically required to coordinate compliance with Section 106 and the National Environmental Policy Act (NEPA) process.

<u>State</u>

State regulations applicable to historical resources include CEQA, California PRC Sections 5024.1, 21084.1, and 21083.2 addressing the CRHR; the California Health and Safety Code Section 7050.5(b) regarding the discovery of human remains; California Native American Graves Protection and Repatriation Acts Sections 8010-8011, and Senate Bill 18.

Senate Bill 18 requires cities and counties to contact and consult with California Native American tribes prior to amending or adopting any general plan or specific plan, or designating land as open space. The adoption of the VPHCP will include amendments to the City's General Plan, and the Otay Mesa and Kearny Mesa Community Plans, thus triggering SB 18. On January 25, 2012, the City sent Notice letters to twelve local tribes notifying them that an EIR/EIS was being prepared for this Project and giving tribes 90 days to request consultation. No responses

have been received to date. Since the Notice of Preparation was filed prior to July 1, 2015, Assembly Bill 52 does not apply to this project.

Local

The City of San Diego's Historic Preservation Element of the General Plan provides guidance on archaeological and historic site preservation in San Diego and sets a series of goals for the City for the preservation of historic resources, the first of which is to preserve significant historical resources. These goals are realized through implementation of policies that encourage the identification and preservation of historical resources. Policies HP-A.1 through HP-A.5 are associated with the overall identification and preservation of historic resource planning and integration into citywide planning documents, such as the VPHCP being analyzed within this EIR/EIS. These policies also focus on coordinated planning and preservation of tribal resources, promoting the relationship with Kumeyaay/Diegueño tribes. Historic Preservation policies HP-B.1 through HP-B.4 address the benefits of historical preservation planning and the need for incentivizing maintenance, restoration, and rehabilitation of designated historical resources.

The City's Historical Resources Regulations (codified in the San Diego Municipal Code as Chapter 11, Article 3, Division 1, §143.0201-143.0280), were adopted in January 2000 and provide a balance between sound historic preservation principles and the rights of private property owners. The Regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these are the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. Compliance with the Historical Resources Regulations begins with the determination of the need for a site- specific survey for a project in accordance with the City's Land Development Manual – Historical Resources Guidelines (City of San Diego 2001).

These Guidelines, as they relate to mitigation measures, are described in Section 5.5.4 below.

5.5.3 <u>CEQA/NEPA Thresholds of Significance</u>

Federal, state, and local criteria have been established for the determination of historical resource significance. The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating CEQA significance. A resource that is not listed in, or determined to be eligible for listing in, the CRHR, not included in a local register of historic resources, or not deemed significant in a historical <u>or tribal cultural</u> resource survey may nonetheless be historically significant for purposes of CEQA. The City's determination of significance of impacts on historical, unique archaeological resources, or tribal cultural resources

is based on the criteria found in Section 21074 and Section 15064.5 of the State CEQA Statutes and Guidelines.

A significant CEQA impact would occur if the Project would:

- 1. Result in any alteration, including adverse physical or aesthetic effects, and/or destruction of a prehistoric or historic building (including an architecturally significant building), structure, object, or site;
- 2. Result in any impact to existing religious or sacred uses within the potential impact area; and/or,
- 3. Result in the disturbance of any human remains, including those interred outside of dedicated cemeteries.

CEQA Guidelines Appendix G also requires consideration of Tribal Cultural Resources when determining if a significant impact would occur if a Project would:

- 4. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

A significant impact under Section 106 of the NHPA would occur if the Project would:

5. Result in any alteration, directly or indirectly, of any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

5.5.4 <u>Environmental Consequences</u>

ISSUE 1: Would the project result in any alteration, including adverse physical or aesthetic effects, and/or destruction of a prehistoric or historic building (including an architecturally significant building), structure, object, or site?

Project

<u>Historical and tribal c</u>Cultural resources may potentially be affected by ground_-disturbing activities related to restoration undertaken as part of the VPHCP (i.e., topographical recontouring). Table 5.5-3 lists the cultural sensitivity of the 28 vernal pools sites within 20 vernal pool complexes with restoration potential. Of the 28 vernal pool sites, five overlap with a known archaeological resource. The other 23 vernal pool sites do not overlap with any recorded resources; however, known archaeological resources are located nearby. Cultural sensitivity levels for each vernal pool complex were rated low, moderate, or high based on the results of the records search, the Native American Contact Program, and regional environmental factors. Sensitivity ratings may be adjusted based on the amount of disturbance that has occurred, which may have previously impacted archaeological resources.

A low sensitivity rating indicates that few or no previously recorded resources were identified within the vernal pool complex. Resources at this level would not be expected to be complex, with little to no site structure or artifact diversity. The potential for encountering additional resources in such areas would be low.

A moderate sensitivity rating indicates that some previously recorded resources were identified within the vernal pool complex. These are more complex resources, consisting of more site structure, diversity of feature types, and diversity of artifact types. The potential for encountering additional resources in such areas would be moderate.

Areas identified as having high sensitivity include those in which the records search identified several previously recorded resources within the vernal pool complex. These resources may range from moderately complex to highly complex, with more defined living areas or specialized work space areas and a large breadth of features and artifact assemblages. The potential for encountering additional resources in such areas would be high. No vernal pool complexes were given a high cultural sensitivity rating.

			Cultural		Cultural
	Complex		Resources		Resource
Vernal Pool	Cultural		Within	Cultural Resource	NRHP
Complex ID	Sensitivity	Vernal Pool Site Name	Vernal Pool	CRHR Eligibility	Eligibility
H 1-10, 13-15,	Low	Del Mar Mesa (City/County)	None	N/A	N/A
18-26					
112	Low	Pueblo Lands	None	N/A	N/A
J 11 E	Low	Slump Block Pools	None	N/A	N/A
J 11 W	Low	J 11W	None	N/A	N/A
J 12	Low	J 12	None	N/A	N/A
J 13 E	Low	South Otay J 13E	None	N/A	N/A
J 13 N	Low	NDU 1 & 2	None	N/A	N/A
J 13 N	Low	South Otay 1 acre (City)	None	N/A	N/A
J 13 S	Low	Bachman	None	N/A	N/A
J 13 S	Low	NDU 1 & 2	None	N/A	N/A
J 13 S	Low	South Otay J 13S	37-026734	Not significant	Unevaluated
				(Mason and	
				Buscharen 2005)	
J 14	Low	Anderprises (City)	None	N/A	N/A
J 14	Low	Bachman	None	N/A	N/A
J 14	Low	Brown Field Basins	None	N/A	N/A
J 14	Low	Handler	None	N/A	N/A
J 16-18	Low	Goat Mesa	None	N/A	N/A
J 16-18	Low	Wruck Canyon	None	N/A	N/A
J 2	Moderate	Clayton Parcel	37-014292	Unevaluated	Unevaluated
J 2	Moderate	Clayton Parcel	37-007604	Not significant	Unevaluated
				(Robbins-Wade et al	
				1987)	
J 2	Moderate	St. Jerome's	37-014292	Unevaluated	Unevaluated
J 2	Moderate	St. Jerome's	37-006941	Not significant	Unevaluated
				(Robbins-Wade et al.	
				1987; Kyle et al.	
				1996; Kyle et al.	
				1997)	
J 20-21	Low	La Media ITS	None	N/A	N/A
J 21	Low	La Media Swale South	None	N/A	N/A
J 28 E	Low	La Media Swale North	None	N/A	N/A
J 34	Moderate	Bachman	37-008645	Not significant	Unevaluated
				(Cook 1990)	
J 34	Moderate	Bachman	37-009541	Unevaluated	Unevaluated
J 36	Moderate	Southview	37-009541	Unevaluated	Unevaluated
N 5-6	Low	Montgomery-Gibbs	None	N/A	N/A
		Executive Airport			
N 7	Low	Serra Mesa Library	None	N/A	N/A
Q 2	Low	Mission Trails Regional Park	None	N/A	N/A
U 15	Low	SANDER	None	N/A	N/A

 Table 5.5-3

 Cultural Sensitivity of Vernal Pools with Restoration Potential

As depicted in Table 5.5-3, seventeen vernal pool complexes were given a low cultural sensitivity rating. Sixteen of these vernal pool complexes were rated low because no previously recorded cultural resources were identified within the complexes. Vernal pool complex J 13 S is considered to have low cultural sensitivity because the lithic scatter within this complex

(37-026734) does not have site structure or artifact density and has been evaluated as not significant (Mason and Buscaran 2005).

Three vernal pool complexes, J 2, J 32, and J 36, are considered to have moderate cultural sensitivity because they overlap with several archaeological resources and/or the archaeological resource(s) present is complex in nature (Table 5.5-4). Vernal pool complex J 2 overlaps with three archaeological resources: a large lithic scatter (37-006941), a temporary camp with a diversity of artifacts and midden deposits (37-007604), and a habitation site with both lithic and groundstone artifacts (37-014292). Vernal pool complex J 32 contains two archaeological resources: a sparse lithic scatter (37-008645) and a temporary camp (37-009541) of over 100 surficial artifacts. Finally, vernal pool complex J 36 contains a large lithic scatter (37-009541). Although 37-006941, 37-007604, and 37-008645 have been determined not eligible; 37-009541 and 37-014292 have not been formally evaluated for inclusion in the CRHR. Thus, Project activity at vernal pool complexs J 2, J 32, and J 36 may have the potential to adversely impact eligible historical resources.

For these reasons, the ground disturbing activities associated with the Project have the potential to cause a substantially adverse and significant impact to prehistoric and historic archaeological <u>or tribal cultural resources</u>.

Vernal Pool Complex ID	Complex Cultural Sensitivity	Vernal Pool Name	Cultural Resource Within Vernal Pool	Cultural Resource CRHR Eligibility	Cultural Resource NRHP Eligibility
J 2	Moderate	Clayton Parcel	37-014292	Unevaluated	Unevaluated
J 2	Moderate	Clayton Parcel	37-007604	Not significant (Robbins-	Unevaluated
				Wade et al 1987)	
J 2	Moderate	St. Jerome's	37-014292	Unevaluated	Unevaluated
J 2	Moderate	St. Jerome's	37-006941	Not significant (Robbins-	Unevaluated
				Wade et al. 1987; Kyle et al.	
				1996; Kyle et al. 1997)	
J 34	Moderate	Bachman	37-008645	Not significant (Cook 1990)	Unevaluated
J 34	Moderate	Bachman	37-009541	Unevaluated	Unevaluated
J 36	Moderate	Southview	37-009541	Unevaluated	Unevaluated

 Table 5.5-4

 Moderate Cultural Sensitivity Vernal Pool Complexes and Potentially Affected Resources

Expanded Conservation Alternative

Potential impacts to historical <u>or tribal cultural</u> resources as a result of the Expanded Conservation Alternative would be similar to the Project; however, the Expanded Conservation Alternative includes an additional vernal pool complex with two vernal pool sites. Table 5.5-5 lists the cultural sensitivity of the additional vernal pool complex.

Vernal Pool Complex ID	Cultural Sensitivity	Vernal Pool Site Name	Cultural Resources Within Vernal Pool Site	Cultural Resources Adjacent
112N	Low	South Otay 1 acre	None	37-025213
J15IN	LOW	(Private)*	INOILE	37-025214

 Table 5.5-5

 Cultural Sensitivity of Added Vernal Pools in Expanded Conservation Alternative

*Two vernal pools sites are associated with this name

The additional vernal pool complex present in the Expanded Conservation Alternative has a low cultural sensitivity rating; however, as discussed above for the Project, potential impacts to archaeological <u>or tribal cultural</u> resources could still occur in vernal pool complexes J 2, J 32, and J 36 as a result of the Expanded Conservation Alternative.

For these reasons, the Expanded Conservation Alternative has the potential to cause a substantially adverse and potentially significant impact to historical <u>or tribal cultural</u> resources.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the City would not be allowed take of the seven covered species and would not conduct activities within the vernal pools. No ground-disturbing activities would occur within the VPHCP Plan Area APE, and no historical or tribal <u>cultural</u> resources would be disturbed. Vernal pool restoration projects would be evaluated individually on a project-by-project basis and subject to review in accordance with CEQA and the City's Historical Resources Regulations.

For these reasons, the Existing Conservation/No Project Alternative would result in no substantial adverse effects and no impacts to historical <u>or tribal cultural resources</u>.

ISSUE 2: Would the project result in any impact to existing religious or sacred uses within the potential impact area?

Project

No religious or sacred sites have been identified within the VPHCP Plan Area APE.

For this reason, the Project would have no impact to existing religious or sacred uses within the potential impact area.

Expanded Conservation Alternative

No religious or sacred sites have been recorded within the Expanded Conservation Alternative, which includes the same area covered by the VPHCP Plan Area APE.

For this reason, the Expanded Conservation Alternative would have no impact to existing religious or sacred uses within the potential impact area.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the City would not be allowed take of the seven covered species and would not conduct activities within the vernal pools. No ground-disturbing activities would occur within the VPHCP Plan Area APE, and no religious or sacred sites would be disturbed.

For this reason, the Existing Conservation/No Project Alternative would have no impact to existing religious or sacred uses within the potential impact area.

ISSUE 3: Would the project result in the disturbance of any human remains, including those interred outside of dedicated cemeteries?

Project

No human remains, including those interred outside of dedicated cemeteries, have been recorded within the VPHCP Plan Area APE.

As of the date of this document, there is no evidence indicating the possible presence of human remains within the Project APE; however, there is a potential to encounter unknown human remains during ground-disturbing activities conducted as part of the Project.

For these reasons, the ground disturbing activities associated with the Project have the potential to cause a substantially adverse and significant impact to unknown human remains.

Expanded Conservation Alternative

No human remains, including those interred outside of dedicated cemeteries, have been recorded within the Expanded Conservation Alternative, which includes the same area as the VPHCP Plan Area APE.

As of the date of this document, there is no evidence indicating the possible presence of human remains within the Project APE; however, there is a potential to encounter unknown human remains during ground-disturbing activities conducted as part of the Expanded Conservation Alternative.

For these reasons, the ground disturbing activities associated with the Expanded Conservation Alternative have the potential to cause a substantially adverse and significant impact to unknown human remains.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the City would not be allowed take of the seven covered species and would not conduct activities within the vernal pools. No ground-disturbing activities would occur within the VPHCP Plan Area APE, and no human remains would be disturbed.

For this reason, the Existing Conservation/No Project Alternative would have no impact to human remains, including those interred outside of dedicated cemeteries.

ISSUE 4: Would the project result in a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.?

Project

Tribal cultural resources may potentially be affected by ground disturbing activities related to restoration undertaken as part of the VPHCP (i.e., topographical recontouring) and areas where covered activities would occur. As described under Issue 1, Table 5.5-3 lists the cultural sensitivity of the 28 vernal pools sites within 20 vernal pool complexes with restoration potential. Of the 28 vernal pool sites, five overlap with a known archaeological resource. The other 23 vernal pool sites do not overlap with any recorded resources; however, known archaeological resources are located nearby. Cultural sensitivity levels for each vernal pool

complex were rated low, moderate, or high based on the results of the records search, the Native American Contact Program, and regional environmental factors. For the purpose of this analysis, archaeological resources could also be or contain tribal cultural resources as defined above. As such, Project activity at vernal pool complexes within or adjacent to areas identified in Cultural Resources Issue 1 as having high or moderate sensitivity may have the potential to adversely impact tribal cultural resources and eligible historical resources.

For these reasons, the ground disturbing activities associated with the Project have the potential to cause a substantially adverse and significant impact to tribal cultural resources.

ISSUE 5: Would the project result in any alteration, directly or indirectly, of any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association? (36 CFR § 800.5(a)(1)).

Resources within the vernal pool complexes are currently unevaluated for National Register eligibility and additional evaluation will be required to determine eligibility for inclusion prior to the start of restoration efforts and in areas where covered activities will occur. As such, ground disturbing activities associated with the Project have the potential to cause a substantially adverse and significant impact to a historic property.

5.5.5 <u>Mitigation Measures</u>

Project

The following mitigation would be required for vernal pool complexes with moderate cultural sensitivity levels to reduce impacts to historical, archaeological or tribal cultural resources and the disturbance of human remains to a less than significant level under CEQA.

Mitigation Measure HIST-1:

Prior to issuance of any permit for a future development project implemented in accordance with the VPHCP Plan area that could directly affect an archaeological or Tribal Cultural Resource, the City shall require the following steps be taken to determine (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources that may be impacted by a development activity. Sites may include residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socioeconomic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

INITIAL DETERMINATION

The environmental analyst will determine the likelihood for a project site to contain historical resources by reviewing site photographs, including aerial photographs and existing historic information (e.g., Archaeological Sensitivity Maps; the Archaeological Map Book; <u>1928-29 Tax Factor series of photos;</u> and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego"), and may conduct a site visit. If there is any evidence that the site contains archaeological or Tribal Cultural Resources, then an archaeological evaluation consistent with the City Guidelines would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

STEP 1:

Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archaeological testing, and analysis. Before actual field reconnaissance would occur, background research is required, which includes a records search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the Native American Heritage Commission must also be conducted at this time. Information about existing archaeological collections should also be obtained from the San Diego Archaeological Center and any tribal repositories or museums.

In addition to the records searches mentioned above, background information may include examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archaeological research in similar areas, models that predict site distribution, and archaeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information would be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including remote sensing, ground-penetrating radar, <u>LIDAR</u>, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If, through background research and field surveys, historical resources are identified, then
an evaluation of significance, based on the City's Guidelines must be performed by a qualified archaeologist.

STEP 2:

Where a recorded archaeological site or Tribal Cultural Resource (as defined in the Public Resources Code) is identified, the City would be required to initiate consultation with identified California Indian tribes pursuant to the provisions in Public Resources Code Section 21080.3.1 and 21080.3.2., in accordance with Assembly Bill 52. It should be noted that during the consultation process, tribal representative(s) will be involved in making recommendations regarding the significance of a Tribal Cultural Resource which also could be a prehistoric archaeological site. A testing program may be recommended which requires reevaluation of the proposed project in consultation with the Native American representative, which could result in a combination of project redesign to avoid and/or preserve significant resources and mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). The archaeological testing program, if required shall include evaluating the horizontal and vertical dimensions of a site; the chronological placement, site function, artifact/ecofact density and variability, and presence/absence of subsurface features; and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines. Results of the consultation process will determine the nature and extent of any additional archeological evaluation of changes to the proposed project.

The results from the testing program will be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the APE, the site may be eligible for local designation. However, this process would not proceed until such time that the tribal consultation has been concluded and an agreement is reached (or not reached) regarding significance of the resource and appropriate mitigation measures are identified. When appropriate, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be nonsignificant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms, and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

STEP 3:

Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. When Tribal Cultural Resources are present and cannot be avoided, appropriate and feasible mitigation will be determined through the tribal consultation process and incorporated into the overall data recovery program where applicable, or project specific mitigation measures shall be developed and incorporated into the project. The data recovery program will also incorporate any agreements regarding curation or repatriation of Tribal Cultural Resources as defined during the consultation process. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to distribution of a draft CEQA document and shall include the results of the tribal consultation process. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property, Tribal Cultural Resource, or archaeological site located on City property or within the APE of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of PRC Section 5097 must be followed. These provisions will be outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in a subsequent project-specific environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time he/she may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

STEP 4:

Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix A of the City

Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as Traditional Cultural Properties, Tribal Cultural Resources, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g., collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation's Archaeological Resource Management Reports: Recommended Contents and Format (see Appendix C of the City Guidelines), which will be used by Environmental staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) with historical resources reports for archaeological sites, Traditional Cultural Properties or Tribal Cultural Resources containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects that result in a substantial collection of artifacts, and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D of the City Guidelines (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

STEP 5:

For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial-related artifacts, catalog information, and final reports recovered during public and/or private development projects, must be permanently curated with an appropriate institution, one that has the proper facilities and staffing for ensuring research access to the collections consistent with state and federal standards, unless otherwise determined during the tribal consultation process. In the event that a prehistoric and/or

historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial-related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., AB 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation for all recovered artifacts must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance. When Tribal Cultural Resources are present, or non-burial-related artifacts associated with Tribal Cultural Resources are suspected to be recovered, the treatment and disposition of such resources will be determined during the tribal consultation process. This information must then be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 CFR 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.

To resolve adverse effects to historic properties, USFWS will delegate its authority under Section 106 of the NHPA to the City through a statewide agreement with the SHPO for their activities.

Expanded Conservation Alternative

Mitigation Measure HIST-1 as described under the Project would also be required for the Expanded Conservation Alternative.

Existing Conservation/No Project Alternative

There are no impacts from the Existing Conservation/No Project Alternative, and no mitigation is required.

5.5.6 Level of Impact after Mitigation

Project

With implementation of Mitigation Measure HIST-1, potential impacts to archaeological or tribal cultural resources from implementation of the Project would be reduced to below a level of significance under CEQA and effects to historic properties would not be substantially adverse under NEPA.

Expanded Conservation Alternative

With implementation of Mitigation Measure HIST-1, potential impacts to archaeological or tribal cultural resources from implementation of the Expanded Conservation Alternative would be reduced to below a level of significance under CEQA and effects to historic properties would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

No adverse effects to archaeological or tribal cultural resources would result from the Existing Conservation/No Project Alternative. Therefore, no mitigation is required, and the impact would remain less than significant under CEQA and effects to historic properties would not be substantially adverse under NEPA.

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5.6 HYDROLOGY AND WATER QUALITY

This section describes existing environmental conditions, policies, and regulations related to hydrology and water quality that are relevant for the Project. An evaluation of the environmental consequences on water resources associated with the implementation of the Project and alternatives is provided.

5.6.1 <u>Affected Environment</u>

Watersheds

The VPHCP Plan Area spans across portions of the city and lies within seven watersheds, which are described below. They are the San Dieguito, Los Peñasquitos, San Diego River, Pueblo, Sweetwater, Otay, and Tijuana watersheds (Figure 5.6-1). Table 5.6-1 below provides information concerning each watershed and contaminants known to affect the water quality within the watershed.

	Hydrologic	Major Water	Clean Water Act		Constituents	Sources/
Watershed	Unit	Bodies	303 (d) List	Major Impacts	of Concern	Activities
San	905.11 - 905.54	San Dieguito	Color, manganese,	Surface water	Coliform	Urban runoff,
Dieguito		River, San	pH; eutrophic;	quality	bacteria, TDS,	agricultural
		Dieguito	fecal coliform,	degradation,	nutrients,	runoff, mining
		Lagoon, and	dissolved oxygen,	habitat	petroleum	operations,
		Lake Hodges	phosphorus,	degradation and	chemicals, toxics,	sewage spills,
			indicator bacteria,	loss, sediment,	and trash	and sand
			TDS, chloride,	invasive species,		mining
			sulfates	eutrophication,		
				and flooding		
Los	906.10 - 906.50	Los	Phosphate, TDS,	Surface water	Indicator bacteria,	Urban runoff,
Peñasquitos		Peñasquitos	sediment/siltation,	quality	nutrients, trace	sewage spills,
		Creek, Los	eutrophic, lead,	degradation,	metals, toxics,	dredging, and
		Peñasquitos	indicator bacteria,	beach closures,	and sediment	landfill
		Lagoon, Rose	sediment toxicity,	sedimentation,		leachate
		Creek,	cadmium, copper,	habitat		
		Tecolote	phosphorous,	degradation and		
		Creek,	toxicity, turbidity,	loss, invasive		
		Mission Bay,	z 7 inc	species,		
		Miramar		eutrophication		
		Reservoir				

Table 5.6-1 VPHCP Watersheds

Watershed	Hydrologic Unit	Major Water Bodies	Clean Water Act 303 (d) List	Major Impacts	Constituents of Concern	Sources/
San Diego River	907.11 - 907.43	San Diego River, El Capitan Reservoir, San Vincente Reservoir, Lake Murray, Boulder Creek, Santee Lakes	Color, manganese, pH, eutrophic, fecal coliform, dissolved oxygen, pH, phosphorus, TDS, indicator bacteria, fecal coliform, low dissolved oxygen, chloride, pH (high), sulfates	Surface water quality degradation, habitat degradation and loss, sediment, invasive species, eutrophication, and flooding	Coliform bacteria, TDS, nutrients, petroleum chemicals, toxics, and trash	Urban runoff, agricultural runoff, mining operations, sewage spills, and sand mining
Pueblo	908.10 - 908.32	Chollas Creek, Paleta Creek, and San Diego Bay	Copper, indicator bacteria, lead, zinc, benthic community effects, sediment toxicity, mercury, PCBs, chlordane, lindane/HCH, PAH	Surface water quality degradation, habitat degradation, sediment toxicity in San Diego Bay, and sewer overflows	Trace metals, toxic substances, and coliform bacteria	Urban runoff
Sweetwater	909.11 – 909.35	Sweetwater River, Sweetwater Reservoir, Loveland Reservoir and San Diego Bay	Loveland Reservoir: aluminum, manganese, dissolved oxygen; San Diego Bay Shoreline (Chula Vista Marina): copper; Sweetwater Reservoir: dissolved oxygen	Surface and groundwater quality degradation, habitat degradation and loss, and invasive species	Coliform bacteria, trace metals and other toxics	Agricultural and urban runoff
Otay	910.10 - 910.37	Upper and Lower Otay Reservoirs, Otay River, San Diego Bay	Color, iron, manganese, nitrogen, ammonia (total ammonia), pH (high), PCBs, phosphorus, turbidity, copper	Surface water quality degradation, reduced ground water recharge, sedimentation, habitat degradation and loss, flood control, and invasive species	Coliform bacteria, trace metals, and other toxic constituents	Urban runoff, agricultural runoff, resource extraction, septic systems, marinas and boating activities
Tijuana	911.11 - 911.85	Tijuana Estuary, Tijuana River, Cottonwood Creek, Pine Valley, Campo Creek, Barrett Lake, Lake Moreno	Color, manganese, pH, indicator bacteria, enterococcus, phosphorus, turbidity, eutrophic, low dissolved oxygen, pesticides, solids, synthetic organics, trace elements, trash, lead, nickel, thallium	Surface water quality degradation, trash, sedimentation, eutrophication, habitat degradation and loss, flooding, erosion, and invasive species	Freshwater: coliform bacteria, nutrients, trace metals, pesticides, miscellaneous toxics, low dissolved oxygen, and trash <u>Groundwater:</u> TDS, nitrates, petroleum, MTBE, and solvents	Urban runoff, sewage spills, industrial discharges, agricultural, orchards, livestock, domestic animals, and septic systems

HCH = hexachlorocyclohexane; MTBE = methyl tertiary-butyl ether; PAH = polycyclic aromatic hydrocarbon; PCB = polychlorinated biphenyl; TDS = total dissolved solids Source: Project Clean Water 2015



City of San Diego VPHCP EIR/EIS

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San Dieguito Watershed

The San Dieguito Watershed is a rectangular-shaped area of approximately 350 square miles. It includes the San Dieguito River and its tributaries, along with Santa Ysabel and Santa Maria creeks. The unit contains two reservoirs — Lake Hodges and Sutherland — and a smaller facility, the San Dieguito Reservoir. The unit contains one coastal lagoon, the San Dieguito Slough, located at the mouth of the San Dieguito River, which forms the northerly edge of the City of Del Mar. The lagoon is normally closed off from the ocean by a sandbar.

Los Peñasquitos Watershed

The Los Peñasquitos Watershed is a triangular-shaped area of approximately 170 square miles, extending from Poway on the east to San Diego's La Jolla community on the west. There are no substantial streams in this unit although it is drained by numerous creeks. Miramar Reservoir, a storage facility, contains imported Colorado River water. The unit contains two coastal lagoons, Los Peñasquitos and Mission Bay. Small finger canyons drain into three main creeks (Carmel Valley Creek, Los Peñasquitos Creek, and Carroll Canyon Creek) that lead into Los Peñasquitos Lagoon and ultimately the Pacific Ocean near the northerly boundary of the City. Mission Bay and the mouth of the San Diego River form a 4,000-acre aquatic park known as Mission Bay Park. Water quality within Mission Bay generally is lower than that of the coastal ocean water due to the poor flushing characteristics of the bay and the input of nutrient material from storm runoff. Annual precipitation in the unit ranges from less than 8 inches along the ocean to 18 inches inland. Poway and La Jolla are among population centers.

San Diego River Watershed

The San Diego Watershed is a long, triangular-shaped area of approximately 440 square miles drained by the San Diego River. El Capitan, San Vicente, Cuyamaca, Lake Jennings, and Lake Murray reservoirs are the major storage facilities. San Vicente Reservoir, Murray Reservoir, and Lake Jennings Reservoir store mainly Colorado River water, whereas El Capitan Reservoir mainly stores local runoff and some Colorado River water. Cuyamaca Reservoir stores only local runoff. Much of the impounded water is used to serve population centers, including a portion of the San Diego metropolitan area and the communities of El Cajon, Santee, Lakeside, Alpine, and Julian. Annual precipitation ranges from less than 11 inches at the coast to about 35 inches around Cuyamaca and El Capitan Reservoir.

Pueblo San Diego Watershed

The Pueblo San Diego Watershed is a triangular-shaped area of about 60 square miles with no substantial stream system. Although not necessarily a major stream system, the Pueblo San Diego Watershed consists of a group of relatively small local creeks and pipe conveyances,

including Chollas Creek and Paleta Creek, which present important water quality challenges. It is bordered to the north by the watershed of the San Diego River and on the south, in part, by that of the Sweetwater River. The primary population center is the City of San Diego. The unit is relatively dry with an annual precipitation of less than 11 inches to 13 inches. San Diego Bay lies offshore of this unit. The bay is approximately 13 miles long and varies from ¹/₂ to 1¹/₂ miles in width.

Sweetwater San Diego Bay Watershed

The Sweetwater Watershed is an elongated northeasterly trending strip with an area of about 230 square miles. It is traversed along its length by the Sweetwater River. The Sweetwater Watershed includes part of National City and Chula Vista. Much of the Sweetwater Watershed is occupied by undeveloped lands in the Cleveland National Forest, Cuyamaca Rancho State Park, and the unincorporated communities of Pine Valley, Descanso, Alpine, and the Viejas Indian Reservation. The annual precipitation varies from less than 11 inches at the coast to about 35 inches inland.

Otay Watershed

The Otay Watershed is a club-shaped area of approximately 160 square miles. The stream system traversing the area is the Otay River and its tributaries. The Lower Otay Reservoir is the terminus of the second San Diego Aqueduct. The Otay Watershed area includes part of Chula Vista and part San Diego, as well as part of Imperial Beach in the coastal area and the inland unincorporated community of Dulzura upstream. The annual precipitation generally increases landward from the coast and varies from less than 11 to 19 inches.

Tijuana Watershed

The Tijuana Watershed is a triangular-shaped area that is drained by Cottonwood and Campo creeks, which are tributaries to the Tijuana River. It covers an area of approximately 470 square miles and lies mainly in the mountain-valley section. The Tijuana Hydrologic Unit (HU) is arbitrarily divided by the U.S./Mexican border. Surface water quality has been adversely affected by runoff coming across the border from Mexico. Ground water quality has been affected by seawater intrusion and waste discharges in both the U.S. and Mexico. The unit's coastal lagoon is the Tijuana Estuary, which occupies approximately 2,000 acres and is generally open to the ocean but is influenced by pollution from Mexico that is transported by the Tijuana River. Runoff is captured by Morena Reservoir and Barrett Lake on Cottonwood Creek. Much of the unit is sparsely populated on the U.S. side, with the populated areas ranging from San Diego's San Ysidro community to the small unincorporated community of Campo. Annual precipitation

varies from less than 11 inches near the coast to more than 25 inches farther inland near Laguna Mountain.

Receiving Waters

Within San Diego, surface receiving waters include rivers and watercourses, reservoirs, bays, estuaries, and the Pacific Ocean. Rivers and bays include the San Diego River, San Dieguito River, Los Peñasquitos Creek, Otay River, Chollas Creek, Sweetwater River, Tijuana River, San Diego Bay, and Mission Bay. Reservoirs and other water bodies within the City include San Dieguito Lagoon, Los Peñasquitos Lagoon, Lakes Hodges, Lake Murray, Lower and Upper Otay Reservoirs, Miramar Reservoir, Chollas Heights Reservoir, and Morena Reservoir. In addition to these water bodies, there are numerous other creeks and channels located throughout the city.

Surface Drainage

Drainages within the seven watersheds that encompass the VPHCP area are generally from east to west and extend from the interior foothills and mountains to the coast, outletting in the coastal lagoons, marshes, bays, or created channels before flowing to the Pacific Ocean. Wetlands associated with the drainages or smaller seasonally wet depressions are located throughout the city, including foothills and inland valleys, mesas, and coastal areas. Surface streams in these regions are predominantly intermittent, flowing only during periods of high rainfall. In addition, much of the area is steeply sloped, leading to potentially high rainfall runoff rates and flood hazards.

Storm Water Flows and Collection System

The surface hydrology within San Diego has been modified because of urbanization. Primarily in response to flood risks and the need to convey storm flows, a storm water conveyance system has been developed throughout the city. The system of drainage is referred to as the Municipal Separate Storm Sewer System, also known as MS4, and it is separate from the sewage system. The MS4 conveys water from storm flows through man-made storm drains or channels and drainages to receiving waters such as rivers, creeks, reservoirs, bays, or the Pacific Ocean.

Surface runoff during storm events is directly affected by absorption rates (i.e., the time required for pervious ground to absorb water flows), the rate of surface runoff (the rate at which unabsorbed water flows to receiving waters), and drainage patterns. Because of its increase in impervious surfaces, urbanization generally decreases the area available for absorption and increases the volume and rates of surface runoff. Increased surface runoff may result in increased erosion and siltation of uplands and natural water courses, which may result in adverse environmental impacts. Increased runoff also increases the potential for flood damages.

Increases of impervious surfaces also increase the potential for water pollution because pollutants carried in urban water flows are not filtered out as they would be by soils and vegetation under natural conditions. Increased levels of pollutants can be detrimental to aquatic habitats.

100-Year Floodplain

While the city's numerous canyons and valleys compose an efficient natural drainage system that results in a low ratio of floodplain area to total land area, there are areas that experience flooding during heavy rains (City of San Diego 2008a). These areas are referred to as 100-year floodplains and are subject to possible major flooding events. The 100-year floodplain is defined as the land predicted to flood during a 100-year storm (also referred to as a base flood), which has a 1% statistical chance of occurring in any given year (FEMA 2015). The land area inundated by the base flood is identified as the SFHA where the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies (FEMA 2015). The NFIP aims to reduce the impact of flooding on private and public structures through the use of development regulations within the SFHA (FEMA 2015).

5.6.2 <u>Regulatory Framework</u>

Regulations exist at local, state, and federal levels that guide the development and enforcement of codes to protect water resources. These regulations include, but are not limited to, those summarized below.

Federal

Clean Water Act 1972

The Clean Water Act (CWA) is the primary federal law dealing with surface water quality control and protection of beneficial uses of the nation's waters, including lakes, rivers, aquifers, and coastal areas. The purpose of the CWA is to provide guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters through prevention and elimination of pollution. The CWA applies to discharges of pollutants into waters of the U.S. The CWA establishes a framework for regulating storm water discharges from municipal, industrial, and construction activities under the National Pollutant Discharge Elimination System (NPDES). Under the CWA, municipalities across the nation are issued Municipal NPDES permits. In California, the State Water Resources Control Board (SWRCB) administers the NPDES program. The following CWA sections are most relevant to this analysis.

- Section 303(d) of the CWA requires states to adopt water quality standards for all surface waters in the United States. Water quality standards consist of designated beneficial uses (e.g., wildlife habitat, agriculture supple, fishing etc.) for a particular water body, along with water quality criteria necessary to support those uses. Water quality criteria are prescribed concentrations or levels of constituents—such as lead, suspended sediment, and fecal coliform bacteria—or narrative statements that represent the quality of water that supports a particular use. Section 303(d) requires states to identify streams whose water quality is "impaired" (affected by the presence of pollutants or contaminants) and to establish the Total Maximum Daily Load (TMDL) or the maximum quantity of a particular constituent that a water body can assimilate without experiencing adverse effect (EPA 2012). The SWRCB and the applicable Regional Water Quality Control Board (RWQCB) are responsible for implementing and ensuring compliance with the provisions of the CWA.
- Section 401 of the CWA requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S. obtain a state certification that the discharge complies with other provisions of the CWA. The SWRCB administers the certification program within California through its nine RWQCBs.
- Section 402 of the CWA establishes the NPDES permit program to regulate the discharge of pollutants from point sources. The CWA defines point sources of water pollutants as "any discernable, confined, and discrete conveyance" that discharges or may discharge pollutants. These are sources from which wastewater or storm water is transmitted in some type of conveyance (pipe and channel) to a water body and are classified as municipal or industrial. Municipal point sources consist primarily of domestic treated sewage and processed water, including municipal sewage treatment plant outfalls and storm water conveyance system outfalls. These outfalls contain harmful substances that are emitted directly into waters of the U.S. Without a permit, the discharge of pollutants from point sources into navigable waters of the U.S. is prohibited. NPDES permits require regular water quality monitoring. Assessments must be completed to ensure compliance with the permit standards.
- Section 404 of the CWA establishes a permit program, administered by USACE, regulating discharge of dredged or fill materials into waters of the U.S., including wetlands. Activities in waters of the U.S. that are regulated under this program include fills for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. CWA Section 404 permits are issued by USACE.

Vernal pools are generally no longer regulated by USACE under Section 404 of the CWA (USACE 1997) in light of the Solid Waste Agency of Northern Cook County court decision excluding intrastate wetlands that are isolated from other "waters of the U.S." (531 U.S. 159, 2001). The City is not relying on the Section 404 process to implement the VPHCP conservation strategy. However, during project-level environmental review for proposed vernal pool restoration projects associated with the VPHCP, project proponents will determine if potentially affected vernal pools are isolated from waters of the U.S. If project-level surveys determine waters of the U.S. would be potentially impacted by vernal pool restoration activities, the project proponent would be regulated by USACE and if Section 404 permitting is required. Appropriate permits would be obtained at the project -level, if applicable.

Executive Order 11988, Floodplain Management

EO 11988 requires federal agencies to avoid to the extent possible development in floodplains; to reduce hazard and risk associated with floods; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial value of the floodplain. Local zoning is generally used to regulate construction in potentially hazardous floodplains. Since the City was certified as a participant in the NFIP in July 1976, construction without required engineered flood protection has not been permitted.

National Flood Insurance Act 1968

The National Flood Insurance Act of 1968 established the NFIP. The NFIP is a federal program administered by the Flood Insurance Administration of FEMA. It enables individuals who have property within the 100-year floodplain to purchase insurance against flood losses. Community participation and eligibility, flood hazard identification, mapping, and floodplain management aspects are administered by state and local programs and support directorate within FEMA. FEMA works with the states and local communities to identify flood hazard areas and publishes a flood hazard boundary map of those areas. Floodplain mapping is an ongoing process as such maps must be regularly updated for both major rivers and tributaries, as land uses and development patterns change.

State

State Water Resources Control Board

The SWRCB has jurisdiction over water resources throughout California. Created by the State Legislature in 1967, the SWRCB protects water quality by setting statewide policy, coordinating

and supporting RWQCB efforts, and reviewing petitions that contest RWQCB actions. There are nine RWQCBs that exercise rulemaking and regulatory activities by basins. Region 9 consists of most of San Diego County, and parts of Orange and Riverside counties, and is governed by the San Diego RWQCB.

The mission of the San Diego RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the City's waters while recognizing the City's local differences in climate, topography, geology, and hydrology. San Diego lies within the San Diego Basin Planning Area as defined in the San Diego Basin Water Quality Control Plan (1994, as amended in 2011), referred to as the "Basin Plan." The San Diego RWQCB Basin Plan designates beneficial uses for water bodies in the San Diego region, and establishes water quality objectives and implementation plans to protect those beneficial uses. Typical constituents of concern throughout the region's surface water bodies include phosphorous, manganese, sedimentation/siltation, and pH, among many others.

SWRCB Construction General Permit, 2012-0006-DWQ

This permit covers construction activities that disturb 1 or more acres of land that could impact hydrologic resources. Under the terms of the permit, the applicant must file a complete and accurate NOI with the SWRCB, must implement applicable best management practices (BMPs), and must develop a Storm Water Pollution Prevention Plan (SWPPP). Information to be included in the SWPPP consists of site maps, existing and proposed buildings, lots, roadways, storm water collection and discharge points, topography before and after construction, and drainage patterns across the project site.

Porter-Cologne Water Quality Control Act 1969

The Porter-Cologne Water Quality Control Act is the primary state law that establishes California's legal and regulatory framework for water quality control. The Porter-Cologne Water Quality Control Act is embodied in the California Water Code, which authorizes the SWRCB to implement the provisions of the federal CWA. California is divided into nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under oversight of the SWRCB. San Diego is located within the purview of the San Diego RWQCB (Region 9). The Porter-Cologne Act also provides for the development and periodic review of Water Quality Control Plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters.

Local

San Diego RWQCB Order Number R9-20153-0001, NPDES Permit Number CAS0109266

Under the authority prescribed by the CWA amendments and NPDES permit regulations, the RWQCB issued Order Number R9-2013-001 to the 18 cities in San Diego County, the County of San Diego, San Diego County Regional Airport Authority, and the Port of San Diego. Order Number R9-2013-001, commonly called the "Municipal Permit," requires all affected jurisdictions to prepare Jurisdictional Runoff Management Plans (JRMPs). In February 2015, Order No. R-9-2015-0001 amended Order No. R9-2013-001 to add Orange County copermittees and made other revisions. In November 2015, Order No. R9-2015-0100 was adopted and further amended Order No. R9-2013-0001 to extend coverage to Riverside County copermittees and made other revisions. The order requires that JRMPs must address land use planning for new development and redevelopment, existing development, construction, illicit discharge detection and elimination, education programs and public participation, assessment of the effectiveness of programs, and fiscal analysis. The permit also requires the copermittees to collaborate on the development of a Water Quality Improvement Plan (WQIP) for each watershed management area that addresses high-priority storm water quality issues.

Due to the poor water quality of storm water runoff from urban conveyance systems, the City requires that construction and post-construction storm water BMPs be utilized for all new development. The Municipal Permit requires the City to implement regulations for the provision of storm water BMPs for development projects. An NPDES permit is a means of ensuring proper BMPs during construction (through preparation of a SWPPP or a Water Pollution Prevention Control Plan that would be required for some smaller tasks). Examples of structural BMPs that could be employed to address a proposed increase in impervious surfaces and prevent increases in runoff rates and volumes that could cause erosion and sedimentation include:

- Infiltration detention basins
- Infiltration trenches
- Permeable pavement
- Placement of riprap dissipaters and filter blanket material at all storm drain discharge points
- Vegetative swales and filter strips
- Sand filters
- Dry flow weather flow separation and treatment
- Constructed wetlands

BMPs can also include nonstructural methods, such as controlling litter and waste disposal practices, buffer strip and riparian zone preservation, minimization of disturbance and imperviousness, and maximization of open space.

City of San Diego Jurisdictional Runoff Management Program

As indicated, the Municipal Permit required that the City develop a JRMP for the lands under their jurisdiction. The JRMP describes how the City plans to protect and improve the water quality of the surface waters (bays, rivers, and the ocean) in compliance with the Municipal Permit. The document also describes how the City incorporates storm water BMPs into land use planning, development review and permitting, the City's Capital Improvement Program, and the execution of construction contracts.

Water Quality Improvement Plans

The City has participated in the development of six WQIPs that cover high-priority storm water quality issues found in watershed management areas at least partially within the City. The watershed management areas addressed are San Dieguito, Los Peñasquitos, Mission Bay/La Jolla, San Diego River, San Diego Bay (comprising the Otay,Pueblo San Diego, andSweetwater, and Otay HUs), and Tijuana. The WQIPs identify and prioritize water quality-related issues that are potentially related to discharges from the municipal storm drain systems within these watershed management areas. In addition to providing baseline data and characterization of the water quality impairments, these plans provide action plans explaining how the copermittees will implement strategies through their JRMPs and work together to improve water quality of discharges from the MS4s and receiving waters. WQIPs also emphasize an adaptive process to achieve water quality improvements.

City of San Diego Storm Water Standards Manual

In 2003, and updated in 2016, as part of the Municipal Code, the City published Storm Water Standards – A Manual for Construction & Permanent Storm Water Best Management Practices Requirements (City of San Diego 2016), which is the reference document for all of the storm water issues encountered in development, including BMPs. Before preparing a drainage study, the Storm Water Requirements Applicability Checklist is completed. This checklist is used to determine the priority level of the project. Projects in the city likely would require Priority Project Permanent Storm Water BMPs and High Priority Construction Storm Water BMPs. The Applicability Checklist among other things is used to determine if a Water Quality Technical Report and permanent structural treatment is required. BMPs appropriate to the characteristics of each project proposed for development would be employed to reduce pollutants available for

transport or to reduce the amount of pollutants in runoff prior to discharge to a surface water body.

The update of the City Storm Water Standards Manual required by the current MS4 Permit was updated in February 2016. Part 1, Best Management Practices (BMP) Design Manual for Permanent Site Design, Storm Water Treatment & Hydromodification, is to comply with the Regional MS4 Permit regulating post-construction storm water discharges on-site. Part 2, Construction BMP Standards, is to comply with the Regional MS4 Permit and State Water Resources Control Board General Permit regulating construction-phase storm water discharges. Part 3, Alternative Compliance Program, is to comply with the Regional MS4 Permit regulating post-construction storm water discharges 0.

Point Source Permits

The RWQCB regulates most point source discharges of water through the issuance of Waste Discharge Requirements and NPDES permits. Compliance with these permits requires self-monitoring and reporting to the RWQCB by each individual discharger. All applicable dischargers are required to comply with the conditions of these permits.

Construction Permits

Construction in San Diego is subject to the requirements of erosion control in the City's Stormwater Management and Discharge Control Ordinance (Section 43.0301), and is also required to comply with the CWA. Conformance with the CWA is established through compliance with the requirements of the SWRCB NPDES General Permit No. CAS000002. For this permit, as discussed above, the SWRCB issued Order 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-006-DWQ), Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activity. To comply with the permit, the applicant for a construction permit must file a complete and accurate NOI with the SWRCB. Compliance requires conformance with applicable BMPs and development of a SWPPP and monitoring program plan. When construction is completed, the applicant must file a Notice of Termination with the SWRCB.

City of San Diego Drainage Design Manual

This manual, which is included as an appendix to the Land Development Manual (which is part of the LDC), provides a guide for designing drainage and drainage-related facilities for development projects in the city.

San Diego County Hydrology Manual

This manual provides uniform procedures for preparing flood and storm water analyses within San Diego County. It provides guidance for policies and procedures designed to standardize hydrology studies for projects within the county.

San Diego County Drainage Design Manual

This manual provides design standards and procedures regarding the development of storm water drainage and flood management facilities in San Diego County. The standards and procedures provide jurisdictions with guidance in the selection, design, construction, and maintenance of flood management and storm water drainage facilities in the county.

5.6.3 <u>CEQA Thresholds of Significance</u>

The following thresholds are derived from the City's 2016 Significance Determination Thresholds for the purpose of evaluating potential hydrologic and water quality-related impacts. A significant CEQA impact would occur if the Project would:

- 1. Result in increased flooding on- or off-site;
- 2. *Result in decreased aquifer recharge or extraction of water from an aquifer that would cause a net deficit in the aquifer volume or a reduction in the local groundwater table;*
- 3. Grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25% grade, and would drain into a sensitive water body or stream; and/or
- 4. *Result in modifications to existing drainage patterns so there may be significant impacts on environmental resources.*
- 5. *Result in substantial increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body; and/or*
- 6. *Impact local and regional water quality, including groundwater.*

5.6.4 <u>Environmental Consequences</u>

This section identifies potential environmental consequences to hydrology and water quality that would result from the Project and alternatives. The direct and indirect impacts to hydrology and water quality are assessed qualitatively. This qualitative analysis is conducted from a region-wide standpoint as the VPHCP spans across the San Diego region and water resource systems are naturally interconnected.

ISSUE 1: Would the project result in increased flooding on- or off-site?

Project

As part of the overall management of vernal pools and the seven covered species, implementation of management and monitoring activities described in the VPHCP would occur. The VPHCP includes regular monitoring of the vernal pool complexes to assess the status and need for complex-specific management action. The VPHCP includes maintenance, monitoring, and restoration (where needed based on monitoring observations) of the vernal pool hydrological network (i.e., inlet and outlet features) and water storage (maximum depth within +/-10% of baseline) functions.

Vernal pool restoration carried out under the VPHCP could potentially involve relatively minor grading of basins and the surrounding watershed area to restore the natural topographic and hydrologic functions of the vernal pools (average of grading depth between 3 and 6 inches). Grading efforts, though critical for vernal pool function, would be relatively minor in the overall site drainage patterns and topography of the area and would not be of the magnitude to modify or induce on-site or off-site flood flows. In fact, per the requirements for vernal pool restoration outlined in the VPHCP, restoration projects would be required to maintain on-site hydrology and hydrologic function (see all requirements of the Mitigation Framework in Chapter 11, Mitigation Monitoring and Reporting Program).

The natural surface water storage function of vernal pools is defined as the capacity of the vernal pool wetlands complex to capture and store precipitation falling on the basin and catchment area (SDSU 2011). Water held in depression storage, that is, in cracks, grooves, and depressions on the surface, such as vernal pools, is unavailable for runoff (Barnes et al. 2002). Moisture is stored within the depression as free water on the surface and/or in the surface and subsurface soils of the pool, swale(s) connecting pools, and adjacent uplands (SDSU 2011). Water moves into and out of the basin by defined inlets and outlets and/or to and from the soil of the associated swales and adjacent uplands (SDSU 2011). The management activities outlined in the VPHCP would serve to maintain or restore these natural topographic characteristics of vernal pools that allow for water retention and thus prevent or reduce off-site flooding.

Although vernal pools are typically associated with claylike impervious subsoils, the VPHCP would protect pervious top soils within and adjacent to the vernal pools and associated upland watershed. Pervious soils allow for the free passage of water through porous soils into the groundwater column. Vernal pools often become full through the perched water table below ground that has become saturated from surrounding pervious soils. Thus, the maintained, improved, or restored proper hydrologic function of the vernal pools, allowing them to absorb water from saturated surrounding soils, would also serve to minimize flooding potential both on-

site and off-site by keeping water compounded in the pools as opposed to the water flooding the site or leaving the site as runoff.

In comparison to natural or vegetated areas where storm water either collects in pool depressions or saturates the ground, storm water runoff flows quickly off of developed urban landscapes, which have high levels of impervious surfaces. Impervious urban surfaces consist of land cover such as paved streets, driveways, sidewalks, etc., which water cannot penetrate. Runoff is defined as water that flows over the surface of the land when rainfall is not able to infiltrate into the topsoil, either because the topsoil is already infiltrated or because the soil is already saturated. Replacement of naturally vegetated habitat, such as vernal pools, with flat impermeable urban surfaces increases the volume of runoff and heightens flooding events (Barnes 2002). No element of the VPHCP would create new impervious surfaces that could generate increased runoff or flood risk. Covered projects and covered activities that could result in the creation of impervious surfaces would be evaluated during the subsequent project-specific environmental review.

The intent of the VPHCP is to maintain or restore vernal pools to their natural hydrologic functions, which ultimately would serve to reduce and avoid flooding as described in the analysis above. Therefore, implementation of the Project would not result in a substantial adverse effect related to increased flooding on-site or off-site. The potential impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative adds additional lands to the MHPA, beyond those added under the VPHCP. Table 3-9 summarizes the additional conservation of vernal pools that would be provided under implementation of the Expanded Conservation Alternative through addition of lands to the MHPA. The Expanded Conservation Alternative would conserve an additional eight vernal pool complexes within the Plan Area, and conserve an additional 277 pools (11% more), totaling 3.3 acres of basin area, than what is currently conserved under the existing conservation. The Expanded Conservation Alternative includes the same elements of the Project as described above, including conservation strategies, monitoring and management, and implementation. The analysis provided under the Project describing how the proper function of vernal pools helps to reduce flooding impacts and the fact that the minor grading associated with vernal pool restoration would not substantially alter drainage patterns in a way that could influence flooding would also be applicable to this alternative as the actions associated with this alternative are similar to the Project but expanded to additional areas. The additional areas included in the Expanded Conservation Alternative would receive the same benefits from maintained and improved vernal pools relative to flooding. No element of the Expanded Conservation Element would create new impervious surfaces that could generate increased runoff or flood risk.

Thus, the Expanded Conservation Alternative would not result in a substantial adverse effect related to an increase in flooding on-site or off-site. The potential impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing /No Project Alternative, conditions would continue as they are related to local flooding conditions. However, no additional vernal pool maintenance or restoration would occur to improve hydrologic conditions and reduce flooding risk on-site or off-site. The Existing Conservation/No Project Alternative would not create new impervious surfaces that could generate increased runoff or flood risk. While no positive benefits related to vernal pool water retention and flood minimization would result with implementation of this alternative, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to an increase in flooding on-site or off-site, and the impact would be less than significant.

ISSUE 2: Would the project result in decreased aquifer recharge or extraction of water from an aquifer that would cause a net deficit in the aquifer volume or a reduction in the local groundwater table?

Project 1997

The VPHCP does not include actions that result in decreased aquifer recharge or would extract water from an aquifer. In California, vernal pools generally have "top-down" hydrology, with water collecting in the basins and creating a locally perched water table above a soil horizon (Zedler 2003). The perched water table develops because of infiltration from the basins. Vernal pools are generally hydrologically connected, such that water flows over the surface from one vernal pool to another. As a result, vernal pools depend more on precipitation than groundwater as their water source (California Wetlands Monitoring Workgroup 2013). Given rainfall patterns and amounts typical for southern California, the direct precipitation into the pools is by far the most important source of water to the vernal pools (Hanes et al. 1990). Thus, the maintenance or restoration of vernal pools would not result in the extraction of groundwater to fill the pools. Additionally, no element of the VPHCP would necessitate the use of groundwater for implementation. The VPHCP does not include any actions that would create new impervious surfaces that could interfere with water absorption and decreased aquifer recharge.

For these reasons, the Project would not result in a substantial adverse effect related to decreased aquifer recharge or extraction of water from an aquifer that would cause a net deficit in the aquifer volume or a reduction in the local groundwater table. The potential impact would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative adds additional lands to the MHPA, beyond those added under the VPHCP. The Expanded Conservation Alternative includes the same elements of the Project as described above in the Project analysis, including conservation strategies, monitoring and management, and implementation. Due to the similarities between the Project and the Expanded Conservation Alternative, the analysis of groundwater impacts is the same. The expanded area of coverage resulting in maintenance or restoration of vernal pools would not result in the extraction of groundwater to fill the pools. No element of the Expanded Conservation Alternative implementation would necessitate the use of groundwater for implementation or create new impervious surfaces that could interfere with water absorption and decreased aquifer recharge.

Thus, the additional lands added in the Expanded Conservation Alternative would not result in a substantial adverse effect related to decreased aquifer recharge or extraction of water from an aquifer that would cause a net deficit in the aquifer volume or a reduction in the local groundwater table. The potential impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, the recharge rate of aquifers or the extraction of water from an aquifer would continue as is. No element of the Existing Conservation/No Project Alternative implementation would necessitate the use of groundwater for implementation or create new impervious surfaces that could interfere with water absorption and decreased aquifer recharge. Thus, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to decreased aquifer recharge or extraction of water from an aquifer that would cause a net deficit in the aquifer volume or a reduction in the local groundwater table. The potential impact would be less than significant.

ISSUE 3: Would the project grade, clear, or grub more than 1.0 acre of land, especially into slopes over a 25% grade, and would drain into a sensitive water body or stream?

Project

The VPHCP would include restoration of degraded vernal pools throughout the Plan Area. As described under Issue 1 above, restoration of vernal pools could potentially involve relatively minor grading. It is possible that more than 1 acre of land could be graded in one location for vernal pool restoration and recontouring. However, grading work would serve the purpose of creating proper hydrologic function for the vernal pool system. Thus, the minor grading work associated with vernal pool restoration would not result in degraded drainage; rather, it would improve hydrologic function of the vernal pool complex.

Additionally, vernal pools within the VPHCP Plan Area are not located within slopes over a 25% grade. Grading necessary for vernal pool restoration would typically average 3 to 6 inches in depth and would not create or modify slopes over a 25% grade. Where applicable, a grading permit would be obtained from the City for vernal pool restoration projects and a SWPPP would be implemented. The required SWPPP BMPs, such as erosion control measures (e.g., straw wattles), and minimization measures included in the VPHCP Mitigation Framework, such as prohibiting grading during the rainy season, would prevent drainage into a sensitive water body or stream and potentially significant impacts on stream hydrology. Therefore, while some minor grading associated with vernal pool restoration is anticipated, no effects to stream hydrology would occur.

For these reasons, the Project would not result in a substantial adverse effect related to grading, clearing, or grubbing more than 1 acre of land, especially into slopes over a 25% grade, and draining into a sensitive water body or stream. The potential impact would be less than significant.

Expanded Conservation Alternative

Due to the similarities between the Project and the Expanded Conservation Alternative, the analysis under Issue 3 is the same. It is possible that more than an acre of land could be graded in one location for vernal pool restoration and recontouring, which would serve to create proper hydrologic function for the vernal pool system. Thus, the minor grading work associated with vernal pool restoration would not result in degraded drainage; rather, improved hydrologic function of the vernal pool complex would occur. Grading necessary for vernal pool restoration would not create or modify slopes over a 25% grade. Implementation of SWPPP BMPs and minimization measures related to grading outlined in the VPHCP (where applicable) would prevent impacts to stream hydrology.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to grading, clearing, or grubbing more of than 1 acre of land, especially into slopes over a 25% grade, and draining into a sensitive water body or stream. The potential impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, grading related to vernal pool restoration projects would continue to occur on a project-by-project basis. The analysis for the Project is essentially equivalent for vernal pool restoration projects that would be implemented under the Existing Conservation/No Project Alternative. Therefore, Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to grading, clearing, or grubbing of more than 1 acre of land, especially into slopes over a 25% grade, that would drain into a sensitive water body or stream. The potential impact would be less than significant.

ISSUE 4: Would the project result in modifications to existing drainage patterns such that there may be significant impacts on environmental resources?

Project

A key component of the VPHCP is the restoration of degraded vernal pools throughout the Plan Area. As described under Issue 1, vernal pool restoration would involve relatively minor grading. Modification to existing drainage patterns would involve minor grading for recontouring or restoration of vernal pools and basins to the natural state, thus benefiting sensitive vernal pool habitat and associated covered species.

The VPHCP requires qualitative monitoring of each complex managed under the VPHCP to determine what level of modification to existing drainage patterns needs to occur. The qualitative monitoring of each vernal pool assesses a series of conditions and threats that include topographic disturbance, which may require modifications to existing drainage patterns. Each applicable vernal pool complex would be monitored for topographic disturbance or altered hydrology from vehicle damage, illegal trespass, or other landscape-damaging impacts. The qualitative assessment of topographic disturbance will evaluate the following:

- Pool integrity and hydrologic function
- Shape and size of the disturbance and the overall pool
- Depth and duration of ponding
- Need for hand work or mechanical equipment for repairs
- Need for watershed analysis and/or microtopographic plans

As a result of the overall assessment, project-specific vernal pool restoration and enhancement plans would be developed. Each plan would be consistent with the general requirements outlined in the City's LDM Biology Guidelines to minimize impacts associated with the vernal pool restoration process. Per the requirements for vernal pool restoration outlined in the VPHCP, restoration projects would be required to maintain on-site hydrology and hydrologic function as part of the Mitigation Framework. The VPHCP requires that the vernal pool restoration plan include the following information and conditions to minimize impacts to existing drainage patterns:

- Grading plans that show the watersheds of extant vernal pools, and overflow pathways that hydrologically connect the restored pools in a way that mimics natural vernal pool complex topography/hydrology.
- A hydraulic analysis that shows each proposed vernal pool and its watershed, and hydrologic connection between the pools.

Because any grading or land modification conducted for the purposes of vernal pool restoration or maintenance would be fairly minimal and in accordance with the grading plan developed for correct hydrology and natural topography in association with a hydraulic analysis, the restored pools and their modified watersheds would not substantially or negatively impact drainage patterns of the area. Grading modifications would not be of the extent or magnitude such that the resulting drainage patterns would impact other environmental resources.

For these reasons, the Project would not result in a substantial adverse effect related to modifications to existing drainage patterns such that there may be significant impacts on environmental resources. The potential impact to existing drainage patterns would be less than significant.

Expanded Conservation Alternative

The Expanded Conservation Alternative adds additional lands to the MHPA beyond those added under the VPHCP. The Expanded Conservation Alternative includes the same elements of the Project, including conservation strategies, monitoring and management, and requirements for vernal pool restoration projects that would involve minor grading. As described for the Project, the Expanded Conservation Alternative would also require that vernal pool restoration plans include grading plans demonstrating that the watersheds and hydrological connections mimic the natural vernal pool complex topography/hydrology, and that a hydraulic analysis shows a connection between the vernal pool and its watershed. Due to the similarities between the Project and the Expanded Conservation Alternative, the analysis is the same. Because any grading would be fairly minimal and in accordance with the grading plan developed for correct hydrology and natural topography, the restored pools and their modified watersheds would not substantially or negatively impact drainage patterns of the area. These grading modifications would not be of the extent or magnitude such that the resulting drainage patterns would impact other environmental resources.

Therefore, the additional lands added in the Expanded Conservation Alternative would not result in a substantial adverse effect related to modifications to existing drainage patterns such that there may be significant impacts on environmental resources, and the impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, vernal pool restoration projects would continue to be implemented on a project-by-project basis. Grading would be evaluated on a project-by-project basis, and would be subject to the same requirements for vernal pool restoration as the Project (i.e., grading plans that show the watersheds and hydrological connections mimic the natural vernal pool complex topography/hydrology and a hydraulic analysis prepared showing connections between vernal pools and watersheds). Therefore, as with the Project, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to modifications to existing drainage patterns such that there may be significant impacts on environmental resources. The potential impact would be less than significant.

ISSUE 5: Would the project result in substantial increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body?

Project

As described in Section 5.6.1, Affected Environment, the VPHCP lies within seven watersheds: the <u>San DieguitoOtay</u>, Los Peñasquitos, <u>Pueblo</u>,San Diego River, <u>Pueblo San Diego</u>, <u>San Dieguito</u>Sweetwater, <u>Otay</u>, and Tijuana watersheds. Multiple receiving surface water bodies within the seven watersheds are listed on the 303(d) list of Water Quality Impaired Segments as detailed in Table 5.6-1. Vernal pools are considered hydrologically isolated as they often do not connect to other water bodies or streams (Pennsylvania Natural Heritage Program 2015). Vernal pools are on level ground and are surrounded by hillocks, known as mima mounds, in which

water fills the indentations between and naturally filters through the soil (California Wetlands Monitoring Workgroup 2013). In comparison, impervious urban surfaces allow for the accumulation of many types of pollutants along their surfaces. These pollutants are subsequently conveyed into water bodies during storm events, ultimately contributing to pollutant loading of already impaired water bodies.

Implementation of the VPHCP would not result in an increase of pollutants caused by actions associated with the VPHCP. Common constituents of concern with TMDLs throughout the region's surface water bodies include phosphorous, manganese, and pH, among others. Potential sources of contaminants associated with the VPHCP include herbicide use for weed control and use of equipment (e.g., skip loader) during grading for restoration projects. The use of herbicides for weed control would only be permitted consistent with state and county regulations, and (as stated in the requirements for restoration projects under the VPHCP) herbicides would not be applied within 24 hours of a forecasted rain event (30% chance or greater). Thus, the use of herbicide for weed control would not result in substantial discharge to the region's surface water bodies. Implementation of SWPPP BMPs and minimization measures for vernal pool restoration projects outlined in the VPHCP (where applicable) would prevent pollutant discharge during grading activities.

Additionally, sedimentation is a common constituent of concern in many of the watersheds and impaired water bodies. The VPHCP restoration and maintenance efforts would minimize grading, require erosion control BMPs (where applicable), and conform to natural topographic features during pool restoration so as not to cause a substantial increase of erosion that could lead to sedimentation/siltation of receiving water bodies. The grading and recontouring would serve to improve the hydrologic function of the site to appropriately capture on-site water in the vernal pool systems. Additionally, revegetation and plantings associated with the restoration activities would serve to minimize erosion potential and sedimentation by covering exposed soils. Maintenance and restoration activities would also be required to comply with the City's ESL Regulations, further minimizing potential for pollutant discharge. Thus, the VPHCP would not substantially contribute to pollutant loading of sedimentation or other constituents of concern known to pollute the region's surface water bodies.

Based on the analysis above, the Project would not result in a substantial adverse effect related to an increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body. The potential impact would be less than significant.

Expanded Conservation Alternative

Due to the similarities between the Project and the Expanded Conservation Alternative, the analysis is the same. The Expanded Conservation Alternative would not result in a substantial discharge of chemicals and elements known to pollute the region's surface water bodies. Restoration and maintenance efforts would minimize grading and conform to natural topographic features during pool restoration so as not to cause a substantial increase of erosion that could lead to sedimentation/siltation of receiving water bodies. Revegetation would serve to further reduce erosion and sedimentation potential. As a result, the Expanded Conservation Alternative would not substantially contribute to pollutant loading of sedimentation or other constituents of concern known to pollute the region's surface water bodies.

Thus, the Expanded Conservation Alternative would not result in substantial adverse effect related to an increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body. The potential impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project conditions, vernal pool restoration projects would continue to be implemented on a project-by-project basis. Grading for restoration and use of herbicides for weed control would be subject to the same federal, state, and local regulations as the Project, and (where applicable) would require a SWPPP and associated BMPs to prevent pollutant discharge. Herbicide use for weed control would require approval from CDFW and USFWS, and herbicide application would still be regulated by the state (i.e., no application 24 hours prior to a rain event). For these reasons, there would be no actions that result in increased pollutant discharge. Thus, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to an increase in pollutant discharge to receiving waters and increase discharge of identified pollutants to an already impaired water body. The potential impact would be less than significant.

ISSUE 6: Would the project impact local and regional water quality, including groundwater?

Project

The VPHCP would restore vernal pools to their natural hydrological functions, which would serve to improve water quality due to the natural bio-filtration processes that would result. The VPHCP includes measures that avoid and minimize impacts to local and regional water quality, including groundwater, including the regulation of herbicide use (i.e., no application within 24 hours of a rain event) and requirements for minimizing erosion control and pollutant discharge

during grading activities (i.e., SWPPP BMPs). No additional actions associated with implementation of the VPHCP would lead to the substantial increase of water pollution. The analysis provided under ISSUE 5 provides further description of water quality protection.

For these reasons, the Project would not result in a substantial adverse effect related to an impact on local and regional water quality, including groundwater, and the potential impact would be less than significant.

Expanded Conservation Alternative

Due to the similarities between the Project and the Expanded Conservation Alternative, the analysis is the same. For the reasons described above under the Project analysis, implementation of the Expanded Conservation Alternative would not lead to the substantial increase of water pollution.

Thus, the Expanded Conservation Alternative would not result in a substantial adverse effect related to an impact on local and regional water quality, including groundwater, and the potential impact would be less than significant.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project conditions, vernal pool restoration projects would be implemented on a project-by-project basis. Activities implemented under the VPHCP that could potentially affect water quality, including grading for restoration and use of herbicides for weed control, would be subject to the same federal, state, and local regulations as the Project, and (where applicable) would require a SWPPP and associated BMPs to prevent pollutant discharge. Herbicide use for weed control would still be regulated by the state (i.e., no application 24 hours prior to a rain event). For these reasons, there would be no actions that result in degradation of water quality. Thus, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect to local or regional water quality, and the potential impact would be less than significant.

5.6.5 <u>Mitigation Measures</u>

No significant adverse hydrology and water quality impacts were identified for the Project or alternatives and no mitigation measures are required.

5.6.6 <u>Level of Impact after Mitigation</u>

Project

No significant adverse hydrology and water quality impacts would result from implementation of the Project. Therefore, no mitigation is required, and the impact would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Expanded Conservation Alternative

No significant adverse water quality and hydrology impacts would result from implementation of the Expanded Conservation Alternative. Therefore, no mitigation is required, and the impact would remain less than significant under CEQA and would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, no significant adverse water quality and hydrology impacts would occur. Therefore, no mitigation is required, and the impact would remain less than significant under CEQA and would not be substantially adverse under NEPA.

5.7 ENVIRONMENTAL JUSTICE

This section presents an evaluation of Project impacts with regard to environmental justice populations. Under CEQA, the focus of an EIR is primarily on potential changes to the "physical conditions," which include land, air, water, flora, fauna, population, housing, noise, and objects of historic or aesthetic significance (PRC Section 21060.5; CCR Title 14 Section 15358(b) and Section 15382); environmental justice considerations are typically not included. However, those actions subject to federal approval requiring compliance with NEPA are required to evaluate the potential for project components to result in disproportionately high or adverse effects on low-income or minority populations, using as a model the analytical methods prescribed in federal EO 12898, as well as the regulations promulgated by CEQ. Any NEPA document must also consider potential disproportionate environmental health and safety risks to children in order to comply with relevant federal EOs.

To satisfy NEPA requirements, the environmental justice assessment is focused on the potential of the Project to result in disproportionately high and adverse effects in low-income, minority, and child populations, as defined below. The analysis of the cultural, social, economic, health, and environmental effects that these populations may sustain relative to the rest of society is referred to as "environmental justice." The purpose of an analysis of environmental justice issues is to better ensure equity for these populations when an action or program could create such effects. "Equity" in this case means that these groups do not bear a disproportionate burden of the adverse environmental and health consequences of an action relative to the potential benefits.

5.7.1 Affected Environment

To provide a localized environmental justice context for the Project, this section presents information on population and income in the Project area for populations that reside within the areas contiguous with parcels that would be subject to the VPHCP (i.e., lands currently within the MHPA or that would be added to the MHPA via implementation of the VPHCP).

To meet the specific intent of EOs 12898 and 13045, it is necessary to consider the age, minority, and economic status of the population in those areas contiguous with the Project parcels. To allow for a subsequent evaluation of potential disproportionate impacts to these populations, it is necessary to compare the same type of demographic and income information for the local jurisdiction and the larger region. Therefore, the data provide information on population, age, race/ethnicity, and poverty status for the area around the VPHCP parcels compared to the City and County of San Diego.

Census tracts are the standard localized units of land-based analysis for these types of data. The parcels that would be subject to the VPHCP are contiguous with 189 census tracts. These census tracts are listed in Table 5.7-1. Some tracts contain all or portions of more than one parcel and some parcels straddle two or more census tracts.

1.00	30.03	80.02	83.46	87.01	96.04	148.04	170.46
2.01	30.04	81.01	83.47	87.02	97.03	148.05	170.47
2.02	31.09	81.02	83.48	89.01	97.04	166.05	170.49
4.00	31.11	82.00	83.50	89.02	97.05	166.06	170.50
5.00	31.12	83.01	83.53	90.00	97.06	166.12	170.56
6.00	31.14	83.03	83.54	91.02	98.01	169.01	171.10
7.00	31.15	83.06	83.55	91.03	98.05	169.02	172.00
11.00	32.01	83.07	83.59	91.04	99.01	170.10	173.06
15.00	34.01	83.10	83.61	91.06	100.01	170.15	204.01
19.00	36.01	83.11	83.62	92.01	100.09	170.19	204.04
20.01	36.02	83.12	83.63	92.02	100.14	170.20	207.06
20.02	42.00	83.13	83.64	93.01	100.15	170.22	207.09
25.01	43.00	83.24	83.65	93.04	101.03	170.29	207.10
25.02	54.00	83.27	83.66	93.05	101.04	170.30	208.01
26.02	56.00	83.28	85.01	93.06	101.07	170.32	208.07
27.03	65.00	83.29	85.02	94.00	101.09	170.33	211.00
27.05	68.01	83.30	85.04	95.02	101.10	170.34	213.02
27.10	68.02	83.33	85.05	95.04	102.00	170.35	213.03
27.11	72.00	83.35	85.09	95.05	131.03	170.37	213.04
28.01	74.00	83.39	85.10	95.06	132.05	170.39	215.00
28.03	75.01	83.40	85.11	95.07	132.06	170.42	219.00
29.04	76.00	83.41	85.12	95.09	133.08	170.43	
29.05	77.02	83.43	85.13	95.11	133.14	170.44	
30.01	78.00	83.44	86.00	96.03	134.19	170.45	

Table 5.7-1Census Tracts Contiguous with VPHCP Parcels

Source: U.S. Census Bureau 2015

The data presented in this section for census tracts, City, and County of San Diego are from the U.S. Census 2010 100% survey or the U.S. Census American Community Survey 2009-2013 5-Year Estimates, depending on data availability. Table 5.7-2 presents relevant environmental justice information for the census tracts.

Census		Under Age 18		Mino	ority	Economic	Low-Income	
Tract	Population	Number	Percent	Number	Percent	Population	Number	Percent
1.00	3,029	549	18.1%	415	13.7%	2,706	99	3.7%
2.01	1,801	236	13.1%	342	19.0%	2,067	74	3.6%
2.02	4,208	479	11.4%	1,026	24.4%	4,529	130	2.9%
4.00	3,669	215	5.9%	1,225	33.4%	3,375	584	17.3%
5.00	2,722	211	7.8%	695	25.5%	2,686	254	9.5%
6.00	3,108	182	5.9%	954	30.7%	2,886	305	10.6%
7.00	3,754	200	5.3%	1,031	27.5%	3,877	510	13.2%
11.00	3,098	376	12.1%	1,367	44.1%	3,297	562	17.0%
15.00	3,934	621	15.8%	1,844	46.9%	3,813	570	14.9%
19.00	2,939	368	12.5%	762	25.9%	3,052	397	13.0%
20.01	3,354	513	15.3%	590	17.6%	3,285	103	3.1%
20.02	2,559	416	16.3%	759	29.7%	2,636	399	15.1%
25.01	5,504	1,737	31.6%	4,863	88.4%	5,555	1,321	23.8%
25.02	6,264	1,781	28.4%	4,809	76.8%	6,061	1,233	20.3%
26.02	4,450	1,588	35.7%	4,051	91.0%	4,046	1,221	30.2%
27.03	6,900	1,758	25.5%	5,021	72.8%	7,016	1,023	14.6%
27.05	4,300	1,091	25.4%	3,599	83.7%	4,204	403	9.6%
27.10	4,228	1,440	34.1%	3,898	92.2%	3,873	957	24.7%
27.11	3,200	1,128	35.3%	2,428	75.9%	3,065	396	12.9%
28.01	3,068	161	5.2%	1,061	34.6%	2,053	1,084	52.8%
28.03	5,370	865	16.1%	2,927	54.5%	5,295	888	16.8%
29.04	7,316	504	6.9%	3,032	41.4%	5,072	2,400	47.3%
29.05	4,022	705	17.5%	1,932	48.0%	4,310	1,025	23.8%
30.01	4,226	1,215	28.8%	3,953	93.5%	3,861	900	23.3%
30.03	5,062	1,198	23.7%	3,789	74.9%	5,244	914	17.4%
30.04	4,940	1,608	32.6%	4,614	93.4%	5,415	1,397	25.8%
31.09	3,358	673	20.0%	3,165	94.3%	3,435	404	11.8%
31.11	6,183	1,936	31.3%	5,944	96.1%	6,920	2,044	29.5%
31.12	4,574	1,303	28.5%	4,237	92.6%	4,237	713	16.8%
31.14	3,341	821	24.6%	3,212	96.1%	3,532	175	5.0%
31.15	6,454	1,813	28.1%	5,930	91.9%	6,862	1,364	19.9%
32.01	4,932	1,520	30.8%	3,949	80.1%	5,557	1,008	18.1%
34.01	6,065	1,459	24.1%	4,990	82.3%	6,424	612	9.5%
36.01	3,250	1,189	36.6%	3,155	97.1%	2,924	1,362	46.6%
36.02	3,079	1,070	34.8%	2,985	96.9%	3,577	1,451	40.6%
42.00	5,673	938	16.5%	2,124	37.4%	6,028	771	12.8%
43.00	3,665	543	14.8%	1,234	33.7%	3,714	200	5.4%
54.00	7,435	289	3.9%	2,088	28.1%	7,567	917	12.1%
56.00	4,463	241	5.4%	1,545	34.6%	3,516	251	7.1%
65.00	2,569	180	7.0%	925	36.0%	2,651	609	23.0%
68.01	2,503	290	11.6%	701	28.0%	2,355	341	14.5%
68.02	5,032	824	16.4%	2,014	40.0%	5,646	795	14.1%
72.00	5,493	791	14.4%	733	13.3%	3,944	204	5.2%
74.00	6,590	1,012	15.4%	1,394	21.2%	6,293	843	13.4%
75.01	4,040	366	9.1%	830	20.5%	3,841	386	10.0%
76.00	5,607	307	5.5%	822	14.7%	4,563	1,233	27.0%

Table 5.7-2Environmental Justice Statistics for Census Tracts
Contiguous with VPHCP Parcels

Census		Under Age 18 Minority		ority	Economic Low-I		ncome	
Tract	Population	Number	Percent	Number	Percent	Population	Number	Percent
77.02	3,849	213	5.5%	733	19.0%	3,477	433	12.5%
78.00	5,724	1,217	21.3%	2,164	37.8%	5,500	657	11.9%
80.02	2,522	389	15.4%	308	12.2%	2,344	145	6.2%
81.01	4,009	575	14.3%	687	17.1%	3,624	410	11.3%
81.02	3,395	814	24.0%	464	13.7%	3,157	113	3.6%
82.00	3,022	256	8.5%	420	13.9%	2,658	191	7.2%
83.01	3,094	467	15.1%	498	16.1%	2,631	196	7.4%
83.03	3,446	571	16.6%	629	18.3%	3,294	189	5.7%
83.06	2,997	540	18.0%	601	20.1%	3,422	401	11.7%
83.07	3,794	663	17.5%	906	23.9%	3,749	260	6.9%
83.10	5,392	1,026	19.0%	1,135	21.0%	5,328	491	9.2%
83.11	2,884	637	22.1%	503	17.4%	2,817	20	0.7%
83.12	3,629	509	14.0%	661	18.2%	3,652	164	4.5%
83.13	2,225	477	21.4%	483	21.7%	2,182	59	2.7%
83.24	6,600	1,239	18.8%	1,154	17.5%	6,890	163	2.4%
83.27	5,775	1,438	24.9%	1,763	30.5%	5,908	192	3.2%
83.28	5,162	1,717	33.3%	1,841	35.7%	4,986	401	8.0%
83.29	6,347	1,242	19.6%	2,360	37.2%	6,210	992	16.0%
83.30	5,668	1,679	29.6%	2,156	38.0%	5,402	110	2.0%
83.33	13.748	4.674	34.0%	5.902	42.9%	13.681	730	5.3%
83.35	10,541	3.338	31.7%	5.341	50.7%	11.168	154	1.4%
83.39	1,853	135	7.3%	1,014	54.7%	1,936	568	29.3%
83.40	8,988	1,039	11.6%	4,727	52.6%	9,445	1,998	21.2%
83.41	7,614	416	5.5%	4,211	55.3%	7,314	2,459	33.6%
83.43	4,587	599	13.1%	2,644	57.6%	5,106	1,876	36.7%
83.44	3,462	731	21.1%	956	27.6%	3,648	564	15.5%
83.46	4,615	977	21.2%	2,555	55.4%	5,308	141	2.7%
83.47	6,358	1,396	22.0%	4,054	63.8%	6,568	408	6.2%
83.48	5,259	1,050	20.0%	3,705	70.5%	5,230	247	4.7%
83.50	6,493	1,365	21.0%	4,890	75.3%	6,445	329	5.1%
83.53	5,048	1,097	21.7%	3,087	61.2%	5,270	656	12.4%
83.54	5,972	1,423	23.8%	3,948	66.1%	6,214	224	3.6%
83.55	3,365	824	24.5%	2,474	73.5%	3,894	341	8.8%
83.59	3,975	700	17.6%	2,736	68.8%	3,657	491	13.4%
83.61	2,642	255	9.7%	1,061	40.2%	2,837	1,197	42.2%
83.62	3,141	369	11.7%	1,105	35.2%	3,580	754	21.1%
83.63	4,921	398	8.1%	3,311	67.3%	4,868	1,500	30.8%
83.64	4,992	427	8.6%	2,275	45.6%	5,114	1,488	29.1%
83.65	2,979	816	27.4%	1,424	47.8%	3,008	82	2.7%
83.66	5,881	1,738	29.6%	3,022	51.4%	6,194	237	3.8%
85.01	5,271	1,035	19.6%	1,429	27.1%	5,545	706	12.7%
85.02	6,241	1,217	19.5%	2,342	37.5%	6,279	608	9.7%
85.04	6,021	1,146	19.0%	2,135	35.5%	5,439	540	9.9%
85.05	5,605	1,027	18.3%	2,414	43.1%	5,965	453	7.6%
85.09	6,647	1,333	20.1%	2,979	44.8%	6,784	808	11.9%
85.10	6,626	1,168	17.6%	3,401	51.3%	6,884	1,035	15.0%
85.11	2,633	360	13.7%	1,282	48.7%	2,921	487	16.7%
85.12	4,193	794	18.9%	1,064	25.4%	4,364	329	7.5%
85.13	2,691	469	17.4%	663	24.6%	2,961	212	7.2%
86.00	6,864	1,892	27.6%	5,515	80.3%	6,738	1,629	24.2%
Census		Under Age 18		Minority		Economic Low-Ir		ncome
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Tract	Population	Number	Percent	Number	Percent	Population	Number	Percent
87.01	3,361	1,076	32.0%	1,832	54.5%	3,458	383	11.1%
87.02	5,206	1,183	22.7%	2,656	51.0%	4,261	461	10.8%
89.01	4,805	633	13.2%	2,292	47.7%	4,825	1,181	24.5%
89.02	2,221	141	6.3%	705	31.7%	2,146	251	11.7%
90.00	3,861	864	22.4%	2,491	64.5%	3,641	833	22.9%
91.02	3,537	462	13.1%	1,454	41.1%	3,636	838	23.0%
91.03	3,679	586	15.9%	788	21.4%	3,475	284	8.2%
91.04	2,775	491	17.7%	519	18.7%	2,871	164	5.7%
91.06	3,882	281	7.2%	1,145	29.5%	1,880	190	10.1%
92.01	5,014	1,735	34.6%	3,013	60.1%	5,141	544	10.6%
92.02	4,428	743	16.8%	1,627	36.7%	4,556	288	6.3%
93.01	4,164	809	19.4%	2,037	48.9%	4,912	497	10.1%
93.04	7,944	579	7.3%	3,253	40.9%	8,090	1,049	13.0%
93.05	4,488	647	14.4%	1,823	40.6%	4,666	600	12.9%
93.06	5,589	1,052	18.8%	2,430	43.5%	6,215	687	11.1%
94.00	5,028	903	18.0%	2,044	40.7%	1,982	118	6.0%
95.02	3,659	769	21.0%	1,361	37.2%	4,115	201	4.9%
95.04	5,914	1,757	29.7%	2,103	35.6%	6,249	149	2.4%
95.05	6,442	1,348	20.9%	2,121	32.9%	6,574	418	6.4%
95.06	4,258	1,014	23.8%	1,404	33.0%	4,115	261	6.3%
95.07	3,369	617	18.3%	1,142	33.9%	3,739	111	3.0%
95.09	4,136	448	10.8%	1,505	36.4%	3,756	233	6.2%
95.11	4,427	2,360	53.3%	2,298	51.9%	4,391	623	14.2%
96.03	4,533	404	8.9%	1,904	42.0%	4,709	671	14.2%
96.04	3,179	621	19.5%	1,055	33.2%	3,162	330	10.4%
97.03	3,446	655	19.0%	801	23.2%	3,371	180	5.3%
97.04	5,750	1,042	18.1%	1,615	28.1%	5,794	211	3.6%
97.05	3,652	755	20.7%	1,075	29.4%	3,206	255	8.0%
97.06	6,996	1,243	17.8%	1,528	21.8%	6,830	463	6.8%
98.01	4,894	862	17.6%	1,264	25.8%	4,710	398	8.5%
98.05	4,715	970	20.6%	1,111	23.6%	5,267	205	3.9%
99.01	626	10	1.6%	188	30.0%	32	0	0.0%
100.01	4,097	1,036	25.3%	3,599	87.8%	3,824	229	6.0%
100.09	6,693	2,276	34.0%	6,489	97.0%	6,771	1,666	24.6%
100.14	17,679	4,084	23.1%	14,788	83.6%	14,593	844	5.8%
100.15	2,803	937	33.4%	2,665	95.1%	2,784	632	22.7%
101.03	5,569	1,568	28.2%	4,731	85.0%	6,753	1,046	15.5%
101.04	3,217	712	22.1%	2,156	67.0%	3,406	202	5.9%
101.07	6,498	1,700	26.2%	5,690	87.6%	6,670	813	12.2%
101.09	4,595	1,256	27.3%	4,206	91.5%	4,462	727	16.3%
101.10	7,298	2,137	29.3%	6,429	88.1%	7,384	1,297	17.6%
102.00	6,800	1,351	19.9%	3,221	47.4%	6,537	1,314	20.1%
131.03	2,668	751	28.1%	2,343	87.8%	2,649	687	25.9%
132.05	2,381	769	32.3%	2,189	91.9%	1,980	414	20.9%
132.06	6,544	1,691	25.8%	5,646	86.3%	6,759	1,847	27.3%
133.08	3,731	1,107	29.7%	3,381	90.6%	4,208	408	9.7%
133.14	14,837	5,012	33.8%	11,853	79.9%	16,090	579	3.6%
134.19	7,922	2,612	33.0%	5,986	75.6%	8,591	422	4.9%
148.04	4,351	638	14.7%	1,155	26.5%	3,834	434	11.3%
148.05	4,328	708	16.4%	1,624	37.5%	4,433	700	15.8%

Census		Under	Age 18	Minority		Economic	Low-Income	
Tract	Population	Number	Percent	Number	Percent	Population	Number	Percent
166.05	7,339	1,464	19.9%	1,945	26.5%	7,381	461	6.2%
166.06	3,388	787	23.2%	926	27.3%	3,660	257	7.0%
166.12	6,143	1,484	24.2%	1,420	23.1%	5,999	518	8.6%
169.01	6,909	1,710	24.8%	1,526	22.1%	6,864	283	4.1%
169.02	2,341	610	26.1%	967	41.3%	2,467	308	12.5%
170.10	3,152	821	26.0%	859	27.3%	2,793	117	4.2%
170.15	7,295	1,503	20.6%	2,286	31.3%	7,623	575	7.5%
170.19	5,883	749	12.7%	830	14.1%	6,226	183	2.9%
170.20	3,694	854	23.1%	615	16.6%	3,447	164	4.8%
170.22	5,316	1,232	23.2%	1,409	26.5%	5,159	255	4.9%
170.29	8,823	2,344	26.6%	2,111	23.9%	8,174	335	4.1%
170.30	17,064	5,062	29.7%	7,764	45.5%	18,091	514	2.8%
170.32	13,593	4,376	32.2%	6,495	47.8%	13,017	283	2.2%
170.33	4,694	1,132	24.1%	2,098	44.7%	4,864	327	6.7%
170.34	4,747	1,203	25.3%	1,901	40.0%	4,875	429	8.8%
170.35	2,354	664	28.2%	1,228	52.2%	2,697	806	29.9%
170.37	5,880	1,421	24.2%	2,713	46.1%	5,465	520	9.5%
170.39	6,921	1,757	25.4%	3,119	45.1%	7,385	168	2.3%
170.42	7,869	2,517	32.0%	3,781	48.0%	8,139	230	2.8%
170.43	5,535	1,522	27.5%	2,878	52.0%	5,686	187	3.3%
170.44	5,570	1,803	32.4%	2,451	44.0%	5,951	196	3.3%
170.45	2,790	926	33.2%	1,102	39.5%	2,795	23	0.8%
170.46	3,678	860	23.4%	1,204	32.7%	3,872	189	4.9%
170.47	4.021	1,100	27.4%	1,014	25.2%	3,847	63	1.6%
170.49	2,919	812	27.8%	1.073	36.8%	3,022	466	15.4%
170.50	3,068	712	23.2%	1,241	40.4%	2,894	98	3.4%
170.56	4,144	896	21.6%	1,796	43.3%	4,111	297	7.2%
171.10	10,622	3,321	31.3%	2,898	27.3%	10,898	1,706	15.7%
172.00	4,146	562	13.6%	388	9.4%	4,207	69	1.6%
173.06	2,818	515	18.3%	403	14.3%	2,759	97	3.5%
204.01	2,369	383	16.2%	318	13.4%	2,418	132	5.5%
204.04	5,070	1,083	21.4%	2,107	41.6%	5,426	799	14.7%
207.06	6,286	1,384	22.0%	1,643	26.1%	6,321	456	7.2%
207.09	8,007	2,106	26.3%	3,025	37.8%	8,311	848	10.2%
207.10	1,749	333	19.0%	450	25.7%	1,687	57	3.4%
208.01	5,230	1,126	21.5%	989	18.9%	5,269	367	7.0%
208.07	2,599	505	19.4%	574	22.1%	2,208	162	7.3%
211.00	7,589	1,971	26.0%	3,450	45.5%	6,439	1,829	28.4%
213.02	7,361	1,095	14.9%	3,556	48.3%	4,646	890	19.2%
213.03	8,981	2,390	26.6%	4,113	45.8%	8,789	488	5.6%
213.04	2,616	565	21.6%	805	30.8%	2,564	92	3.6%
215.00	8,846	3,140	35.5%	3,218	36.4%	8,813	183	2.1%
219.00	6,816	497	7.3%	4,266	62.6%	1,787	389	21.8%
San Diego – City	1,307,402	279,368	21.4%	717,700	54.9%	1,286,036	200,777	15.6%
San Diego – County	3,095,313	724,168	23.4%	1,595,266	51.5%	3,057,308	441,648	14.4%

Note: Shaded fields indicate values in excess of the County of San Diego regional value; these tracts are considered to contain environmental justice populations for the purpose of this analysis.

Source: U.S. Census Bureau 2011, 2014

As shown, the total population within the census tracts of the study area ranges from 626 in tract 99.01 to 17,679 in tract 100.14. The proportion of children (persons under age 18) in San Diego County is 23.4%, with 70 of the 189 census tracts in the study area exhibiting a larger proportion. The census tract with the highest proportion of children residents is 95.11, located along Interstate 15, south of Aero Drive.

The minority population includes those who self-identify as Black, Asian, Native American, Native Hawaiian or Other Pacific Islander, "some other race," "two or more races," or Hispanics of any race. Per CEQ guidance, a geographic area with a minority population (i.e., 50.0% or more minority residents) should be considered environmental justice population, regardless of the demographics of the surrounding geography. Based on this threshold, 60 census tracts within the study area are considered environmental justice populations. The census tract with the greatest proportion of minority residents is 36.01, located in the Barrio Logan area.

The low-income threshold for the study area is 14.4%, based on the rate seen in San Diego County. As a point of reference, the low-income threshold for a family of four with two children in 2014 was \$24,008 according to the U.S. Census (U.S. Census 2015). Based on this threshold, 59 census tracts within the study area are considered environmental justice populations. The census tract with the greatest proportion of low-income residents is 28.01, located near San Diego State University.

With regard to minority and low-income data for those private parcel owners whose lands would be incorporated into the VPHCP as part of the Project, no publicly available dataset exists that details this information.³ However, public scoping comments, comments on previously published environmental documents associated with the establishment of the VPHCP, and feedback from internal stakeholders have suggested that many potentially affected private parcels are owned by minorities. Secondary data identifying private parcel landowners with historically Latino and/or Asian surnames have been suggested to strengthen this suggestion. While not quantifiable, this environmental justice analysis assumes that there is a disproportionate number of minority private parcel landowners potentially affected by the Project, providing for a conservative analysis in response to public comment.

³ Children are excluded from this part of the description of the affected environment because it is assumed that children cannot be owners of private property except under unique conditions and, even then, cannot convey or make contracts related to real estate without an adult custodian.

5.7.2 <u>Regulatory Framework</u>

Executive Order 12898

EO 12898 applies to federal agencies (Section 1-101). This order requires federal agencies to identify and address any disproportionate environmental or health impacts that federal actions or programs create on minority and low-income populations. Two specific provisions of EO 12898 provide further guidance to federal agencies.

Section 1-103 of the order requires that each federal agency develop an agency-specific environmental justice strategy, defining how the agency will identify disproportionate adverse effects on minority and low-income populations, and attempt to avoid those effects. Section 2-2 of the order requires that federal agencies should perform their actions and programs in a manner that neither excludes minority and low-income populations from relevant participation in the action or program nor denies those groups the benefits of the action. The CEQ guidance for performing environmental justice analysis as part of the NEPA process (CEQ 1997) offers useful definitions for this section.

Council on Environmental Quality Guidance

CEQ publishes a guidance document that provides useful definitions and methods relevant to environmental justice analysis (CEQ 1997:25–26). This guidance indicates that federal agencies shall identify low-income populations as follows (CEQ 1997:25):

Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

Minority individuals and populations are defined as:

Minority: Individual(s) [are] members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. Minority population: Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. In identifying minority communities, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a geographically dispersed/transient set of individuals (such as migrant workers or Native American), where either type of group experiences common conditions of environmental exposure or effect. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority percentage.

These definitions thus provide specific ways to implement environmental justice analysis by defining the relevant study populations.

Executive Order 13045

On April 21, 1997, President Clinton signed EO 13045, Protection of Children from Environmental Health Risks and Safety Risks (62 Fed. Reg. 19885 (1997)). For the purposes of the analysis, children are defined as all people under the age of 18. The policy of the EO states that:

A growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because: children's neurological, immunological, digestive, and other bodily systems are still developing; children eat more food, drink more fluids, and breathe more air in proportion to their body weights than adults; children's size and weight may diminish their protection from standard safety features; and children's behavior patterns may make them more susceptible to accidents because they are less able to protect themselves. Therefore, to the extent permitted by law and appropriate, and consistent with the agency's mission, each Federal agency:

- (a) shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and
- (b) ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.

California Government Code Amendments (Various)

Various California Assembly and Senate Bills have been passed related to environmental justice and how specific state agencies should conduct their activities in a nondiscriminatory manner. Many of these bills are focused on hazardous materials, wastewater, groundwater, and solid waste management and are not relevant for the analysis here.⁴ However, SB 115 does define environmental justice as the "fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies" (Government Code Section 65040.12[e]).

5.7.3 <u>CEQA Thresholds of Significance</u>

The requirement for analysis of environmental justice is mandated through NEPA. NEPA requires consideration of "economic" and "social" effects (40 CFR Section 1508.8), but CEQA does not contain a similar requirement; thus, there are no specific CEQA thresholds applicable to this analysis.

For NEPA evaluation purposes, the CEQ guidance provides a framework for determining if a project would result either in disproportionately high and adverse human health effects or in disproportionately high and adverse environmental effects (CEQ 1997:26–27). The CEQ guidance provides an explanation of the nature of each impact. Disproportionately high and adverse human health and environmental effects occur when:

- Human health effects are significant when measured by risk or rates of incidence, or above generally accepted norms;
- There are significant ecological, cultural, economic, or social impacts to a minority population, low-income population, or Native American tribe that are associated with impacts on the natural or physical environment;
- The risk or rate of hazard exposure or incidence of sociocultural impact sustained by a minority population (including Native American tribes) or low-income population is significant and appreciably exceeds the exposure or incidence sustained by the general population; or
- Health effects or sociocultural impacts would occur in a minority population, low-income population, or Native American tribe affected by multiple or cumulative exposures from the environmental hazard.

⁴ A full list of California legislation related to environmental justice can be found at http://www.calepa.ca.gov/ EnvJustice/Legislation/.

Based on the CEQ guidance and explanation of potential environmental justice impacts, the following section analyzes the potential for two impact issue classes with regard to environmental justice impacts:

- 1. Human health and environmental safety impacts resulting from implementation of the Project; and
- 2. Land use impacts resulting from implementation of the Project.

To be evaluated here, a human health, environmental safety, or land use impact would have to remain significant after implementation of all feasible mitigation measures to result in disproportionately high and adverse effects on minority, low-income, or child populations.

5.7.4 <u>Environmental Consequences</u>

ISSUE 1: Would the project result in a disproportionately high and adverse impact on environmental justice populations with regard to human health and environmental safety impacts?

Project

To comply with EOs 12898 and 13045, this EIR/EIS analysis process included gathering demographic and income information from the U.S. Census Bureau to identify areas of low-income, high minority, and/or high children populations in areas contiguous with those parcels identified for inclusion in the VPHCP that would potentially be exposed to impacts.

As discussed in Section 5.7.1, Affected Environment, multiple census tracts with high proportions of low-income, minority, and children residents are located contiguous with parcels to be included in the VPHCP, suggesting that there are nearby communities of concern with regard to disproportionate environmental and human health impacts. However, as demonstrated through the analysis sections of this EIR/EIS (Sections 5.1 through 5.6), the Project would not have a significant impact on environmental or human health. Thus, despite the presence of environmental justice populations in areas contiguous with parcels within the Preserve, no substantial adverse impacts would be present to accrue disproportionately to an environmental justice population.

For these reasons, the Project would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to human health and environmental safety.

Expanded Conservation Alternative

Under the Expanded Conservation Alternative, the impacts on human health and environmental safety would be similar or the same as under the Project as demonstrated through the analysis sections of this EIR/EIS (Sections 5.1 through 5.6).

For this reason, the Expanded Conservation Alternative would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to human health and environmental safety.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, less than significant impacts on human health and environmental safety would occur as demonstrated through the analysis sections of this EIR/EIS (Sections 5.1 through 5.6).

For this reason, the Existing Conservation/No Project Alternative_would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to human health and environmental safety.

ISSUE 2: Would the project result in a disproportionately high and adverse impact on environmental justice population with regard to land use impacts?

Project 1997

To comply with EOs 12898 and 13045, this EIR/EIS analysis process included gathering demographic and income information from the U.S. Census Bureau to identify areas of environmental justice populations in areas contiguous with those parcels identified for inclusion in the VPHCP that would potentially be exposed to impacts.

However, the specific land use impact is associated with private property rights associated with future land development on private parcels; these impacts would accrue to private land owners. No publicly available datasets exist that tabulate the race/ethnicity and/or annual income level/poverty status of private land owners that can be used to specifically identify the environmental justice population of private land owners. Thus, as mentioned in Section 5.7.3, to provide for a conservative analysis, it is assumed that a disproportionate number of private parcels affected by the Project are owned by minorities and that there are communities of concern with regard to high and adverse impact on land use or private property rights.

As discussed in Section 5.1, Land Use, however, the Project would not have a significant impact on land use or private property rights. In many ways, the Project would establish limits on private development within these parcels; the process of which would be similar under existing conditions as well as the Project. In fact, private developers may find the streamlining of regulatory compliance under the Project to be a benefit. Additionally, contingent upon the availability of funds and willing sellers, owners of private parcels included in the VPHCP may have their lands acquired by the City or others by purchase, or by nonfiscal methods such as land exchanges and private mitigation banks. Thus, despite an assumed presence of a disproportionate number of minority private land owners involved in the Project, no substantial impacts are present to accrue disproportionately to an environmental justice population.

For these reasons, the Project would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to land use.

Expanded Conservation Alternative

Under the Expanded Conservation Alternative, the impacts on land use would be largely the same as under the Project. Thus, even though the Expanded Conservation Alternative would result in the inclusion of an additional 3.7 acres of land generally within the Otay Mesa area that would include private properties, the increased coverage would not result in different or substantially increased land use impacts that could accrue disproportionately to an environmental justice population.

For these reasons, the Expanded Conservation Alternative would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to land use.

Existing Conservation/No Project Alternative

Under the Existing Conservation/No Project Alternative, less than significant impacts on land use would occur and property development restrictions currently in place, such as those associated with the MHPA or ESL Regulations, would continue. Private property owners would continue to be subject to all existing development regulations permitting processes that are applicable to parcels with vernal pool resources.

For these reasons, the Existing Conservation/No Project Alternative would not result in a substantial adverse effect related to disproportionately high and adverse impacts on environmental justice populations with regard to land use.

5.7.5 <u>Mitigation Measures</u>

No substantial adverse environmental justice effects were identified and no mitigation measures are required.

5.7.6 Level of Impact after Mitigation

Project

No adverse environmental justice effects would result from implementation of the Project. Therefore, no mitigation is required, and the impact would not be substantially adverse under NEPA.

Expanded Conservation Alternative

No adverse environmental justice effects would result from implementation of the Expanded Conservation Alternative. Therefore, no mitigation is required, and the impact would not be substantially adverse under NEPA.

Existing Conservation/No Project Alternative

No adverse environmental justice effects would result from implementation of the Existing Conservation/No Project Alternative. Therefore, no mitigation is required, and the impact would not be substantially adverse under NEPA.

CHAPTER 6.0 COMPARISON OF ALTERNATIVES

This chapter includes a comparison of the environmental consequences resulting from the Project, Expanded Conservation Alternative, and Existing Conservation/No Project Alternative based on the analysis of the affected environment in Chapter 5, Environmental Consequences. Both CEQA and NEPA require analysis of a reasonable range of alternatives. Accordingly, this EIR/EIS analyzes alternatives that feasibly meet the project objectives (as described in Section 3.2, Project Purpose and Objectives), along with a no project/no action alternative.

The CEQA Guidelines (14 CCR Section 15126.6) require that an EIR present a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any significant effects of the project. Section 15126.6 of the CEQA Guidelines also requires an evaluation of the comparative merits of the alternatives. An EIR is not required to consider alternatives that are infeasible. NEPA (40 CFR Section 1502.14[a]) requires that an EIS explore and evaluate a range of reasonable alternatives to the project. Alternatives that were considered, but eliminated, are discussed in Section 3.5 of this EIR/EIS.

6.1 SUMMARY OF THE EFFECTS OF THE PROJECT AND ALTERNATIVES

Table 6-1 summarizes the environmental consequences resulting from implementation of the Project for each of the issues areas evaluated in the affected environment, as well as cumulative effects. A comparison of the two alternatives for each issue area is also provided. The alternatives have either generally the same effect as the Project, have a greater effect than the Project, or the effect is less than the Project. The effect of an alternative can be less or greater than the Project, but still be considered less than significant.

Where the effects of the two alternatives are generally equivalent to the Project, as detailed in Chapter 5, Environmental Consequences, further comparison is not warranted. Where the effects are substantially different than the Project, either less than or greater, a comparison of the alternatives is provided below.

	Environmenta	al Consequences af	es after Mitigation		
			Existing		
		Expanded	Conservation/		
Affected Environment		Conservation	No Project		
(Section of EIR/EIS)	Project	Alternative	Alternative		
Land Use (Section 5.1)	LS/B	=	<		
Biological Resources (Section 5.2)	LS/B	=	>		
Air Quality (Section 5.3)	LS	=	=		
Greenhouse Gas (GHG) Emissions (Section	IS	_	_		
5.4)	LS	_	_		
Historical Resources (Section 5.5)	LS	=	<		
Hydrology and Water Quality (Section 5.6)	LS/B	=	=		
Environmental Justice (Section 5.7)	LS	=	=		

Table 6-1Comparison of Alternatives

LS - Effect is less than significant after mitigation (if mitigation is required), per the analysis in Chapter 5

B - Beneficial effect (the Project or alternative would result in a net benefit to the affected environment)

= - Effect of the alternative is equivalent or similar to the Project effect (including any beneficial effects)

> - Effect is greater than the Project effect (but still may be less than significant per the analysis in Chapter 5)

< - Effect is less than the Project effect (even if the Project effect is less than significant per the analysis in Chapter 5)

6.2 COMPARISON OF ALTERNATIVES ENVIRONMENTAL EFFECTS AND BENEFITS

6.2.1 Land Use

As described in Section 5.1, Land Use, the Project and Expanded Conservation Alternative would generally result in similar land use issues, as all of the policies and implementation activities associated with the VPHCP impacts would be identical.

The Existing Conservation/No Project Alternative would result in continued conservation of vernal pools within the City's MHPA and would not necessitate the modification of existing land use and environmental documents. Additionally, no new development restrictions would result from continued implementation of the Existing Conservation/No Project Alternative, as would occur on parcels added to the MPHA under the Project and Expanded Conservation Alternative (parcels wholly added to the MHPA would be 75% conserved, 25% developable).

However, the Existing Conservation/No Project Alternative would not provide additional preservation, restoration, and management of sensitive vernal pool resources in a cohesive Preserve and, thus, would not advance efforts to achieve planning goals or policies related to protection of vernal pools and the seven covered species.

Under the Project and Expanded Conservation Alternative, a regulatory advantage may result from implementation of the VPHCP as both public and private property owners would likely benefit

from the issuance of take permits to local authorities that would streamline the permit process and clearly define project mitigation requirements for future projects. The streamlined process may allow for more timely completion of projects and greater efficiency in land development. Thus, public and private applicants may find the streamlining of regulatory mechanisms under the Project beneficial. In addition, land owners may benefit from the potential option of selling their land for use as a mitigation bank (for vernal pools and/or other sensitive resources, such as burrowing owl habitat).

The Expanded Conservation Alternative would reduce industrial development potential in the Kearny Mesa Community Plan Area. Although the expanded area does not contain vernal pool resources, it is designated as critical habitat for the San Diego fairy shrimp per the USFWS. This alternative would also further reduce residential and industrial development potential in the Otay Mesa Community Planning area, and would require an additional amendment to the Community Plan. In particular, the uses within the Southwest Village Specific Plan Area would be greatly reduced, including density planned for the area. With a decrease in density, the Otay Mesa community would in turn experience a loss of housing, new park acreage, commercial and employment opportunities, and funding potential for infrastructure improvements, including roads (i.e. contribution towards Development Impact Fees [DIF] and Facilities Benefit Assessment [FBA]).

6.2.2 Biological Resources

As detailed in Section 5.2, Biological Resources, no substantial adverse effects were identified for the Project or Expanded Conservation Alternative and impacts were all identified as less than significant. Although the Project and alternatives would not result in significant impacts to biological resources (after implementation of the VPHCP Mitigation Framework at the project level), differences in the level of conservation would result from each independent alternative relative to the others.

The Expanded Conservation Alternative would conserve the same number of vernal pool complexes when compared to the Project (eight more than under Existing Conservation/No Project Alternative), but would result in overall fewer direct impacts to vernal pools (Table 6-2). The Expanded Conservation Alternative would conserve an additional 51 vernal pools in the VPHCP Plan Area when compared to the Project and 277 more vernal pools than the Existing Conservation/No Project Alternative (conservation of 2% and 11% more vernal pools, respectively). An additional 0.5 acre and 3.3 acres of basin area would be conserved under the Expanded Conservation Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative when compared to the Project and Existing Conservation/No Project Alternative, respectively.

Alternative	Total Number of Complexes Conserved	Number of Complexes Outside MHPA	Total Number of Pools Conserved ¹	Total Pools Impacted by Development ¹	Pools Impacted by Development outside Preserve (0% Conservation)	Pools Impacted by Development inside Preserve ¹	% Total4 Pools Impacted by Development	Total Surface Area of Pools Impacted (Acres)
Project	53	1	2,409	182	120	63	7%	7.5
Expanded Conservation Alternative	53	1	2,460	131	80	51	5%	7.1
Existing Conservation/ No Project Alternative	45	9	2,183	408	392	16	16%	10.4

Table 6-2Comparison of Vernal Pool Impacts by Alternative

¹Pools conserved are based on 75% or 100% conservation level by vernal pool complex.

Take of San Diego fairy shrimp would be marginally reduced by conserving two additional pools containing San Diego fairy shrimp (representing a 0.3% increase in conservation) compared to the Project. The Expanded Conservation Alternative would not reduce take of Riverside fairy shrimp or any of the covered plant species.

Under the Expanded Conservation Alternative, all 628 acres of spreading navarretia Critical Habitat within the VPHCP Plan Area would be conserved (51 more acres than the Project and 53 more acres than the Existing Conservation/No Project Alternative). The Project would conserve 11 additional acres of Riverside fairy shrimp Critical Habitat and 100 acres of San Diego fairy shrimp Critical Habitat beyond the Existing Conservation/No Project Alternative while the Expanded Conservation Alternative would also conserve an additional 14 acres of Riverside fairy shrimp Critical Habitat and 143 acres of San Diego fairy shrimp Critical Habitat beyond the conservation levels provided under the Project.

The Project and Expanded Conservation Alternative would create a more cohesive and comprehensive Preserve area for vernal pools than the Existing Conservation/No Project Alternative. In addition, the VPHCP would establish a consistent management and monitoring program for the conserved vernal pools under the Project and Expanded Conservation Alternative. The preservation, maintenance, management, and (where needed) enhancement or restoration of vernal pools, as prescribed under the VPHCP, would provide an overall net benefit to the City's vernal pool resources. The benefit of a cohesive vernal pool Preserve network on and comprehensive management and monitoring program would not be achieved under the Existing Conservation/No Project Alternative.

6.2.3 <u>Air Quality</u>

As detailed in Section 5.3, Air Quality, implementation of the Project or any of the alternatives would involve minimal activities that would generate air pollutants, and no substantial adverse effects or significant impacts were identified. The difference in air pollutant generation between the Project and alternatives is nominal and does not warrant further comparison.

6.2.4 <u>Greenhouse Gas Emissions</u>

As detailed in Section 5.4, Greenhouse Gas (GHG) Emissions, implementation of the Project or any of the alternatives would involve minimal activities that would generate GHG emissions and no substantial adverse effects or significant impacts were identified. The differences in GHG emissions generation between the Project and alternatives is nominal and does not warrant further comparison.

6.2.5 Historical and Tribal Cultural Resources

As detailed in Section 5.5, Historical Resources, the Project and the Expanded Conservation Alternative both have the potential to impact historical, archaeological, or tribal cultural resources and unknown human remains due to the ground disturbance that would result with implementation. The difference in the amount of ground disturbance between the Project and the Expanded Conservation Alternative is fairly minimal and would not create a substantial difference in their potential to impact a historic resource.

The Existing Conservation/No Project Alternative would not involve ground disturbing activities and would have no potential to impact unknown historical, archaeological, or tribal cultural resources or buried human remains. Therefore this alternative would have less impact to historical or tribal cultural resources compared to the Project and the Expanded Conservation Alternative.

6.2.6 <u>Hydrology and Water Quality</u>

As detailed in Section 5.6, Water Quality and Hydrology, no substantial adverse effects were identified for the Project or alternatives and all impacts were identified as less than significant. However, slight differences in the level of resulting benefit would result from each independent alternative relative to the others.

The management activities outlined in the VPHCP and as implemented through the Project or Expanded Conservation Alternative would serve to maintain or restore vernal pools to their natural hydrologic functions, which ultimately would serve to reduce and avoid on-site and off-site flooding.

6.2.7 <u>Environmental Justice</u>

As detailed in Section 5.7, Environmental Justice, implementation of the Project or any of the alternatives would not generate substantial adverse effects related to disproportionately high and adverse impacts on environmental justice populations. The difference in adverse impacts on environmental justice populations between the Project and alternatives is nominal and does not warrant further comparison.

6.3 ENVIRONMENTALLY PREFERABLE ALTERNATIVE

Both CEQA and NEPA require the identification of an environmentally preferable (CEQ NEPA Guidelines, Section 1505.2[b]) or superior (CEQA Guidelines, Section 15126[e][2]) alternative.

The environmentally preferable and superior alternative is the alternative that would result in the least damage to the environment. If the No Project Alternative is environmentally superior, identification of a superior alternative among the other alternatives is required (CEQA Guidelines Section 15126.6[e][2]). Based on the analysis presented in Chapter 5 and comparison of alternatives in Chapter 6, the environmentally preferable/superior alternative is the Expanded Conservation Alternative.

The Expanded Conservation Alternative would result in the highest amount of conservation, restoration, maintenance, and monitoring of vernal pools and their associated resources, including the seven listed species that would be afforded coverage with adoption of the VPHCP. The increased amount of vernal pool protection under this alternative is a result of additional lands to the MHPA that contain valuable vernal pool resources. As shown in Table 6-1 and described throughout Section 6.2, Comparison of Alternatives Environmental Effects and Benefits, this higher level of conservation would be accomplished with nominal or no increase in adverse environmental effects as a result, relative to both the Project and Existing Conservation/No Project Alternative.

It is possible that some take could occur with this alternative, whereas no take would be allowed under the Existing Conservation/No Project Alternative. However, the overall improvement to vernal pool resources through higher conservation levels, a more cohesive and comprehensive Preserve area, and a consistent management and monitoring program would provide a greater net benefit to the environment as opposed to an adverse impact due to take. This alternative would meet all Project objectives and the Project purpose.

The Expanded Conservation Alternative would primarily add additional lands with more suitable habitat for vernal pool restoration (e.g., soils, slopes). While take would be marginally reduced by just two pools<u>containing San Diego fairy shrimp</u> (representing a 0.3% increase in conservation) and conservation of <u>modeled</u> vernal pool habitat would be greater than the Project, implementation of this alternative is not necessary to meet the objectives of the VPHCP for San Diego fairy shrimp, and would meet all the Project objectives and the Project purpose to a greater extent. <u>The Expanded Conservation Alternative would not reduce take of Riverside fairy shrimp or any of the covered plant species</u>. However, it would further reduce industrial and residential development opportunities within the Kearny Mesa and Otay Mesa Community Planning areas.

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CHAPTER 7.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(b) and NEPA (40 CFR 1502.16) require that an EIR address any significant irreversible and irretrievable effects. Section 15126.2(c) of CEQA requires discussion of the extent to which a proposed project will commit nonrenewable resources to uses that future generations will probably be unable to reverse. NEPA requires discussion of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity and also requires an explanation of which environmental impacts are irreversible or would result in an irretrievable commitment of resources.

Adoption of the Project or Expanded Conservation Alternative, and issuance of a take permit under Section 10(a)(1)(b) of FESA would permanently preserve portions of habitat areas within the City that are outside of the existing MHPA and would permit take of the species on the covered species list outside of the Preserve. Additionally, take may potentially occur within the MHPA in accordance with the development allowed per the City's ESL Regulations (i.e., 25% development within the least sensitive area for parcels wholly within the MHPA).

Incidental take of the seven covered species would represent an irreversible environmental change associated with implementation of the federal action. The number of covered species that could potentially be taken under the VPHCP or Expanded Conservation Alternative is summarized in detail in Section 5.2, Biological Resources. As demonstrated in the analysis in Section 5.2, the Project and Expanded Conservation Alternative would result in a net benefit to vernal pool habitat and the associated covered species by creating a preserve network that would be managed and monitored in perpetuity. While the authorized take of species would be considered an irreversible and irretrievable commitment of a limited biological resource, the enhancement and restoration efforts would improve the quality of preserved vernal pool habitat and promote recovery of covered species populations. Thus, the short-term adverse result of take associated with the restoration activities would be countered by the long-term benefit of increased preservation and recovery of those species and natural resources. Take of the covered species may occur under the Existing Conservation/No Project Alternative. However, federal and/or state authorization would be required.

Resources that are irreversibly or irretrievably committed to a project can include those typically used on a short-term basis or on a long-term permanent basis; these resources may include the use of nonrenewable resources such as fuel, wood, construction materials, or other natural or historical resources. The Project would require the ongoing use of natural nonrenewable resources such as gasoline, diesel fuel, oils, and other energy sources used to power equipment and worker vehicles. The use of these resources would be irreversible and the resources irretrievable. However, this commitment of resources is necessary for implementation of the VPHCP and the use of resources would be relatively minimal as a low number of vehicle trips would be necessary and equipment use would be limited to the initial recontouring of sites requiring restored hydrologic function and minor maintenance activities requiring power equipment (such as line trimmers).

CHAPTER 8.0 GROWTH INDUCEMENT

Growth inducement refers to factors that would directly or indirectly induce growth or remove obstacles to growth. State CEQA Guidelines Section 15126.2(d) requires that an EIR "discuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The EIR should also "discuss the characteristics which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

According to the City's Significance Determination thresholds, growth inducement "is usually associated with those projects that foster economic or population growth, or the construction of additional housing, either directly or indirectly which may result in the construction of major and new infrastructure facilities. Also, a change in land use policy or projects that provide economic stimulus, such as industrial or commercial uses, may induce growth... Accelerated growth may further strain existing community facilities or encourage activities that could significantly affect the surrounding environment" (City of San Diego 2011a).

The VPHCP does not propose any actions that would directly induce growth as there is no housing or development of utilities or infrastructure proposed. Additionally, implementation of the VPHCP does not necessitate the development of new or additional housing or other population supporting infrastructure nor would it cause accelerated growth beyond what is planned and forecast.

Implementation of management and monitoring requirements under the VPHCP could result in the creation of a very limited amount of employment. New employment opportunity could result from the need for additional City staff, laborers for physical implementation tasks, and specialized biologists for restoration/monitoring activities. However, the resulting workforce is expected to be fairly minimal and drawn from the local region and would not cause a substantial influx of new population growth to the area or create other economic or employment conditions that could cause population growth.

Indirect growth inducement could occur from a change in the location, type, or pattern of growth, resulting in the construction of additional housing in an area not currently planned for such housing. A project that would reduce the supply of available land for housing in one area may be

considered to have indirect growth-inducing effects, if such a reduction would result in a shift in projected growth to an area not currently planned for such growth.

The Project and Expanded Conservation Alternative have the potential to constrain development within a limited number of parcels (37 parcels would have restricted development under the Project, and an additional 50 under the Expanded Conservation Alternative). Parcels that would be wholly added to the MHPA would be subject to a development restriction over the land requiring 75% conservation but allowing 25% of the parcel to be developed. For example, Otay Mesa contains the largest area of vernal pool resources on parcels that retain development potential. With the new development restrictions that would be adopted with the VPHCP, it is possible that private land owners would look for property in other locations to develop.

It is not anticipated that this new restriction on development would cause a substantial change in location, type, or pattern of growth, resulting in the construction of housing or supporting infrastructure in an area not currently planned for such development. As described above, all parcels added to the MHPA as part of the Project or alternatives would maintain a development potential of at least 25% consistent with current land use and zoning (i.e., residential, commercial, industrial) regulations. Additionally, while lands subject to inclusion in the MHPA via the VPHCP currently do not have automatic development limitations as they would with implementation of the VPHCP, these lands are generally known to have wetlands and other sensitive biological resources and would likely be subject to ESL Regulations and other mitigation that could result in development restrictions. For these reasons, the potential volume of displaced or relocated development opportunities would be minimal. Any development that would be relocated from the VPHCP lands would be expected to be absorbed in development planned and currently occurring throughout the local and regional areas and would not be of the magnitude to cause substantial new or unplanned growth or modify the development location, type, or pattern of growth.

The Existing Conservation/No Project Alternative would not change or restrict any current land uses or development, and management of vernal pools would continue in a manner consistent with existing conditions; therefore, no growth-inducing impacts would occur with this alternative.

CHAPTER 9.0 CUMULATIVE IMPACTS

CEQA and NEPA require preparation of a cumulative impact analysis. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis. This chapter analyzes how the VPHCP may affect the environmental conditions within and beyond the Plan Area.

9.1 LEGAL REQUIREMENTS FOR THE ANALYSIS OF CUMULATIVE IMPACTS

National Environmental Policy Act

NEPA defines "cumulative impact" as "the impact of the environment which results from the incremental impact of the action when added to other, past, present, and reasonable foreseeable future actions regardless of which agency (federal or nonfederal) or person undertakes the other actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Section 15065 (c) states that there is a mandatory finding of significance if the project has possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15230.

California Environmental Quality Act

CEQA Guidelines Section 15130 describes the requirements for the discussion of cumulative impacts in an EIR. It states that an EIR will discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. The discussion will reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as much detail as is provided for the impacts attributable to the project alone.

Section 15355 defines cumulative impacts as follows:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- (a) The individual effects may be changes resulting from a single project or a number of separate projects.
- (b) The cumulative impact from several projects is the change in environment which results from the incremental impact of the 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)(1) of the CEQA Guidelines allows for the use of two alternative methods to determine the scope of projects for the cumulative analysis:

List Method – A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency (if necessary).

Projection Method – A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.

This analysis relies on the projection method, using regional planning and resource conservation documents, in accordance with Section 15130(b)(1), to serve as a basis for the analysis of the cumulative impacts. Pursuant to Section 15130(d), cumulative impact discussions may rely on previously approved land use documents such as general plans, specific plans, and local coastal plans and may be incorporated by reference. Also, no further cumulative impact analysis is required when a project is consistent with such plans, where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have already been adequately addressed in a certified EIR for that plan.

9.2 CUMULATIVE ANALYSIS APPROACH

This cumulative impact analysis utilizes the projection method described above and relies on previously approved regional and local conservation and land planning documents, as summarized below.

Land Planning Documents

City of San Diego General Plan

The City's General Plan provides guidance for development of the city. It provides a comprehensive slate of city-wide policies to balance the needs of a growing city while enhancing quality of life for current and future San Diegans. The General Plan presents 10 elements that

overall provide a comprehensive "blueprint" for the City's growth over the next 20 plus years (City of San Diego 2008a).

A broad examination of cumulative impacts involves considering the Project together with the growth of the city. Conservation pursuant to the General Plan would occur in accordance with the conservation and land use designations and intensities identified in the Conservation and the Land Use and Community Planning Elements of the General Plan.

County of San Diego General Plan

The County's General Plan is based on a set of guiding principles designed to protect San Diego County's unique and diverse natural resources and maintain the character of its rural and semirural communities. It reflects an environmentally sustainable approach to planning that balances the need for adequate infrastructure, housing, and economic vitality, while maintaining and preserving each unique community within the county, agricultural areas, and extensive open space. It guides the County's management of its environmental resources through policies to sustain and enhance the land, water, air, and biodiversity upon which all life depends, while recognizing that the county's growing population must also be accommodated (County of San Diego 2011).

Various Regional General Plans and Community Plans

Throughout the San Diego region, individual cities have general plans, similar to the City's General Plan, that outline guidance for future development of the jurisdiction. Most general plans also address policies and goals for natural resource conservation and open space preservation. Additionally, as detailed in Section 5.1.2, many communities throughout San Diego have community plans addressing similar issues on a smaller, more localized scale.

Conservation Plans

Natural Community Conservation Plan Program

The NCCP Program, established in 1991, is an unprecedented effort by the State of California and numerous private and public partners that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. The primary objective of the NCCP Program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listings by focusing on the long-term stability of wildlife and plant communities and including key interests in the process (CDFW 2015). CDFW and USFWS provide the necessary support, direction, and guidance to NCCP participants.

San Diego Multiple Species Conservation Program

In December 1996, CDFW and USFWS approved the San Diego MSCP SAP, which encompasses 582,000 acres and establishes a 172,000-acre preserve system in San Diego County (County of San Diego 1998). The MSCP SAP covers 85 species of plants and animals and 23 vegetation types. The MSCP area encompasses 11 planning subareas in various stages of plan development (County of San Diego 1998). These SAPs create a habitat preserve system that provides coordinated coverage for the most of the county. Approved SAPs to date include the La Mesa SAP, Poway SAP, City of San Diego SAP, Chula Vista Subarea Plan, and the County of San Diego South County SAP. Other jurisdictions within the MSCP Subregion include Imperial Beach, Lemon Grove, and National City. These cities have not initiated the development of subarea plans. Additional detail on the City's MSCP SAP is provided in the land use analysis, Section 5.1.2.

San Diego Gas & Electric (SDG&E) Subregional Plan

SDG&E has completed an NCCP for SDG&E properties within the San Diego region. This linear NCCP, extending from southern Orange County south to the Mexican border, was the first plan approved in San Diego County. The plan covers 110 plant and animal species and emphasizes avoidance of impacts. Mitigation required by the plan includes revegetation and use of up to 240 acres of credits set aside in land parcels purchased by SDG&E as mitigation banks. SDG&E's properties and easements provide habitat connectivity in areas where little natural habitat remains.

Marine Corps Air Station (MCAS) Miramar Integrated Natural Resources Management Plan (INRMP) 2000

The INRMP integrates current and future land use activities at MCAS Miramar with natural resources management and conservation. The INRMP was developed in cooperation with USFWS, USACE, and CDFW. The INRMP contains the baseline information that supports compliance with regulatory and planning processes, such as those required by NEPA, FESA, and CWA (MCAS 2000).

9.3 CUMULATIVE IMPACT ANALYSIS

This discussion evaluates the potential cumulative effects on land use, biological resources, air quality, GHG emissions, historical resources, hydrology and water quality, and environmental justice. In particular, the analysis focuses on the cumulative effects of the VPHCP with the other regional and local land use and conservation plans being developed by adjoining jurisdictions in San Diego County, as described in Section 9.2, Cumulative Analysis Approach.

The land planning documents described in this chapter are consistent with the NCCP and HCP conservation guidelines, and the overall goal to balance preservations of biological resources, land use, and economics. Impacts associated with implementation of the VPHCP, as described in Chapter 5, could also be associated with cumulative implementation of the various programs described above with potential beneficial and adverse environmental consequences.

9.3.1 Land Use

As detailed in Section 5.1, Land Use, implementation of the Project or Expanded Conservation Alternative would lead to an overall city-wide minor reduction in development potential due to development restrictions associated with adding lands to the MHPA under the VPHCP. Otherwise, development patterns would be consistent with those approved under the City's General Plan, community plans, and the City's MSCP. All parcels for addition to the MHPA would continue to have some development potential allowed (25%). The magnitude of the reduction in development potential is anticipated to be minimal and would not interfere with planned development patterns throughout the region or contribute to other types of adverse land use effects such as urban sprawl or division of established communities. Activities such as the installation of exclusionary fencing, signage, and interpretative features within preserved vernal pool complexes would not necessitate a change in existing or planned land use and would not contribute to a land use-related impact in a manner that could result in or increase environmental impacts.

The increased vernal pool conservation, restoration, and monitoring efforts that would result with implementation of the Project or Expanded Conservation Alternative would be complementary to the existing vernal pool conservation efforts guided by other regional documents such as the SDG&E Subregional Plan, MCAS Miramar INRMP, NCCP, and County MSCP. Implementation of the VPHCP would not contribute to substantial conflicts or adverse environmental effects associated with regional vernal pool conservation plans.

Under the Existing Conservation/No Project Alternative, future development would be approved consistent with the existing General Plan and City MSCP. As discussed in Section 5.1, Land

Use, no land use impacts would result from the Existing Conservation/No Project Alternative. Thus, no new land use incompatibilities or conflicts would result that could contribute to a cumulative impact.

Because the Project or alternatives would not result in impacts related to land use inconsistencies, there would be no significant contribution to a long-term direct or indirect cumulatively considerable adverse impact related to land use.

9.3.2 <u>Biological Resources – Vernal Pools</u>

As detailed in Section 5.2, Biological Resources, implementation of the Project or Expanded Conservation Alternative would result in take of covered species due to issuance of ITPs. However, similar to other HCP and NCCP plans in the San Diego region (e.g., SDG&E NCCP Plan, South County San Diego MSCP Plan) the Project and Expanded Conservation Alternative include implementation of the Mitigation Framework, which requires avoidance, minimization, and compensatory mitigation measures that would mitigate adverse impacts to vernal pool habitat and the covered species populations associated with covered projects and covered activities. It is anticipated that cumulative, direct impacts to the covered species would be reduced to below a level of significance due to assembly and management of a vernal pool Preserve in accordance with the HCP Guidelines. Establishment of a vernal pool Preserve would result in a net benefit by providing a city-wide Preserve that is managed and monitored to sustain and enhance existing vernal pool habitat and covered species populations, as well as restoring degraded habitat.

Under the Existing Conservation/No Project Alternative, no incidental take would be authorized by the City and impacts to vernal pools would be avoided; thus, the Existing Conservation/No Project Alternative would not contribute to a cumulative loss of vernal pool species.

Under the Project or both alternatives, cumulative indirect impacts would potentially be associated with edge effects and increased development pressure outside the Preserve. These indirect impacts are not regarded as significant, either cumulatively or at the project level, with implementation of the MSCP/MHPA Land Use Adjacency Guidelines. Implementation of the Land Use Adjacency Guidelines would be required for all future projects proposing development within or adjacent to the MHPA. Other conservations plans in the County have similar types of adjacency requirements that also avoid and minimize potential edge effects.

For these reasons, the Project or alternatives would not result in a cumulatively considerable contribution to a long-term direct or indirect cumulatively considerable adverse impact related to the overall loss of biological resources.

9.3.3 <u>Air Quality</u>

As detailed in Section 5.3, Air Quality, implementation of the Project or alternatives would not result in a significant air quality environmental impact. The Project and alternatives would not obstruct implementation of the applicable air quality plan, violate any air quality standard, or contribute substantially to an existing or projected air quality violation. The Project or alternatives would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. If small hand tools and/or machinery are to be used during restoration or maintenance efforts associated with the Project and Expanded Conservation Alternative, the air quality impact would be minimal, as would the emissions associated with driving vehicles for monitoring visits. The emissions associated with the Project (approximately 37 MT CO₂e per year as a conservative estimate) and Expanded Conservation Alternative are negligible and would not contribute to a cumulative impact.

The Existing Conservation/No Project Alternative would not require any additional restoration, maintenance, or monitoring activity beyond what would currently occur under existing conservation conditions; thus, no air quality impacts would result from the Existing Conservation/No Project Alternative, and no contribution to a cumulative impact would occur.

For these reasons, the Project or alternatives would not result in a cumulatively considerable contribution to a long-term direct or indirect cumulatively considerable adverse impact related to the overall degradation of air quality.

9.3.4 Greenhouse Gas Emissions

As detailed in Section 5.4, Greenhouse Gas (GHG) Emissions, implementation of the Project or Expanded Conservation Alternative would lead to a minor increase in GHG emissions due to an increase in vehicular transportation to and from vernal pool restoration sites within the MHPA by restoration and monitoring field personnel. In addition, small machinery may be used for restoration purposes; however, the overall increase in emissions (approximately 37 MT CO₂e per year as a conservative estimate for the Project) is not considered a cumulatively considerable contribution to climate change according to the City's GHG screening criteria and CEQA Significance Thresholds. The City defines a project to have less than a cumulatively considerable impact if the construction and operation GHG emissions for the project would not exceed 900 MT CO₂e per year (City of San Diego 2011a). As the Project and alternatives involve minimal machinery for restoration purposes and do not include construction of structures or substantial ground disturbance, the impacts would not significantly contribute to new emissions.

The Existing Conservation/No Project Alternative would not require any additional restoration, maintenance, or monitoring activity beyond what would currently occur under current conditions; thus, the Existing Conservation/No Project Alternative would not result in additional GHG emissions, and no cumulative impact would occur.

For these reasons, the Project or alternatives would not result in a cumulatively considerable contribution to a long-term direct or indirect cumulatively considerable adverse impact related to the overall increase in GHG emissions.

9.3.5 <u>Historical and Tribal Cultural Resources</u>

As detailed in Section 5.5, Historical and Tribal Cultural Resources, implementation of the Project or Expanded Conservation Alternative could result in the alteration, including adverse physical or aesthetic effects and/or the destruction, of any prehistoric or historical building, structure, or object, archaeological, or tribal cultural resource, or unknown buried human remains due to ground-disturbing activities. The VPHCP Plan Area does not include areas of existing religious or sacred uses or known burial sites. Grading may be necessary for vernal pool restoration that would typically average 3 to 6 inches in depth, which is generally not substantial enough to penetrate unknown prehistoric burial sites. The impact assessment is based on the APE, which includes the area of both the direct and indirect impacts of a VPHCP Plan Area on a historical or tribal cultural resource. If impacts to historical or tribal cultural resources were to occur from VPHVP-related actions, this would also constitute a potentially significant contribution to a cumulative historical resources impact resulting from combination with other ground-disturbing projects throughout the region. To mitigate for the potential VPHCP-related impact, Mitigation Measure HIST-1 would be required for the Project and Expanded Conservation Alternative. Implementation of this mitigation measure allows for evaluation of potential impacts to historical and tribal cultural resources to protect and preserve resources in accordance with the Historical Resources Regulations. Similarly, if implementation of other regional plans or projects involves ground-disturbance and has the potential to impact buried resources, those actions would also be subject to all federal, state, and local regulations mandating the protection of historical resources. If other cumulative actions identify a potential to impact historical resources, the impact would typically be mitigated through measures such as site preservation or data recovery. With implementation of such measures, similar to Mitigation Measure HIST-1, the overall critical information regarding regional history, archaeological resources, and tribal cultural resources would be preserved and/or documented.

For these reasons, with implementation of Mitigation Measures HIST-1, the Project or alternatives would not make a cumulatively considerable contribution to a long-term direct or indirect cumulatively considerable adverse impact related to the overall loss of historical or tribal cultural resources. A less than significant impact would result.

9.3.6 <u>Hydrology and Water Quality</u>

As detailed in Section 5.6, Hydrology and Water Quality, the Project or alternatives would not create significant impacts to water quality and hydrology. The Project or alternatives require a variety of appropriate BMPs that would protect water quality, minimize erosion, and minimize sediment transport during vernal pool management and restoration activities. The VPHCP does not propose an increase in impervious area. The VPHCP under the Project and alternatives includes an enhancement and restoration component for Level 2 and 3 complexes. As part of these activities, minor grading would occur to a typical average of 3 to 6 inches in depth to restore the natural topographic features and hydrological function of the vernal pools. This would increase the overall function and values of the City's vernal pool habitat and associated hydrologic function of the area. As a result, the Project or alternatives would slightly change the existing hydrology and drainage patterns within the VPHCP Plan Area; however, the changes would result in a net beneficial impact to hydrology, specifically watershed function and values. The Project would not result in an adverse impact to water quality or hydrology, and thus would not result in a contribution to a cumulative water quality or hydrology impact.

For these reasons, the Project and alternatives would not make a cumulatively considerable contribution to a cumulatively significant direct or indirect adverse impact to water quality and hydrology.

9.3.7 <u>Environmental Justice</u>

As detailed in Section 5.7, Environmental Justice, implementation of the Project or alternatives would not result in disproportionately high or adverse effects on low-income, minority, and child populations with regard to human health, environmental safety, or land use impacts. Generally, regional conservation plans, such as the SDG&E Subregional Plan, MCAS Miramar INRMP, NCCP, or MSCP do not include actions or policies that would have a substantial adverse effect on specific populations as they are characteristically centered on conservation of natural resources. Because there would be no considerable impacts to environmental justice communities, there would be no cumulative contribution to disproportionately high or adverse effects on low-income, minority, and child populations.

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CHAPTER 10.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

A number of environmental issue areas are not evaluated in this EIR/EIS because the identified resource is not present within or around the VPHCP Plan Area, or because implementation of the Project or alternatives would clearly have no potential for substantial adverse effects with respect to the action being evaluated. As allowed by Section 15128 of the CEQA Guidelines, effects found not to be significant need not be discussed in detail in an EIR. Rather, a brief discussion as to why various possible effects of a project were determined not to be significant is appropriate. These issue areas are described below, with an explanation and rationale of why they are not being evaluated further in this EIR/EIS. These issues are:

- 10.1 Agricultural Resources
- 10.2 Energy
- 10.3 Geologic Conditions
- 10.4 Health and Safety
- 10.5 Mineral Resources
- 10.6 Noise
- 10.7 Paleontological Resources

- 10.8 Population and Housing
- 10.9 Public Services and Facilities
- 10.10 Public Utilities
- 10.11 Recreational Resources
- 10.12 Transportation/Circulation/Parking
- 10.13 Visual Effects and/ Neighborhood Character

The Project and alternatives would protect vernal pool species by conserving habitat, restoring degraded habitat, managing the vernal pool Preserve, and conducting biological monitoring in perpetuity. The Project also includes issuance of incidental take by USFWS to the City for the seven covered vernal pool species. The City then would be able to issue third-party status for projects within the City's jurisdiction. Any future projects that may benefit from the third-party status would be required to conduct a project-specific environmental analysis in compliance with CEQA and/or NEPA, as applicable, including evaluation of the issue areas listed in this chapter.

10.1 AGRICULTURAL RESOURCES

The Project and alternatives are not located within existing or designated agricultural areas: Prime Farmland, Farmland of Statewide Importance, Farmland of Local importance, or Grazing Land. The 275 acres included in the MHPA via implementation of the Project are not currently in agricultural production. The activities associated with implementation of the VPHCP, such as restoration, management, and monitoring, are not of the nature to cause or influence the conversion of surrounding agricultural operations to convert to nonagricultural uses. Implementation of the Project or alternatives would not create permanent structures or other permanent elements that could preclude future agricultural use in areas that could, in the future, be potentially put into agricultural production. Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition. Thus, the Project and alternatives would not result in a significant or adverse impact to agricultural resources and further analysis is not necessary.

10.2 ENERGY

Other than minor amounts of fossil fuel consumption associated with the periodic operation of equipment such as a small skid-steer loader (i.e., bobcat) used during enhancement and restoration activities, small handheld power equipment such as a line trimmer during maintenance activities, or driving of vehicles to vernal pool sites for monitoring, implementation of the Project and Expanded Conservation Alternative would not have any additional energy demands. The use associated with such equipment would not be excessive and would be temporary in nature. No known fossil fuel resources are present within the vernal pool complexes managed under the VPHCP. Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition and would not require additional fossil fuel consumption beyond current conditions. Therefore, impacts associated with energy would be less than significant and not adverse, and further analysis is not necessary.

10.3 GEOLOGIC CONDITIONS

The Project and alternatives would not have a direct impact on geology and soils because the results of implementation are not expected to differ measurably from the existing conditions. Restoration of vernal pool resources may involve temporary minor recontouring of topsoil (average 3 to 6 inches in depth) but the underlying vernal pool soils and geologic formations would remain intact. Planting of native species as part of restoration efforts would aid in stabilizing soil and minimizing erosion potential. For these reasons, the Project and alternatives would not expose people or structures to potential substantial adverse effects or result in substantial soil erosion or the loss of topsoil. The Project or alternatives would not expose people or structures geologic hazards as the Project would not involve the development of any structures or modify the soil or geology of an area in a manner that could change the stability or result in increased geologic hazards on-site or off-site. Furthermore, there is no potential for landslide, lateral spreading, or collapse.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition. No geologic or soil conditions would be altered under the Existing Conservation/No Project Alternative. Therefore, the Project and alternatives would result in a less than significant impact and not adverse, and further analysis is unwarranted.

10.4 HEALTH AND SAFETY

The Project and alternatives would not directly or indirectly affect public health and safety because conditions after implementation of the VPHCP are not expected to differ significantly from the existing conditions. Essentially, the same potential for development resulting in hazards to human health and public safety would occur under the Project and alternatives as under the existing conditions. The Project and alternatives would not occur on or propose a change to existing hazardous material sites. The Project and alternatives would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as existing roads would not be modified, disturbed, or otherwise impaired in their ability to serve as evacuation routes. The Project or alternatives would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires as no new structures are proposed and areas would be restored to their proper hydraulic functions. Invasive plant species would be removed and revegetation would consist of native, drought-tolerant plants that would not result in substantial increased wildlife risk.

The Project and alternatives would not create a hazard to the public or the environment through transportation of hazardous materials or the release of hazardous materials into the environment, including near a school. Although herbicide may be used during restoration and management activities associated with Project and Expanded Conservation Alternative, herbicide use would be targeted to address discrete invasive plant populations within the vernal pool complexes. Herbicide would be applied by a licensed applicator and consistent with all federal, state, and county requirements.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition with minimal potential to increase public safety risks. Therefore, a less than significant and no adverse impact to public health and safety would result, and further analysis of this issue is unwarranted.

10.5 MINERAL RESOURCES

San Diego's important mineral resources include salt, sand and gravel, all of which have been produced in San Diego for many decades. "Mineral resources" refers to aggregate resources that consist of sand, gravel, and crushed rock (City of San Diego 2011a). Mineral Resource Zone (MRZ) as defined by California Department of Conservation, Division of Mines and Geology and, specifically, MRZ-2 are areas of land where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists (City of San Diego 2011a). The Project and alternatives are not located within any areas classified as MRZ-2 (City of San Diego 2008a), meaning it is not likely that important minerals that could be extracted would be located in the VPHCP Plan Area. Additionally, implementation of the Project or alternatives, including the Existing Conservation/No Project Alternative, would not create permanent structures or other permanent elements that could preclude future mineral extraction operations if significant mineral resources were to be discovered. Therefore, the impact to mineral resources would be less than significant and not adverse, and further analysis is unwarranted.

10.6 NOISE

For the purpose of analysis, noise is defined as unwanted or objectionable sound. The Project and alternatives would not create new noise generation sources, with the possible exception of minor temporary noise generated from restoration activities (i.e., equipment used for recontouring) or maintenance activities (i.e., line trimmer used for weed management). For the remainder of any given year outside of restoration or maintenance activities, no noise would be generated in association with the VPHCP. Any future restoration activities would include restrictions during the bird breeding season to ensure no adverse impacts from noise would occur. Maintenance activities would sound similar to common residential lawn care noise. Because noise-generating activities associated with the Project would generally be limited to periodic and temporary minor equipment use (skid loader) in areas of restoration or other small hand-held power tools for maintenance, these activities would not create significant increases in ambient noise levels or exceed the City's adopted noise ordinance. Project activities may result in a slight periodic increase in traffic due to laborers traveling to and from a restoration or monitoring site; however, noise impacts are expected to be temporary and negligible due to the very low volume or trips.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition. No substantial increase in noise generation would result under the Existing Conservation/No Project Alternative.
Therefore, a less than significant and not adverse impact would occur, and further analysis is unwarranted.

10.7 PALEONTOLOGICAL RESOURCES

Paleontological resources (i.e., fossils) are the buried remains and/or traces of prehistoric organisms. Paleontological resources are found in the geological formations within which they were originally buried. Fossils are considered nonrenewable resources because, typically, the organisms they represent no longer exist. Generally, to impact a paleontological resource, the sedimentary bedrock that embeds the resources must be disturbed.

The Project and alternatives would not impact paleontological resources, as only minor grounddisturbing activities would be required with implementation of the VPHCP. Restoration of vernal pool resources may at times involve minor grading to an average depth of 3 to 6 inches, which would not be of the magnitude necessary to reach or damage paleontological resources buried in sedimentary bedrock layers.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition with no excavations into sedimentary bedrock.

Therefore, implementation of the Project or its alternatives would result in a less than significant and not adverse impact to paleontological resources, and further analysis is unwarranted.

10.8 POPULATION AND HOUSING

The Project or alternatives would not displace existing housing or people as there are no residential developments within the VPHCP Plan Area. Also, the Project does not include the development of new housing or any population-generating uses. The Project or alternatives would also not require or add to a need for infrastructure expansion that could induce substantial new population growth. The Project and the Expanded Conservation Alternative may slightly reduce the amount of vacant land available to accommodate future residential or other development in the VPHCP Plan Area. However, the potential increase in demand for land elsewhere due to new development restrictions is expected to be minimal and would only be accommodating existing housing demand within the region.

The VPHCP would expand the City's existing MHPA by adding approximately 275 acres of land with valuable vernal pool resources. No other land use changes within the remaining Plan Area

(approximately 205,849 acres) are proposed. Of the 275 acres, 84 acres (see Table 3-2) are already conserved and 191 acres of lands are currently unconserved (see Table 3-1). Of the 191 unconserved acres, 59 acres are City-owned and 132 acres are under private ownership. Land use designations within the remaining VPHCP Plan Area (approximately 205,849 acres) would remain the same, including approximately 51,000 acres designated as residential within the Plan Area.

In addition, many of the vernal pool complexes that would be conserved under the VPHCP contain other sensitive natural resources, such as nonnative grasslands and burrowing owl habitat. Therefore, development restrictions already exist on these lands, so a further reduction in development potential from implementation of the VPHCP would be marginal at most.

Implementation of management and monitoring requirements under the VPHCP could require additional City staff, thus providing employment opportunity. Laborers would also be required to implement actions such as recontouring, vegetation planting and irrigating, trash removal, fence installation, and other physical tasks. Specialized biologists would be required for the surveying, monitoring, reporting, and other biological activities. However, the workforce is expected to be fairly minimal and drawn from the local region and would not cause a substantial influx of new population growth to the area.

The Existing Conservation/No Project Alternative would be the same as existing conditions with continued management and monitoring where required based on existing resource management plans, or left in their existing condition.

For these reasons, any population and housing impacts from the Project and alternatives would be less than significant and not adverse, and further analysis is unwarranted.

10.9 PUBLIC SERVICES AND FACILITIES

The discussion of public services and facilities is relative to those government services such as fire or police protection or public facilities such as schools, libraries, parks, or other facilities that would be affected by the Project or alternatives, including the Existing Conservation/No Project Alternative in a manner that would result in substantial adverse physical impacts from the construction or alteration of facilities needed to maintain acceptable service ratios, response times, or other performance objectives public services. The Project or alternatives do not propose construction of any service facilities. Additionally, as described in Section 10.8, Population and Housing, the Project or alternatives would not result in the substantial increase of population or other public congregation opportunities that would result in the increased demand on or need for governmental services or facilities. The Project and alternatives would not alter the planned

location or distribution of facilities or services, nor generate a need for new or upgraded facilities or services. Therefore, no significant impacts or adverse impacts would result, and further analysis is unwarranted.

10.10 PUBLIC UTILITIES

The Project and alternatives, including the Existing Conservation/No Project Alternative, would not alter the existing or planned location of public utilities or distribution of planned facilities necessary to meet anticipated service demand. The Project or alternatives would not require the use of generated power on the restoration sites. Temporary irrigation may be required as part of the restoration and enhancement activities for Level 2 or 3 complexes for the plants to become established; however, irrigation would be needed only on a short-term basis (up to 3 years) for plant establishment. Irrigation would include watering only during the event where natural rain is inadequate to support plant establishment, upon approval by the City and Wildlife Agencies. As described in Section 5.6, Hydrology and Water Quality, drainage patterns of recontoured sites would not cause new volumes of runoff that could affect storm water drainage facilities. Minimal solid waste could be generated through trash removal from sites as part of the maintenance efforts. For these reasons, the Project and alternatives would not generate a need for new or upgraded electrical power infrastructure, water or wastewater facilities, natural gas utilities, storm water drainage facilities, solid waste disposal facilities, or communications systems. Additionally, the Project and alternatives would not alter the planned location, distribution, density, or growth rate of the City's population that would lead to the need for new or upgraded public utilities.

No structures are proposed that would create supply demand or require the disturbance or relocation of existing utility infrastructure; the Project and alternatives would generate nominal need for power, water or wastewater services, or solid waste disposal needs; and no changes are anticipated to the location or distribution of the City's population. Therefore, the Project and alternatives would not result in a need for altered public infrastructure or utilities.

Thus, no significant or adverse impacts to public utilities would result from implementation of the Project or alternatives, and further analysis is unwarranted.

10.11 RECREATIONAL RESOURCES

The Project and alternatives propose no substantial changes to large-scale development patterns or any element that would influence population density. Because the Project or alternatives would not bring new or increased population to an area or propose any element that could influence the number of visitors to a park facility, the Project and alternatives would not increase the use of neighborhood and regional parks. The Project or alternatives do not include recreational facilities as part of the VPHCP and would not require the construction or expansion of recreational facilities to meet increased demand generated by the Project. The Project and alternatives would allow trails as a compatible use in certain locations. The Project and Expanded Conservation Alternative may increase recreational opportunities by providing more open space within the MHPA for passive recreation, but trail development or implementation of other passive recreation opportunities is not proposed as part of the Project or alternatives.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition with no modifications or additional demands on recreational resources.

There would be no significant change related to recreational resources in the City with implementation of the Project or alternatives regarding the need for new or expanded recreational facilities or increased demand on existing facilities or opportunities. Therefore, no significant adverse effect would occur related to the quality or quantity of recreational opportunities in the City, and further analysis is not necessary.

10.12 TRANSPORTATION/CIRCULATION/PARKING

The Project and Expanded Conservation Alternative would add lands to the MHPA, thereby potentially reducing development and associated future traffic generation. However, change to development potential would be relatively minor, so while it is anticipated that a small decrease in future traffic generation would occur in the specific areas of the VPHCP Plan Area, no changes would occur to proposed community plan circulation element roadways. Consistent with the existing MSCP, circulation element roads would be allowed within the lands added to the MHPA through implementation of the VPHCP. No additional conservation acreage would be proposed with the Existing Conservation/No Project Alternative. Under this alternative, development would occur consistent with existing conditions.

No element or component of the Project or alternatives would result in the generation of substantial volumes of traffic. Minor traffic trips would result from maintenance vehicles visiting the sites for restoration, maintenance, and monitoring activities. These trips would be limited to the small number of workers needed at a site and would occur only periodically throughout the year. Thus, the Project and alternatives would not cause an increase in traffic congestion; would not affect levels of service; would not increase safety risks or increase the need for additional parking; and would not preclude the development of circulation element roads, affect emergency access, or conflict with adopted plans.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition with minimal impact on traffic conditions due to small volumes of trip generation from ongoing management activities.

Therefore, the Project and alternatives would have a less than significant and not adverse impact on traffic and circulation, and further analysis is unwarranted.

10.13 VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

Adoption of the VPHCP would create a Preserve designed to protect and preserve vernal pool resources. The Project or alternatives would not involve the construction of any structures or alternations to any existing structures or landforms. Any topographic recontouring to restore proper hydrologic function of an area would appear very minimal with only minor visual distinction between existing and new conditions. There would be no impacts on scenic vistas and scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway as a result of VPHCP implementation. Additionally, the Project or alternatives would not alter visual elements within any designated scenic sites and/or corridors.

Vernal pool enhancement and restoration would occur with implementation of the Project or Expanded Conservation Alternative. Implementation would not include the development of any visual elements outside of protective measures. Protective measures include the placement of fencing (e.g., post and cable or 3-strand wire) and signage, which would be installed to prevent trespassing as well as ensure success of the enhancement and restoration efforts. The visibility of the proposed fencing types is quite minimal and while fencing may cause minor alterations to the existing visual setting, overall the existing visual character or quality of the sites would be improved through restoration or enhancement activities (e.g., planting of native species) and management activities (e.g., removal of trash, debris, and invasive, weedy plants).

The Project and alternatives would not result in the creation of any physical components that would result in light or glare. The Project and alternatives do not include the construction of or improvement to buildings or other structures. Management activities, including restoration and enhancement, would occur during daylight hours. Therefore, no significant impacts related to lighting, glare, or shading would occur.

The VPHCP is designed to restore, manage, and protect vernal pool habitat and associated sensitive species within all communities where they occur within the City's jurisdiction. The Project and Expanded Conservation Alternative would not have an adverse impact to community

character; rather existing habitat areas and the visual character and natural setting of vernal pool complexes would be preserved and, where needed, enhanced and/or restored. There would be no significant change between existing conservation and the Project and alternatives.

Under the Existing Conservation/No Project Alternative, vernal pools within the VPHCP Plan Area would continue to be managed and monitored where required based on existing resource management plans, or left in their existing condition. No visual elements would be introduced or altered under the Existing Conservation/No Project Alternative.

For these reasons, any impacts on visual quality and neighborhood character from the Project and alternatives would be less than significant and not adverse, and further analysis is unwarranted.

CHAPTER 11.0 MITIGATION, MONITORING, AND REPORTING PROGRAM AND MITIGATION FRAMEWORK

CEQA, Section 21081.6, requires that an MMRP be adopted upon certification of an EIR to ensure that the mitigation measures are implemented. The MMRP specifies what the mitigation is, the entity responsible for monitoring the program, and when in the process it should be accomplished. This MMRP is designed to ensure compliance with PRC Section 21081.6 during implementation of mitigation measures. A record of the MMRP will be maintained at the City.

In addition to the mitigation measures required specifically by the EIR/EIS, the VPHCP contains a Mitigation Framework that requires measures to avoid or minimize adverse effects to vernal pool resources resulting from covered projects and covered activities. The Mitigation Framework also identifies compensatory mitigation for impacts to vernal pools and covered species resulting from covered projects and covered activities. The Mitigation Framework is considered part of the Project and the full text as written in the VPHCP is included in this MMRP to ensure implementation and enforceability of the required measures.

11.1 MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP table below summarizes the potentially significant Project impacts and lists the associated mitigation measures and monitoring efforts, timing, and responsible party necessary to ensure that the measures are properly implemented. All Project-specific mitigation measures identified in the EIR/EIS are stated herein.

Mitigation Measure Number	Mitigation Measure	Timeframe of Mitigation	Monitoring, Enforcement, and Reporting Responsibility
Historical and Tribal Cultural Resources			
HIST-1	Mitigation Measure HIST-1: Prior to issuance of any permit for a future development project implemented in accordance with the VPHCP Plan area that could directly affect an archaeological or Tribal Cultural Resource, the City shall require the following steps be taken to determine (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources that may be impacted by a development activity. Sites may include residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socioeconomic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.	Prior to and/or During Construction	City Mitigation Monitoring Coordination Section; Principal Investigator

Table 11-1Mitigation Monitoring and Reporting Program

Mitigation Measure		Timeframe	Monitoring, Enforcement, and Reporting
Number	Mitigation Measure	Mitigation	Responsibility
	INITIAL DETERMINATION The environmental analyst will determine the likelihood for a project site to contain historical resources by reviewing site photographs and existing historic information (e.g., Archaeological Sensitivity Maps; the Archaeological Map Book; and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego"), and may conduct a site visit. If there is any evidence that the site contains archaeological or Tribal Cultural Resources, then an archaeological evaluation consistent with the City Guidelines would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.		
	STEP 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archaeological testing, and analysis. Before actual field reconnaissance would occur, background research is required, which includes a records search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the Native American Heritage Commission must also be conducted at this time. Information about existing archaeological collections should also be obtained from the San Diego Archaeological Center and any tribal repositories or museums. In addition to the records searches mentioned above, background information may include examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archaeological research in similar areas, models that predict site distribution, and archaeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information would be included in the evaluation report. Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including remote sensing, ground-penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If, through background research and field surveys, historical resources are identified, t		
	STEP 2: Where a recorded archaeological site or Tribal Cultural Resource (as defined in the Public Resources Code) is identified, the City would be required to initiate consultation with identified California Indian tribes pursuant to the provisions in Public Resources Code Section 21080.3.1 and 21080.3.2., in accordance with Assembly Bill 52. It should be noted that during the consultation process, tribal representative(s) will be involved in making recommendations regarding the significance of a Tribal Cultural Resource which also could be a prehistoric archaeological site. A testing program may be recommended which requires reevaluation of the proposed project in consultation with the Native American representative, which could result in a combination of project redesign to avoid and/or preserve significant resources and mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). The archaeological testing program if required shall		

Mitigation		Timeframe	Monitoring, Enforcement,
Measure		of	and Reporting
Number	Mitigation Measure	Mitigation	Responsibility
	include evaluating the horizontal and vertical dimensions of a site; the		
	and presence/absence of subsurface features: and research potential. A thorough		
	discussion of testing methodologies, including surface and subsurface		
	investigations, can be found in the City Guidelines. Results of the consultation		
	process will determine the nature and extent of any additional archeological		
	evaluation of changes to the proposed project.		
	The results from the testing program will be evaluated against the Significance		
	identified within the APE, the site may be eligible for local designation.		
	However, this process would not proceed until such time that the tribal		
	consultation has been concluded and an agreement is reached (or not reached)		
	regarding significance of the resource and appropriate mitigation measures are		
	Identified. When appropriate, the final testing report must be submitted to		
	designation. An agreement on the appropriate form of mitigation is required		
	prior to distribution of a draft environmental document. If no significant		
	resources are found, and site conditions are such that there is no potential for		
	further discoveries, then no further action is required. Resources found to be		
	nonsignificant as a result of a survey and/or assessment will require no further		
	work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms, and inclusion of results in the survey		
	and/or assessment report. If no significant resources are found, but results of the		
	initial evaluation and testing phase indicates there is still a potential for		
	resources to be present in portions of the property that could not be tested, then		
	mitigation monitoring is required.		
	STEP 3.		
	Preferred mitigation for historical resources is to avoid the resource through		
	project redesign. If the resource cannot be entirely avoided, all prudent and		
	feasible measures to minimize harm shall be taken. For archaeological resources		
	where preservation is not an option, a Research Design and Data Recovery		
	Program is required, which includes a Collections Management Plan for review		
	avoided, appropriate and feasible mitigation will be determined through the		
	tribal consultation process and incorporated into the overall data recovery		
	program where applicable, or project specific mitigation measures shall be		
	developed and incorporated into the project. The data recovery program will		
	also incorporate any agreements regarding curation or repatriation of Tribal		
	recovery program shall be based on a written research design and is subject to		
	the provisions as outlined in CEQA Section 21083.2. The data recovery		
	program must be reviewed and approved by the City's Environmental Analyst		
	prior to distribution of a draft CEQA document and shall include the results of		
	the tribal consultation process. Archaeological monitoring may be required		
	resources are known or suspected to be present on a site, but cannot be		
	recovered prior to grading due to obstructions such as existing development or		
	dense vegetation.		
	A Native American observer must be retained for all subsurface investigations,		
	including geotechnical testing and other ground-disturbing activities, whenever		
	a Native American Traditional Cultural Property, Tribal Cultural Resource, or archaeological site located on City property or within the APE of a City project		
	would be impacted. In the event that human remains are encountered during		
	data recovery and/or a monitoring program, the provisions of PRC Section 5097		
	must be followed. These provisions will be outlined in the Mitigation		
	Monitoring and Reporting Program (MMRP) included in a subsequent project-		
	specific environmental document. The Native American monitor shall be		

Mitigation		Timeframe	Monitoring,
Measure		of	and Reporting
Number	Mitigation Measure	Mitigation	Responsibility
	consulted during the preparation of the written report, at which time he/she may		
	American community requests participation of an observer for subsurface		
	investigations on private property, the request shall be honored.		
	STEP 4: Archaeological Resource Management reports shall be prepared by qualified		
	professionals as determined by the criteria set forth in Appendix A of the City		
	Guidelines. The discipline shall be tailored to the resource under evaluation. In		
	cases involving complex resources, such as Traditional Cultural Properties, Tribal Cultural Resources, rural landscape districts, sites involving a		
	combination of prehistoric and historic archaeology, or historic districts, a team		
	of experts will be necessary for a complete evaluation.		
	Specific types of historical resource reports are required to document the		
	or absence of historical resources: to identify the notential impacts from		
	proposed development and evaluate the significance of any identified historical		
	resources; to document the appropriate curation of archaeological collections		
	(e.g., collected materials and the associated records); in the case of potentially		
	measures that would reduce the impacts to below a level of significance; and to		
	document the results of mitigation and monitoring programs, if required.		
	Archaeological Resource Management reports shall be prepared in conformance		
	With the California Office of Historic Preservation's Archaeological Resource Management Reports: Recommended Contents and Format (see Appendix C of		
	the City Guidelines), which will be used by Environmental staff in the review of		
	archaeological resource reports. Consultants must ensure that archaeological		
	resource reports are prepared consistent with this checklist. This requirement		
	submitted to the City. A confidential appendix must be submitted (under		
	separate cover) with historical resources reports for archaeological sites,		
	Traditional Cultural Properties or Tribal Cultural Resources containing the		
	background study. In addition, a Collections Management Plan shall be		
	prepared for projects that result in a substantial collection of artifacts, and must		
	address the management and research goals of the project and the types of		
	materials to be collected and curated based on a sampling strategy that is		
	Report Form) may be used when no archaeological resources were identified		
	within the project boundaries.		
	STED 5.		
	For Archaeological Resources: All cultural materials, including original maps.		
	field notes, non-burial-related artifacts, catalog information, and final reports		
	recovered during public and/or private development projects, must be		
	facilities and staffing for ensuring research access to the collections consistent		
	with state and federal standards, unless otherwise determined during the tribal		
	consultation process. In the event that a prehistoric and/or historic deposit is		
	encountered during construction monitoring, a Collections Management Plan		
	human remains and burial-related artifacts that cannot be avoided or are		
	inadvertently discovered is governed by state (i.e., AB 2641 and California		
	Native American Graves Protection and Repatriation Act of 2001) and federal		
	(i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the		
	deceased individual(s) and their descendants. Any human bones and associated		
	grave goods of Native American origin shall be turned over to the appropriate		

Mitigation		Timeframe	Monitoring, Enforcement,
Measure		of	and Reporting
Number	Mitigation Measure	Mitigation	Responsibility
	Native American group for repatriation.		
	Arrangements for long-term curation for all recovered artifacts must be		
	established between the applicant/property owner and the consultant prior to the		
	initiation of the field reconnaissance. When Tribal Cultural Resources are		
	present, or non-burial-related artifacts associated with Tribal Cultural Resources		
	are suspected to be recovered, the treatment and disposition of such resources		
	will be determined during the tribal consultation process. This information must		
	then be included in the archaeological survey, testing, and/or data recovery		
	report submitted to the City for review and approval. Curation must be		
	accomplished in accordance with the California State Historic Resources		
	Commission's Guidelines for the Curation of Archaeological Collection (dated		
	May 7, 1993) and, if federal funding is involved, 36 CFR 79 of the Federal		
	Register. Additional information regarding curation is provided in Section II of		
	the City Guidelines.		

11.2 MITIGATION FRAMEWORK

The VPHCP Mitigation Framework included below, which would be adopted as part of the VPHCP under the Project, would be implemented on a project-by-project basis for covered projects and covered activities, as well as future development that is consistent with the provisions of the VPHCP.

General Avoidance and Minimization Measures

As required by FESA, the VPHCP includes measures to avoid or minimize adverse effects to vernal pools and the taking of covered species.

In accordance with the City's ESL regulations, projects within the MHPA would require a wetland deviation. For those projects that would use the Essential Public Project and Economic Viability Options, avoidance must be considered first. If avoidance is not feasible, then impacts must be minimized to the maximum extent practicable. Under the Biologically Superior Option, impacts to vernal pools may be considered if the resources are of a low quality, and through project design and/or mitigation a biologically superior project would result. An example of this situation would be the loss of an isolated pool with fairy shrimp outside of the MPHA with mitigation occurring within the MPHA. This would increase the viability and conservation within an area that has been determined to contain significant vernal pool resources (i.e., MHPA).

Indirect impacts to conserved vernal pools will be minimized through the City's existing discretionary permit review process, which requires development projects adjacent to the Preserve or MHPA to comply with existing Land Use Adjacency Guidelines (see Section 1.4.3)

of the MSCP SAP and Section 10.4 of the MSCP Implementing Agreement) and as described below. Areas designated for conservation and described in this chapter include substantial amounts of high-quality habitat for covered species and vernal pool habitat. Covered activities that result in permanent impacts are anticipated to occur primarily in areas with low-quality habitat. The majority of vernal pool preservation would be concentrated within the MHPA away from covered activities.

General avoidance and minimization measures for covered projects and covered activities required in the VPHCP are as follows:

- 1. Any development adjacent to the MHPA shall be constructed to slope away from the extant pools to be avoided, to ensure that runoff from the project does not flow into the pools.
- 2. Covered projects shall require temporary fencing (with silt barriers) of the limits of project impacts (including construction staging areas and access routes) to prevent additional vernal pool impacts and prevent the spread of silt from the construction zone into adjacent vernal pools. Fencing shall be installed in a manner that does not impact habitats to be avoided. Final construction plans shall include photographs that show the fenced limits of impact and all areas of vernal pools to be impacted or avoided. If work inadvertently occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing shall be removed upon project completion.
- 3. Impacts from fugitive dust that may occur during construction grading shall be avoided and minimized through watering and other appropriate measures.
- 4. A qualified monitoring biologist that has been approved by the City shall be on-site during project construction activities to ensure compliance with all mitigation measures identified in the CEQA environmental document. The biologist shall be knowledgeable of vernal pool species biology and ecology. The biologist shall perform the following duties:
 - a. Oversee installation of and inspect the fencing and erosion control measures within or upslope of vernal pool restoration and/or preservation areas a minimum of once per week and daily during all rain events to ensure that any breaks in the fence or erosion control measures are repaired immediately.
 - b. Periodically monitor the work area to ensure that work activities do not generate excessive amounts of dust.

- c. Train all contractors and construction personnel on the biological resources associated with this project and ensure that training is implemented by construction personnel. At a minimum, training shall include (1) the purpose for resource protection; (2) a description of the vernal pool species and their habitat(s); (3) the conservation measures that must be implemented during project construction to conserve the vernal pool species, including strictly limiting activities, vehicles, equipment, and construction materials to the fenced project footprint to avoid sensitive resource areas in the field (i.e., avoided areas delineated on maps or on the project site by fencing); (4) environmentally responsible construction practices as outlined in measures 5, 6, and 7; (5) the protocol to resolve conflicts that may arise at any time during the construction process; and (6) the general provisions of the project's mitigation monitoring and reporting program (MMRP), the need to adhere to the provisions of FESA, and the penalties associated with violating FESA.
- d. Halt work, if necessary, and confer with the City to ensure the proper implementation of species and habitat protection measures. The biologist shall report any violation to the City within 24 hours of its occurrence.
- e. Submit regular (e.g., weekly) letter reports to the City during project construction and a final report following completion of construction. The final report shall include as-built construction drawings with an overlay of habitat that was impacted and avoided, photographs of habitat areas that were avoided, and other relevant summary information documenting that authorized impacts were not exceeded and that general compliance with all conservation measures was achieved.
- 5. The following conditions shall be implemented during project construction:
 - a. Employees shall strictly limit their activities, vehicles, equipment, and construction materials to the fenced project footprint.
 - b. The project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site.
 - c. Disposal or temporary placement of excess fill, brush, or other debris shall be limited to areas within the fenced project footprint.
- 6. All equipment maintenance, staging, parking, and dispensing of fuel, oil, coolant, or any other such activities shall occur in designated areas within the fenced project impact limits. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering the vernal pools or their watersheds, and shall be shown on the construction plans. Fueling of equipment shall take place within existing paved areas greater than 100

feet from the vernal pools or their watersheds. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary. A spill kit for each piece of construction equipment shall be on-site and must be used in the event of a spill. "Nofueling zones" shall be designated on construction plans.

- 7. Grading activities immediately adjacent to vernal pools shall be timed to avoid wet weather to minimize potential impacts (e.g., siltation) to the vernal pools unless the area to be graded is at an elevation below the pools. To achieve this goal, grading adjacent to avoided pools shall comply with the following:
 - a. Grading shall occur only when the soil is dry to the touch both at the surface and 1 inch below. A visual check for color differences (i.e., darker soil indicating moisture) in the soil between the surface and 1 inch below indicates the soil is dry.
 - b. After a rain of greater than 0.2 inch, grading shall occur only after the soil surface has dried sufficiently as described above, and no sooner than 2 days (48 hours) after the rain event ends.
 - c. To prevent erosion and siltation from storm water runoff due to unexpected rains, best management practices (BMPs) (e.g., silt fences) shall be implemented as needed during grading.
 - d. If rain occurs during grading, work shall stop and resume only after soils are dry, as described above.
 - e. Grading shall be done in a manner to prevent runoff from entering preserved vernal pools.
 - f. If necessary, water spraying will be conducted at a level sufficient to control fugitive dust but not to cause runoff into vernal pools.
 - g. If mechanized grading is necessary, grading will be performed in a manner to minimize soil compaction (i.e., use the smallest type of equipment needed to feasibly accomplish the work).
- 8. Prior to project construction, topsoil shall be salvaged from the impacted vernal pools or road ruts with fairy shrimp on-site consistent with the requirements of the approved restoration plan (e.g., free of versatile fairy shrimp [*Branchinecta lindahli*]). Vernal pool soil (inoculum) shall be collected when dry to avoid damaging or destroying fairy shrimp cysts and plant seeds. Hand tools (e.g., shovels and trowels) shall be used to remove the first 2 inches of soil from the pools. Whenever possible, the trowel shall be used to pry up intact chunks of soil, rather than loosening the soil by raking and shoveling, which can damage the cysts. The soil from each pool shall be stored

individually in labeled boxes that are adequately ventilated and kept out of direct sunlight in order to prevent the occurrence of fungus or excessive heating of the soil, and stored off-site at an appropriate facility for vernal pool inoculum. Inoculum from different source pools shall not be mixed for seeding any restored pools, unless otherwise approved by the City and Wildlife Agencies. The collected soils shall be spread out and raked into the bottoms of the restored pools. Topsoil and plant materials salvaged from the upland habitat areas to be impacted shall be transplanted to, and/or used as a seed/cutting source for, the upland habitat restoration/creation areas to the maximum extent practicable as approved by the City.

9. Permanent protective fencing shall be used along any interface with developed areas and/or other measures approved by the City to deter human and pet entrance into on- or off-site habitat shall be installed. Fencing shall be shown on the development plans and should have no gates (accept to allow access for maintenance and monitoring of the biological conservation easement areas) and be designed to prevent intrusion by pets. Signage for the biological conservation easement area shall be posted and maintained at conspicuous locations. The requirement for fencing and/or other preventative measures shall be included in the project's mitigation program.

Compensatory Mitigation

Impacts to vernal pool resources outside and within the MHPA shall be limited to covered projects, future projects, and covered activities, which are summarized in Chapter 3 (and described in further detail in Chapter 4 of the VPHCP). As part of the VPHCP, the Mitigation Framework has been developed to be consistent with requirements established in the City's LDM Biology Guidelines of the Land Development Manual and the ESL Regulations for wetland impacts. Mitigation shall prevent any net loss of vernal pool functions and values of impacted vernal pools (Appendix D of the VPHCP). Because the measures specified in the Mitigation Framework shall be required as part of the VPHCP implementation and development of covered projects, future projects, and covered activities, the Mitigation Framework is considered part of the purposes of analysis in the EIR/EIS.

Consistent with the ESL Regulations, the Mitigation Framework includes compensatory measures that would result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved. As required by the Mitigation Framework, the biologically superior mitigation shall include either:

- (1) Standard mitigation including wetland vernal pool restoration and enhancement (of the same type of wetland resource that is being impacted) that results in high-quality wetlands; AND a biologically superior project design whose avoided area(s) (i) is in a configuration or alignment that optimizes the potential long-term biological viability of the on-site sensitive biological resources, and/or (ii) conserves the rarest and highest quality on-site biological resources; or
- (2) For a project not consistent with (1) above, extraordinary mitigation is required.

Examples of increased function and value include, but are not limited to, an increase in the availability of habitat for native fauna, an increase in native flora diversity, a decrease in invasive species, an increase in ground water recharge, water quality improvements, and sedimentation deposition rates. Success criteria using the best currently available information for the particular mitigation habitat shall be required as part of the restoration or enhancement plan.

Mitigation for projects impacting vernal pools shall include salvage of sensitive species, when appropriate (i.e., high quality and no presence of versatile fairy shrimp), from vernal pools to be impacted, introduction of salvaged material into restored vernal pool habitat where appropriate (e.g., same vernal pool series), and maintenance of salvaged material pending successful restoration of the vernal pools. Use of salvaged materials will be determined on a project-specific basis during the project-level review phase. Salvaged material shall not be introduced to existing vernal pools containing the same species outside the vernal pool series unless approved by USFWS. The mitigation sites shall include preservation of the appropriate area of watershed and a buffer based on functions and values and a hydraulic analysis that evaluates surface and/or subsurface flow; however, if such an analysis is not conducted, there shall be a default of a minimum 100-foot buffer from the watershed.

Impacts to vernal pool habitat within the MHPA require a deviation from the City's ESL Regulations (Appendix E of the VPHCP). Any impacts to vernal pools inside and outside the MHPA shall be mitigated "in-kind" and achieve a "no-net loss" of wetland function and values (except as provided for in the City's ESL Wetland Deviation Section 143.0510 (d)(2) Economic Viability Option). Standard mitigation ratios for vernal pools shall range from 2:1 when no listed species are present, and up to 4:1 for when listed species with very limited distributions are present (e.g., *Pogogyne abramsii*). Consistent with the City's LDM Biology Guidelines for the biologically superior alternative, extraordinary mitigation ratios for vernal pools can range from 4:1 when no listed species are present (e.g., *Pogogyne abramsii*).

As part of the project-specific environmental review for future projects, all biological impacts would be analyzed and mitigated in accordance with the ESL Regulations, VPHCP, and the City's LDM Biology Guidelines. This shall include mitigation for vernal pools impacted within and outside the Preserve as outlined in the sections below.

General Conditions for Compensatory Mitigation/Enhancement Projects

Project-specific vernal pool restoration and enhancement plans that are required as part of compensatory mitigation under the VPHCP Mitigation Framework shall be consistent with the general requirements outlined in the City's LDM Biology Guidelines. The restoration/ enhancement/preservation plan and perpetual management and monitoring plan will be mailed to the Wildlife Agencies for technical review, as generally defined below, and approval. Upon receipt of the plans, the Wildlife Agencies shall have 30 working days in which to review and provide written comments to the City. Subsequent reviews and comments shall be completed within 15 working days. Failure to respond within the specified timelines shall result in approval of the draft plans unless an extension is agreed to by all parties. General conditions specific to vernal pool enhancement and restoration/ enhancement/ and restoration preservation and perpetual management and monitoring plans are as follows:

- 1. The project proponent will submit a vernal pool restoration/enhancement/preservation plan to the City (Development Services Environmental Analysis Section and Planning Department MSCP Staff) and Wildlife Agencies for approval as part of the development review process and the plan shall be included as an attachment to the Project's CEQA document. The restoration plan shall be consistent (as applicable) with the restoration plan outline included in Attachment B of the City's LDM Biology Guidelines. The plan must be approved and implemented prior to or concurrent with project impacts. In addition, the restoration plan shall include the following information and conditions:
 - a. Implementation of the enhancement/restoration shall be conducted under the direction of a qualified biologist (vernal pool restoration specialist) with at least 3 years of vernal pool restoration experience, to be approved by the City and Wildlife Agencies.
 - b. To avoid impacts to any extant vernal pools, all conservation measures required at the project construction site to avoid and minimize impacts to adjacent vernal pools and their watersheds will also be implemented at the restoration site and thus specified in the restoration plan.
 - c. All vernal pools to be avoided and their watersheds shall be enhanced as deemed appropriate by the Wildlife Agencies to achieve the same success criteria, or better,

as the restored pools and surrounding uplands. Enhancement activities shall include addition of vernal pool plant species and addition of appropriate upland habitat (e.g., coastal sage scrub, native grassland, and/or chaparral) compared to the surrounding uplands. All plant material used for enhancement shall be collected from local sources (i.e., as close to the site as reasonably feasible). This establishment can be accomplished by redistributing topsoil containing seeds, spores, bulbs, eggs, and other propagules from affected pools and adjacent vernal pool and upland habitats; by the translocation of propagules of individual species from off-site habitats; and by the use of commercially available native plant species and/or any vernal pool inoculum or plant material from an off-site source approved by the Wildlife Agencies. Topsoil and plant materials from the native habitats to be affected on-site shall be applied to the watersheds of the enhanced and restored pools to the maximum extent practicable. Nonnative invasive weed control shall be implemented within the restoration areas to protect and enhance habitat remaining on-site.

- d. All restoration/enhancement activities shall commence the first summer-fall season prior to or concurrently with the initiation of project impacts.
- e. Discussion and a table on the exact activities will occur at each restored or enhanced vernal pools. The discussion and table shall also include the initial and planned conditions of the pools (i.e., basin size, average depth, ponding duration), existing native and nonnative cover, and presence of listed species.
- f. All final specifications and topographic-based grading, planting, and watering plans shall have 0.5-foot contours for the vernal pools, watersheds, and surrounding uplands (including adjacent mima mounds) at the restoration sites. The basis for this fine-scale resolution is the micro-depth (i.e., several inches) of the vernal pools that shall be restored. The grading plans shall also show the watersheds of extant vernal pools, and overflow pathways that hydrologically connect the restored pools in a way that mimics natural vernal pool complex topography/hydrology.
- g. A hydraulic analysis (i.e., surface and/or subsurface flow, where applicable) that shows each vernal pool proposed for restoration and its watershed, and hydrologic connection between the pools is required. The restored pools and their watersheds shall not impact the watersheds of any extant pools except where needed to establish hydrologic connections.
- h. As a last resort and after approval by the Wildlife Agencies, additional inoculum from donor vernal pools as close to the project site as possible may be used to supplement the inoculum collected at the project impact site. If inoculum is be used

for restoration and enhancement, the plan shall identify any proposed donor pools and include documentation that they are free of versatile fairy shrimp (*Branchinecta lindahli*). No more than 10% of the basin area of any donor pool shall be used for collection of inoculum. Collection of inoculum from donor pools shall be coordinated with the Wildlife Agencies.

- i. Inoculum and planting shall not be installed until the City and Wildlife Agencies have approved habitat restoration site grading. All planting shall be installed in a way that mimics natural plant distribution, and not in rows. Inoculum shall not be introduced into the restored or enhanced pools until after they have been demonstrated to retain water for the appropriate amount of time to support the targeted vernal pool species (i.e., at least 21 to 28 days for San Diego fairy shrimp or 30 to 60 days for Riverside fairy shrimp) and have been surveyed for versatile fairy shrimp to the satisfaction of the City and Wildlife Agencies. If versatile fairy shrimp are detected in the restored or enhanced pools, inoculum shall not be introduced until appropriate measures to address versatile fairy shrimp are approved by the City and Wildlife Agencies. Inoculum shall be spread evenly over the surface, no more than 0.25 inch deep. If any ponding water is present at the time of soil inoculation, the soil shall only be placed on the wet soil adjacent to the ponded areas. Inoculum shall be placed into the bottoms of the restored/enhanced pools in a manner that preserves, to the maximum extent possible, the orientation of the fairy shrimp cysts and plant seeds within the surface layer of soil (e.g., collected inoculum shall be shallowly distributed within the pond so that cysts have the potential to be brought into solution upon inundation).
- j. Plant palettes (species, size, and number/acre) and seed mix (species and pounds/acre) shall be included in the restoration/enhancement plan. The plant palette shall include native species specifically associated with the on-site habitat type(s) and should be from a local source. The source and proof of local origin of all plant material and seed shall be provided.
- k. Native plants and animals shall be established within the restored/enhanced pools, their watersheds, and surrounding uplands. This can be accomplished by redistributing topsoil containing seeds, spores, bulbs, eggs, and other propagules from affected pools and adjacent vernal pool and upland habitats; by the translocation of propagules of individual species; and by the use of commercially available native plant species. Any vernal pool inoculum or plant material from an off-site source shall be approved by the City and Wildlife Agencies. Topsoil and plant materials from the native habitats to be affected on-site shall be applied to the watersheds of the enhanced and restored pools to the maximum extent practicable.

Exotic weed control shall be implemented within the restoration/enhancement areas to protect and enhance habitat remaining on-site.

- 1. In the event that natural rain is inadequate to support plant establishment, artificial watering of the restored/enhanced pools and their watersheds may be done upon approval by the City and Wildlife Agencies to establish plants but not hydrate shrimp. Any artificial watering shall be done in a manner that prevents ponding in the pools. Any water to be used shall be identified and documented to be free of contaminants that could harm the pools.
- m. All weeding within and immediately adjacent to the enhanced/restored pools shall be performed by hand. All workers conducting weed removal activities shall be educated to distinguish between native and nonnative species so that local native plants are not inadvertently killed by weed removal activities.
- All herbicide and pesticide use shall be under the direction of a licensed pest control n. advisor and shall be applied by a licensed applicator, under the supervision of a vernal pool restoration specialist. Glyphosate-based herbicides, such as RoundUp or Aquamaster, shall be applied on all areas that have been dethatched. Herbicide shall only be applied when wind speed is less than 5 miles per hour, and spray nozzles shall be of a design to maximize the size of droplets, to reduce the potential for drift of herbicide to non-target plants. A 10-foot buffer shall be maintained between concentrations of any sensitive plant species. Application of herbicide shall not occur if rain is projected within 24 hours of the scheduled application. When vernal pools are ponding or close to saturation, only hand herbicide application (i.e., saturated glove technique) shall be used in and around the edges of pools by specially trained herbicide applicators under the direct supervision of the vernal pool restoration specialist. When vernal pools are not ponding or close to saturation, herbicide may be sprayed, but applicators must stay at least 3 feet from the edge of the pools.
- o. A final implementation schedule shall be included that indicates when all vernal pool impacts, as well as vernal pool restoration/enhancement grading and planting, shall begin and end. A temporal loss of vernal pools will be avoided by initiating the restoration work prior to or concurrent with impacts. This will minimize the length of time inoculum is kept in storage and ensure that there is appropriate habitat to translocate it to.
- p. A minimum of 5 years of monitoring will be conducted to ensure that success criteria are achieved. Success criteria for vernal pool and upland habitat restoration/enhancement areas shall include quantitative hydrological, vegetation

transects, fairy shrimp protocol surveys, or other measurements as approved by the City and Wildlife Agencies (e.g., viable cyst, hatched fairy shrimp, and gravid female measurements), floral and faunal inventories; and photographic documentation. To minimize impacts to the vernal pool's soil surface during restoration, enhancement, and monitoring, cobbles will be oriented within the vernal pools to serve as stepping stones. Reference data will be established from a vernal pool reference or control site located within each of the three of the VPHCP subareas (North, Central, South). The vernal pool control sites shall be approved by the City and Wildlife Agencies.

- Restoration success for fairy shrimp shall be determined by measuring the ponding q. of water, and density of viable cysts, hatched fairy shrimp, and gravid females within the restored pools. Water measurements shall be taken in the restored pools to determine the depth, duration, and quality (e.g., pH, temperature, total dissolved solids, and salinity) of ponding. Dry samples shall be taken in the restored and reference pools to determine the density of viable cysts in the soils. Dry sampling shall occur in the first year of the restoration monitoring program to establish a baseline, and the last year to identify changes to viable cyst density. Wet samples shall also be taken in the restored and reference pools to determine the density of hatched fairy shrimp and gravid females. The pools shall pond for a period of time similarly to reference vernal pools during an average rainfall year and at an appropriate depth and quality to support fairy shrimp. The hatched fairy shrimp and gravid female density of the restored pools shall not differ significantly (p < 0.05) from reference pools for at least three wet seasons before a determination of success can be made. The average viable cyst density of the restored pools shall not differ significantly (p < 0.05) from reference pools at the end of the monitoring period before a determination of success can be made. Vernal pools selected as reference or control pools for evaluating restoration success shall be identified and described in the restoration plan. Alternate methods of determining success may be used upon approval by the City and Wildlife Agencies.
- r. To ensure that the construction and operation of the project do not adversely affect the vernal pools on-site, post-construction monitoring will be conducted throughout the rainy season of an adequate rainfall year (i.e., 55% of average rainfall) to verify that avoidance measures were successful and determine whether the project is changing the hydrology of, or causing erosion and sediment delivery to, these vernal pools (based on pre-construction conditions). Monitoring will occur for 3 years following project construction. In the event that sufficient rainfall to demonstrate adequate ponding does not occur during the 3 years following project construction, monitoring will continue in 1-year increments, to a maximum of 5

years. A monitoring report will be submitted to the City and Wildlife Agencies by September 1 following each monitoring season. The monitoring program will be described in the final vernal pool restoration/enhancement plan. If monitoring detects impacts to the adjacent vernal pools from construction and/or operation of the proposed project (e.g., from changes in hydrology) within the monitoring period, remediation will be required.

- s. Monitoring and success criteria for vernal pool and upland restoration/enhancement areas shall include coastal sage scrub, native grassland, and chaparral species richness and cover criteria for all 5 years of monitoring. Success criteria for weed cover shall be as follows: 0% cover for weed species categorized as High or Moderate in the Cal-IPC Invasive Plant Inventory, and relative cover of all other weed species is no more than 5% and 10% coverage in the pools basins and watersheds, respectively, for other exotic/weed species for all 5 years of the monitoring period. Container plant survival success criteria shall be 80% of the initial plantings for the first 5 years. At the first and second anniversaries of plant installation, all dead plants shall be replaced unless their function has been replaced by natural recruitment. The method used for monitoring shall be described and a map of proposed sampling locations shall be included. Photo points shall be used for qualitative monitoring.
- t. Verification that restoration/enhancement of vernal pools is complete shall require written sign-off by the City and Wildlife Agencies. If a performance criterion is not met for any of the restored/enhanced vernal pools or upland habitat in any year, or if the final success criteria are not met, the project proponent shall prepare an analysis of the cause(s) of failure and, if deemed necessary by the City or Wildlife Agencies, propose remedial actions for approval. If any of the restored/enhanced vernal pools or upland habitat has not met a performance criterion during the initial 5-year period, the project proponent's maintenance and monitoring obligations shall continue until the City and Wildlife Agencies deem the restoration/enhancement successful. Contingency measures may be required by the City or Wildlife Agencies. Restoration/enhancement shall not be deemed successful until success criteria are achieved. If contingency measures are required, restoration/enhancement will not be deemed successful until at least 2 years after any significant contingency measures are implemented, as determined by the City and Wildlife Agencies.
- u. Annual reports shall be submitted to the City and Wildlife Agencies by December 1 of each year that assess both the attainment of yearly success criteria and progress

toward the final success criteria. The reports shall also summarize the project's compliance with all applicable mitigation measures and permit conditions.

- 2. The project proponent shall ensure the long-term management of the on-site areas shall occur in perpetuity. Each project proponent will implement a perpetual management, maintenance, and monitoring plan (e.g., Habitat Management Plan) for their respective biological conservation easement areas. The Plan, which will be approved by the City and Wildlife Agencies and funding source must be established prior to or concurrent with impacts. The plan should include, but not be limited to, the following: method of protecting the resources in perpetuity (i.e., covenant of easement dedication to the City, or a deed restriction or other conservation mechanism consistent with California Civil Code Section 815, et seq. and acceptable to the Wildlife Agencies); monitoring schedule; measures to prevent human and exotic species encroachment; funding mechanism; and contingency measures should problems occur. In addition, the plan will include the proposed land manager's name, qualifications, business address, and contact information. The project proponent will also establish a nonwasting endowment or similar secure funding method in an amount approved by the City and the Wildlife Agencies based on a Property Analysis Record (PAR; Center for Natural Lands Management ©1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the biological conservation easement area by an agency, nonprofit organization, or other entity approved by the City and the Wildlife Agencies.
- 3. In the event that a new occurrence of a covered species is identified (i.e., previously undocumented) within an area to be impacted by a covered project or covered activity, mitigation shall be required in the form of salvage and restoration for the impact to the new occurrence. Mitigation shall occur consistent with Conditions 1 and 2 above, as well as the City's LDM Biology Guidelines.

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CHAPTER 13.0 LIST OF PREPARERS

The following individuals were consulted during preparation of this EIR/EIS.

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APPENDIX A

NOTICE OF PREPARATION / NOTICE OF INTENT AND COMMENTS RECEIVED

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FILED	F	ILED IN THE OFFICE OF THE COUNTY OF FR
Ernest J Dronenburg, Jr., Recorder County Clerk	THE CITY OF SAN DIEGO ^S	an Diego County on NOV 2 8 2011
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BY L. Kesian	DEVELOPMENT SERVICES DEPARTM	eturned to agency on
DEPUTY	Date of Notice: November 28, 2011	
PU	BLIC NOTICE OF THE PREPARATION	OF A
ENVIRONMENTAL	IMPACT REPORT/ENVIRONMENTAL	IMPACT STATEMENT
	AND	
PUBLIC N	OTICE OF AN ENVIRONMENTAL IMP.	ACT REPORT
	SCOPING MEETING	
	SAP No AB1000310-09 (Internal No.)	
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PUBLIC NOTICE: The City of San Diego as the Lead Agency has determined that the project described below will require the preparation of an Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation of a project EIR/EIS and Scoping Meeting was publicly noticed and distributed on November 28, 2011 and published in the SAN DIEGO DAILY TRANSCRIPT; in addition it was placed on the City of San Diego web-site (<u>http://clerkdoc.sannet.gov/Website/publicnotice/pubnotceqa.html</u>).

SCOPING MEETING: A public scoping meeting will be held by the City of San Diego's Development Services Department on Monday, December 12, 2011, beginning at 5:30 PM and running no later than 7:30 PM at the Santa Fe Room of the Balboa Park Club located in Balboa Park at 2150 Pan American Road, San Diego, CA 92101. Please note that depending on the number of attendees, the meeting could conclude earlier than 7:30 PM. Verbal and written comments regarding the scope and alternatives of the proposed EIR/EIS will be accepted at the meeting.

Written/Mail-in comments may also be sent to Elizabeth Shearer-Nguyen, City of San Diego Development Services Department, 1222 First Avenue, MS 501, San Diego, CA 92101, or e-mailed to **DSDEAS@sandiego.gov** referencing the Project Name (Vernal Pool Habitat Conservation Plan) in the subject line within 30 days of the receipt of this notice/date of the Public Notice above. Responsible agencies are requested to indicate their statutory responsibilities in connection with this project when responding. An EIR/EIS incorporating public input will then be prepared and distributed for public review and comment.

PROJECT NAME/NO.: VERNAL POOL HABITAT CONSERVATION PLAN COMMUNITY AREA: City-wide COUNCIL DISTRICT: City-wide

PROJECT DESCRIPTION: The project would include the conservation of the vernal pool resources within the existing City of San Diego Multi-Habitat Planning Area and conserved lands plus additional core lands containing the seven focal species (San Diego fairy shrimp, Riverside fairy shrimp, San Diego button celery, spreading navarretia, San Diego mesa mint, California Orcutt grass, and Otay mesa mint) and associated vernal pool habitat. This proposal would provide a comprehensive approach to the protection and management of the vernal pool preserve areas. The vernal pool preserve areas would be identified based on the analysis to be provided in the project's technical white papers including: Focal Species Status, Assessment of the Conservation of the Seven Focal Species, Development of Adaptive Management Strategy, Development

of Monitoring Strategy, Property Analysis Record (PAR), Recommendations for Conditions of Coverage, Conservation Analysis, and Presserve Management Funding Mechanisms. Lie proposal would include adoption of the Vernal Pool Habitat Conservation Plan (HCP), Implementing Agreement, a Vernal Pool Management Plan, a funding strategy, specific conditions of coverage for the seven focal species, amendments to the City's General Plan, Community Plans, and the Land Development Code (LDC)/Environmentally Sensitive Lands (ESL) Ordinance and Land Development Manual/Biology Guidelines.

Applicant: Development Services Department, Multiple Species Conservation Program

Recommended Finding: Pursuant to Section 15060(d) of the CEQA Guidelines, it appears that the proposed project may result in significant environmental impacts in the following areas: Land Use, Biological Resources, Hydrology, and Cumulative Effects.

Availability in Alternative Format: To request the City's letter to the applicant detailing the required scope of work (EIR Scoping Letter) in alternative format, call the Development Services Department at (619) 446-5460 immediately to ensure availability. This information is ALSO available in alternative formats for persons with disabilities; to request this notice in alternative format, call (619) 446-5446 or (800) 735-2929 (TEXT TELEPHONE).

Additional Information: For environmental review information, contact Elizabeth Shearer-Nguyen at (619) 446-5369. The Scoping Letter and supporting documents may be reviewed, or purchased for the cost of reproduction, at the Fifth floor of the Development Services Department. For information regarding public meetings/hearings on this project, contact the Project Manager, Jeanne Krosch, at (619) 236-7225.

Cecilia Gallardo, AICP Assistant Deputy Director Development Services Department

CERTIFICATE OF PUBLICATION

Stacie Maxwell City of San Diego/Development Svcs. 1222 First Avenue, M.S 501 SAN DIEGO CA 92101

IN THE MATTER OF

SAP No. AB1000310-09

THE CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT Date of Notice: November 28, 2011 PUBLIC NOTICE OF THE PREPARATION OF A ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

PUBLIC NOTICE OF AN ENVIRONMENTAL IMPACT REPORT SCOPING MEETING SAP No AB1000310-09 (Internal No.)

PUBLIC NOTICE: The City of San Diego as the Lead Agency has determined that the project described below will require the preparation of an Environmental Impact the project described below will require the preparation of an Environmental impact Report (EIR/Environmental Impact Statement (EIS) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation of a project EIR/EIS and Sogargo Meeting was publicly noticed and distributed of November 26, 2011 and published in the SAN DIEGO DAILY TRANSCRIPT! Weadhloor (Pwais placed on the City of San Diedo Interaction) web-site San Diego

City of San Diego Hot-Server web-site (http://clerkdoc.sannet.gov/Website/publicnotice/publicnoticea.html). SCOPING MEETING: A public scoping meeting will be held by the City of San Diego's Development Services Department on Monday, December 12, 2011, beginning at 5:30 PM and running no later than 7:30 PM at the Santa Fe Room of the Belboa Park Club located in Balboa Park at 2150 Pan American Road, San Diego, CA 92101. Please note that depending on the number of attendees, the meeting could conclude earlier than 7:30 PM. Verbal and written comments regarding the scope and alternatives of the proposed EIR/EIS will be accepted at the meeting. Written/Mail-in comments may also be sent to Elizabeth Shearer Nguyen, City of San Diego Development Services Department, 1222 First Avenue. MS 501, San Diego, CA 92101, or e-mailed to DSDEAS@sandiego.gov_referencing the Project Name Diego Development Services Department, 1222 First Avenue, MS 501, San Diego, CA 92101, or e-mailed to <u>DSDEA8@sandlego.gov</u>_referencing the Project Name (Vernal Pool Habitat Conservation Plan) in the subject line within 30 days of the receipt of this notice/date of the Public Notice above. Responsible agencies are requested to indicate their statutory responsibilities in connection with this project when responding. An EIR/EIS incorporating public input will then be prepared and distributed for public review and comment. Project Name/No.: Vernal Pool Habitat Conservation Plan

Community Area: City-wide Council District: City wide Project Description: The project would include the conservation of the vernal pool Council District: City-wide Project Description: The project would include the conservation of the vernal pool resources within the existing City of San Diego Mutit-Habitat Planning Area and conserved lands plus additional core lands containing the seven focal species (San Diego fairy shrimp, Riverside fairy shrimp. San Diego button celery, spreading navarretia. San Diego mesa mint, California Orcult grass, and Otay mesa mint) and associated vernal pool habitat. This proposal would provide a comprehensive approach to the protection and management of the vernal pool preserve areas. The vernal pool preserve areas would be identified based on the analysis to be provided in the project's technical white papers including: Focal Species Status, Assessment of the Conservation of the Seven Focal Species, Development of Adaptive Management Strategy, Development of Monitoring Strategy, Property Analysis Riccord (PAR). Recommendations for Conditions of Coverage, Conservation Analysis, and Preserve Management Funding Mechanisms. The proposal would include adoption of the Vernal Pool Habitat Conservation Plan (HCP), Implementing Agreement, a Vernal Pool Management Plan, a funding strategy, specific conditions of coverage for the seven focal species, amendments to the City's General Plan, Community Plans, and the Land Development Code. (LDC)/Environmentally Sensitive Jands (ESL) Ordinance and Land Development Manua/Biology Guidelines. Applicant: Development Services Department; Multiple Species Conservation Program

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Cecilia Gallardo, AICP Assistant Deputy Director

CASE NO.

I. Gail V. Daniels, am a citizen of the United States and a resident of the county aforesaid; I am over the age of eighteen years, and not party to or interested in the above entitled matter. I am the principal clerk of the San Diego Daily Transcript, a newspaper of general circulation, printed and published daily, except on Saturdays and Sundays, in the City of San Diego, County of San Diego and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of San Diego, State of CA, under the date of January 23, 1909, Decree No. 14894; and the

Public Notice

is a true and correct copy of which the annexed is a printed copy and was published in said newspaper on the following date(s), to wit:

November 28

I certify under penalty of perjury that the forgoing is true and correct.

Dated at San Diego, California this November 28, 2011

Signature

This site displays a prototype of a "Web 2.0" version of the daily Federal Register. It is not an official legal edition of the Federal Register, and does not replace the official print version or the official electronic version on GPO's Federal Digital System (FDsys.gov).

The articles posted on this site are XML renditions of published Federal Register documents. Each document posted on the site includes a link to the corresponding official PDF file on FDsys.gov. This prototype edition of the daily Federal Register on FederalRegister.gov will remain an unofficial informational resource until the Administrative Committee of the Federal Register (ACFR) issues a regulation granting it official legal status. For complete information about, and access to, our official publications and services, go to the **OFR.gov website**.

The OFR/GPO partnership is committed to presenting accurate and reliable regulatory information on FederalRegister.gov with the objective of establishing the XML-based Federal Register as an ACFR-sanctioned publication in the future. While every effort has been made to ensure that the material on FederalRegister.gov is accurately displayed, consistent with the official SGML-based PDF version on FDsys.gov, those relying on it for legal research should verify their results against an official edition of the Federal Register. Until the ACFR grants it official status, the XML rendition of the daily Federal Register on FederalRegister.gov does not provide legal notice to the public or judicial notice to the courts.

The Federal Register

The Daily Journal of the United States Government

Notice

Draft Environmental Impact Statement and Proposed Vernal Pool Habitat Conservation Plan for the City of San Diego, CA

A Notice by the Fish and Wildlife Service on 12/20/2011

Summary

We, the Fish and Wildlife Service (Service), intend to prepare an environmental impact statement (EIS) under the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed Vernal Pool Habitat Conservation Plan (VPHCP) under development by the City of San Diego (City). The draft EIS will evaluate the impacts of several alternatives related to the VPHCP being prepared by the City in support of the City's anticipated application for an Endangered Species Act (ESA) permit for incidental take of seven federally listed vernal pool species, from activities associated with urban development activities. We also announce plans for a public scoping meeting and the opening of a public comment period. We request data, comments, new information, or suggestions from the public, other concerned governmental agencies, the scientific community, Tribes, industry, or any other interested party.

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- Alternatives in the Draft Environmental Impact Statement
- No-Action Alternative
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- Covered Species
- Conservation Alternative
- Environmental Review and Next Steps
- Public Comments
- Public Availability of Comments
- Authority

DATES:

To ensure consideration, please send your written comments by February 16th, 2012.

For more information, see "Public Comments" and "Reasonable Accommodation" under the SUPPLEMENTARY INFORMATION section.

ADDRESSES:

To request further information or submit written comments, please use one of the following methods, and note that your information request or comment is in reference to the City of San Diego Vernal Pool HCP:

- Fax: Attn: Jim Bartel, Field Supervisor, (760) 431-5902.
- U.S. Mail: Jim Bartel, Field Supervisor, Carlsbad Fish and Wildlife Office, U.S. Fish and Wildlife Service, 6010 Hidden Valley Road, Suite 101, Carlsbad, CA 92011.
- In-Person Drop-off: You may drop off comments during regular business hours at the above address.

FOR FURTHER INFORMATION CONTACT:

Karen Goebel, Assistant Field Supervisor, by phone at (760) 431-9440, or by U.S. mail at the above address; or Jeanne Krosch, Senior Planner, City of San Diego, by phone at (619) 236-7225.

http://www.federalregister.gov/articles/2011/12/20/2011-32494/draft-environmental-impa... 12/29/2011

SUPPLEMENTARY INFORMATION:

We publish this notice under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.; NEPA), and its implementing regulations in the Code of Federal Regulations (CFR) at 40 CFR 1506.6, as well as in compliance with section 10(c) of the Endangered Species Act (16 U.S.C. 1531 et seq.; ESA). We intend to prepare a draft environmental impact statement to evaluate the impacts of several alternatives related to the potential issuance of an incidental take permit (ITP) to the City of San Diego, as well as impacts from implementation of the supporting habitat conservation plan. The EIS will be a joint document with an environmental impact report (EIR) prepared by the City under the California Environmental Quality Act (CEQA).

The City proposes to develop a Vernal Pool HCP as part of their application for an ITP under section 10 (a)(1)(B) of the ESA. The proposed VPHCP will include measures necessary to minimize and mitigate the impacts, to the maximum extent practicable, of potential proposed taking of federally listed species to be covered by the VPHCP, and the habitats upon which they depend, resulting from residential, commercial, and other development activities within the proposed plan area.

In addition to this notice, the City has publicly released a CEQA notice of preparation for its EIR via State Clearinghouse and local media. Please see <u>http://www.sandiego.gov/development-</u><u>services/industry/pdf/infobulletin/ib401.pdf</u> for more information on the CEQA process.

The proposed VPHCP would establish the structure to integrate development and vernal pool conservation in the City.

The proposed VPHCP would serve as a multiple-species HCP for the City in its application for an ITP under section 10(a)(1)(B) of the ESA. If the application is approved by the Service, the City would obtain authorization for the incidental take of certain threatened and endangered animal species ("covered species"). If the Federal permit is issued, the City could extend the permit authorization to proponents of development projects under the City's jurisdiction.

Background

Section 9 of the ESA prohibits taking of fish and wildlife species listed as endangered or threatened under section 4 of the Act. Under the ESA, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The term "harm" is defined in the regulations as including significant habitat modification or degradation that results in death or injury to listed wildlife species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 CFR 17.3). The term "harass" is defined in the regulations as to carry out actions that create the likelihood of injury to listed wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, behavioral patterns, which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3).

Federal Register | Draft Environmental Impact Statement and Proposed Vernal Pool Habit... Page 4 of 8

However, under specified circumstances, the Service may issue permits that allow the take of federally listed wildlife species, provided that the take is incidental to, but not the purpose of, an otherwise lawful activity. Regulations governing permits for endangered and threatened wildlife species are <u>50 CFR 17.22</u> and 17.32, respectively. The ESA's take prohibitions do not apply to federally listed plants. However, other provisions of the Act prohibit the removal or destruction of plants on non-federal lands in violation of State law.

Section 10(a)(1)(B) of the ESA contains provisions for issuing incidental take permits to non-Federal entities for the take of endangered and threatened wildlife species, provided the following criteria are met:

1. The taking will be incidental;

2. The applicants will, to the maximum extent practicable, minimize and mitigate the impact of such taking;

3. The applicants will develop a proposed HCP and ensure that adequate funding for the plan will be provided;

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and

5. The applicants will carry out any other measures that the Service may require as being necessary or appropriate for the purposes of the HCP.

Thus, the purpose of issuing an ITP to the City would be to allow the City, under its local authority, to authorize development while conserving the covered species and their habitats. Implementation of a vernal pool species habitat conservation plan, rather than a species-by-species or project-by-project approach, is intended to maximize the benefits of conservation measures for covered species and eliminate expensive and time-consuming efforts associated with processing individual ITPs for each project within the City's proposed plan area. The Service expects that the City will request ITP coverage for a period of 50 years.

Project Area

The proposed VPHCP Planning Area covers approximately 206,124 acres of land in the City's jurisdiction, including City-owned lands in the unincorporated areas of Otay Lakes and Marron Valley, where development potentially may occur. The proposed VPHCP would cover non-Federal lands in the Planning Area. To facilitate timely and environmentally responsible development, the proposed VPHCP may focus on specific areas for development, such as Otay Mesa, Kearny Mesa, Mira Mesa, and Del Mar Mesa.

Alternatives in the Draft Environmental Impact Statement

http://www.federalregister.gov/articles/2011/12/20/2011-32494/draft-environmental-impa... 12/29/2011

The proposed action presented in the draft EIS will be compared to the no-action alternative. The noaction alternative represents estimated future conditions assuming an ITP is not issued, to which the proposed action's estimated future conditions can be compared. Other alternatives, including their potential impacts, will also be addressed in the draft EIS.

No-Action Alternative

Because future development activities are vital for the City, these activities would likely continue regardless of whether the proposed 10(a)(1)(B) ITP is issued. Where a specific project would result in potential impacts to federally protected species within the proposed permit area that could not be avoided and a federal permit or federal funding is involved, i.e., there is a federal nexus for the project, the project proponent would address impacts in accordance with the an individual formal or informal consultation under Section 7 of the Act between the Federal authorizing agency and the Service. If no federal nexus exists for a proposed project that is likely to result in take of a listed vernal pool animal species, the project proponent would likely seek an individual section 10(a)(1)(B) ITP on a project-specific basis. Although future activities by the City or a private applicant would be similar to those covered by the VPHCP, not all activities would necessitate an incidental take permit or consultation with the Service. Thus, under the no-action alternative, the City and various project proponents would likely have to file numerous separate section 10(a)(1)(B) permit applications over the 50-year project period. This activity-by-activity approach would be more time-consuming and less efficient than authorizing activities under an umbrella incidental take permit, and could result in a fragmented mitigation approach.

Proposed Alternative

The proposed action is the issuance of an ITP to the City of San Diego covering impacts to seven vernal pool species resulting from development activities authorized by the City within the proposed Planning Area for a period of 50 years. The purpose of the Vernal Pool HCP would be to contribute to the conservation of the covered species while streamlining endangered species permitting for development projects. The Vernal Pool HCP, which must meet the requirements of section 10(a)(2)(A) of the ESA, would be developed and implemented by the City through its local regulatory and land use authorities. This alternative would allow for a comprehensive mitigation approach for unavoidable impacts and reduce permit processing times and efforts for the City and the Service.

Potential impacts to covered species would be addressed through a conservation program that includes avoidance, minimization, mitigation, preservation, and restoration and enhancement of habitat for covered species by multiple components, such as reserve design and assembly processes, protection and management elements, funding assurances, monitoring, and adaptive management within the VPHCP planning area.

The planning goals of the Vernal Pool HCP are anticipated to include the following:

- Provide for long-term conservation and management of Covered Species within the VPHCP area;
- Preserve, restore, and enhance vernal pool ecosystems that support Covered Species within the VPHCP area;
- Build on the City's general plans;
- Further identify the most appropriate locations within the VPHCP area for development projects, taking into account potential impacts to threatened and endangered species and their vernal pool habitat;
- Provide a means to implement covered activities in a manner that complies with the ESA, NEPA, CEQA, and other relevant laws;
- Provide a basis for the issuance of take authorizations allowing the lawful take of covered species incidental to covered activities;
- Provide a comprehensive means to coordinate and standardize mitigation and compensation requirements for covered activities within the plan area;
- Provide a framework for a more efficient process by which proposed development projects with the plan area may obtain regulatory authorizations, and which results in greater conservation values than would a project-by-project, species-by-species review; and
- Identify and incorporate climate change adaptation research, management objectives, and policies into the final plan document.

More information on the proposed VPHCP is available on the Internet at <u>http://www.sandiego.gov/planning/mscp/</u>.

Covered Activities

The covered activities under the VPHCP are expected to include residential, commercial, and industrial development; airports; roads; utilities; trails; and vernal pool restoration and enhancement.

Covered Species

We anticipate that the following federally listed endangered wildlife species will be included as covered species in the City of San Diego's proposed VPHCP: the San Diego fairy shrimp (Branchinecta sandiegonensis) and the Riverside fairy shrimp (Streptocephalus woottonii). Take of federally listed plant species is not prohibited under the ESA, and authorization under an ESA ITP is not required. Section 9 of ESA does, however, prohibit the removal or malicious destruction of federally listed plants from areas under Federal jurisdiction and the removal or destruction of such plants in knowing violation of State law. In addition, section 7(a)(2) of the ESA prohibits Federal agencies from jeopardizing the continued existence of any listed plant or animal species, or destroying or adversely modifying the critical habitat of such species. The following federally listed plant species are anticipated to be included in the VPHCP in recognition of the conservation benefits to be provided for them under the plan and to be listed on the ITP for purposes of receiving mitigation assurances: The threatened spreading navarretia (Navarretia fossalis), the endangered San Diego button celery (Eryngium aristulatum var. parishii), the endangered San

Diego mesa mint (Pogogyne abramsii), the endangered California Orcutt grass (Orcuttia californica), and the endangered Otay mesa mint (Pogogyne nudiscula).

Conservation Alternative

An expanded conservation alternative that would conserve additional vernal pool resources and provide increased opportunities for restoration and enhancement of vernal pool habitat will also be considered in the draft EIS.

Environmental Review and Next Steps

The Service will conduct an environmental review to analyze the proposed action, along with other alternatives evaluated and the associated impacts of each. The draft EIS will be the basis for the impact evaluation for each covered species and the range of alternatives to be addressed. The draft EIS is expected to provide biological descriptions of the affected species and habitats, as well as the effects of the alternatives on other resources, such as vegetation, wetlands, wildlife, geology and soils, air quality, water resources, water quality, cultural resources, land use, recreation, water use, local economy, and environmental justice.

Following completion of the environmental review, the Service will publish a notice of availability and a request for comment on the draft EIS and the City's permit application, which will include the proposed HCP. The draft EIS and proposed HCP are expected to be completed and available to the public in late summer 2012.

Public Comments

We request data, comments, new information, or suggestions from the public, other concerned governmental agencies, the scientific community, Tribes, industry, or any other interested party on this notice. We will consider these comments in developing a draft EIS and in the development of a HCP and ITP. We particularly seek comments on the following:

1. Biological information concerning the species;

2. Relevant data concerning the species;

3. Additional information concerning the range, distribution, population size, and population trends of the species;

4. Current or planned activities in the planning area and their possible impacts on the species;

5. The presence of archeological sites, buildings and structures, historic events, sacred and traditional

areas, and other historic preservation concerns, which are required to be considered in project planning by the National Historic Preservation Act; and

6. Identification of any other alternatives to the proposed action that should be analyzed in the draft EIS.

7. Identification of any other environmental issues that should be considered in the draft EIS.

You may submit your comments and materials by one of the methods listed in the ADDRESSES section.

Comments can also be submitted to the City in response to their notice of EIR preparation under CEQA at **DSDEAS@sandiego.gov**, and comments will also be included as an appendix to the draft EIR/EIS.

Comments and materials we receive, as well as supporting documentation we use in preparing the draft EIS, will be available for public inspection by appointment, during normal business hours, at our office (see FOR FURTHER INFORMATION CONTACT).

Public Availability of Comments

Written comments we receive become part of the public record associated with this action. Before including your address, phone number, email address, or other personal identifying information in your comments, you should be aware that your entire comment—including your personal identifying information —may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority

We provide this notice under section 10 of the ESA (<u>16 U.S.C. 1531</u> et seq.) and by NEPA Regulations (<u>40 CFR 1501.7</u>, <u>40 CFR 1506.6</u>, and 1508.22).

Paul McKim,

Deputy Regional Director, Pacific Southwest Region, U.S. Fish and Wildlife Service, Sacramento, California.

[FR Doc. 2011-32494 Filed 12-19-11; 8:45 am]

BILLING CODE 4510-55-P

Site Feedback



STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Edmund G. Brown Jr. Governor

Notice of Preparation

November 29, 2011

RECEIVED

DEC 02 2011

Development Services

To: Reviewing Agencies

Re: Vernal Pool Habitat Conservation Plan SCH# 2011111075

Attached for your review and comment is the Notice of Preparation (NOP) for the Vernal Pool Habitat Conservation Plan 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 <u>Agency</u>. 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:

Elizabeth Shearer-Nguyen 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. Mugan

Scott Morgan Director, State Clearinghouse

Attachments cc: Lead Agency

> 1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# 2011111075

Project Title Vernal Pool Habitat Conservation Plan Lead Agency San Diego, City of

Type NOP Notice of Preparation

Description

The project would include the conservation of the vernal pool resources within the existing City of San Diego Multi-Habitat Planning Area and conserved lands plus additional core lands containting the

seven focal species (San Diego fairy shrimp, Riverside fairy shrimp, San Diego button celery, spreading navarretia, San Diego mesa mint, California Orcutt grass, and Otay mesa mint) and associated vernal pool habitat. This proposal would provide a comprehensive approach to the protection and management of the vernal pool preserve areas. The vernal pool preserve areas would be identified based on the analysis to be provided in the project's technical white papers including: Focal Species Status, Assessment of the Conservation of the Seven Focal Species, Development of Adaptive Management Strategy, Development of Monitoring Strategy, Property Analysis Record (PAR), Recommendatins for Conditions of Coverage, Conservation Analysis, and Preserve Management Funding Mechanisms. The project would include adoption of the Vernal Pool Habitat Conservation Plan (HCP), Implementing Agreement, a Vernal Pool Management Plan, a funding strategy, specific conditions of coverage for the seven focal species, amendments to the City's General Plan, Community Plans, and the Land Development Code (LDC)/Environmentally Sensitive Lands (ESL) Ordinance and Land Development Manual/Biology Guidelines.

Lead Agency Contact

Lead Agency	y Contact		
Name	Elizabeth Shearer-Nguyen	· · ·	
Agency	City of San Diego	Fax	
Phone	(619) 446-5369	144	
email			
Address	1222 First Avenue, MS-501	State CA	Zip 92101
City	San Diego	State OA	
Project Loca	ation		
County	San Diego		
City	San Diego		
Region			
Cross Streets	City-wide		
Lat / Long			
Parcel No.		Section	Base
Township	Range	Section	
Proximity to	0:		
Highways	5, 15, 52, 54, 56, 67, 76, 125,		
Airports	Multiple		
Railways	Multiple		
Waterways	Multiple		
Schools	Multiple		
Land Use	Varied - project is city-wide		
Project Issues	Biological Resources; Drainage/	Absorption; Water Quality; La	anduse; Cumulative Effects
			pent of Parks and Recreation; California
Reviewing Agencies	 Resources Agency; California Constraints Energy Commission; Department Native American Heritage Comm 	it of Water Resources; Department nission; Public Utilities Commons District 11: Department Q	rtment of Fish and Game, Region 5; nission; Caltrans, Division of Aeronautics; of Toxic Substances Control; Regional

Note: Blanks in data fields result from insufficient information provided by lead agency.

Document Details Report State Clearinghouse Data Base

Date Received	11/29/2011	Start of Review	11/29/2011	End of Review	12/28/2011

LAITTTTAY	Regional Water Quality Control <u>Board (RWQCB)</u>	Cathleen Hudson	North Coast Region (1)	Environmental Document Coordinator	San Francisco Bay Region (2)	Central Coast Region (3)	L RWQCB 4 Teresa Rodgers	Los Angeles Region (4)	Central Valley Region (5)	L RWQCB 5F Central Valley Region (5)	Fresho Branch Office		Central valiey region (5) Redding Branch Office	Lahontan Region (6)		Lahontan Region (6) Victorville Branch Office		Colorado River Basin Region (7)	L RWQCB 8 Santa Ana Recion (8)		San Diego Region (9)			Other				Conservancy	• • • • • • • • • • • • • • • • • • •
セクレ SCH#	C C Caltrans, District 8 Dan Kopulsky	Gayle Rosander Caltrans, District 9 Caltrans, District 10	Tom Dumas Caltrans. District 11	Jacob Armstrong	L Caltrans, District 12 Marlon Regisford	<u>Cal EPA</u>	Air Resources Board	Airport/Energy Projects	Transportation Projects	Douglas Ito	Mike Tollstrup		Board Board	Regional Programs Unit Division of Financial Assistance	- - - - - - - - - - - - - - - - - - -	Board	Student Intern, 401 Water Quality Certification Unit	Division of Water Quality	State Water Resouces Control Board	Phil Crader	Division of Water Rights	Control	CEQA Tracking Center	Bepartment of Pesticide Regulation	CEQA Coordinator			_	
County: NAVI UN	Native American Heritage Comm. Debbie Treadway	Public Utilities Commission	Santa Monica Bay Restoration	Guangyu wang State Lands Commission	Jennifer Deleong	Agency (TRPA)		Business, Irans & Housing	Aeronautics	Caltrans - Planning	Terri Pencovic	California Highway Patrol	Office of Special Projects	Housing & Community Development	CEQA Coordinator Housing Policy Division		Dept. of Transportation		Caltrans, District 1		Marcelino Gonzalez	Caltrans, District 3	Bruce de Terra	Lisa Carboni	Caltrans, District 5	David Murray	LI Caltrans, District 6 Michael Navarro	Caltrans, District 7	Elmer Alvarez
	Laurie Harnsberger	L Fish & Game Region 2 Jeff Drongesen Fish & Game Region 3	Charles Armor	Julie Vance	Leslie Newton-Reed	Habitat Conservation Program	Gabrina Gatchel Habitat Conservation Program	Fish & Game Region 6 I/M	Brad Henderson Inyo/Mono, Habitat Conservation		George Isaac	Marine Region	Other Departments	Eood & Agriculture	Dept. of Food and Agriculture	Depart. of General	Public School Construction	Dept. of General Services	Anna Garpen Environmental Services Section	Dept. of Public Health	Bridgette Binning Dept. of Health/Drinking Water		Delta Stewardship	Council Terry Macaulay	Independent	Commissions, Boards	Commission	Linda Flack	Cal EMA (Emergency) Management Agency) Dennis Castrillo
NOP Distribution List	isources Agency	Resources Agency Nadell Gayou	Waterways	Nicole worig California Coastal	Commission Elizabeth A. Fuchs	Colorado River Board	Dept. of Conservation	Elizabeth Carpenter	California Energy Commission	Eric Knight	Allen Robertson	Central Valley Flood	Protection Board James Herota	Drosenvation	Ron Parsons	Dept of Parks & Recreation	Eliviruliiterital otewarderite Section	California Department of	Resources, Kecycling & . Recovery	Sue O'Leary	L S.F. Bay Conservation & Dev't. Comm.	Steve McAdam	Dept. of Water	Agency	Nadell Gayou	sh and Game	Cott Flint	Environmental Services Division	L استقلال المناطقة ال المناطقة المناطقة الم

Last Updated 9/29/11

NATIVE AMERICAN HERITAGE COMMISSION 915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-6251 Fax (916) 657-5390 Web Site <u>www.nahc.ca.gov</u> ds_nahc@pacbell.net



December 5, 2011

Ms. Elizabeth Shearer-Nguyen, Environmental Planner

City of San Diego Development Services Department

1222 First Avenue, MS-501 San Diego, CA 92101

Re: <u>SCH#2011111075</u> <u>CEQA Notice of Preparation (NOP); draft Environmental limpact</u> <u>Report (DEIR) for the "Vernal Pool Habitat Conservation Plan;" located City-Wide; City</u> <u>of San Diego; San Diego County, California</u>

Dear Ms. Shearer-Nguyen:

The Native American Heritage Commission (NAHC) is the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources, impacted by proposed projects including archaeological, places of religious significance to Native Americans and burial sites. The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect.

The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources** <u>were identified</u> within the City Limits of the City of San Diego in numerous locations. Contact the Native American contacts for further input on the proposed project. Also, the absence of archaeological resources does not preclude their existence. California Public Resources Code §§5097.94 (a) and 5097.96 authorize the NAHC to establish a Sacred Land Inventory to record Native American sacred sites and burial sites. These records are exempt from the provisions of the California Public Records Act pursuant to. California Government Code §6254 (r). The purpose of this code is to protect such sites from vandalism, theft and destruction. The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the <u>list of Native American contacts</u>, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Special reference is made to the *Tribal Consultation* requirements of the California 2006 Senate Bill 1059: enabling legislation to the federal Energy Policy Act of 2005 (P.L. 109-58), mandates consultation with Native American tribes (both federally recognized and non federally recognized) where electrically transmission lines are proposed. This is codified in the California Public Resources Code, Chapter 4.3 and §25330 to Division 15.

Furthermore, pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq*. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 Secretary of the Interiors Standards for the Treatment of Historic Properties were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the <u>historic context</u> of proposed projects and to "research" the <u>cultural landscape</u> that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerelv Jave Singleton Program Analyst Cc: State Clearinghouse

Attachment: Native American Contact List

San Diego County December 5, 2011

Barona Group of the Capitan Grande Edwin Romero, Chairperson 1095 Barona Road Diegueno Lakeside , CA 92040 sue@barona-nsn.gov (619) 443-6612 619-443-0681

La Posta Band of Mission Indians Gwendolyn Parada, Chairperson PO Box 1120 Diegueno/Kumeyaay Boulevard , CA 91905 gparada@lapostacasino. (619) 478-2113 619-478-2125

San Pasqual Band of Mission Indians Allen E. Lawson, Chairperson PO Box 365 Diegueno Valley Center, CA 92082 allenI@sanpasqualband.com (760) 749-3200 (760) 749-3876 Fax

lipay Nation of Santa Ysabel Virgil Perez, Spokesman PO Box 130 Diegueno Santa Ysabel, CA 92070 brandietaylor@yahoo.com (760) 765-0845 (760) 765-0320 Fax Sycuan Band of the Kumeyaay Nation Danny Tucker, Chairperson 5459 Sycuan Road Diegueno/Kumeyaay El Cajon , CA 92021 ssilva@sycuan-nsn.gov 619 445-2613 619 445-1927 Fax

Viejas Band of Kumeyaay Indians Anthony R. Pico, Chairperson PO Box 908 Diegueno/Kumeyaay Alpine , CA 91903 jrothauff@viejas-nsn.gov (619) 445-3810 (619) 445-5337 Fax

Kumeyaay Cultural Historic Committee Ron Christman 56 Viejas Grade Road Diegueno Alpine , CA 92001 (619) 445-0385

Diegueno/Kumeyaay

Jamul Indian Village Kenneth Meza, Chairperson P.O. Box 612 Jamul CA 91935 jamulrez@sctdv.net (619) 669-4785 (619) 669-48178 - Fax

Diegueno/Kumeyaay

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011111075; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Vernal Pool Habitat Conservation Plan; located City-Wide; City of San Diego; San Diego County, california.

San Diego County December 5, 2011

Mesa Grande Band of Mission Indians Mark Romero, Chairperson P.O Box 270 Diegueno Santa Ysabel, CA 92070 mesagrandeband@msn.com (760) 782-3818 (760) 782-9092 Fax

Pala Band of Mission Indians Tribal Historic Preservation Office/Shasta Gaugher 35008 PalaTemecula Road, PMB Luiseno Pala , CA 92059 Cupeno sgaughen@palatribe.com (760) 891-3515

(760) 742-3189 Fax

Rincon Band of Mission Indians Tiffany Wolfe, Cultural & Environmental P.O. Box 68 Luiseno Valley Center, CA 92082 twolfe@rincontribe.org (760) 297-2632 (760) 297-2639 Fax

Kwaaymii Laguna Band of Mission Indians Carmen Lucas P.O. Box 775 Diegueno -Pine Valley , CA 91962 (619) 709-4207 Inaja Band of Mission Indians Rebecca Osuna, Spokesperson 2005 S. Escondido Blvd. Diegueno Escondido , CA 92025 (760) 737-7628 (760) 747-8568 Fax

Kumeyaay Cultural Repatriation Committee Steve Banegas, Spokesperson 1095 Barona Road Diegueno/Kumeyaay Lakeside , CA 92040 (619) 742-5587 - cell (619) 742-5587 (619) 443-0681 FAX

Pauma Valley Band of Luiseño Indians Bennae Calac, Tribal Council Member P.O. Box 369 Luiseno Pauma Valley CA 92061 bennaecalac@aol.com

(760) 617-2872 (760) 742-3422 - FAX

Rincon Band of Mission Indians Bo Mazzetti, Chairperson P.O. Box 68 Luiseno Valley Center, CA 92082 bomazzetti@aol.com (760) 749-1051 (760) 749-8901 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011111075; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Vernal Pool Habitat Conservation Plan; located City-Wide; City of San Diego; San Diego County, california.

San Diego County December 5, 2011

San Pasqual Band of Indians Kristie Orosco, Environmental Coordinator P.O. Box 365 Luiseno Valley Center, CA 92082 Diegueno (760) 749-3200 council@sanpasqualtribe.org

(760) 749-3876 Fax

Ewiiaapaayp Tribal Office Will Micklin, Executive Director 4054 Willows Road Diegueno/Kumeyaay Alpine , CA ⁹¹⁹⁰¹ wmicklin@leaningrock.net (619) 445-6315 - voice (619) 445-9126 - fax

Ewiiaapaayp Tribal Office Michael Garcia, Vice Chairperson 4054 Willows Road Diegueno/Kumeyaay Alpine , CA ⁹¹⁹⁰¹ michaelg@leaningrock.net (619) 445-6315 - voice (619) 445-9126 - fax

San Luis Rey Band of Mission Indians Cultural Department 1889 Sunset Drive Luiseno Vista , CA 92081 Cupeno 760-724-8505

760-724-2172 - fax

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This list is current only as of the date of this document.

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This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2011111075; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Vernal Pool Habitat Conservation Plan; located City-Wide; City of San Diego; San Diego County, california.

San Diego County December 5, 2011

Inter-Tribal Cultural Resource Protection Council Frank Brown, Coordinator 240 Brown Road Diegueno/Kumeyaay Alpine , CA 91901 FIREFIGHTER69TFF@AOL. COM ((619) 884-8437

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THE CITY OF SAN DIEGO

VERNAL POOL HABITAT CONSERVATION PLAN (PROJECT NO. NO. TBD/SCH NO. 2011111075) EIR Scoping Meeting Sign-In Sheet Monday, December 12, 2011

Name/Affiliation (please print)	Address (please print)
Frank Landis, CNPSSD	7885 Na Montebello #5, San Dieno CA 9212
JOE FRICHTEL MIRA MESA	8/20 VALDOSTA SDICA 92126
CLANDRO CASTINUTA	220 2ND AVE CHULF VISTA (A 919)0
Greg Mason / Alicen	3245 University #1158, San Digo, CA Palot
Jim Peogle	2776 Nipowa St. San Diego 9218
Mike Kelly	11591 Polans Dr S.D. 97-126
DAVID 1-)06AN	THE CHAPARRAL LANDS CONSERVANCY NOBIHI MOUNT LAGUNA CA 91948
RUSS Bagg 3	1042 NEI Camino Real Ste B339 92024
Dustin Janeta	2924 Lorkin Pl. San Diego CA 92123
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City of San Diego - Development Services Department
VERNAL POOL HABITAT CONSERVATION PLAN – SCOPING MEETING
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Email or Phone Number DIRECTOR QCHAPARRALCONSIGNANCY.OR/- 619 756-3811
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Transcript from the Scoping Meeting for the EIR/EIS Vernal Pool HCP December 12, 2011

Good evening thank you for attending and welcome to the scoping meeting for the Environmental Impact Report for the Vernal Pool Habitat Conservation Plan. I am Anna McPherson Senior Environmental Analyst with the City of San Diego Development Services Department.

I will be managing the production of the document. This meeting is referred to as Environmental Impact Report scoping meeting and the purpose is to give the public and interested parties an opportunity to submit comments regarding the potential environmental impacts of a proposed project. The information that is gathered tonight along with submitted written comments provided during the 30 day public review scoping period will be used to develop the scope and the content of the Environmental Impact Report. Public review began on November 28, 2011 and will formally conclude on December 28, 2011 but we will also take comments after that date. I am required as the environmental review staff by the City's municipal code to provide the public and the decision makers with an independently prepared environmental document which discloses the impacts to the physical environment of the proposed project

The information is used by the City's decision makers as part of the deliberating process in approving or denying a project. The environmental document itself does not recommend approval or denial of a project. I just have a few sort of housekeeping comments about how the meeting will be conducted. First a brief description of the project by the project applicant and in this instance it is the City will take place and then we will open the meeting for public comment. The meeting is designed to get as much public input as possible on areas that need to be addressed in the EIR (Environmental Impact Report) in the time we have allocated for this meeting. Our meeting this evening is scheduled from 5:30pm-7:30pm depending on the number of people who come in to speak. The meeting could end earlier than the noted 7:30 pm time.

Our purpose is to get everyone's comments that being the most important thing. Your verbal comments will be recorded up here therefore each speaker is asked to introduce themselves, state their address, and complete your comments within approximately 3 minutes. This is especially important this is a scoping meeting to assist Jeanne and me (whom you will meet in a few minutes) in the preparation of the document.

Please refrain from trying to conduct a debate on the merits of the project at this meeting for that is not the purpose of this meeting. The focus of the comments tonight need to stay on those potential environmental impacts you believe need to be thoroughly analyzed in the projects EIR. Hopefully you have all received a copy of the NOP and the scoping letter if not I can provide you a copy either electronically or in hard copy format.

The scoping letter identified the following issue areas that will be addressed in the EIR those were land us, biological resources and hydrology. The EIR will also describe the impacts that cannot be avoided as a result of the project growth inducement, cumulative impacts, those that effects that are found not to be significant and alternatives.

Lastly I will be acting as the moderator and timekeeper for the duration of the meeting and I respectfully request that you end your comments when I notify you that your time is up. We usually allocate 3 minutes for each speaker. There are not a lot of us here so we can be a little flexible but we do like to be fair. Thank you very much for your patience.

We will now begin first I would like to introduce you to Jeanne Krosch who is a Senior Planner with the Multiple Species Conservation program section of the Development Services Department. Jeanne is Project Manager of the HCP and she is going to provide you with a brief description of the project.

Hello everyone thanks for coming out tonight. We will be preparing a Vernal Pool HCP (Habitat Conservation Program). The proposed project is for the adoption of a Vernal Pool HCP the lands within the City of San Diego's jurisdiction and that includes city owned lands in the unincorporated areas in Otay Lake, Proctor Valley, and Marron Valley. The proposal includes obtaining coverage for seven endangered and threatened Vernal Pool species. An issuance of an incidental take permit from the U.S. Fish and Wildlife Service under Section 10a of the Federal Endangered Species Act. The seven species include San Diego Fairy Shrimp, Riverside Fairy Shrimp, San Diego Button Celery, San Diego Mesa Mint, California Orcutt Grass, Otay Mesa Mint and Spreading Navarretia. The proposed project would provide a comprehensive approach to the protection and management of the Vernal Pool preserve areas which would be identified as part of the HCP planning process. The preserve areas are being formulated by the City in coordination with the U.S. Fish & Wildlife Service and the California Department of Fish & Game. Input has been and will continue to be solicited from property owners, environmental groups, the building industry and the public. The EIR it is going to be a joint document - the EIR (Environmental Impact Report) and EIS (Environmental Impact Statement) and will include at the no project alternative based on the MSCP or MHPA (Multi-Habitat Planning Area) and the existing conserved lands. In addition to the proposed project, there will be an expanded conservation alternative which will include additional Vernal Pool resources and/or additional restoration and enhancement of vernal pool habitat.

The purpose of the Vernal Pool HCP is to contribute to the conservation of the seven covered species and will include multiple components such as preserve design, assembly process, protection and management elements, funding insurances, monitoring and adaptive management of the Vernal Pool complexes within the Vernal Pool HCP preservation areas. Proposed actions that would occur with the project include adoption of the VP HCP, the implementing agreement, a Vernal Pool management plan, funding strategy, specific conditions of coverage for the seven species, amendments to the community plans if any land use changes are proposed, and amendments to the land development code, environmentally sensitive lands ordinance and land development manual/biology guidelines. Again thank you for coming out tonight. We also have David Zoutendyk from the U.S. Fish & Wildlife Service, Craig Hooker, and Cathy Winterrowd are here too.

Thank you Jeanne for the project overview so now we are going to open it up for public comment. We do have sign in sheets, speaker slips if you can fill one out and give that to us to make sure your name and information is correct. This is for the administrative record and also put into the environmental document. If you can go ahead and give us a speaker slip we can call your name and when you come forward please come up to the podium and speak into the microphone because that is how we are recording the meeting this evening.

So I have Frank Landis is that correct?

My name is Frank Landis- Representative for the California Native Plant Society San Diego Chapter my address is: 7885 Via Montebello #5 San Diego, Ca 92129

First I want to thank you for the opportunity to provide input. California Native Plant Society is very concerned about the scope both as it presented and in its implications. As presented we found four issues. First the list of local species seemed to be incomplete and the plant species heard by the MSCP's such as "Little Mouse Tail", San Diego Golden Star and Orcutt's brodiaea are not considered in this analysis. These are plants that occur in or near Vernal Pools.

Furthermore there are over a dozen other sensitive plants listed by Fish & Game and not listed by the MSCP that could be affected by any development around a Vernal Pool.

Impacts to these species must be analyzed as well whether they are listed by the MSCP or not. Second issue the scope calls for the use of figures to present information, unfortunately the location provided for our perusal was so crude I could not tell where important boundaries are, where the scope was applied or not. Since at least one vernal pool currently exist at the very edge of a preserve on Del Mar Mesa accurate maps and figures are critical in this project. The scope should be amended to reflect this need for absolute accuracy and where the boundaries are. Third, the scope says that the growth inducement must be analyzed and the growth inducement has already been determined to be a non-significant issue in two different paragraphs.

I would suggest correcting this so growth inducement is analyzed. We would also suggest that the neighborhood quality is a significant issue, as at least some people who live near vernal pools value them very highly. Fourth, the pools currently contain water, fairy shrimp, tadpoles, and sprouting plants and field survey should have started weeks ago because vernal pools are ephemeral. The scope must require that all field surveys are performed at the proper time of year for each species surveyed. Unless the City can expedite the contract, field work may have to wait until 2012-2013 rainy season next winter. If the next winter is dry, field work may have to wait another year, so that survey can be accurate. As for the implications of this update, CNPS (California Native Plant Society) is concerned that an updated HCP would open the door to further take of Vernal Pools. Over 97% of San Diego's vernal pools are already gone. While the City may think a 99% take is appropriate; we do not think so.

The court has already ruled "the City's application must satisfy the ESA goal of conservation which would allow species to recover in order to reverse the trend to extinction". Further take of sensitive species will not further endangered species. We do hope the City will realize this and mandate the HCP to enhance conservation of unique and tiny ecosystems. Thank you very much for hearing my testimony.

I apologize in advance if I mispronounce your name. I believe it is Joe Frichtel

Good evening my name is Joe Frichtel. I am from Mira Mesa. I have good news; fairy shrimp will outlive all of us. They are in with cockroaches; we will never get rid of them. One of the things we need to do with the vernal pools and habitat we have to open them up to the public, we cannot restrict them and keep them away from everybody because people do not understand this environment, what it entails and what it is for. Without any understanding and experience of

these things we are running a downhill battle all the time. The community of Mira Mesa has been severely penalized with these vernal pools and the habitat surrounding the vernal pools. If you drive off road anywhere in Mira Mesa where there is dirt and leave 2 inch impression with a tire you are going to have a vernal pool.

We have some areas of Miramar campus that has been stopped from building out their campus completely because of these are low grade vernal pools. What we would like to do, with permission of Fish & Wildlife, is to move them over to a different location. Which we all know we can do now. Twenty years ago you could not move or create a vernal pool. We do need to have some flexibility in how we approach this. Getting these vernal pools open to the public in different areas in the communities will greatly enhance all this work that the environmentalists and everybody that really cares about these things will make it t easier to get public support for this kind of an effort. Keep up the good work.

David Hogan with Chaparral Lands Conservancy, address: P.O. Box 141 Mt. Laguna Ca 91948. Thanks for having the meeting tonight. I was in the field today doing some fairy shrimp surveys. I just had a few random thoughts, the vernal pool preserve that you come up with should be more land than just the pools and watershed. One of the things we keep seeing in places where there are preserves are if a watershed is only 2 feet from the edge of the pool that is where the retaining wall goes and the houses are right behind that.

We want to make sure that these are actual viable vernal pool preserves that include more land than just the pools and immediate watersheds. At the very least, we need to be going out at least 100 feet if not further. I think the way to look at this, any particular property that has a vernal pool complex that is important we should be looking at if the conditions are right on the rest of the property for vernal pool conservation and management. Looking at using that entire parcel up to 25% development footprint for preservation so that way there is still the MSCP standard of fair property use that has already been applied and upheld by courts at the same time we are able to maintain viable pool preserves in areas where there are important resources. When the preserves is identified we would really like to see you use each of the particular species; covered species as a basis for not the sole basis but one basis for why a particular area is important for pools. For example, in Otay Mesa we would need to preserve enough vernal pools to preserve Otay Mesa Mint, Orcutt Grass, and Riverside fairy shrimp. For example, in Mira Mesa, preserve San Diego Mesa Mint, Button Celery, and San Diego fairy shrimp.

It can't just be because there is more land left on Otay Mesa that is where the preserve goes or because there is more land protected at Del Mar Mesa that is where preserves end up being. It needs to actually be an assessment of are there enough places spread throughout the county to meet the needs of the covered species that will be covered by the HCP. It is critical to come up with the assured funding source that has been so illusive for the existing MSCP. There cannot be yet another HCP that is approved with a speculative future funding source. I know there has been talk of different methods. The one that seems the best possibility being the community assessment districts. Vernal pools and other resources can be treated just like street lights or medians for management in funding.

One of the things we would like to ask for when you do the HCP is that the HCP cover not just development activities but restoration. The Chaparral Lands Conservancy is interested in

restoring vernal pools and one of the hurdles to that is getting permits to do restoration. They can be difficult when there is not a development that the restoration project is a mitigation project for. To the extent that there can be CEQA & NEPA coverage for restoration as part of the HCP for the City of San Diego that would be extremely helpful. I am not sure if it would go this far. If we could actually get clean water act permission for that as well, it would be extremely helpful. I agree with the anti-environmental zealous and vernal pool opponents. In some cases, it is a good idea to have more public access to vernal pools so it is one of the things we actually agree on. Places like Carmel Mountain, Del Mar Mesa, Mira Mesa and future reserves in Otay Mesa where you have a place that has had previous public use and there are trails and informal paths that have never been designated it can be much more effective to pick one path that weaves through the area where it causes the least damage, is well fenced and has educational signs.

A place to take people on nature walks, show them vernal pools and reduce the impact. If you go from 10 informal paths to a single trail that is designated, that is well defined, fenced and signed, that is much better than say "NO ACCESS" because the access will continue if we ask for it or not.

The only thing I would add is it would be good to expand the number of species that are covered. Some of the plants he listed but also potentially Western Spadfoot Toad, which is very sensitive and Tooth Calico Flower down. **Geocuspidada** is also very sensitive just has not been recognized as such. It is very limited in the Southbay. For example, there is only one vernal pool in the entire Proctor Valley area that has the species that is a good example of the species not listed. I do not think it is a candidate for listing but it is very sensitive. Two striped garter snake is another obvious one. Thank you.

Van Collinsworth my address is 9222 Lake Canyon Road Santee Ca I am representing Preserve Wild Santee and also the California Chaparral Institute. My comments are going to focus on the objectives for the project and also providing you with a large stack of written materials so I will not up here more than three minutes.

The following points should be the objectives used for the project and all alternatives considered in the EIR (Environmental Impact Report)/EIS (Environmental Impact Study) should be evaluated by how will they will meet these objectives in essential plan components. So, first I am going to go through three general objectives and then get into some more specific objectives and planned components:

- 1. Provide for both preservation and recovery for vernal pool species and their ecosystems preserve enhanced ecosystem acreage and function.
- 2. Develop comprehensive inventory of vernal pools and vernal pool species on all lands public and private inside & outside MHPA within the City of San Diego as the basis of a comprehensive recovery strategy.
3. Establish an adequate and reliable funding mechanism to implement the recovery strategy and perpetuity.

In terms of specific objectives and essential plan components:

- 1. Provide comprehensive vernal pool ecosystem inventory. Include all ephemeral pools, known historic sites of vernal pools including those considered damaged or degraded to the point of being labeled road ruts.
- 2. Utilize Hydrogeomorphic approach to evaluate existing vernal pool functions and assess the overall health and status of the entire vernal pool inventory.
- 3. Provide strict recovery standards
- 4. Conserve adjacent uplands and maximize preserve connectivity to protect entire ecosystems within hardline preserves.
- 5. Utilize proven restoration measures. The plan should not rely upon unproven mitigation measures such as vernal pool creation nor should it attempt to create vernal pools under stretched labels of restoration. Restoration should take place on known historically authentic vernal pool sites.
- 6. Make other management plans consistent with Vernal Pool HCP. Include adjacent land use guidelines and all plans to reduce adjacent site impacts on vernal pool ecosystems.
- 7. Include an education and recreational component implemented simultaneous with and complimentary to protective measures that addresses edge effects and other threats such as fairy shrimp hybridization.
- 8. Establish a standardized system and data base to track and report the status on vernal pools and their functions using readily measured and quantitative descriptions.
- 9. Include specific details required for implementation including expected staff hours, task, and oversight. Include mechanisms to leverage non-profit and volunteer partnership.
- 10. Establish an adequate and reliable funding mechanism to implement the recovery plan in perpetuity. Include measures to prevent degradation by invasion by non-native species, include surveillance, enforcement, prosecution and fencing measures that will prevent damage to pools from human disturbance such as motor vehicles, dumping, etc.

All of these things which I have listed off actually were presented earlier in a letter presented to the City earlier by Coalition and Environmental groups. My comments essentially reinforce those goals that were provided to the City earlier. Thank you

Jim Peugh, Conservation Chair of the San Diego Audubon Society. We have messed up a lot of vernal pools and vernal pool species in our region. I would strongly urge that recovery be the standard for this program and the program not be accepted unless that is the case. Recovery for all vernal pool species listed. Dan mentioned a thorough inventory, I urge that the inventory also describe what the watershed benefits the pool and have that in the inventory and how much a buffer to keep that watershed viable. Minimizing edge effects that could eventually degrade those watersheds so they should all be inventoried not just the pools themselves. It is really important that the management and maintenance standards be clear and who is responsible for them. How they are going to be implemented.

In particular with respect to invasive species but also to hydrology changes in the watershed. As far as Van mentioned making sure that the funding is adequate to preserve the pools in perpetuity. It cannot just be adequate. It has to be adequate based on what we hope or plan for, it has to be adequate in the face of the fact we don't really know what the cost will be and we don't know what things will not work out well. So, to be adequate with a really reasonable sort of range for error so it really will work in the long run rather than only working in the long run if things go well. I support the former comment Van gave as well.

Mike Kelley- Conservation Chair for Friends of Penasquitos Canyon Preserve. We own two parcels in Penasquitos with vernal pools on them, which we currently have grants to begin to do restoration work. I want to support the remarks made by Frank on species. One in particular that concerns me is the Danengia. I consider that a rare species a species that needs to be part of the active management plans. Dave mentioned Spadfoot Toad, Little Mouse Tails and a number of other plants associated with vernal pools. I can't see ignoring them in these plans. Dave mentioned funding. We were supposed to have funding for the Multiple Species Conservation Plan in the City of San Diego, and the County. Years have gone by, it never materialized. Some in desperation negotiated via Trans Net and SANDAG a pretty big chunk of funding for land conservation & restoration. That was only a down payment for what is needed overall. Attempts to get on the ballot with a permanent funding measure for MSCP have failed to gel due to the economy. Even though SANDAG did not vote for it, funding is the Achilles heel for this Vernal Pool Management Plan that looks great on paper. But, if we don't have a secure funding mechanism and as Jim said not based on minimal maintenance restoration but something that is going to allow for the fact that we are dealing with perhaps a sensitive ecosystem. We are going to be attempting to restore. One issue that needs to be addressed specifically is fire and fire management.

Vernal pools on Lopez Ridge were part of a fire that swept through the vernal pool. Carmel Mountain is susceptible to fire. The vernal pools themselves can do just fine in fire. The plant and animal species will come through a fire just fine. We have seen that in the past. I am concerned about the fire fighting and that needs to be addressed. We have significant damage to public owned property by the fire fighters, vehicles, and the after math of them. Unless we have detailed fire fighting plans to prevent damage in the very fighting of these fires. If you have prepared ahead of time you can minimize the damage that is done if you have good planning and actual on the ground coordination. This is done elsewhere. We have nothing in the City of San Diego to incorporating fire fighting and planning for it into our management plans. Public access that was mentioned. We do already have public access The Friends of Penasquitos Canyon have been leading vernal pool walks in the City of San Diego owned lands on Carmel Mountain and in the ground parcels on Lopez Ridge now for 15-20 years done under very controlled conditions with small groups and active participation of City of San Diego departments. If we want to have public support for saving these vernal pools, then the public needs to be educated about them. Take people through with trained guides which we do on Carmel Mountain and Del Mar Mesa. The Navy has allowed public access of their pools. Restoration permitting is very important. I have done restoration work for the Navy Murphy Canyon pools and also other pools on Miramar and even there the permitting process is too rigorous and too restrictive.

Anna McPherson- That is all the speaker slips that I have so if there is anyone else who wishes to speak I encourage them to come up at this time. Looks like everyone who would like to speak has, you can also of course send comments on the NOP and the scoping letter electronically. You can send to our email address which is enclosed on the NOP and on our website. I would like to offer mine <u>AMcPherson@sandiego.gov</u>. I also have business cards if anyone wants to get one.

I would encourage you to send it that way if you did not wish to speak this evening or you think of something else later.

You can also rely upon U.S. Postal service and send us a letter we don't get many of those, but they are still fully legitimate. If you can express your thoughts that way we would encourage you to do so. You can call on the telephone but we do like it to be memorialized in writing so that we make sure that we accurately represent when we transcribe and as we look at this information as we begin to approach the document. If no one else has anything, I can go ahead and end the testimony and the meeting. Anybody have any objections to that? Okay I don't hear any objections. Thank you very much for coming out this evening. We do appreciate your participation this will be a very exciting process, very public process. I want to remind you this is just the beginning of the environmental review. Once the document is out you can provide public comment and then we will be going through the public hearing process. Those of you who provided comments on the NOP will receive a copy of the draft environmental document. So, if you have not done so and you want to submit please do so.

Thank you

Frank Landis, PhD (Botany) Representing the California Native Plant Society, San Diego Chapter 7885 Via Montebello Unit 5 San Diego, CA 92129 310-883-8569

December 12, 2011

Comments for the Scoping Meeting of the Vernal Pool Habitat Conservation Plan

Thank you for this opportunity to provide input. The California Native Plant Society is very concerned about this scope, both as it is presented and in its implications.

As presented, we found four problems:

First, the list of focal species is incomplete, in that plant species covered by the MSCP, such as little mousetail, San Diego goldenstar, and Orcutt's brodiaea, are not considered in this analysis. Furthermore, there are over a dozen other sensitive plants listed by CDFG and not covered by the MSCP that could be affected by any development around vernal pools. Impacts to these species must be analyzed as well, whether they are listed by the MSCP or not.

Second, although the scope calls for use of figures to present information, the Location Map provided for our perusal is so crude that I cannot tell whether where important boundaries are. Since at least one vernal pool currently exists at the very edge of a preserve on Del Mar mesa, accurate maps and figures are critical in this project, and the scope should be amended to reflect this need for accuracy.

Third, the scope says both that Growth Inducement must be analyzed, and that Growth Inducement has already been determined to be a non-significant issue. This needs to be corrected so that Growth Inducement is analyzed. We also suggest that Neighborhood Quality is a significant issue, as at least some people who live near vernal pools value them highly.

Fourth, the pools currently contain water, fairy shrimp, tadpoles, and sprouting plants. Field surveys should have started weeks ago. Because vernal pools are ephemeral, the scope must require that all field surveys are performed at the proper time of year for each species surveyed. Unless the city can expedite this contract, field work may have to wait until the 2012-2013 rainy season next winter. If that winter is dry, field work may have to wait another year after that.

As for the implications of this update, CNPS is concerned that an updated HCP would open the door to further take of vernal pools. Over 97 percent of San Diego's vernal pools are already gone. While the City may think a 99 percent take is appropriate, it is not. The court has already ruled that "the City's permit application must satisfy the ESA goal of conservation, which will allow the species to recover in order to 'reverse the trend to extinction."" Further take of sensitive will not further the Endangered Species Act's goal of conserving these species. We hope the city will realize this, and that it will only amend the HCP to enhance conservation of these unique and tiny ecosystems.

Thank you for taking my testimony.

HCP Scoping Mtg. December 12, 2011 9 public 4 CityStaff I WA (Dave routendyk) CINPS - Concerned about scope D'Focal species are incomplete. - affected by development awind venal posts. 2) Bundary into was difficult to determine. Scope nust 3) Klight Granth inducement/Heighborhood character 4) Field surveys 5) Cincenced about further take of vernal probs - CHPS disagrees. Frichtel - Open up venal pools to public; Miva Mesa is severely penalized (Really speaking to project -rather than scope)

Will help to get public support. David Hogan - Chapamal Lands Conservances - Vp preserve shall be nore than flandt vetral pool and watershed to protect yps - very least so art at least 30 feet - Up to 23.1. property Postprint; Still maintain Nable prove preserve Use species - to detenime why imposant to prevue a certain area - conit j'ng re because nive land= nore presurve. Meet needy canent greeier. Assured finding somer - Community ascessment district Civer renderation as well as development mojects-CEDA à NEPA civerage. More public access may help putect pools-singleteil than say no access. Expand species that are curred - mentioned species. Van Civilingsnuth- 922 Loube Canon Prenve Wildoute Cal. Chap Institute Project Objectives: 3 geveral -1) Puride miseriation and recovery 2) Comp inventury 3) Establish adequate à veliable fudg · VP ecesystem inventory Caro · hydrosponiorphic standard o strict recever Jendres

· putectupands Reliable methods - not creation - nertwaturo m knum sites Include adjacent suidelies Edig recreational components to address edge effects VP data base - notrice Implementation costs molude meaning & protect vernal pools Jim Peugh - Andebon Society Thorough inventory- benefits of watershed and how to protect watershed. Management à maintenance standards should be clear Financing must be adequate in face of unknown cost-range of enor Mikekelly- Friends & Perasquites Campu Preserve

Support Frank's comments ; especially concerned about particular spectres - spay toot toad, (also pave Hosonis) Do not ignove in this year.

Funding-we were supposed to have finding. Must have to chouve success. Finding is an Achilles heel - nunt he baked upon complete need.

Five Management needs to be addressed, i.e. hopez Pidge, Carmel Manstain-five fighting causes significant damage and after fives. Need specific plans in place to prevent damage in the time of emergency. The elsenhere; Angeles National Torest.

Public Access - alledy done -very important to gein public support !! Carriel Non · hoardwalk

Resturation needs to be covered

From: Alan Francisco [mailto:alanfrancisco=hotmail.com@change.org] On Behalf Of Alan Francisco Sent: Thursday, December 15, 2011 10:07 AM To: Blake, Martha Subject: Vernal Pool Habitat Conservation Plan

Ladies and Gentlemen:,

I just signed the following petition addressed to: Elizabeth Shearer-Nguyen, City of San Diego Development Services Associate Planner; Martha Blake, City of San Diego Development Services Senior Planner; Sherri Lightner, City of San Diego District 1 Councilmember; Kevin Faulconer, City of San Diego District 2 Council President Pro Tem; Todd Gloria, City of San Diego District 3 Councilmember; Tony Young, City of San Diego District 4 Councilmember Council President; Carl DeMaio, City of San Diego District 5 Councilmember; Lorie Zapf, City of San Diego District 6 Councilmember; Marti Emerald, City of San Diego District 7 Councilmember; David Alvarez, City of San Diego District 8 Councilmember.

We, the undersigned, agree that the Vernal Pool Habitat Conservation Plan is the key to that land preservation. We don't want San Diego to ignore its biodiversity and natural habitat. We do not believe the city will see a long-range benefit by cutting corners on land use planning.

We want the comprehensive provisions and the proposed considerations incorporated and support a thorough EIR/EIS and diligence with all relevant agencies to promote conservation. The efforts put forth to realize this plan will be valuable to ongoing and future environmental conservation campaigns.

The city quality of life depends on the plan provisions constraining any development not respecting vernal pool habitat or sustainable development standards. The city character includes vernal pool habitat scenery. Thank you for your time.

Sincerely,

Not facilitating environmental impact study and mitigation won't preserve our vernal pool habitat.

Alan Francisco

Note: this email was sent as part of a petition started on Change.org, viewable at <u>www.change.org/petitions/san-diego-needs-to-adopt-the-vernal-pool-habitat-conservation-plan</u>. To respond, email <u>responses@change.org</u> and include a link to this petition.

,

From: Frank Landis [mailto:franklandis03@yahoo.com] Sent: Tuesday, December 13, 2011 12:06 PM To: McPherson, Anna Subject: Additional comment on vernal pool HCP

Dear Anna,

Thank you for providing me with the opportunity to speak to the scoping hearing last night.

As a private citizen (not representing CNPS), I'd like to add additional input. I volunteer to patrol and clean up Del Mar Mesa several times per week. I know the area pretty well, and I've talked to other residents who hike and bike in the area.

One of them, who claimed to have lived there for over 20 years, told me that, since McGonigle Creek (north of the vernal pools) had become a perennial stream, frogs and toads no longer breed in it. My assumption is that McGonigle Creek is perennial due to upstream urban runoff, and that frogs have disappeared from it due to increased pollution and also to the introduction of mosquito fish for vector control.

I have only lived here since 2008, so I cannot corroborate his history. However, I've never seen tadpoles in the creek. The only place I see tadpoles is in the vernal pools. My assumption is that the pools have fewer predators, and that they also have cleaner water than the stream does. I'd like to see this addressed in the EIR/S if possible. With urban runoff turning many local streams into perennial and polluted waterways, vernal pools and similar ephemeral water bodies may be the only places where amphibians can breed. Given the declines faced by amphibians in California in general, elimination of vernal pools may hasten the decline of local amphibian populations.

As a separate comment, I have noted that many of the cyclists who use Del Mar Mesa avoid the pools. Most of them "don't want to hurt the pollywogs" (their words), but they don't seem to know about fairy shrimp or the other endangered species. Although I know it's a controversial suggestion, I'd suggest that major public education might be useful for preserving the pools, given how a little information is already affecting which routes cyclists take to avoid pools. We may be able to better than fencing, walkways, and educational signage.

For example, someone called vernal pools "miniature Serengetis," for all the natural drama that goes on in them every wet year. Will the fairy shrimp breed before the dragonfly larvae eat them or the pool dries out? Will the tadpoles metamorphose before the pool dries and the crows, garter snakes, and ducks eat them all? Will the button celery avoid being eaten by the deer? As a biologist, I can tell you its fascinating to watch, but I have yet to find anything in writing that says more than something like "vernal pools are delicate and home to many endangered tiny species." We can do a bit better than that, I think.

Sincerely,

Frank Landis





Preserve Wild Santee

December 12, 2011

Elizabeth Shearer-Nguyen City of San Diego Development Services Department 1222 First Avenue, MS 501 San Diego, CA 92101

RE: Scope of the Vernal Pool Habitat Conservation Plan EIR/EIS

Dear Ms. Shearer-Nguyen,

The following points should be the objectives used for the Project and all alternatives considered in the EIR/EIS should be evaluated by how well they meet these objectives and essential plan components:

General Objectives:

1. Provide for both the preservation and <u>recovery</u> of vernal pool species and their ecosystems. Preserve and enhance ecosystem acreage and function.

2. Develop a comprehensive inventory of vernal pools and vernal pool species on all lands (public and private) (inside and outside the MHPA) within the City of San Diego as the basis for a comprehensive recovery strategy.

3. Establish an adequate and reliable funding mechanism to implement the recovery strategy in perpetuity.

Specific Objectives & Essential Plan Components:

1. Provide a comprehensive vernal pool ecosystem inventory. Include all ephemeral pools on known historic sites of vernal pools, including those considered damaged or degraded to the point of being labeled "road ruts".

2. Utilize the Hydrogeomorphic (HGM) approach to evaluate existing vernal pool functions and assess the overall health and status of the entire vernal pool inventory.

• 3. Provide strict recovery standards.

4. Conserve adjacent uplands and maximize preserve connectivity to protect entire ecosystems within hard line preserves.

5. Utilize proven restoration measures. The plan should not rely upon unproven mitigation measures such as vernal pool "creation." Nor should it attempt to "create" vernal pools under stretched labels of "restoration." Restoration should take place on

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known historically authentic vernal pool sites.

6. Make other management plans consistent with the Vernal Pool HCP. Include adjacent land use guidelines in all plans to reduce adjacent site impacts on vernal pool ecosystems.7. Include an education and recreational component implemented simultaneous with and complimentary to protective measures that address edge effects and other threats such as fairy shrimp hybridization, etc.

8. Establish a universal standardized system and database to track and report the status of vernal pools and their functions, using readily measured quantitative metrics, not qualitative descriptions.

9. Include specific details required for implementation including expected staff hours, tasks and oversight. Include mechanisms to leverage non-profit and volunteer partnerships.

10. Establish an adequate and reliable funding mechanism to implement the recovery plan in perpetuity. Include measures to prevent degradation by invasion of non-native species. Include surveillance, enforcement, prosecution, and fencing measures that will prevent damage to pools from human disturbance such as motor vehicles, dumping, etc.

The objectives listed above were presented by nine environmental organizations to the City of San Diego by letter dated April 25, 2011. The letter is attached for reference.

The EIR/EIS should also closely consider the court's prior vernal pool decision. A copy of the decision is attached for reference.

Thank you for your consideration,

The

Van K. Collinsworth, M.A. Natural Resource Geographer Resource Analyst/Executive Director Preserve Wild Santee Vernal Pool Conservation Program Coordinator California Chaparral Institute

Attachments:

Vernal Pool Habitat Conservation Plan Preparation Letter, April 25, 2011 Decision And Injunction, Case No. 98-CV-2234-B(JMA), Southwest Center for Biological Diversity vs, Jim Bartel, et al.





Preserve Wild Santee

April 25, 2011

Ms. Jeanne Krosch, Senior Planner City Planning & Community Investment 202 C Street, MS 5A San Diego, CA 92101-3865

RE: Vernal Pool Habitat Conservation Plan Preparation

Dear Ms. Krosch,

We appreciate that the City of San Diego has launched vernal pool habitat conservation plan preparations and is currently soliciting public input with regard to potential HCP content. This letter is intended to offer a basic set of guiding principles that can serve as the foundation for a successful vernal pool habitat conservation plan.

Guiding Principles for development and implementation of the Vernal Pool Habitat Conservation Plan (HCP)

Objectives:

1. Provide for both the preservation and <u>*recovery*</u> of vernal pool species and their ecosystems. Preserve and enhance ecosystem acreage and function.

- 2. Develop a comprehensive inventory of vernal pools and vernal pool species on all lands (public and private) (inside and outside the MHPA) within the City of San Diego as the basis for a comprehensive recovery strategy.
- 3. Establish an adequate and reliable funding mechanism to implement the recovery strategy in perpetuity.

Rationale:

The new HCP must address the specific findings of the Court regarding the inadequacy of the previous conservation plan. Specifically, the Court found that the prior plan violated "both the spirit and the letter of the ESA." The Court stated,

"...FWS has authorized extensive development of lands containing vernal pools that would destroy essential habitat for these rare species under the guise of obtaining promises for 'mitigation' in other areas. The ostensible 'mitigation' is inadequate to ensure that fairy shrimp will survive and recover to the point where they need not be listed for protection under the ESA. In short, while vigorous development is certain, the purported mitigation is unlikely to conserve listed species. Moreover, the record does not support FWS's finding that the City of San Diego would fund its share of the conservation plan. The Court finds that this plan violates both the spirit and the letter of the ESA."¹

The Court devoted substantial consideration and emphasis to the topic of recovery concluding, "Thus, the City's permit application must satisfy the ESA goal of conservation, which will allow the species to recover in order to "reverse the trend to extinction."²

The Court directed the US Fish & Wildlife Service to consider the standards within its own Vernal Pools of Southern California Recovery Plan (1998) ("Vernal Pool Recovery Plan").

"The Vernal Pool Recovery Plan is pertinent evidence of the measures necessary to prevent the extinction of vernal pool species. The language and structure of the ESA's provisions for recovery plans shows that FWS must make a conscientious and educated effort to implement the plans for recovery of species."³

Therefore, the standards of the USFWS Vernal Pool Recovery Plan must be utilized as guidance for the preparation of the new HCP.

- ² Decision And Injunction, P. 11.
- ³ Decision And Injunction, P. 22, 23.

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¹ Decision And Injunction, Case No. 98-CV-2234-B(JMA), United States District Court Southern District of California, Southwest Center for Biological Diversity, et al., vs. Jim Bartel, et al., page 3.

The City of San Diego has asked the public "Which areas are most important for the conservation of targeted species? What factors should be considered in evaluating the importance of preserving vernal pools (e.g. size of vernal pool, number of vernal pool species, located on conserved land, connectivity to other pools, etc.).

The premise of this important question (that there are some areas that aren't that important) fails to recognize the current status of vernal pools. Only 3% of vernal pools remain and many of these are being damaged by direct human disturbance and the edge effects of adjacent land uses (even on conserved lands). Most functional vernal pool ecosystems in San Diego have already been lost. The very few that remain are on the verge of destruction. The situation is dire, therefore **all lands with targeted species and restoration potential are "most important"**. The new HCP must be an extraordinarily ambitious effort that provides for recovery of targeted species and the vernal pool ecosystem as a whole. In the judgment of the Court, "Given the exceptionally small number of vernal pool species that may still be viable in San Diego, it defies reason to give *less* protection to those creatures and plants that have survived some measure of damage by human activity, as these would appear to be among the more hearty specimens."⁴

It is crucial for the new plan to include a complete inventory of vernal pools and understand the status of these pools, including the species supported by each pool, the functional status of the pools and the restoration potential of their ecosystems. A fiscal analysis and funding mechanism is critical to the implementation of any conservation strategy prepared.

Essential Plan Components:

1. A comprehensive vernal pool ecosystem inventory. Include all ephemeral pools on known historic sites of vernal pools, including those considered damaged or degraded to the point of being labeled "road ruts".

2. Utilize the Hydrogeomorphic (HGM) approach to evaluate existing vernal pool functions and assess the overall health and status of the entire vernal pool inventory.

3. Provide strict recovery standards.

4. Conserve adjacent uplands and maximize preserve connectivity to protect entire ecosystems within hard line preserves.

5. Utilize proven restoration measures. The plan should not rely upon unproven mitigation measures such as vernal pool "creation." Nor should it attempt to "create" vernal pools under stretched labels of "restoration." Restoration should take place on known historically authentic vernal pool sites.

6. Make other management plans consistent with the Vernal Pool HCP. Include adjacent land use guidelines in all plans to reduce adjacent site impacts on vernal pool ecosystems.

3

⁴ Decision And Injunction, P. 25.

7. Include an education and recreational component implemented simultaneous with and complimentary to protective measures that address edge effects and other threats such as fairy shrimp hybridization, etc.

8. Establish a universal standardized system and database to track and report the status of vernal pools and their functions, using readily measured quantitative metrics, not qualitative descriptions.

9. Include specific details required for implementation including expected staff hours, tasks and oversight. Include mechanisms to leverage non-profit and volunteer partnerships.

10. Establish an adequate and reliable funding mechanism to implement the recovery plan in perpetuity. Include measures to prevent degradation by invasion of non-native species. Include surveillance, enforcement, prosecution, and fencing measures that will prevent damage to pools from human disturbance such as motor vehicles, dumping, etc.

Thank you for your diligence and consideration of these thoughts as the new HCP moves forward.

Sincerely,

Van K. Collinsworth, M.A. Natural Resource Geographer Resource Analyst/Executive Director Preserve Wild Santee Vernal Pool Conservation Program Coordinator California Chaparral Institute

Richard Halsey Director, California Chaparral Institute

Jim Peugh Conservation Chair San Diego Audubon Society

John Buse Senior Staff Attorney Center for Biological Diversity

Ben McCue Conservation Director WiLDCOAST

Duncan McFetridge Director, Save Our Forests & Ranchlands President, Cleveland National Forest Foundation Carrie Schneider Conservation Chair California Native Plant Society, San Diego Chapter

Michael Beck San Diego Director Endangered Habitats League

Carolyn Chase Chapter Chair Sierra Club of San Diego

CC.

Keith Greer, SANDAG Cheryl Mason, SANDAG David Mayer, CADFG Jim Bartel, USFWS David Zoutendyk, USFWS Susan Wynn, USFWS Patrick Gower, USFWS Mayor Jerry Sanders, City of San Diego Council President Tony Young Council President Pro Tem Kevin Faulconer Councilmember Sherri Lightner Councilmember Todd Gloria Councilmember Carl DeMaio Councilmember Lorie Zapf Councilmember Marti Emerald Councilmember David Alvarez

APPENDIX B

SUMMARY OF KEY COMMENTS ON PRELIMINARY DRAFT VPHCP

PRELIMINARY REVIEW DRAFT VPHCP (March 2015) RESPONSE TO KEY PUBLIC COMMENTS

Commenter	General Topic	Comment Summary	Response to Comment
CBD et al.			
1	Guiding principles from 2011 letter	The VPHCP should include a section in the introduction that analyzes how well the VPHCP achieves the objectives and essential plan components requested by the 2011 letter.	The VPHCP meets the guiding principles outlined in the 2011 letter. Refer to Chapter 5 and Appendix C for an analysis of conservation of vernal pools and species, including the conservation strategy. The analysis is based on an updated vernal pool inventory (as discussed in Section 1.3.4). Refer to Chapter 10 and Appendix F for the funding strategy.
2	Provide for recovery	The VPHCP needs to provide for recovery of the species.	Although not required, the City's VPHCP is consistent with the Recovery Plan for Vernal Pools of Southern California. Refer to Section 1.1.2, Section 4.1.1, and Section 5.1 of the VPHCP, which state that the biological goal of the VPHCP is to contribute to the recovery of vernal pool species. Table 5-1 of the VPHCP summarizes conservation objectives to achieve this.
3	Comprehensive vernal pool ecosystem inventory	A comprehensive inventory of vernal pools should be developed.	A comprehensive inventory was completed. Refer to Sections 1.3.3 and 1.3.4, Table 2-2, and the vernal pool mapping tool on the City's website at https://www.sandiego.gov/planning/programs/mscp /vphcp. This information is the best scientific data available for the seven vernal pool species addressed in this VPHCP. The mapping tool now has a table of references.
4	Adequate funding	Establish an adequate and reliable funding mechanism to implement the recovery strategy in perpetuity.	Adequate funding is an issuance criterion that must be met (see Section 1.4.1). Chapter 10 was not complete in the preliminary draft VPHCP. Chapter 10 has been updated in the Public Review Draft VPHCP.

Commenter	General Topic	Comment Summary	Response to Comment
5	Utilize the	Utilize the HGM approach to	As discussed in Section 7.5.3, the plan does utilize
	Hydrogeomorphic	evaluate existing vernal pool	HGM methods where appropriate and feasible. A
	(HGM)	functions, overall health, and status	citation and discussion that HGM is being used for
		of the entire vernal pool inventory.	hydrology baseline studies has been added to
			Section 7.5.2.
6	Conserve adjacent	Conserve adjacent uplands and	The preservation of watershed and buffer area is a
	uplands/connectivity	maximize preserve connectivity to	requirement of the VPHCP (see Section 5.3.1).
		protect entire ecosystems within hard	Language has been added to Section 5.2.2 to make
		line preserves.	this point more clear.
7	Proven restoration	Utilize proven restoration measures.	The VPHCP does rely on only proven restoration
			measures (see Section 5.3.2). Language has been
			added to Section 5.1 that acknowledges and
			clarifies restoration requirements, as well as in
			Section 5.3.2 that states that the plan does not rely
			on vernal pool creation as a mitigation measure.
8	Update existing	Make other management plans	To the extent that the City has discretion (see
	management plans for	consistent with the Vernal Pool	Section 8.2.2), other management plans will be
	consistency	HCP.	made consistent. Language has been added to the
			introduction of Chapter 7 that other management
			plans should be consistent with the VPHCP.
9	Adjacency guidelines	Adjacency guidelines should be	The existing ESL includes these (see Sections 5.2.1
		addressed in the plan.	and 6.3).
10	Education and	Include an education and	Education is a component of management (see
	recreational	recreational component	Table 4.5). A summary of management goals,
	component		including stewardship, public outreach, educational
			use, information sharing, and administration has
			been added to Chapter 7.
11	Data Base	Establish a universal standardized	Refer to Section 7.7. The VPHCP data will be sent
		system and database tracker.	to multi-taxa database at SDMMP.
12	Implementation and	Specific details should be included	Chapter 8 has been expanded to include a
	staffing	that address implementation	discussion of staffing and City coordination with
		including staffing. Mechanisms to	other entities.
		leverage non-profit and volunteer	
		partnerships should also be included.	

Commenter	General Topic	Comment Summary	Response to Comment
13	ESA requirements	The VPHCP does not follow	The VPHCP does follow the standards of the
		standards of the USFWS Vernal Pool	USFWS Vernal Pool Recovery Plan (see Section
		Recovery Plan.	1.4.1).
14	Lawsuit requirements	The Endangered Species Act and the Southwest Center for Biological Diversity v. Bartel decision (470 F. Supp. 2d 1118, S.D. Cal. 2006) require that the standards of the USFWS Vernal Pool Recovery Plan must be utilized for the preparation of the new VPHCP.	There were no binding agreements associated with this law suit and the case was dismissed.
15	Consistency with 1998 Recovery Plan	There is not a discussion of how the impacts to vernal pools, allowed by covered projects, is consistent with the 1998 Recovery Plan.	The Recovery Plan anticipated that development would continue and that some pools would be lost; however, this would be balanced with active management and monitoring. Language has been added to Chapter 5 that clarifies the intent of the Recovery Plan. Consistency with the Recovery Plan is analyzed in Chapters 5 and 6.
16	Adequacy of baseline data	The surveys and analysis essential to avoiding loss and establishing the baseline conditions of vernal pools is being deferred.	Disagree. The location of vernal pool habitat and species is well documented throughout the plan area (also see Response to Comments 3 and 5).
17	Documentation of management level	The management plan was not provided	The Vernal Pool Management and Monitoring Plan (VPMMP) was not released with the preliminary draft VPHCP as it was still in development. The VPMMP will be released with the Public Review Draft VPHCP.
18	Adequacy of maps	Maps of the vernal pool areas, complexes and maps of un- conserved pools versus conserved pools need to be included.	Please utilize the City's mapping tool (see Response to Comment 3), which allows users to zoom in on individual parcels. Hard copy maps are not available at the same scale.
19	Hyperlink TOC to document	Include hyperlinks of all items in the TOC.	Please see revised TOC.

Commenter	General Topic	Comment Summary	Response to Comment
20	Reference on Page 1.3	The reference on Page 1.3, Section 1.1.2 Conservation Goals should reference Chapter 5 instead of Chapter 6.	Agree. The typo has been fixed.
21	Vernal Pool Preservation Fund	Discussion is needed that provides the status and dollar balance of the Vernal Pool Preservation Funds and what vernal pool land acquisitions and other activities the fund has been used for.	The status of the Vernal Pool Preservation Fund is included in Section 1.3.1.
22	Map of losses	Specific known losses of vernal pool complexes should be mapped to provide additional perspective needed to create a functional preserve.	This is beyond the scope of the HCP. References to the 5-year review have been added for a complete discussion on the status of each species.
23	Impact analysis	Additional analysis should be provided of activities cited that degrade or destroy vernal pool resources. Analysis should include options to avoid such impacts.	Please see Chapters 6 and 7. This analysis has also been addressed in the EIR/EIS; specifically, that coordination with the fire department is a component of the VPHCP.
24	Species maps	A summary of covered species key information and status within the VPHCP should be supported by a set of species-specific maps.	The mapping tool (see Response to Comment 3) allows the user to click on each pool and see what species occur in the specific location; however, there are no comprehensive maps by species. Figures 3-1 through 3-7 have been added and include species locales. The ability to display species distribution has also been added to the mapping tool.
25	Castlerock	Castlerock project maps should be modified to reflect changes resulting from settlement of CEQA litigation.	The figure for Castlerock has been updated.
26	Status of covered projects	Ensure all four of the projects listed in Section 4.1.2 have completed their entitlement process.	None one of these projects have completed the entitlement process, except Castlerock, which is now a Planned Project.

Commenter	General Topic	Comment Summary	Response to Comment
27	Covered road projects	Maps and greater detailed information is needed to explain why the Covered Road Projects should be allowed to impact vernal pools.	A map showing the general alignments has been added to Section 4.1.4. This project (as with all Covered Projects) will be subject to project-specific CEQA review to analyze impacts from the project. The VPHCP is not the environmental document for Covered Projects.
28	Brown Field	The Brownfield discussion should be updated to describe the status and changes (if any) due to CEQA litigations and negotiations. Agree. In addition, this section will be updated to reflect recent discussions with Montgomery Field.	Agree. Section 4.1.6 has been updated to include maps for both airports as well as recent discussions with Montgomery Field.
29	Resource protection	On Page 4-3, Section 4.2.2 the word "resource" should be inserted prior to "protection".	This revision has been made to Section 4.2.2.
30	Pipeline projects	Describe the entitlement status of each of the pipeline projects listed on Page 4-21, Section 4.3, Pipeline Projects.	Existing baseline is already permitted; however, take is not addressed by the VPHCP.
31	Un-managed pools	Describe the supporting rationale for excluding approximately eight vernal pool sites from the VPMMP and where they are located.	These pools are isolated and have little long-term conservation value. This discussion has been added to Section 5.1.
32	Conservation analysis	Describe approximately how many acres of occupied habitat are being conserved and where.	Basin acreages by vernal pool site are detailed in the Conservation Analysis in Appendix C and summarized in Table 5-2.
33	Monitoring associated with adjacent construction	Monitoring should be expanded to 12 years, rather than 3, for projects affecting vernal pools.	Monitoring is to verify that adjacency measures are adequate, not to follow up on restoration activities. Section 5.2.1, Measure 9 has been modified to clarify intent.
34	Basis for proposed loss	Describe the basis for allowing the destruction of 14% of vernal pools within the VPHCP area.	The impacts to the vernal pools are fully mitigated and will result in a net gain of function and value so that issuance criteria can be met (see Sections 1.4 and 5.3).

Commenter	General Topic	Comment Summary	Response to Comment
35	Proposed impacts to J13	Explain why eight of the eleven pools occupied by San Diego button- celery are being destroyed.	Of the 732 pools occupied with San Diego button- celery in the VPHCP Plan Area, 99% are being conserved (722 occupied pools). Avoidance of nine pools occupied with San Diego button-celery at the J 13 complex is not practicable as the pools would be surrounded by development and therefore their long-term viability is questionable. A biologically superior alternative has been identified and San Diego button-celery has been successfully reestablished in restored pools. Text has been added to Section 5.2.3 to clarify.
36	Critical habitat	Describe the rational for conserving the designated amount (percentage) of the covered species. In addition, Table 5-4 Summary of Critical Habitat Conservation needs supporting maps.	The rationale is provided in Section 5.2.4. The City's mapping tool (refer to Response to Comment 3) has been updated to include critical habitat.
37	Mitigation is speculative	Identify the support that mitigation will include compensatory measures that would result in biologically superior net gain in overall function and values. Also, creation should not be conducted.	Restoration and enhancement are not speculative and has been successful in many instances; however, creation in areas not historically supporting vernal pools is not appropriate. Text has been modified in Section 5.3.1 to delete reference to creation.
38	Salvaged materials	Describe how long would salvaged materials be maintained and how will the USFWS determine whether to approve it.	This section is a general summary of measures to be included in a detailed restoration plan, which would be developed on case-by-case basis.
39	Hybridization	Experts have concerns regarding hybridization.	This is a concern and is discussed in Section 3.9.
40	Need to ensure functions and values for avoided pools	A hydraulic analysis should be completed rather than relying on biologist to make a "function and buffer" decision.	Text has been added to Section 6.2.1 to require a hydraulic analysis.

Commenter	General Topic	Comment Summary	Response to Comment
41	Standard versus	The standard versus extraordinary	This language is from the Wetlands Deviation
	extraordinary	ratios are unclear.	Ordinance. Text has been added to Section 5.3.1 to
			clarify.
42	Mitigation Measure f	Describe the circumstances, as well	These determinations will be made on a case-by-
		as process for determining, how	case basis (during project-specific review)
		would hydrologic connections be	depending on the conditions at an individual site. A
		needed or not needed for restored	qualified biologist will prepare the restoration plan,
		pools and their watersheds and be	which will be reviewed and approved by the City
		required or not required to impact the	and Wildlife Agencies prior to implementation, as
		watershed of any extant pool.	described in Condition 1 of Section 5.3.2.
43	Mitigation Measure h	The following should be defined:	Agree that targeted ponding should be defined.
		amount of time to support targeted	However, regarding versatile fairy shrimp, this is a
		species, demonstrate water retention,	work in progress. As effective measures are
		support species and survey for fairy	identified, they will be included. Condition "h" has
		snrimp.	been modified to include requirements for ponding
4.4			for SDFS and RFS.
44	Mitigation Measure j	Define how long exotic weed control	Initial control will be done during the 5-year
		will be implemented within the	restoration period (see Condition P) and then long-
		restoration/ennancement areas.	term control will be implemented in perpetuity by
45	Mitiantian Maanuna la	Define what contaminants and levels	The interst of this measure is to disclose the use of
45	Mitigation Measure K	Define what contaminants and levels	the intent of this measure is to disallow the use of the processing of
		are anowable for artificial watering.	ablering. These details would be provided in a site
			specific restoration plan, which would be approved
			by the City and Wildlife Agencies
16	Mitigation Measure i	Define how the basic plant	All work will be conducted under the oversight of a
40	wittigation wiedsure i	knowledge of maintenance workers	analified biologist who will ensure that all workers
		will be identified	are properly educated and implementing the
		will be identified.	restoration as prescribed in the approved plan
47	Mitigation Measure o	Define what alternate methods of	There are no other alternative methods at this point
.,	white gallon we as a construction of	determining success may be used	in time that the authors are aware of however
		upon approval by the City and	there could be new technology or methods in the
		USFWS.	future that may be appropriate at that point in time
			Mitigation Measure o allows for this.

Commenter	General Topic	Comment Summary	Response to Comment
48	Mitigation Measures p and q	Define how a determination is made regarding the function/value of recruited plants relative to the functions/value that should be being	These are case specific and will be reviewed at the point in time when they become an issue. Text has been revised to state "required contingency measure."
		provided by the deceased plants and their replacement, as well as what circumstances remedial actions would be "deemed necessary" and be required? What is a "significant contingency measure"?	
49	Long-term management	Page 5-19 needs to define how applicants would ensure long-term management of the on-site areas into perpetuity.	Please refer to Chapter 7.
50	Mitigation Banking	Page 519, 5.3.3 Mitigation Banking needs to define a "vernal pool Conservation Bank" and a "Wetland Mitigation Bank regulated by the USACE".	The reference to Wetland Mitigation Banks has been deleted as it is not relevant to the discussion.
51	Include a biologically superior alternative to the proposed project.	On Page 6-4, 6.1 Direct Impacts to Vernal Pools there should be a biologically superior alternative that limits take of remaining vernal pools to 2% or less.	Agree that a biologically superior alternative should be considered; however, the expanded conservation alternative limits impacts to 4%. Table 11-1 has been revised to include expanded conservation of all pools, not just pools containing SDFS.
52	Justification of impacts	On Page 6-5 there should be a discussion of why the 49 pools are not being avoided and what it would take to conserve them.	See Response to Comment 34. In addition, there is no "taking" of land.
53	Page 6-7 - Indirect impacts	Indirect Impacts to Vernal Pools, define the circumstances that a Bruch Management Zone would be allowed within the associated watershed and buffer as well as the process that will be utilized to make the determination.	The last sentence of this section has been deleted.

Commenter	General Topic	Comment Summary	Response to Comment
54	VPMMP Standards	Define where the VPMMP standards	These standards were developed based on expert
		on Page 7-5, Section 7.3 came from	opinion provided through the Technical White
		and how they relate to maintaining	Papers (TWPs) and in coordination with the
		functions and values of vernal pool	Wildlife Agencies. The standards were vetted with
		ecosystems and if they have been	the scientific advisors during the TWP review
		tested elsewhere in vernal pool	process. Additional details are provided in Table 7-
		conservation plan implementation.	1.
55	Monitoring protocol	Explain, in detail, what level of	Staffing is included in the Vernal Pool
		staffing is needed.	Management Plan, as well as in TWPs 3 and 4. The
			detailed cost analysis in Appendix F also accounts
			for staffing needs and cost.
56	Baseline hydrologic	Page 7-12, Section 7.5.2 Baseline	Baseline surveys have been completed for all
	surveys	Hydrologic Surveys needs to define	pipeline projects that have already been permitted.
		if baseline surveys for pipeline and	This section is related to management of the
		covered projects have been	preserve not development projects. A reference
		completed, and if not then describe	addressing which type of hydrologic survey has
		when and how they will be	been added to Section 7.5.2 with language that
		completed.	allows methods to evolve over time. Baseline
			surveys are funded as part of implementation of the
			VPMMP.
57	CNPS Plat cover	On Page 9-15, Section 7.5.4	Yes, it has been tested by Ellen Bauder and, per her
	methodology	Quantitative Monitoring Methods,	suggestion, the protocol has been modified.
		define the limitations of the CNPS	
		plant cover methodology when	
		applied to valuation of vernal pool	
		ecosystems and if it has been tested	
		elsewhere in vernal pool	
		conservation plan implementation.	
58	Compliance	On Page 7-25, Section 7.7 VPMMP	The Wildlife Agencies are responsible for ensuring
	monitoring - data	Data Collection, Analysis, And	compliance (Section 8.5.2) and data will be sent to
	sharing	Reporting, define who makes sure	SDMMP multi-taxa database, which the public is
		the City performs or contracts to	able to access. Reporting on the VPHCP program
		perform the required actions on an	will be sent to the Wildlife Agencies on an annual
		annual basis and what data and	basis, as described in Section 7.7.
		reports will be made available to the	

Commenter	General Topic	Comment Summary	Response to Comment
		public and how the public will be	
		notified of their availability.	
59	Opportunistic	On Page 727, Section 7.9	Answering these questions is beyond the scope of
	management related	Opportunistic Management-Related	the VPHCP.
	research	Research, explain the following; the	
		requirements to upgrade covered	
		shrimp species data collection	
		methods for use in the HGM Model,	
		why a sufficient method is not being	
		built in from the outset, frequency	
		that the City will incorporate vernal	
		pool data into the statewide CRAM	
		database and what the requirements	
		are for sufficient data collection and	
		annual updates to statewide CRAM.	
60	Responsibilities of	On Page 8-1, Section 8.1	Additional text has been added to Condition 2 in
	private properties	Implementation Overview define who is	Section 5.3.2 describing that the project proponent
		responsible for implementing the	is responsible for developing and funding the long-
		actions within the private/third party	term management and monitoring consistent with
		plans and describe funding as well as	the measures described in the VPHCP.
		incentives/penalties for failure to	
		perform.	
61	Grant opportunities	On Page 8-1 define the following; existing	Non-traditional Section 6 Grants are the most
		structures to request and manage	common acquisition grant that has been used to
		grants for opportunistic acquisitions,	acquire vernal pools. Vernal pool complexes that
		what the most promising sources of	have been acquired with grants or City mitigation
		acquisition grants for vernal pool	funds for conservation in the past are identified on
		parcels are, who will lead the	the management sheets in Appendix B of the
		acquisition effort/s and what parcels	VPMMP.
		exist with vernal pool complexes that	
		have been acquired with grants or	
		City mitigation funds for	
		conservation in the past.	

Commenter	General Topic	Comment Summary	Response to Comment
62	Agency Staffing	Funding for City and Wildlife	Comment noted. Agency staffing is subject to
		Agency staffing	availability of appropriated funds. City staffing is
			addressed above in Comment 12.
63	Funding for changed	On Page 8-2, define what amounts	Assured funding must be identified for responding
	and unforeseen	project applicants are required to fund	to changed circumstances (see Chapter 10).
		long-term management and	Appendix F in Chapter 10 identifies funding for
		monitoring of conserved lands and	changed circumstances.
		how those needs and funding	
64	Listomy of Linformation	Prese 0 1 Assure for	This finding has not hear mode for any of the
04	Circumstances	Un Page 91, Assurances for	approved southern California regional HCPs
	Circumstances	what funds are available to respond to	Eollowing the 2003 and 2007 fires USEWS
		a finding of "unforeseen	collaborated with USGS and SANDAG to establish
		circumstances" and what funds are	post-fire monitoring to determine the effects of
		being established up to respond to a	these large fires and their impacts on covered
		finding of "changed circumstances"	species; this effort is ongoing.
		and where are the funds maintained	
		and managed.	
65	Large Fires	The catastrophic 280,000 acre Cedar	Large fires are not unforeseen as they have
		Fire of 2003 had severe impacts upon	happened twice in the last decade and therefore
		MSCP "covered species" status and	should be planned for, as they are in the VPHCP
		was an unforeseen circumstance.	under Changed Circumstances. Training of
		Define how firefighters are trained to	firefighters is beyond the scope of the VPHCP.
		avoid vernai pool impacts.	impacts to vernal pools from emergency response
66	Climata ahanga	Page 0, 12 should discuss how	A gree. The text has been modified as suggested
00	language	climate change is preventable	Agree. The text has been mounted as suggested.
67	Cost analysis	On Page 10-1 Chapter 10 Preserve	The estimates of cost were prenared by the City and
07		Management And Funding	their consultants (see Appendix F Chapter 10)
		Mechanisms, describe what evidence	Details regarding the cost estimate, including
		exists to support the conclusions and	process for developing costs and assumptions, are
		values provided by Appendix F.	provided. Costs are listed by site.

Commenter	General Topic	Comment Summary	Response to Comment
68	Funding mechanisms	On Page 10-4, 10.3 Identifying Funding Mechanisms, define the status	The VPHCP does not rely on a future funding source for implementation. Existing funding sources are identified in Chapter 10. The status of
		mechanism and the status of "SANDAG's Quality of Life	regional funding for MSCP is beyond the scope of the VPHCP. Chapter 10 has been updated to include this discussion
69	Short term funding	On Page 10-9 Section 10.6 Short-Term Funding Mechanisms, define what the items of competing "normal operations" are and why vernal pool management would rise to a level of	Chapter 10 has been updated to clarify.
70	Alternatives to Take	On Page 11-1, Chapter 11 Alternates to Take, the alternatives are not complete and should avoid take in "covered", "pipeline" and other projects, as well as have maps for comparison.	Agree. The identified alternatives do minimize take (see Response to Comments 51 and 30) and the mapping tool has been updated.
71	Appendix D	Appendix D was not provided in the preliminary draft.	Appendix D has been included.
72	Appendix E	Appendix D was not provided in the preliminary draft.	Appendix E has been included.
73	Contingency Fund	Page F-4, define the incentive to establish, maintain and utilize contingency funds for as-needed vernal pool expenditures. Contingency Fund is for management of vernal pools, it cannot be used for other activities. It is also assumed that it would not be needed every year so it will build up over time. The incentive is that this will keep them in compliance and minimize costs in the future by addressing issues sooner.	Contingency Fund is for the management of vernal pools; it cannot be used for other activities. It is also assumed that the fund would not be needed every year so it will build up over time while remaining in compliance and minimizing costs in the future by addressing issues sooner. Contingency funding would be identified in an annual report, which the Wildlife Agencies would review.

Commenter	General Topic	Comment Summary	Response to Comment
74	VPMMP	For Table F-5, Column 18 Level 1	The intent of Table F5 is to indicate the level of
	Management &	should be the standard for all	management needed to bring the site up to Level 1.
	Monitoring Level	conserved sites.	Level 2 or 3 management and monitoring is needed
			for sites that are not a Level 1. Level 1 costs shown
			in Column 18 are the ongoing annual cost once a
			site is at Level 1.
Bauder			
75	Comparison table	Include a table that summarizes the	Agree. Table 11.1 has been expanded.
		reasons for and against inclusion of	
		sites that are not protected by the	
		alternatives (as indicated in Tables	
		2.4-6).	
76	Geomorphology of	Section 1.2 needs to discuss which of	Text has been added to end of Section 1.2.
	pools	the 24 pool types each pool complex	
		is assigned to.	
78	Status of J14	Describe the current status of J14.	J14 is currently owned by Caltrans and therefore is
			considered part of the baseline conditions and is
			currently being restored.
79	Status of Pogogyne	Pogogyne nudiuscula has been	True; however, additional populations have been
	nudiuscula	extirpated from this J14.	restored within the existing preserves across Otay
			Mesa (see 5-year review for complete details on
			distribution). Additional text has been added to
			Section 3.7.3 to describe this.
80	Seed distribution	Pages 3-9, 13, and 7-3 need to say	Agree. Text has been modified as suggested in
		that small and large mammals	Sections 3.5.1 and 3.7.1 and Figure 7-1.
		distribute seeds.	
81	Pogogyne seed	Page 3-9 needs to include	Agree. Section 3.5.1 has been updated to include
	storage	information on seed storage in the	the provided information and reference.
		soil as described by Dr. Tom Ebert.	
82	Bauder citation for	Section 3-5 needs to include the	Reference has been added.
	Pogogyne abramsii	biology and ecology of <i>Pogogyne</i>	
		abramsii that is contained in the first	
		chapter of a book published in 2011	
		by California State University, Chico.	

Commenter	General Topic	Comment Summary	Response to Comment
83	Bauder citation for precipitation and plant distributions	On Page 6-2 cite the paper (Bauder 2000) that deals with year-to-year changes in vernal pool plant distributions related to variation in precipitation.	Reference has been added.
84	Appendix A	The ACOE in Appendix A should be replaced with the table that is included in the Draft Guidebook (Bauder <i>et al.</i> 1999) as Appendix D.	Appendix A has been updated.
85	Level 1 monitoring	Pools chosen for Level 1 monitoring should represent the diversity of size, depth and network position present in the complex or assessment area.	Section 7.5.2 has been updated.
Ponder - Cubic			
86	<i>Myosurus minimum</i> ssp. <i>apus</i>	The unresolved taxonomic issues for little mouse tail (<i>Myosurus minimus</i> <i>ssp. apus</i>) are not included within the VPHCP.	This species is not being included in the VPHCP because it is not a unique species to southern California vernal pools and is widely distributed throughout California.
87	California Orcutt grass	Page 3-11 needs to include a discussion describing how California Orcutt grass is wind pollinated.	Determining how Orcutt's grass is pollinated is beyond the scope of the VPHCP and is not needed to meet issuance criteria. All of the species accounts were peer reviewed by vernal pool experts and rely on the best available scientific information.
88	Communities Facilities District	Should the City determine it practical to purse a CDF, the City should be aware of City of San Diego v. Shapiro (2014) 228 Cal.App.4 th 756.	Chapter 10 has been updated.
89	Cubic	The government is required to offer just compensation for taking of private property.	The VPHCP allows for reasonable use of private property and is consistent with the 25% allowable development in the MHPA. Based on a site visit with the property owner and biological surveys provided by Helix Environmental, hard lines have been agreed to by the property owner and the VPHCP has been updated accordingly.

Commenter	General Topic	Comment Summary	Response to Comment
Ponder - Pardee			
90	Access - streets	Street construction addressed in the VPHCP	Circulation elements are an allowable use in the VPHCP (see Section 4.1.4).
91	West Mesa Village Planning Area	Mitigation requirements need to address both exant pools as well as loss of critical habitat PCEs	Based on a site visit with the property owner and biological surveys provided by RECON, hard lines have been agreed to by the property owner and the VPHCP has been updated accordingly.
Story - Otay Tijuana			
92	Otay-Tijuana Venture, LLC	The City's interactive maps do not show any vernal pools on the property and therefor it is not clear why the draft VPHCP would include any portion of the property in the expanded MHPA.	Based on a site visit with the property owner and biological surveys provided by Helix Environmental, hard lines have been agreed to by property owner and the VPHCP has been updated accordingly. Land with suitable habitat for vernal pools (e.g., soils, slopes) has been included in the MHPA as part of the VPHCP.
Rhodes			
93	Rhodes Crossing	Impacts from Rhodes Crossing project	This project's impacts to listed species were addressed through a separate Biological Opinion and are not take-authorized in the VPHCP. The project is part of the baseline and is therefore not subject to analysis in the VPHCP.
Asmus			
94	Status of research	Discuss if the research concepts listed in Section 7.9 have been implemented.	The research being funded by SANDAG is currently underway; research identified as an "option" has not been implemented.
Ohrmund			
95	Corn Property	The Corn Property property was used by the ACOE in 2001 as a construction yard which created tractor tire ruts, later identified as Vernal Pools, which were subsequently graded by the ACOE. The area has also been used by the Border Patrol to patrol the border	Thank you for the information provided. The data sources are available on the City's website through the mapping tool (see Response to Comment 2). We agree that conditions change; however, site- specific surveys are not required to process the VPHCP (see Comment 3). Site-specific surveys are required when the property owner seeks land development permits (see existing City ordinances).

Commenter	General Topic	Comment Summary	Response to Comment
		with their vehicles and any new	
		vernal pools are most certainly a	
		result of their. As such, copies of all	
		sources used to determine the habitat	
		and species on the property should	
		be provided.	
96	One management	All vernal pools should be managed	This is not feasible given the numerous land
	entity	by one public agency entity.	owners.
97	Mitigation	Any mitigation for impacts to vernal	Comment noted. The conservation strategy and
	requirements	pools on a parcel should only require	mitigation ratios are based on existing ordinances.
		the project to fund management on	
		the same number of pool square	
		footage and not any excess pools that	
		just happen to remain on the parcel.	
98	Funding through	The management expenses for	Comment noted. Funding strategies for the City are
	property tax bill	mitigation and an option approved	outlined in Chapter 10.
		by the County of San Diego to add	
		the annual management expense to	
		the property tax bill of a designated	
		development parcel or parcels.	
99	Agricultural Lands	Previously developed farmland,	On Otay Mesa, some agricultural lands do provide
		tilled and graded lands that do not	buffer, watershed, and opportunities for restoration.
		have any vernal pools should not be	When these lands are located adjacent to extant
		included within the VPHCP preserve	vernal pools, they are critical to the conservation
		boundary.	strategy and therefore are included in the Preserve.
Whalen - Tierra			
100	MHPA versus	Distinguish the MHPA versus the	Refer to the Glossary for definitions. The document
	preserve	preserve.	has been updated throughout to clarify.
101	Road maintenance	Clarify how the City would know if	The existing City ordinance requires surveys prior
	and avoidance of	road ruts contain SDFS or RFS.	to maintenance activities.
	fairy shrimp		
102	Deep rooted species.	In Table 4-3, the "installation of	The description does state that no deep root species
		vegetation" should be clarified to	are allowed.
		include that no deep rooted species	
		would be planted.	
Commenter	General Topic	Comment Summary	Response to Comment
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103	Dust control	Page 5-5, 7(a)-(e) needs to include	Text has been added to Section 5.2.3 to address
		how the measures accommodate	spraying and compaction.
		water spraying for dust control and	
		soil compaction purposes.	
104	Addition of Conserve	In Section 5.2.2 the subsection title	Section 5.2.2 heading has been changed per
	Lands	"Addition of Conserved Lands to the	suggestion.
		MHPA" should be changed to	
		"Addition of Lands not Currently in	
107		MHPA to MHPA".	
105	Verify level of	Page 5-7 states approximately 94%	The 86% conservation referenced refers to the
	conservation 94%	of the vernal pools will be	baseline conditions. The 94% refers to the
	versus 86%	conserved. Clarify how its differs	percentage of pools to be conserved through
		from the previous quoted 86%	implementation of the VPHCP. Note these numbers
		referenced in the first paragraph of	have been updated based on the revised
106		Section 5.2.2	conservation analysis.
106	Figure /-4	The meaning of "prevent an	Please refer to Section 7.3 for a description of the
		average needs to be explained and	Standards. The graphic includes a downward arrow,
		the graphic needs to be updated	meaning "prevent an average decline." Figure 7-4
107			has been updated to be more clear.
107	Benchmark for	Clarify if 55% or 65% percent is the	Text in Section 7.3 has been updated.
	rainfall	benchmark for rainfall as they are	
100	Comment	both used throughout.	The first line levels are defined as front and the O'ter
108	Cap on management	Explain now the VPMIMP would be	The funding levels are defined upfront and the City
100	Pour domy line	Tunded.	receives assurance infough the nothed a used for
109	Boundary line	On Page 8-5, Section 8.5.2, describe	Section 8.3.2 does describe the methods used for
	adjustments	line adjustments were not used	MSCP.
110	City accortance of	On Dage 8.8 hullet #5 discuss if the	The City is evaluating entions for eccenting years
110	vernal pool open	City will accept versal pool open	need open space for long term management under
	space	space or not	the VDHCD
111	Wildlife agency	On Page 8 8 Section 8 5 2 describe	As stated in Section 8.5.2 projects that include an
	review	which small subset of covered	FSI /Wetland Deviation/biologically superior
		species/project would require	option require agency review and approval
		additional agency review	option require agency review and approval.
106 107 108 109 110 111	Figure 7-4 Benchmark for rainfall Cap on management efforts Boundary line adjustments City acceptance of vernal pool open space Wildlife agency review	from the previous quoted 86% referenced in the first paragraph of Section 5.2.2 The meaning of "prevent an average" needs to be explained and the graphic needs to be updated accordingly. Clarify if 55% or 65% percent is the benchmark for rainfall as they are both used throughout. Explain how the VPMMP would be funded. On Page 8-5, Section 8.3.2, describe why the standard MSCP boundary line adjustments were not used. On Page 8-8, bullet #5, discuss if the City will accept vernal pool open space or not. On Page 8-8, Section 8.5.2, describe which small subset of covered species/project would require additional agency review.	 implementation of the VPHCP. Note these numbers have been updated based on the revised conservation analysis. Please refer to Section 7.3 for a description of the Standards. The graphic includes a downward arrow, meaning "prevent an average decline." Figure 7-4 has been updated to be more clear. Text in Section 7.3 has been updated. The funding levels are defined upfront and the City receives assurance through the No Surprises rule. Section 8.3.2 does describe the methods used for MSCP. The City is exploring options for accepting vernal pool open space for long-term management under the VPHCP. As stated in Section 8.5.2, projects that include an ESL/Wetland Deviation/biologically superior option require agency review and approval.

Commenter	General Topic	Comment Summary	Response to Comment
112	County staff	On Page 9-8 define why biologists must be County staff.	Text has been changed to reference City staff.
113	Typo in Appendix A title	In Appendix A, "indication" should be replaced with "indicator".	Indication changed to Indicator.
114	Consultation with land managers	In Appendix F, Page F-2 to F3 the discussion of not contacting the entities funding and managing the pools is an omission in the planning of this document.	Multiple entities were contacted, as described in this section. In addition, the costs reflected in Tables F2 and F3 are programmatic estimates and will be further refined when projects apply for permitting.
115	Tierra Alta	Description of this covered project	The figure has been updated as has narrative description of the project in Section 4.1.
116	Tierra Alta	Appendix D-1 baseline mm level for Tierra Alta	A footnote has been added to Appendix D-1.
117	Tierra Alta	Funding and Management Level	Agree that this applicant will do their own plan and PAR – cost estimate is for planning purposes. A footnote has been added.
118	Account for inflation	Table F-8 does not reflect inflation.	The cost analysis is a programmatic estimate based on 2014 dollars. Actual implementation costs will be determined on an annual basis based on the results of the prior year's VPMMP program to identify management and monitoring needs at each site that is managed under the VPHCP. Therefore, adjusting for inflation at the programmatic level is not necessary. As stated in Section 10.4, hen determining final funding amounts on an annual basis, the City should assume an average annual inflation rate of 3% over time. It is assumed that, over time, revenues from the funding sources would also increase by at least the same rate on average.
whalen - St. J	Church of Ct. Is us u	Section 412 should be reader 1 71	Nometing dependence in Continue 4.1.0 hours
119	Cnurch at St. Jerome	proposed project originally included a church.	updated.

Commenter	General Topic	Comment Summary	Response to Comment						
120	Costs for St. Jerome	Tables F-5 and F-8 need to be	Footnote 1 has been clarified.						
		clarified as the costs for St. Jerome's							
		are not yet determined.							
Boyer									
121	Miramar ownership	Large parcel of land belonging to	Online maps have been updated.						
		MCAS Miramar on the south side of							
		SR 52, and west of Magnatron Blvd.							
		is not shown in the plan as a part of							
		the federal property of MCAS							
		Miramar (vernal pool group U-15).							
122	City actions on	Explain how the plan could support	Federal lands are not included in the VPHCP, with						
	Federal land	City actions on federal lands,	the exception of lands under jurisdiction of						
		specifically MCAS Miramar.	USFWS.						
Schaeffer									
123	Brown Field - Kelco	Clarify if the vernal pools containing	Yes, these were addressed as part of the Biological						
	Ponds	RFS that will be covered under the	Opinion that was issued for the project and that is						
		MHPA as a result of the VPHCP	part of the baseline condition.						
		include the ones located at the Kelco							
		Ponds at Brownfield.							
124	Salvaged materials	Clarify requirements for salvage	This would be determined on a case-by-case basis						
		materials from vernal pools for	and would be reviewed during the review and						
		restoration.	approval of the restoration plan.						
125	Standardized	Consistent restoration and	Restoration and monitoring protocols are required						
	restoration	monitoring protocols should be	as part of the VPMMP, as detailed in Chapter 7.						
	monitoring plan	developed.							
126	Extraordinary	Section 5.3.1 needs to better define	This language is from Wetlands Deviation						
	mitigation	species with limited distribution	Ordinance.						
127	Measure 1a	A qualified biologist should have 5	Three years is sufficient, although more is always						
		years of experience rather than 3.	better.						
128	Measure 1c	Measure 1c should be revised so that	Language has been updated for Measure 1c.						
		enhancement will reach success							
		criteria levels that are the same or							
		better.							
129	Measure 1e	Measure 1e should be revised so that	Measure has been updated to require 25-foot						
		contours are 2 inches.	contours.						

Commenter	General Topic	Comment Summary	Response to Comment
130	Measure 1f	The water balance model is not	The hydraulic model measure has been updated to
		sufficient.	clarify.
131	Measure 1j	The species should be collected	This will be required, if feasible, and is a detail that
		within watershed.	will be reviewed as part of project-specific
			restoration plans.
132	Measure 1k	Clarify that water is to sustain plants,	Measure has been updated.
		not to hydrate shrimp.	
133	Measure 1n	There should be monitoring	Monitoring standards will be consistent with those
		standards mentioned throughout the	defined in Section 7.5.1.
		document.	
134	Measure 10	Dry season sampling should be	Measure has been updated per the comment.
		reduced.	
135	Edge effects	In Section 6.3 edge effects should be	Edge effects will be considered, where feasible, as
		considered.	discussed in Section 6.3.
136	Watershed integrity	Section 7.3 should include a standard	A standard regarding watershed integrity has been
		regarding watershed integrity.	added to Section 7.3.
137	Dry season sampling	In Table 7-1, dry season sampling	Table 7-1 has been updated.
		should be reduced to 5 times per	
		year.	
138	Hydraulic monitoring	In Section 7.5.4 include hydraulic	As described in Section 7.5.1, monitoring of vernal
		monitoring at least every three years	pools following rain events will occur at least three
	-	or during high rainfall.	times per year.
139	Data management	Section 7.7 should be revised so that	Section 7.7 has been updated.
		data is only be submitted to	
		SDMMP, not SANDAG.	

APPENDIX C

AIR QUALITY AND GREENHOUSE GAS EMISSIONS CALCULATIONS

San Diego VPHCP

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.90	Acre	2.90	126,324.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2015
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	720.49	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Additional acreage of vernal pool complexes in the Plan Area.

Construction Phase - Estimated emissions for one year of construction.

Off-road Equipment -

Trips and VMT -

Vehicle Trips - No operational emissions.

Water And Wastewater - No operational emissions.

Solid Waste - No operational emissions.

Construction Off-road Equipment Mitigation -

Grading - Estimated project acreage.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	261.00
tblGrading	AcresOfGrading	391.50	2.90
tblProjectCharacteristics	OperationalYear	2014	2015
tblSolidWaste	SolidWasteGenerationRate	0.25	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	3.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	OutdoorWaterUseRate	3,455,295.91	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		lb/day											lb/c	lay		
2015	0.3268	3.0167	2.2707	3.0400e- 003	0.0364	0.2353	0.2717	7.8100e- 003	0.2164	0.2242	0.0000	313.5520	313.5520	0.0870	0.0000	315.3782
Total	0.3268	3.0167	2.2707	3.0400e- 003	0.0364	0.2353	0.2717	7.8100e- 003	0.2164	0.2242	0.0000	313.5520	313.5520	0.0870	0.0000	315.3782

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	lb/day											lb/day					
2015	0.3268	3.0167	2.2707	3.0400e- 003	0.0300	0.2353	0.2652	7.1100e- 003	0.2164	0.2235	0.0000	313.5519	313.5519	0.0870	0.0000	315.3782	
Total	0.3268	3.0167	2.2707	3.0400e- 003	0.0300	0.2353	0.2652	7.1100e- 003	0.2164	0.2235	0.0000	313.5519	313.5519	0.0870	0.0000	315.3782	

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	17.79	0.00	2.39	8.96	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c			lb/c	lay							
Area	3.5054	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.5054	0.0000	3.1000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000	0.0000	6.7000e- 004

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e			lb/c	day							
Area	3.5054	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.5054	0.0000	3.1000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000	0.0000	6.7000e- 004

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2015	12/31/2015	5	261	

Acres of Grading (Site Preparation Phase): 2.9

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Site Preparation	3	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust					0.0118	0.0000	0.0118	1.2700e- 003	0.0000	1.2700e- 003			0.0000			0.0000
Off-Road	0.3153	3.0031	2.1224	2.7300e- 003		0.2351	0.2351		0.2163	0.2163		286.5517	286.5517	0.0856		288.3482
Total	0.3153	3.0031	2.1224	2.7300e- 003	0.0118	0.2351	0.2468	1.2700e- 003	0.2163	0.2175		286.5517	286.5517	0.0856		288.3482

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category					lb/o	day							lb/e	lb/day 0.0000 0.0000				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000		
Worker	0.0115	0.0136	0.1483	3.1000e- 004	0.0246	1.9000e- 004	0.0248	6.5400e- 003	1.8000e- 004	6.7100e- 003		27.0003	27.0003	1.4200e- 003		27.0300		
Total	0.0115	0.0136	0.1483	3.1000e- 004	0.0246	1.9000e- 004	0.0248	6.5400e- 003	1.8000e- 004	6.7100e- 003		27.0003	27.0003	1.4200e- 003		27.0300		

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3.2 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					5.3000e- 003	0.0000	5.3000e- 003	5.7000e- 004	0.0000	5.7000e- 004			0.0000			0.0000
Off-Road	0.3153	3.0031	2.1224	2.7300e- 003		0.2351	0.2351		0.2163	0.2163	0.0000	286.5517	286.5517	0.0856		288.3482
Total	0.3153	3.0031	2.1224	2.7300e- 003	5.3000e- 003	0.2351	0.2404	5.7000e- 004	0.2163	0.2168	0.0000	286.5517	286.5517	0.0856		288.3482

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	, , ,	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0115	0.0136	0.1483	3.1000e- 004	0.0246	1.9000e- 004	0.0248	6.5400e- 003	1.8000e- 004	6.7100e- 003		27.0003	27.0003	1.4200e- 003		27.0300
Total	0.0115	0.0136	0.1483	3.1000e- 004	0.0246	1.9000e- 004	0.0248	6.5400e- 003	1.8000e- 004	6.7100e- 003		27.0003	27.0003	1.4200e- 003		27.0300

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Mitigated	3.5054	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004
Unmitigated	3.5054	0.0000	3.1000e- 004	0.0000	 - - -	0.0000	0.0000	 - - - -	0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.8021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e- 005	0.0000	3.1000e- 004	0.0000		0.0000	0.0000	1 1 1 1 1	0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004
Total	3.5054	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.8021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7033					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e- 005	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004
Total	3.5054	0.0000	3.1000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		6.3000e- 004	6.3000e- 004	0.0000		6.7000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

San Diego VPHCP

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.90	Acre	2.90	126,324.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2015
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	720.49	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Additional acreage of vernal pool complexes in the Plan Area.

Construction Phase - Estimated emissions for one year of construction.

Off-road Equipment -

Trips and VMT -

Vehicle Trips - No operational emissions.

Water And Wastewater - No operational emissions.

Solid Waste - No operational emissions.

Construction Off-road Equipment Mitigation -

Grading - Estimated project acreage.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	3.00	261.00
tblGrading	AcresOfGrading	391.50	2.90
tblProjectCharacteristics	OperationalYear	2014	2015
tblSolidWaste	SolidWasteGenerationRate	0.25	0.00
tblTripsAndVMT	WorkerTripNumber	8.00	3.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	OutdoorWaterUseRate	3,455,295.91	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2015	0.0426	0.3939	0.2957	3.9000e- 004	4.6800e- 003	0.0307	0.0354	1.0000e- 003	0.0282	0.0292	0.0000	36.9560	36.9560	0.0103	0.0000	37.1722
Total	0.0426	0.3939	0.2957	3.9000e- 004	4.6800e- 003	0.0307	0.0354	1.0000e- 003	0.0282	0.0292	0.0000	36.9560	36.9560	0.0103	0.0000	37.1722

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2015	0.0426	0.3939	0.2957	3.9000e- 004	3.8300e- 003	0.0307	0.0345	9.1000e- 004	0.0282	0.0292	0.0000	36.9560	36.9560	0.0103	0.0000	37.1722
Total	0.0426	0.3939	0.2957	3.9000e- 004	3.8300e- 003	0.0307	0.0345	9.1000e- 004	0.0282	0.0292	0.0000	36.9560	36.9560	0.0103	0.0000	37.1722

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	18.16	0.00	2.40	9.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.6397	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	19					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.6397	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2015	12/31/2015	5	261	

Acres of Grading (Site Preparation Phase): 2.9

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Site Preparation	3	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust				, , ,	1.5400e- 003	0.0000	1.5400e- 003	1.7000e- 004	0.0000	1.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0412	0.3919	0.2770	3.6000e- 004		0.0307	0.0307		0.0282	0.0282	0.0000	33.9242	33.9242	0.0101	0.0000	34.1369
Total	0.0412	0.3919	0.2770	3.6000e- 004	1.5400e- 003	0.0307	0.0322	1.7000e- 004	0.0282	0.0284	0.0000	33.9242	33.9242	0.0101	0.0000	34.1369

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3.2 Site Preparation - 2015

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4800e- 003	1.9600e- 003	0.0187	4.0000e- 005	3.1400e- 003	3.0000e- 005	3.1600e- 003	8.3000e- 004	2.0000e- 005	8.6000e- 004	0.0000	3.0319	3.0319	1.7000e- 004	0.0000	3.0354
Total	1.4800e- 003	1.9600e- 003	0.0187	4.0000e- 005	3.1400e- 003	3.0000e- 005	3.1600e- 003	8.3000e- 004	2.0000e- 005	8.6000e- 004	0.0000	3.0319	3.0319	1.7000e- 004	0.0000	3.0354

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					6.9000e- 004	0.0000	6.9000e- 004	7.0000e- 005	0.0000	7.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0412	0.3919	0.2770	3.6000e- 004		0.0307	0.0307		0.0282	0.0282	0.0000	33.9241	33.9241	0.0101	0.0000	34.1368
Total	0.0412	0.3919	0.2770	3.6000e- 004	6.9000e- 004	0.0307	0.0314	7.0000e- 005	0.0282	0.0283	0.0000	33.9241	33.9241	0.0101	0.0000	34.1368

3.2 Site Preparation - 2015

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4800e- 003	1.9600e- 003	0.0187	4.0000e- 005	3.1400e- 003	3.0000e- 005	3.1600e- 003	8.3000e- 004	2.0000e- 005	8.6000e- 004	0.0000	3.0319	3.0319	1.7000e- 004	0.0000	3.0354
Total	1.4800e- 003	1.9600e- 003	0.0187	4.0000e- 005	3.1400e- 003	3.0000e- 005	3.1600e- 003	8.3000e- 004	2.0000e- 005	8.6000e- 004	0.0000	3.0319	3.0319	1.7000e- 004	0.0000	3.0354

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.509603	0.073619	0.192430	0.134105	0.036943	0.005309	0.012459	0.020989	0.001832	0.002087	0.006541	0.000614	0.003471

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	Category tons/yr												МТ	/yr		
Electricity Mitigated		1 1 1	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 , , ,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	- - - - -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	- - - -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity <u>Mitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005
Unmitigated	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	SubCategory tons/yr												MT	ī/yr		
Architectural Coating	0.1464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005
Total	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.1464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005
Total	0.6397	0.0000	3.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e- 005	5.0000e- 005	0.0000	0.0000	5.0000e- 005

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	7/yr	
City Park	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	7/yr	
City Park	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
Unmitigated	0.0000	0.0000	0.0000	0.0000		
Mitigated	0.0000	0.0000	0.0000	0.0000		

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
City Park	0	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
City Park	0	0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000	

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation