BIOLOGICAL RESOURCES REPORT
UNIVERSITY COMMUNITY PLAN UPDATE
CITY OF SAN DIEGO, SAN DIEGO COUNTY, CALIFORNIA

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TABLE OF ACRONYMS

ADD	Assistant Deputy Director
Alden	Alden Environmental, Inc.
BCME	Biological Construction Mitigation/Monitoring Exhibit
BLC	Boundary Line Correction
CAP	Climate Action Plan
CCA	California Coastal Act
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
City	City of San Diego
CNDDB	California Natural Diversity Database
CNPS	California Native Plan Society
County	County of San Diego
CRPR	California Rare Plant Ranks
CSVR	Consultant Site Visit Record
CVREP	Carmel Valley Restoration and Enhancement Project
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
DSD	Development Services Department
ED	Environmental Designee
ESHA	Environmentally Sensitive Habitat Area
ESL	Environmentally Sensitive Lands
FESA	Federal Endangered Species Act
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
HU	Hydrologic Unit
I	Interstate
LCP	Local Coastal Program
LDM	Land Development Manual
LOSSAN	Los Angeles-San Diego-San Luis Obispo
LSAA	Lake and Streambed Alteration Agreement
MBTA	Migratory Bird Treaty Act
MCAS	U.S. Marine Corps Air Station
MHPA	Multi-Habitat Planning Area
MMC	Mitigation Monitoring Coordination

MMRP	Mitigation Monitoring and Reporting Plan
MSCP	Multiple Species Conservation Program
NCCP	Natural Community Conservation Program
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NRMP	Natural Resources Management Plan
NTP	Notice to Proceed
OR-1-2	Open Space Residential Zone
PAR	Property Analysis Record
RECON	RECON Environmental, Inc.
Rincon	Rincon Consultants, Inc.
RWQCB	Regional Water Quality Control Board
SanGIS	San Diego Geographic Information Source
SDMC	San Diego Municipal Code
SDNHM	San Diego Natural History Museum
SMARA	Sate Surface Mining and Reclamation Act
SR	State Route
TNW	Traditional Navigable Waters
UCPA	University Community Plan Area
UCPU	University Community Plan Update
UCSD	University of California, San Diego
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VPHCP	Vernal Pool Habitat Conservation Plan
WoS	Waters of the State
WoUS	Waters of the U.S.

SECTION 1.0 – INTRODUCTION

The University Community Plan Update (UCPU) is a comprehensive update to the existing University Community Plan (City of San Diego [City] 2018a). The UCPU establishes an updated vision and objectives that align with the City General Plan policies, including those proposed and amended by Blueprint SD and City of Villages Strategy as well as recently adopted policy direction from the Climate Action Plan (CAP), Parks Master Plan, and Climate Resilient SD. The UCPU also takes into consideration the San Diego Association of Government Regional Plan. The UCPU updates the land use plan for the area to help achieve the desired vision and objectives for the University community. The UCPU identifies several guiding principles, plan goals and policies, and procedures for plan implementation. UCPU guiding principles include:

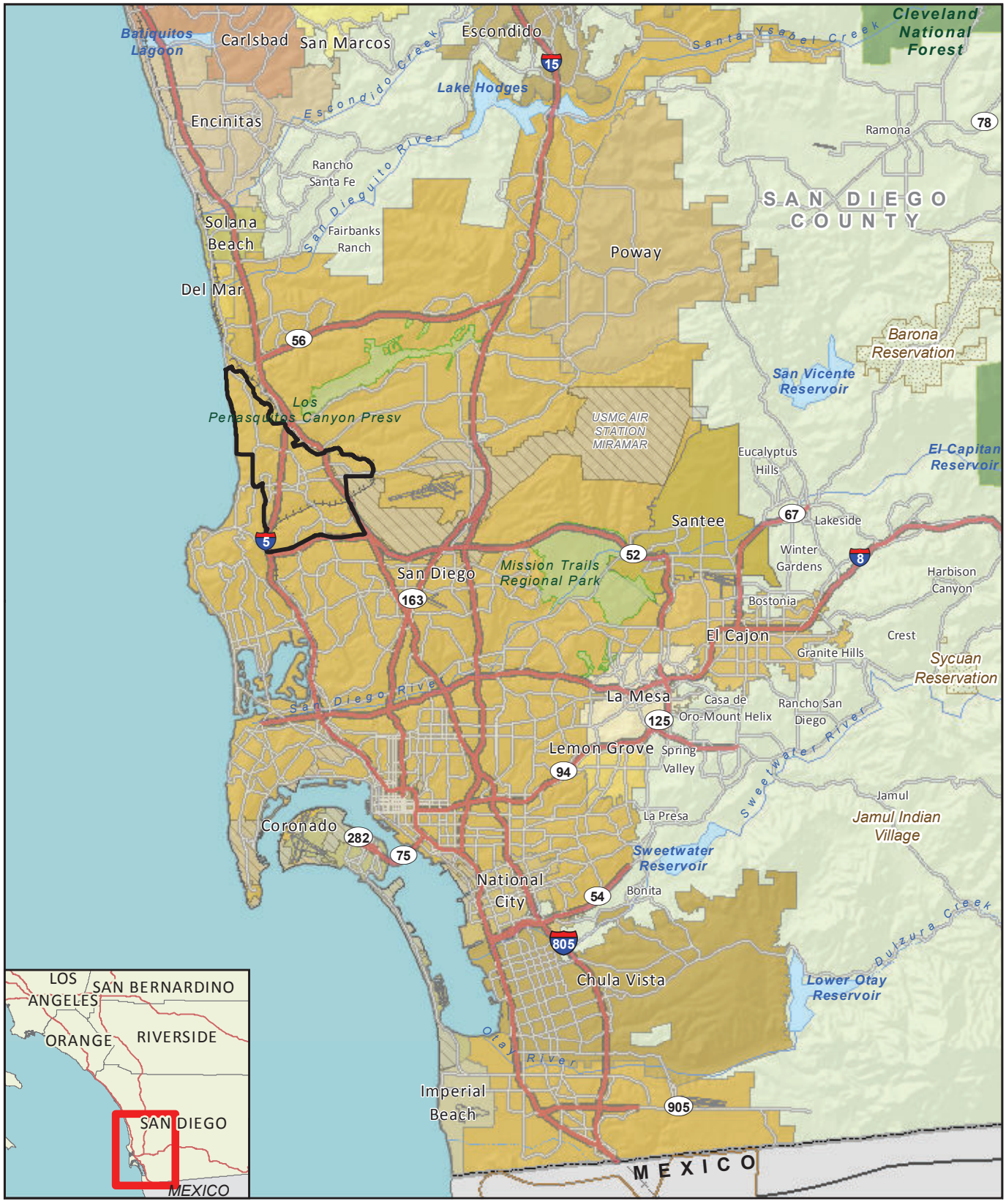
- Renowned Institutions – The development of institutions that provide world leading research, higher education, and healthcare, which contribute to the built environment and support the economic growth and attractiveness of the University community.
- A Vibrant Mixed-Use Urban Core – A land use pattern that focuses growth into a vibrant urban core, which contains regional transit connections and a distinct range of uses, character, streetscapes, places, urban form, and building design as a leader in sustainability.
- A Diversified Housing Inventory – A housing inventory that contains a broad range of housing types and costs to accommodate a variety of age groups, household sizes and compositions, tenure patterns, and income levels.
- A Center of Economic Activity – An employment center with scientific research, technology, and office uses that provide jobs in proximity to residential, retail, and visitor serving uses connected by transit that supports the economic viability and attractiveness of the University community.
- A Complete Mobility System – A mobility system that provides multi-modal options and a complete network for travel not only within the University community but also connectivity to other locations within the region, enhancing economic growth, livability, and sustainability.
- A Sustainable Community Integrated with its Natural Environment, Open Space, and Recreational Areas – Preservation of open space, watershed protection and improvement, restoration of habitat, enhancement of species diversity, improvement of population-based parks and recreation areas, and provision of connections for wildlife and people contribute to community character, enhance quality of life, and preserve unique natural resources.

The UCPU includes amendments to the land use plan to address the demand for homes and jobs and to reflect the recent extension of the Blue Line Trolley service to the University community and other existing and planned transit services.

The University Community Plan Area (UCPA) includes approximately 8,676 acres. It is in the north-central portion of the City, about 13 miles north of downtown San Diego (Figure 1). The UCPA is bounded to the north by Los Peñasquitos Lagoon and the bottom of the east-facing slopes of Sorrento Valley; to the east by the Los Angeles-San Diego-San Luis Obispo (LOSSAN) Coastal Rail Corridor, U.S. Marine Corps Air Station (MCAS) Miramar, and Interstate (I-) 805; to the south by State Route (SR-) 52; and to the west by I-5, Gilman Drive, North Torrey Pines Road, La Jolla Farms, and the Pacific Ocean (Figures 2 and 3). The UCPA is in U.S. Geological Survey (USGS) Del Mar (USGS 1994) and La Jolla (USGS 1996) 7.5-minute quadrangles (see Figure 2).

The UCPU will address all aspects of community development and provide recommendations to guide this development over the next 20 to 30 years. The UCPU provides for more opportunities for homes, jobs, and mixed-use development connected to the University of California, San Diego (UCSD); retail and employment centers; hospitals; health care facilities; residential areas; public spaces; and bus rapid and light rail stations while also focusing on other aspects, such as protecting natural resources, open space, and biodiversity. The City has existing regulations in the Land Development Code that require new development to minimize encroaching on open space, steep slopes, and canyons. The UCPU also proposes conservation policies that support preservation of sensitive biological resources. Policies of the Open Space and Conservation chapter include the following goals:

- Preservation and enhancement of biologically diverse ecosystems and improved viability of endangered, threatened, and sensitive species and their habitats.
- Preservation and enhancement of wetland resources, including estuarine and coastal waters, creeks, bays, riparian wetlands, and vernal pools, to provide ecosystem functions and services, wildlife habitat, water quality improvement, carbon sequestration, and resilience to climate change.
- Protection, enhancement, and long-term management of an open space system that preserves canyonlands, habitat, and sensitive biological resources.
- Development patterns that preserve natural landforms, public and private open spaces, wildlife linkages, sensitive species and habitats, watersheds, and natural drainage systems; that contribute to clean air and clean water; and that help the City meet its climate action goals.
- Sustainable design that reduces greenhouse gas emissions and dependency on non-renewable energy sources, makes efficient use of resources, and incorporates sustainable landscaping, water use, and stormwater management.
- Opportunities for compatible public access to open space, including portions of the Multi-Habitat Planning Area (MHPA), through low impact passive recreation, scenic overlooks, environmental education, and research.



University Community Plan Boundary

FIGURE 1
Regional Location

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Map Source: USGS 7.5 minute topographic map series, Del Mar, 1994 and La Jolla, 1996 quadrangles, Pueblo Lands of San Diego and Mission San Diego Land Grants, T15S R03W

0 Feet 3,000

University Community Plan Boundary

FIGURE 2
USGS Topography

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Image Source: NearMap (flown September 2023)

University Community Plan Boundary

FIGURE 3
Project Location on Aerial Photograph

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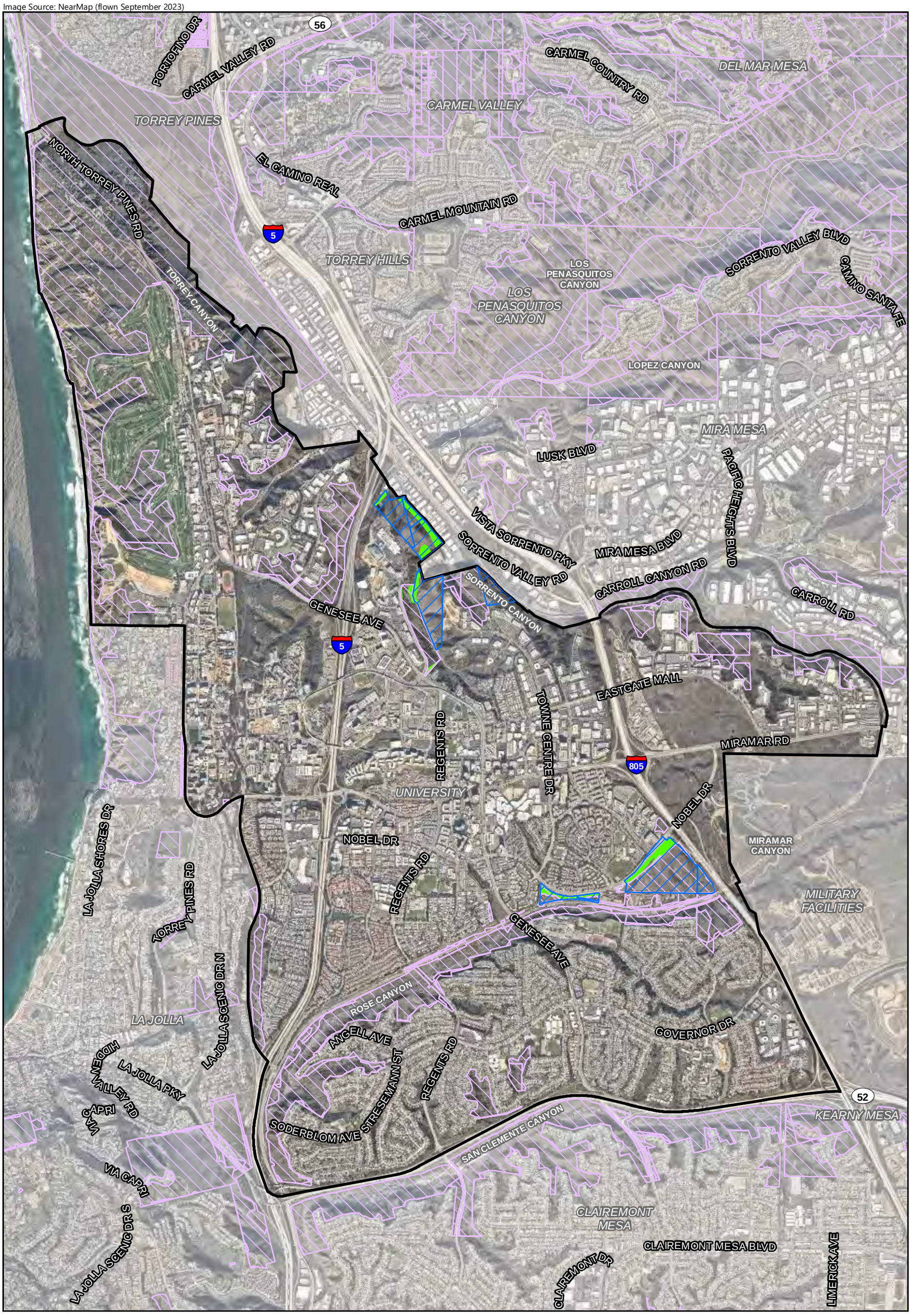
The UCPU includes boundary line corrections (BLCs) for the MHPA – the City's planned habitat preserve within the Multiple Species Conservation Program (MSCP) Subarea – that would result in net increase of 25.97 acres of City-owned land being added to the MHPA (Figure 4). Additionally, the full parcels that contain the City-owned land being added through the BLC and 2.70 acres of City-owned right-of-way (to be vacated) traversing Rose Canyon in the vicinity of Regents Road would be changed from MHPA 75 percent conserved to 100 percent conserved. The UCPU also includes dedication of several City-owned properties as open space pursuant to Charter Section 55 totaling 160.9 acres (Figures 4 and 5). Of the 160.9 acres of land to be dedicated pursuant to Charter Section 55, approximately 21 acres are also part of the MHPA BLC additions.

To inform the UCPU, this biological resources report provides a summary of the existing biological resources within the UCPA and assesses potential impacts to these biological resources that may occur through implementation of the UCPU at a program level of review. This analysis does not include site-specific surveys but outlines the framework that future site-specific development would be required to follow to demonstrate consistency with City plans, policies, and regulations relating to biological resources.

Image Source: NearMap (flown September 2023)



University Community Plan Boundary

MHPA Additions

City Open Space to be Dedicated Pursuant to Charter 55

Existing Conserved Lands

FIGURE 4

Post-Project MHPA and Conserved Lands

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Image Source: NearMap (flown September 2023)

University Community Plan Boundary
Parks
Designated Open Space
Dedicated Open Space
Dedicated Open Space
(proposed subject to City Council action)
Vernal Pools

0 Feet 3,000

FIGURE 5
Open Space to be Dedicated Pursuant to Charter 55

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SECTION 2.0 – REGULATORY FRAMEWORK

The following federal, state, and/or local regulations or policies apply to biological resources within the UCPA.

2.1 APPLICABLE FEDERAL REGULATIONS

Applicable federal regulations that apply to the UCPA are discussed in this section.

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) is administered by the U.S. Fish and Wildlife Service (USFWS). FESA provides the legal framework for the conservation and protection of species and their habitats that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 'take' under FESA. Section 9(a) of FESA defines 'take' as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Federal regulations and case law have also expanded the terms "harm" and "harass" to include actions that adversely affect a federally listed species behavior patterns.

Sections 7 and 10(a) of FESA regulate actions that could jeopardize endangered or threatened species. Section 7 requires all federal agencies to work with USFWS to conserve endangered and threatened species and to ensure that all actions that they fund or authorize do not jeopardize the existence of any listed species. Section 10(a) regulates a variety of activities that affect endangered or threatened species and prohibits activities that affect these species and their habitat unless authorized by a permit from USFWS.

The City was issued an incidental take permit pursuant to Section 10(a) through the approval of the MSCP Subarea Plan (City 1997) as well as through approval of the Vernal Pool Habitat Conservation Plan (VPHCP; City 2019).

2.1.2 Rivers and Harbors Act and Clean Water Act

The Rivers and Harbors Act of 1899 and the Clean Water Act (CWA) regulate project activities within non-marine traditional navigable waters (TNWs) and/or Waters of the U.S. (WoUS). The discharge of any pollutant from a point source into TNWs is illegal unless a permit under the CWA's provisions is acquired. Permitting for projects that include both permanent and temporary dredging and filling in Wetland and Non-Wetland WoUS is overseen by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA. Projects can be permitted on an individual basis or be covered by one of several approved nationwide permits or regional general permits. In addition, the Regional Water Quality Control Board (RWQCB) issues Water Quality Certifications under Section 401 of the CWA for project activities that fill or dredge within Wetland and Non-Wetland WoUS and Waters of the State (WoS), including isolated waters such as vernal pools and other waters showing lack of connectivity to a TNW.

2.1.3 Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (CZMA) is administered by the National Oceanic and Atmospheric Administration's (NOAA's) Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and – where possible – enhance or restore the coastal zone in the U.S. The federal consistency provision, Section 307 of the CZMA, encourages states to join the Coastal Zone Management Program (CZMP), which takes a comprehensive approach to coastal resource management by balancing the competing and/or conflicting demands of coastal resource use, economic development, and conservation and allows states to issue the applicable permits. California has a federally approved CZMP, and the CZMA is administered by the California Coastal Commission (CCC). The CZMP and permit requirements are discussed further in Section 2.2.4: California Coastal Act and Environmentally Sensitive Habitat Areas (ESHAs), and Section 2.2.5: Coastal Zone Management Program, below.

2.1.4 Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004. The MBTA prohibits the kill or transport of native migratory birds or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. No permit is issued under the MBTA, and the MBTA does not mandate specific protection. However, typical acceptable requirements include nesting bird surveys during the avian breeding season and avoidance measures if nesting birds are discovered within or adjacent to a project. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

2.2 APPLICABLE STATE REGULATIONS

Applicable state regulations that apply to the UCPA are discussed in this section.

2.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) is a statute that requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed activities. The purpose of the CEQA process is to identify the ways that environmental damage can be avoided or significantly reduced; prevent significant, avoidable damage by requiring project changes either through the adoption of alternatives or imposition of mitigation measures; and disclose to the public the reasons why a governmental agency approved a project if that project has significant environmental impacts that cannot be mitigated to a less than significant level.

2.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) provides the legal framework for the conservation and protection of species and their habitats that are identified as being endangered or threatened with extinction within California. A plant or animal species may

be listed as rare, threatened, or endangered under CESA after a formal listing process by the California Fish and Game Commission. Once listed, a species cannot be "taken" (i.e., killed, possessed, purchased, or sold) without proper authorization.

The California Department of Fish and Wildlife (CDFW) administers permitting programs to authorize incidental "take" of listed species. For projects that may impact species listed under both FESA and CESA and that have obtained a Federal Incidental Take Permit, CDFW can certify that the incidental take is consistent with CESA by issuing concurrence under the California Fish and Game Code (CFGC) Section 2080.1. For projects that impact species listed only under CESA, CDFW can issue incidental take permits under CFGC Section 2081 if incidental take is consistent with the requirements outlined under CESA.

The City was issued an incidental take permit pursuant to Section 2081 through the approval of the MSCP Subarea Plan.

2.2.3 California Fish and Game Code

CFGC Sections 1600 through 1603 regulate project activities within rivers, streams, lakes, and riparian habitat. CFGC Section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake;
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- Deposit debris, waste, or other materials that could pass into any river, stream, or lake.

CDFW can issue a Lake and Streambed Alteration Agreement (LSAA) for projects that substantially adversely affect CDFW jurisdictional resources. If the activity will not substantially adversely affect any CDFW jurisdictional resources, the entity may commence the activity without an LSAA.

CFGC Section 3503 makes it unlawful to take (i.e., hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill), possess, or needlessly destroy the nest or eggs of any wild bird, except as otherwise provided by the CFGC or any regulation made pursuant to the CFGC.

CFGC Section 3503.5 makes it unlawful to take (i.e., hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill), possess, or destroy raptors and/or the nest or eggs of any such bird, except as otherwise provided by the CFGC or any regulation made pursuant to the CFGC.

CFGC Section 3513 makes it unlawful to take (i.e., hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill) or possess any migratory non-game bird that is designated under the MBTA or any part of a migratory non-game bird except as

allowed by the rules and regulations adopted by the Secretary of the Interior under the provisions of the MBTA.

2.2.4 California Coastal Act and Environmentally Sensitive Habitat Areas

The California Coastal Act of 1972 (CCA) is the primary legislation that provides the standards for balancing development and conservation of resources within the coastal zone, which includes approximately 1.5 million acres along the Pacific Coast of the U.S. The CCA is administered by the CCC to regulate the short- and long-term conservation and use of coastal resources through responsible development.

Section 30107.5 of the CCA defines an ESHA as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments". Pursuant to Section 30240 of the CCA, ESHAs "shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas". In addition, development adjacent to ESHAs must be located and designed to prevent significant impacts to the functions and values of the ESHA.

2.2.5 Coastal Zone Management Program

California has a federally approved CZMP (see Section 2.1.3: Coastal Zone Management Act of 1972, above), which is administered through a partnership between state and local governments. Within southern California, the two state coastal management agencies include the California Coastal Conservancy and the CCC. The California Coastal Conservancy is responsible for purchasing, protecting, restoring, and enhancing coastal resources, while the CCC manages the development within the coastal zone. The CCA encourages local governments to establish Local Coastal Programs (LCPs) to govern decisions on behalf of the CCC and to protect public access and coastal resources on a local level. After certification of an LCP, authority to issue Coastal Development Permits is delegated to the local government, but the CCC maintains permit jurisdiction over certain specified lands (e.g., tidelands, submerged islands, and public trust lands) and can appeal permits approved by local governments in specified geographic areas.

Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP has issued a Coastal Development Permit. When federal activities or federally licensed, permitted, or assisted activities are proposed that are likely to affect land use, water use, or natural resources within the coastal zone, a federal consistency review pursuant to Section 307 of the CZMA, which gives the CCC or approved local government regulatory control over the proposed federal activities, is required. The CCC uses this review authority to facilitate cooperation and coordination between the local, state, and/or federal agencies and to authorize Coastal Development Permits.

2.2.6 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act regulates water quality for project activities in California. Pursuant to the Porter-Cologne Water Quality Control Act, under Section 13000 et seq. of the California Water Code, the RWQCB issues Water Quality Certifications for project activities that fill or dredge within Wetland and Non-Wetland WoUS and WoS, including isolated waters – such as vernal pools – and other waters showing lack of connectivity to a TNW.

2.3 CITY OF SAN DIEGO PROGRAMS AND REGULATIONS

Applicable City programs and regulations are discussed in this section.

2.3.1 Multiple Species Conservation Program and Multi-Habitat Planning Area

The County of San Diego (County) MSCP was prepared in accordance with the California Natural Communities Conservation Planning (NCCP) Act and provides not only the planning framework required for implementation of the comprehensive conservation program but also guidelines for the preparation of individual subarea plans for each jurisdiction within the MSCP Planning Area. The City of San Diego MSCP Subarea Plan and Implementing Agreement was adopted by USFWS, CDFW, and the City in July 1997; it outlines the implementation of the MSCP Subarea Plan and grants the City the authority to issue incidental take permits for MSCP-covered species pursuant to FESA Section 10(a) and CESA 2080.1. MSCP-covered species include species that are covered under the City's incidental take permit and that are also considered adequately protected within the MHPA, which is the City's preserve system.

The MSCP-covered species include 85 rare, threatened, and/or endangered plant and wildlife species, 15 of which are also listed as "Narrow Endemic Species" that have restricted geographic distributions, soil affinities, and/or habitats within the region. Under the MSCP, impacts to Narrow Endemic Species are to be avoided to the maximum extent practicable. Appendix A of the MSCP Subarea Plan provides the conditions under which these species were granted coverage, conditions which include (but are not limited to) avoidance of impacts to Narrow Endemic Species to the maximum extent possible, avoidance of impacts to MSCP-covered species within the MHPA, and area-specific management directives which provide species-specific guidance to address potential direct and indirect impacts.

In addition to species-specific conditions of coverage for the MSCP-covered species, projects within the City must comply with other MSCP Subarea Plan requirements, which include boundary line adjustments (MSCP Subarea Plan Section 1.1.1); Compatible Land Uses (MSCP Subarea Plan Section 1.4.1), General Planning Policies and Design Guidelines (MSCP Subarea Plan Section 1.4.2), and MHPA Land Use Adjacency Guidelines (MSCP Subarea Plan Section 1.4.3). Other management policies as well as additional local, state, and federal laws and regulations may also apply for impacts that are not covered under the MSCP, such as impacts to wetland habitat and to species that are not MSCP-covered.

The MSCP Subarea Plan and Implementing Agreement are applicable to future site-specific development within the UCPA. Sections of the MSCP Subarea Plan that are applicable to the UCPU at the program level are discussed in the following subsections below.

2.3.2 Local Coastal Program

Local governments use the LCP in partnership with the CCC as a basic planning tool to guide responsible development and to protect natural resources within the coastal zone. Development within the coastal zone may not occur until the CCC or a local government with a CCC-certified LCP (e.g., the City) has issued a Coastal Development Permit.

The UCPA is located within the City's LCP. The City's LCP provides the requirements for future development and protection of coastal resources within the portions of the City that occur within the Coastal Zone.

2.3.3 Environmentally Sensitive Lands

The City's Environmentally Sensitive Lands (ESL) regulations protect, preserve, and, where damaged, restore the environmentally sensitive areas within the City (City 2022a). ESL includes sensitive biological resources including lands within, partially within, or immediately adjacent to the MHPA and VPHCP areas (see Section 4.3.3, below); wetlands occurring within or outside the MHPA; vegetation communities classified as Tier I, II, IIIA, or IIIB; habitat for rare, endangered, or threatened species; or Narrow Endemic Species. Tier IV vegetation communities are not considered ESL (City 2018b). ESL also includes steep hillsides, coastal beaches, sensitive coastal bluffs, and special flood hazard areas.

The City's ESL Regulations and accompanying Biology, Steep Hillside, and Coastal Bluffs and Beaches Guidelines serve as standards for the determination of impacts and mitigation under CEQA and the CCA. The Steep Hillside Guidelines apply to areas (1) with a natural slope gradient of at least 25 percent (25 feet of vertical rise for every 100 feet of horizontal distance) with an increase in vertical elevation of at least 50 feet, or (2) where a portion of the site has a slope gradient of at least 200 percent (200 feet of vertical rise for every 100 feet of horizontal distance) with an increase in elevation of at least ten (10) feet (City 2022a). The vertical elevation must occur generally in the area with the steep hillside and may include some pockets of area with less than 25 percent gradient. The Coastal Bluffs and Beaches Guidelines apply to development proposed on a sensitive coastal bluff (within 100 feet of the bluff edge) or on a site containing a coastal beach (where the development will be within 100 feet of the beach). No community-specific requirements for the UCPA are included in these guidelines; however, all applicable general measures would apply to the UCPA.

The ESL Regulations are intended to guide development so that it occurs in a manner that protects the overall quality of the biological resources while protecting the public health, safety, and welfare and allowing for continued, mindful development. To the extent feasible, ESL Regulations require that development avoid impacts to sensitive biological

resources, including (but not limited to) MHPA lands; wetlands and vernal pools in naturally occurring complexes; federally and state-listed species that are not covered by the MSCP; and MSCP-covered Narrow Endemic Species. For wetland impacts, the ESL regulations recommend impact avoidance; however, if impacts are unavoidable, they must be minimized to the maximum extent feasible through project design and/or implementation of appropriate minimization and/or mitigation measures. The minimization and/or mitigation measures typically include a 100-foot wetland buffer to assure the functions and values of the wetland system are protected and maintained; however, the wetland buffer can be greater or less than 100 feet based on the discretion of the regulatory agency (e.g., USACE, CDFW, RWQCB, USFWS, City).

All future development within the UCPA that will occur within or adjacent to ESL will be required to comply with all applicable City ESL regulations as outlined in the City's Municipal Code (SDMC), Chapter 14, Article 3, Division 1: Environmentally Sensitive Lands Regulations; and guidelines as provided in the City's Land Development Manual (LDM), Biology Guidelines (City 2018b), Steep Hillside Guidelines (City 2004a), and Coastal Bluffs and Beaches Guidelines (City 2004b). All projects proposed in these areas will be evaluated for conformance with these guidelines as part of the review process for the required Site Development Permit unless the proposed development is exempt from the ESL Regulations. In addition to the findings required for the Site Development Permit, supplemental findings for ESL must also be made to approve the development. A Coastal Development Permit will be required in addition to the Site Development Permit for all *coastal development* proposed within the coastal overlay zone and which does not qualify for an exemption (City 2004b).

2.3.4 Multi-Habitat Planning Area

The MHPA refers to the City's planned habitat preserve system, which includes core biological resource areas that have been targeted for conservation. The MHPA includes both private and public lands that have biological resource value and/or provide important linkages (or potential linkages) between important biological resource areas and other open space. The MHPA will be assembled through conservation of existing public lands, land use restrictions within the MHPA, open space exactions imposed on new development outside the MHPA, inclusion of open space previously set aside on private lands for conservation as part of the development process, and public acquisition of private lands. Once assembled, the preserve system will include a network of habitat and open space that will protect the biodiversity in San Diego while also maintaining healthy populations of native species and aiding in the long-term recovery of the 85 MSCP-covered species.

To maintain the biological value of the designated MHPA lands, development within and adjacent to these lands is limited. For areas designated as MHPA, a maximum of 25 percent development is allowed in the least sensitive area (e.g., avoid wetlands, sensitive habitats, MSCP-covered Narrow Endemic Species). If more than 25 percent is required, an MHPA boundary line adjustment would be required for the portion that exceeds the 25 percent allowable development area. The MHPA boundary line adjustment must satisfy the six functional equivalency criteria outlined in Section 5.4.2 of

the MSCP, which include (1) effects on significantly and sufficiently conserved habitats, (2) effects to covered species, (3) effects on habitat linkages and function of preserve areas, (4) effects on preserve configuration and management, (5) effects on ecotones of other conditions affecting species diversity, and (6) effects to species of concern not on the covered species list. All MHPA boundary line adjustments require approval by USFWS, CDFW, and the City.

In addition, in some cases at the community plan level or during a subsequent specific project review, some areas of the MHPA that were placed over legal development in 1997 may be able to process an MHPA BLC which is reviewed by City MSCP staff and provided to the wildlife agencies for review and comment. An MHPA BLC will typically be considered by the City when it can be shown that there is a discrepancy between the adopted MHPA boundary and other mapping information (e.g., aerial photography, vegetation maps, topographic maps), which resulted in the inclusion of existing developed areas in the MHPA due to the regional scale of the MHPA mapping.

For an MHPA BLC to be supported by City staff, it must be clearly demonstrated that: (1) the proposed area to be corrected out was legally permitted prior to the adoption of the MSCP in March 1997; (2) no habitat, including wetlands, would be removed; (3) no buffer area (e.g., wetland buffer, wildlife corridor) would be impacted; and (4) removing the area from the MHPA would not avert the applicant from having to otherwise comply with the City's MSCP MHPA Land Use Adjacency Guidelines.

For projects outside of the MHPA, compensatory mitigation may be required for unavoidable significant impacts to sensitive habitats and ESL. The City's Biology Guidelines (City 2018b) provide guidance on mitigation requirements for significant impacts outside of the MHPA. Generally, compensatory mitigation for impacts outside the MHPA is based on the habitat type that would be impacted and would require a lower ratio for preservation occurring inside the MHPA versus preservation occurring outside the MHPA. For all proposed preservation, the mitigation sites must have long-term viability, including connectivity to a larger planned open space system.

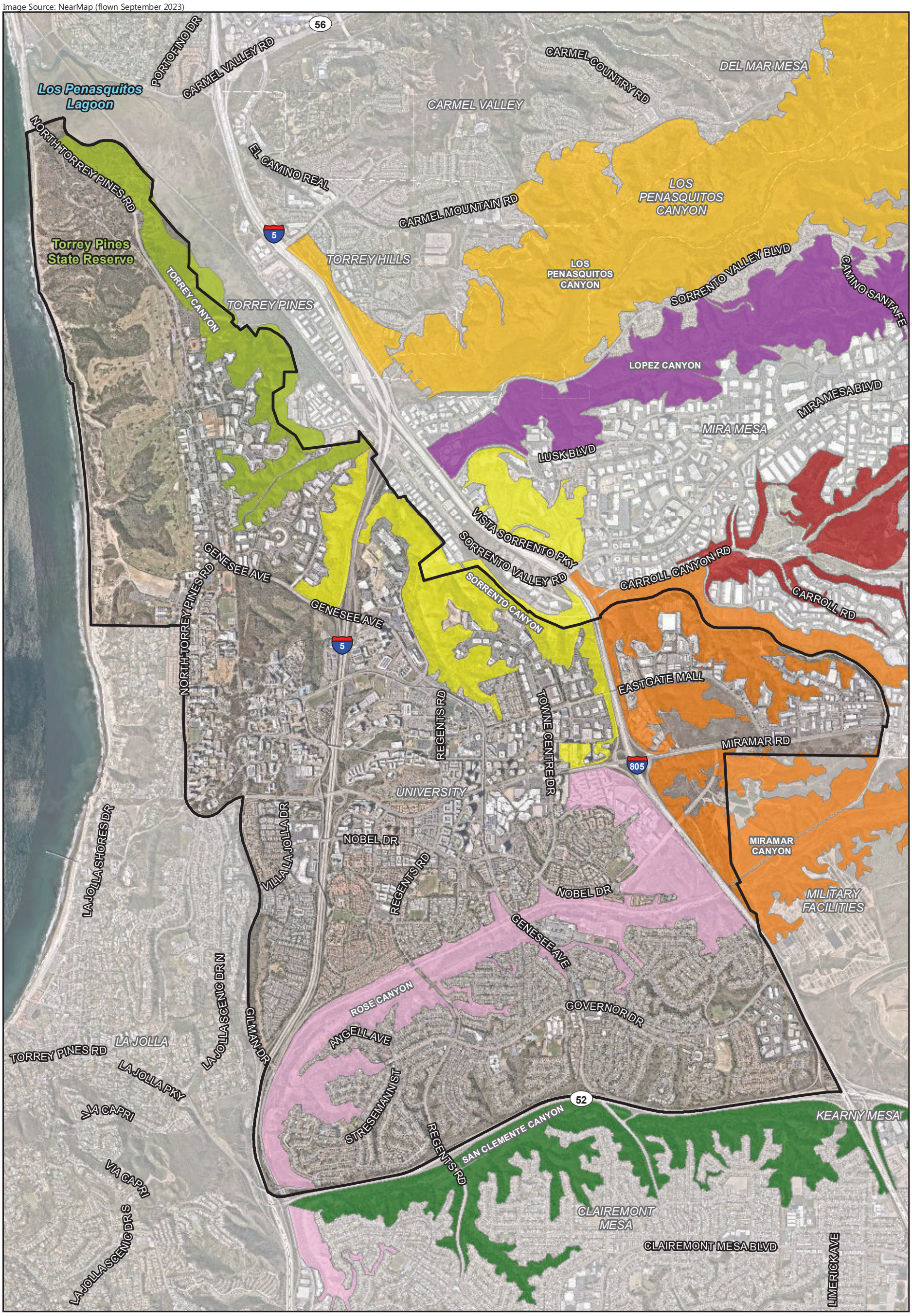
2.3.4.1 MSCP Subarea Plan: Urban Area MHPA and Northern Area MHPA

The UCPA is divided between two areas – the southern portion is within the MSCP Subarea Plan 'Urban Area' (MSCP Subarea Plan Section 1.2.3) and the northern portion is within the MSCP Subarea Plan 'Northern Area' (MSCP Subarea Plan Section 1.2.4).

Urban Area MHPA

MHPA areas within the portion of the Urban Area that is within the UCPA mainly consist of undeveloped, urban canyons (i.e., the majority of Rose Canyon, and portions of Miramar Canyon [Figure 6]) and other undeveloped hillsides that are in relative proximity to other lands that are conserved and/or designated as MHPA (see Figure 4). Urban Area MHPA is important in the urban environment because they support habitats for native plant and wildlife species.

Image Source: NearMap (flown September 2023)



0 Feet 3,000

University Community Plan Boundary

Canyons

- Carroll Canyon
- Lopez Canyon
- Los Penasquitos Canyon
- Miramar Canyon
- Rose Canyon
- San Clemente Canyon
- Sorrento Canyon
- Torrey Canyon

FIGURE 6
Local Canyons

M:\JOBS5\9775\common_gis\BioRpt\Fig6.mxd 12/28/2023 bma

Under Section 1.2.3 of the MSCP Subarea Plan, two specific guidelines for MHPA within the Urban Area are provided at locations designated as B15 and B16 (see Figure 4: Conserved Vegetation Communities in Urban Area on page 20 of the MSCP Subarea Plan). Neither B15 nor B16 is located within the UCPA; therefore, these guidelines do not apply to projects within the UCPA.

Northern Area MHPA

MHPA areas within the portion of the Northern Area that is included in the UCPA mainly consist of intact natural open space areas, such as the majority of Torrey Canyon and the western portion of Sorrento Canyon. The smaller canyons as well as other undeveloped hillsides and patches of open space provide an interface between the developed and natural landscapes and provide important habitat features for native plant and wildlife species within the UCPA.

Under Section 1.2.4 of the MSCP Subarea Plan, 29 specific guidelines for MHPA within the Northern Area are provided at locations designated as C1 though C29 (see Figure 5: Conserved Vegetation Communities in Northern Area on page 25 of the MSCP Subarea Plan). None of these is located within the UCPA; therefore, these guidelines do not apply to projects within the UCPA.

2.3.4.2 MSCP Subarea Plan: Land Use Considerations

Section 1.4 of the MSCP Subarea Plan describes compatible land uses, general planning policies and design guidelines, and the MHPA Land Use Adjacency Guidelines. Each of these topics is discussed in this section.

Compatible Land Uses

Section 1.4.1 of the MSCP Subarea Plan outlines land uses that are conditionally compatible with the biological objectives in the MSCP and thus are allowed within the MHPA. These include passive recreation, utility lines and roads in compliance with the General Planning Policies and Design Guidelines described in Section 1.4.2 of the MSCP Subarea Plan (discussed below), limited water facilities and other essential public facilities, limited low density residential uses, Brush Management Zone 2, and limited agriculture.

General Planning Policies and Design Guidelines

Section 1.4.2 of the MSCP Subarea Plan describes the General Planning Policies and Design Guidelines that would be applied to the review and approval of development projects within and/or adjacent to the MHPA and addresses roads and utilities; fencing, lighting, and signage; materials storage; mining, extraction, and processing facilities; and flood control. The General Planning Policies and Design Guidelines would apply to projects within the UCPA and will be addressed on a project-by-project basis during either the planning (new development) or management (new and existing development) stages to minimize potential impacts and maintain the function of the MHPA. Implementation of these guidelines is addressed further in Section 1.4.2 of the MSCP Subarea Plan. Section 5.0 provides an analysis of the UCPU's consistency with the applicable General Planning Policies and Design Guidelines of the MSCP Subarea Plan.

Land Use Adjacency Guidelines

Section 1.4.3 of the MSCP Subarea Plan describes the Land Use Adjacency Guidelines that would be applied to the review and approval of development projects within and/or adjacent to the MHPA and addresses drainage, toxics, lighting, barriers, invasives, brush management, and grading/land development. The Land Use Adjacency Guidelines would apply to projects within the UPCA and will be addressed, on a project-by-project basis, during either the planning (new development) or management (new and existing development) stages to minimize potential impacts and maintain the function of the MHPA. Implementation of these guidelines is addressed further in Section 1.4.3 of the MSCP Subarea Plan. Section 5.0 provides an analysis of the UCPU's consistency with the Land Use Adjacency Guidelines.

2.3.4.3 MSCP Subarea Plan: Framework Management Plan

Section 1.5 of the MSCP Subarea Plan describes general management goals, objectives, and directives that apply throughout the subarea as well as specific management policies and directives for the Urban Habitat Lands and the Northern Area where the UPCA is located.

General Management Goals and Objectives

Section 1.5.1 of the MSCP Subarea Plan outlines the plan's habitat management goals, and objectives that apply to the entire subarea. The habitat management component of the MHPA is essential to meeting the overall goal of the MSCP, which is to maintain and enhance the biological diversity in the region while also conserving viable populations of sensitive species and their habitats. By doing this, local extirpations and extinctions will be prevented and future species' listings will be minimized while allowing for responsible economic growth in the region. Section 5.0 provides an analysis of the UCPU's consistency with the General Management Goals and Objectives.

General Management Directives

Section 1.5.2 of the MSCP Subarea Plan outlines the plan's general management directives that support the objectives listed in Section 1.5.1. These directives are organized by priority to assist decisions on where to spend limited funds and direct mitigation efforts. Priority 1 refers to directives that protect resources in the MHPA, including management actions that are necessary to ensure that MSCP-covered species are adequately protected, and Priority 2 refers to directives other than those required for MSCP-covered species status and other long-term conservation actions that can be implemented during the life of the MSCP Subarea Plan as funds become available. The directives outlined in Section 1.5.2 of the MSCP Subarea Plan would apply to projects within the UCPA. Section 5.0 provides an analysis of the UCPU's consistency with the General Management Directives.

Specific Management Policies and Directives for Urban Habitat Lands and the Northern Area

Sections 1.5.7 and 1.5.8 of the MSCP Subarea Plan provide the MSCP Subarea Plan's goals and objectives, covered species, major issues, and overall management policies

and directives for Urban Habitat Lands and for the Northern Area as well as specific management directives for the Northern Area. Section 5.0 provides an analysis of the UCPU's consistency with the Specific Management Policies and Directives for the Urban Habitat Lands and the Northern Area.

2.3.5 Vernal Pool Habitat Conservation Plan

The VPHCP (City 2019) provides a framework to protect, enhance, and restore vernal pool resources within the City, while also improving and streamlining the environmental permitting process for impacts to threatened and endangered species associated with vernal pools. The VPHCP is compatible with the MSCP and expands upon the existing MHPA to conserve additional lands with vernal pool resources and provides coverage for seven threatened and endangered species associated with vernal pools that are not covered by the MSCP Subarea Plan, including Otay mesa mint (*Pogogyne nudiuscula*), San Diego mesa mint (*Pogogyne abramsii*), spreading navarretia (*Navarretia fossalis*), San Diego button-celery (*Eryngium aristulatum* var. *parishii*), California Orcutt grass (*Orcuttia californica*), Riverside fairy shrimp (*Streptocephalus woottoni*), and San Diego fairy shrimp (*Branchinecta sandiegonensis*).

The VPHCP area includes a total of approximately 206,124 acres in the southwestern portion of the County and is divided into three planning units – Northern, Central, and Southern. The UCPA is within the North VPHCP planning unit, which includes approximately 110,891 acres within City jurisdiction north of SR-52. One vernal pool complex is located at the Salk Institute in the western portion of the UCPA, just south of the gliderport (Figure 7a). Within the portion of the Northern VPHCP planning unit that is within the UCPA, vernal pools occur primarily in the eastern portion of the UCPA, around Miramar Road and Nobel Drive (Figure 7b).

The VPHCP includes a list of four covered projects that involve development within the City and for which hardline Preserve boundaries have been established and incidental take of VPHCP-covered species would be approved through implementation of the VPHCP. For these projects, adequate avoidance and/or minimization measures have been identified and compensatory mitigation (i.e., conservation measures) have been incorporated for anticipated impacts to VPHCP-covered species and their vernal pool habitat. One of the covered projects – the North City Area component of the Pure Water Program – occurs within the UCPA. This project includes expansion of the existing North City Water Reclamation Plant, construction of a new Advanced Purification Facility, pipelines, and support facilities such as pump stations. The project is not located within the MHPA or within USFWS Critical Habitat designated for San Diego fairy shrimp, and it is not identified in the USFWS Recovery Plan for Vernal Pools of Southern California.

Future City projects, as well as other public and private projects, that occur within the UCPA, that require discretionary permits from the City, and that impact vernal pool resources would be subject to the requirements outlined in the VPHCP.

Image Source: NearMap (flown September 2023)

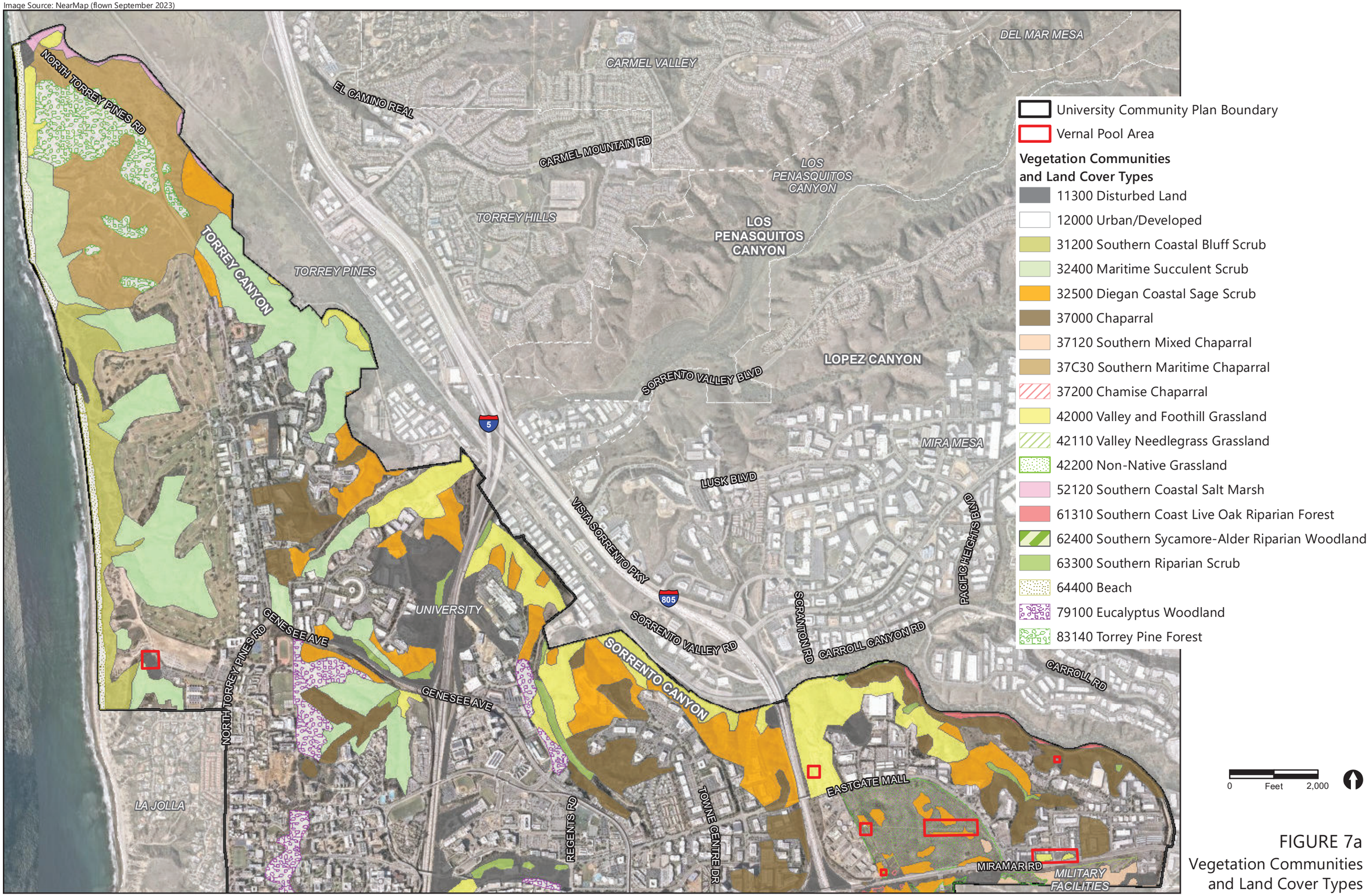


FIGURE 7a
Vegetation Communities and Land Cover Types

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Image Source: NearMap (flown September 2023)

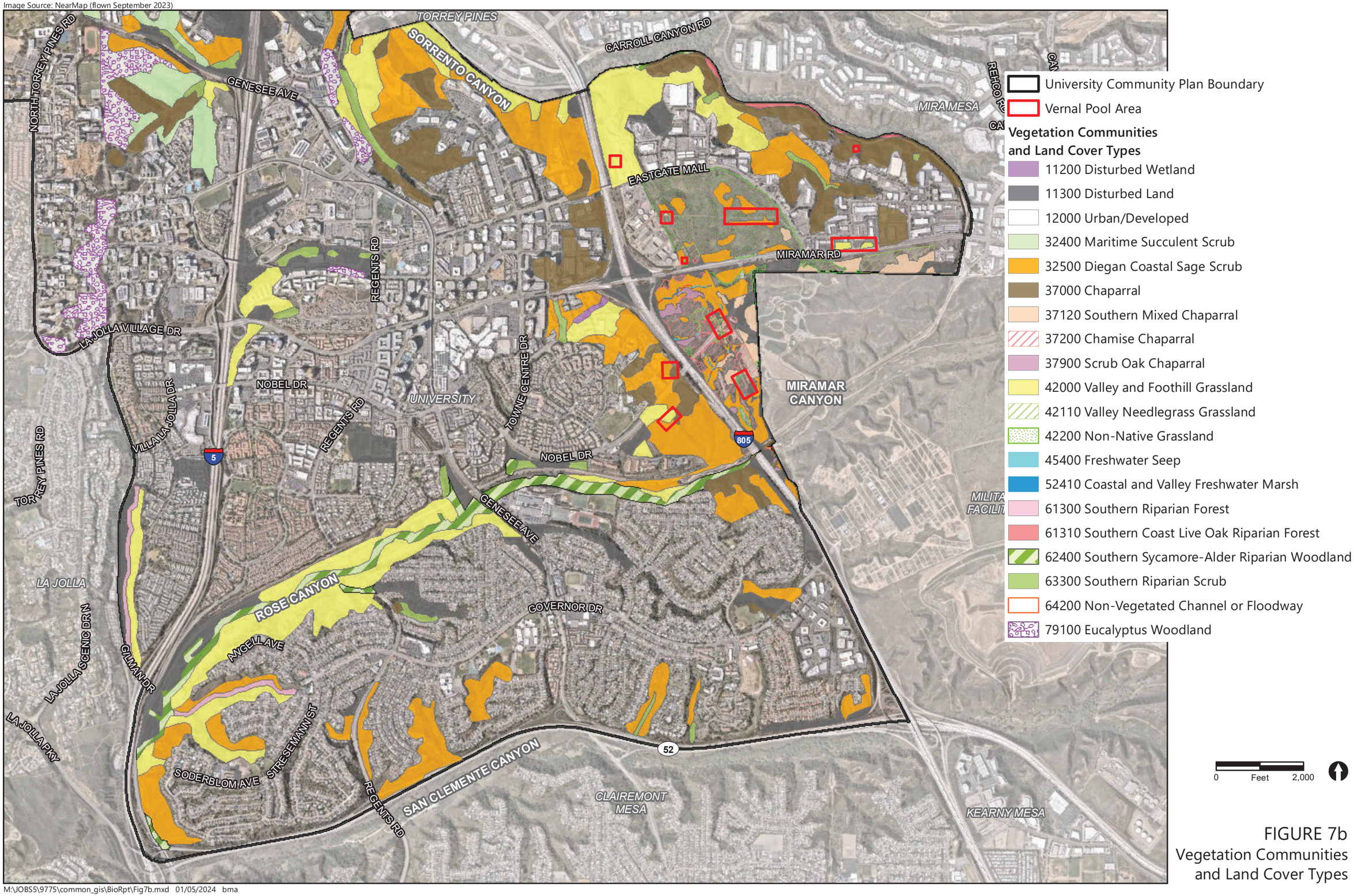

FIGURE 7b
Vegetation Communities and Land Cover Types

M:\JOBS5\9775\common_gis\BioRpt\Fig7b.mxd 01/05/2024 bma

2.3.6 City of San Diego General Plan Conservation Element

The City's General Plan Conservation Element contains policies that will guide the City's long-term conservation and sustainable management of the biological resources within the City. Relevant policies from the following Conservation Element sections are provided in this section – Open Space and Landform Preservation, Coastal Resources, Water Resources Management, Urban Runoff Management, Biological Diversity, Wetlands, and Urban Forestry.

2.3.6.1 Open Space and Landform Preservation

The goal of the Open Space and Landform Preservation section is the "preservation and long-term management of natural landforms and open spaces that help make San Diego unique" (City 2008). The following policies are applicable to the biological resources within the UCPA:

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, and implementation of the VPHCP.
b. Support the preservation of rural lands and open spaces throughout the region.
c. Protect, restore and enhance 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, including environmental education and recreation opportunities, as part of a collective citywide open space system.
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 MSCP Subarea Plan and VPHCP.
g. Protect, restore and preserve wetland and upland areas on City managed lands, prioritizing areas with the greatest needs.
h. Prepare and update Natural Resource Management Plans on all managed preserved lands and include in plans considering shifting habitat or conditions due to climate change as well as sequestration potential, as the information becomes available.

i. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resources conservation.

CE-B.2. Apply the appropriate zoning and ESL regulations to limit development of floodplains and 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.

CE-B.5. Maximize the incorporation of trails and greenways linking local and regional open space and recreation areas into the planning and development review processes.

2.3.6.2 Coastal Resources

The goal of the Coastal Resources section is "coastal resource preservation and enhancement, clean coastal waters by continuing to improve the quality of ocean outfall discharges, [and] enhanced public access to the shoreline and coast" (City 2008). The following policies are applicable to the biological resources within the UCPA:

CE-C.1. Protect, preserve, restore, and enhance important coastal wetlands and habitat (tide pools, lagoons, and marine canyons) for conservation, research, and limited recreational purposes.

CE-C.2. Control sedimentation entering coastal lagoons and waters from upstream urbanization using a watershed management approach that is integrated into local community and land use plans.

CE-C.3. Minimize alterations of cliffs and shorelines to limit downstream erosion and to ensure that sand flow naturally replenishes beaches.

CE-C.4. Manage wetland areas as described in Wetlands (Section 2.3.6.6, below) for natural flood control, and climate resilience benefits, and preservation of landforms.

CE-C.5. Limit the use of beaches and shorelines to appropriate coastal dependent and ocean-oriented recreational/educational uses as identified in local coastal/community plans.

CE-C.6. Implement watershed management practices designed to reduce runoff and improve the quality of runoff discharge into coastal waters.

CE-C.14. Implement nature-based shoreline protection methods to protect areas subject to coastal flooding.

CE-C.15. Utilize adaptive pathways for coastline planning.

2.3.6.3 Water Resources Management

The goal of the Water Resources Management section is "effective long-term management of water resources so that demand is in balance with efficient, sustainable supplies, [and] a safe and adequate water supply that effectively meets the demand for the existing and future population through water efficiency and reclamation programs" (City 2008). The following policies are applicable to the biological resources within the UCPA:

CE-D.3. Continue to participate in the development and implementation of watershed management plans.

a. Control water discharge in a manner that does not reduce reasonable use by others, damage important native habitats and historical resources, or create hazardous conditions (e.g., erosion, sedimentation, flooding, subsidence)
c. Improve and maintain drinking water quality and urban runoff water quality through implementation of Source Water Protections Guidelines for New Development.
d. Improve and maintain urban runoff water quality through implementation of storm water protection measures.

2.3.6.4 Urban Runoff Management

The goal of the Urban Runoff Management section is the "protection and restoration of waterbodies, including reservoirs, coastal waters, creeks, bays, and wetlands, [and] preservation of natural attributes of both the floodplain and floodway without endangering life and property" (City 2008). The following policies are applicable to the biological resources within the UCPA:

CE-E.1. Continue to develop and implement public education programs.

a. Involve the public in addressing runoff problems associated with development and raising awareness of how an individual's activities contribute to runoff pollution.
b. Work with local businesses and developers to provide information and incentives for the implantation of Best Management Practices for pollution prevention and control.
c. Implement watershed awareness and water quality educational programs for City staff, community planning groups, the general public, and other appropriate groups.

CE-E.2. Apply water quality protection measures to land development projects early in the process – during project design, permitting, construction, and operations – in order to minimize the quantity of runoff generated on-site, the disruption of natural water flows, and the contamination of storm water runoff.

a. Increase on-site infiltration, and preserve, restore, or incorporate natural drainage systems into site design.
b. Direct concentrated drainage flows away from the MHPA and open space areas. If not possible, drainage should be directed into sedimentation basins, grassy swales, or mechanical trapping devices prior to draining into the MHPA or open space areas.
c. Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible.
d. Increase permeable areas for new trees and restore spaces that have been paved, focused in areas with the greatest needs.
e. Increase the use of plants in drainage design.
f. Maintain landscape design standards that minimize the use of pesticides and herbicides.
g. Avoid development of areas particularly susceptible to erosion and sediment loss (e.g., steep slopes) and, where impacts are unavoidable, enforce regulations that minimize their impacts.
h. Apply land use, site development, and zoning regulation that limit impacts on and protect the natural integrity of topography, drainage systems, and water bodies.
i. Enforce maintenance requirements in development permit conditions.
j. Increase the use of green infrastructure, both at watershed scale and site-specific locations.

CE-E.3. Require contractors to comply with accepted storm water pollution prevention planning practices for all projects.

a. Minimize the amount of graded land surface exposed to erosion and enforce erosion control ordinances.
b. Continue routine inspection practices to check for proper erosion control methods and housekeeping practices during construction.

CE-E.4. Continue to participate in the development and implementation of Watershed Management Plans for water quality and habitat protection.

CE-E.5. Assure that City departments continue to use “Best Practice” procedures so that water quality objectives are routinely implemented.

a. Incorporate water quality objectives into existing regular safety inspections.
b. Follow Best Management Practices and hold training sessions to ensure that employees are familiar with those practices.

c. Educate City employees on sources and impacts of pollutants on urban runoff and actions that can be taken to reduce these sources.
d. Ensure that contractors used by the City are aware of and implement urban runoff control programs.
e. Serve as an example to the community-at-large.

CE-E.6. Continue to encourage "Pollution Control" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.
a. Promote the provision of used oil recycling and/or hazardous waste recycling facilities and drop-off locations.
b. Review plans for new development and redevelopment for connections to the storm drain system.
c. Follow up on complaints of illegal discharges and accidental spills into storm drains, waterways, and canyons.

CE-E.7. Manage floodplains to address their multi-purpose use, including natural drainage, habitat preservation, and open space and passive recreation, while also protecting public health and safety.

2.3.6.5 Biological Diversity

The goal of the Biological Diversity section is the "preservation of healthy, biologically diverse regional ecosystems and conservation of endangered, threatened, and key sensitive species and their habitats" (City 2008). The following policies are applicable to the biological resources within the UCPA:

CE-G.1. Preserve natural habitats pursuant to the MSCP and VPHCP, preserve rare plants and animals to the maximum extent practicable, and manage all City-owned native habitats 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 the MHPA and open space.

CE-G.2. Prioritize, fund, acquire, and manage the MHPA and open spaces that preserve important ecological resources and provide habitat connectivity.

CE-G.3. Implement the conservation goals/policies of the MSCP Subarea Plan and VPHCP, 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 regulation and development guidelines.

CE-G.5. Promote aquatic biodiversity and habitat recovery by reducing hydrological alteration, such as grading a stream channel.

2.3.6.6 Wetlands

The goal of the Wetlands section is the "preservation of San Diego's rich biodiversity and heritage through the protection and restoration of wetland resources, [and] preservation of all existing wetland habitat in San Diego through a 'no net loss' approach" (City 2008). The following policies are applicable to the biological resources within the UCPA:

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 supports 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. Restore salt marshland and other associated tidal wetland and riparian habitats where feasible.

CE-H.6. 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.7. 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.8. Encourage site planning that maximizes the potential biological, historical, hydrological, climate resilience, and land use benefits of wetlands.

CE-H.9. Implement a "no net loss" approach to wetlands conservation in accordance with all City, state, and federal regulations.

CE-H.10. Consider public health, access, and safety, including pest and vector control, on wetland creation and enhancement sites.

2.3.6.7 Urban Forestry

The goal of the Urban Forestry section is the "protection and expansion of a sustainable urban forest" (City 2008). The following policies are applicable to the biological resources within the UCPA:

CE-J.1. Develop, nurture, and protect a sustainable urban/community forest.

a. Identify City lands and spaces that need trees and identify ways to increase permeable areas for new trees, focused in areas with the greatest need.
b. Seek resources and take actions needed to plant, care for, and protect trees in the public right-of-way and parks and those of significant importance to our community. Prioritize implementation in areas with the greatest need.
c. Plant large canopy shade trees, where appropriate and with consideration of habitat and water conservation goals, in order to maximize environmental benefits. Prioritize implementation in areas with the greatest need.
d. Seek to retain significant and mature trees.
e. Provide forest linkages to connect and enhance public parks, plazas, recreation, and open space areas.

CE-J.4. Continue to require the planting of trees through the development permit process.

a. Consider tree planting as mitigation for air pollution emissions, storm water runoff, and other environmental impacts as appropriate. Residents can request a new street tree through the City's Free Tree SD program.

2.3.7 City of San Diego Parks Master Plan

Adopted August 2021, the City Parks Master Plan identifies policies, actions, and partnerships for planning parks, recreation facilities, and programs that create a citywide network of recreational experiences. The plan identifies existing gaps to guide future park development and promotes equity throughout the City. It establishes new equity goals; new 10-, 20-, 30-, and 40-minute access goals; new park standards for new development that measure recreational value; and citywide Park Development Impact Fees. New park standards will apply to new development and were created specifically to address park access issues in densely populated areas.

The City Parks Master Plan establishes a new park standard, the Recreational Value-Based Park Standard (Value Standard). This differs from the previous population-based standard. The Value Standard applies to population-based parks and portions of regional parks, which serve local populations. The Value Standard is not intended to be applied to portions of regional parks which serve the region, including trails, shorelines, and open space parks. Regional assets are to be evaluated during future community plan updates. The Value Standard determines the value of parks by assigning points based on features related to park size, recreational opportunities, access, amenities, activations, and overall

value delivered. As an outcome-based measure, the Value Standard recognizes the value of parks appropriate for diverse communities, from ball fields to pocket parks to trails.

The Value Standard is based on four communities that met the previous acreage standard of 2.8 acres per 1,000 residents in 2020. The score was based on recreational amenities, yielding a recreation value of 100 points per 1,000 people that is now applied citywide.

2.3.8 University Community Plan Update Elements and Policies

The UCPU will include updated elements and policies that apply to biological resources, which will apply to development within the UCPA. As discussed in Section 1.0, above, the City has existing regulations in the Land Development Code that require new development to minimize encroaching on open space, steep slopes, and canyons. In addition, the UCPU proposes conservation policies that direct new development to maintain natural features and facilitate natural stormwater runoff.

SECTION 3.0 – METHODS

This biological resources report was prepared using data obtained from existing environmental documents and database queries. No field surveys were conducted, because this biological resources report is intended to provide a broad-scale analysis of biological resources within the UCPA, and all future proposed projects within the UCPA would be required on a case-by-case basis to provide a detailed evaluation of existing biological resources; analyze potential proposed site-specific project impacts; and develop appropriate, project-specific avoidance, minimization, and/or mitigation measures to reduce proposed project impacts to below a level of significance. Methods used for obtaining the data presented in this biological resources report are described in this section.

3.1 LITERATURE AND DATABASE REVIEW

Busby Biological Services, Inc., in coordination with Dudek and RECON Environmental, Inc. (RECON), conducted a literature review of applicable environmental documents as well as database searches for historical biological resources information within the UCPA. While anecdotal and citizen science data can provide additional information on biological resources throughout the region, the quality and reliability of this data is not consistent. Therefore, the literature review and database searches conducted for this report were limited to the reliable, peer-reviewed databases described below.

The sources for the literature and database review included the reliable, peer-reviewed data included in the following resources:

- San Diego Geographic Information Source (SanGIS) Vegetation Information in the San Diego Region (County 2020)
- SanGIS Plant and Wildlife Information in the San Diego Region (County 2023)
- CDFW California Natural Diversity Database (CNDDB; CDFW 2023a)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2023)
- Calflora: information on wild California plants (Calflora 2023)
- USFWS historical species database (USFWS 2023a)
- USFWS critical habitat database (USFWS 2023b)
- County of San Diego Multiple Species Conservation Program (MSCP; County 1992)
- City of San Diego MSCP Subarea Plan (City 1997)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database (USDA NRCS 2020)
- USFWS National Wetlands Inventory (USFWS 2023c)
- San Diego County Plant Atlas (San Diego Natural History Museum [SDNHM] 2023)
- San Diego County Bird Atlas (Unitt 2004)
- San Diego County Mammal Atlas (Tremor et al. 2017)
- City of San Diego Vernal Pool Habitat Conservation Plan (City 2019)

Additionally, data from recent biological resources reports were analyzed and included in this report, including sensitive species information from:

- Towne Centre View Project (Alden Environmental, Inc. [Alden] 2023)
- One Alexandria North Project, Biological Technical Report (HELIX Environmental Planning, Inc. [HELIX] 2022)
- Biological Resource Report for the Spectrum Pedestrian Bridge Project San Diego, California (RECON 2021)
- Campus Point Project, Biological Letter Report (Rincon Consultants, Inc. [Rincon] 2019)

3.2 VEGETATION COMMUNITIES AND LAND COVER TYPES

The vegetation communities and land cover types documented within the UCPA were obtained by using the generalized mapping available on SanGIS (County 2020), which maintains a regional Geographic Information Systems (GIS) database that provides public access to data layers for vegetation communities and land cover types that are updated frequently. Because this report is intended to support the UCPU, which is a programmatic level document, the general vegetation community data is sufficient to generalize the vegetation communities and land cover types present in the UCPA. Furthermore, prior to development occurring on land containing ESL, a site-specific biology report would be required to verify existing vegetation communities. However, to provide a complete literature review of available data sources, recently approved biological resource reports completed within the UCPA were reviewed to verify consistency with the generalized vegetation provided on SanGIS. Available biology reports covered small areas within the community; therefore, the updated vegetation classifications for particular projects is not reflected on the vegetation mapping for this project. Vegetation communities and land cover types were classified following Holland (1986) as modified by Oberbauer et al. (2008). Sensitive vegetation communities were determined following the City's Biology Guidelines (City 2018b).

3.3 SENSITIVE PLANT SPECIES

Sensitive plant species locations were obtained from database queries of the USFWS sensitive species database, CNDDB (CDFW 2023a), and SanBIOS database (County 2023). In addition, data obtained from the CNPS online rare plant inventory (CNPS 2023), Calflora website (Calflora 2023), and the San Diego County Plant Atlas (SDNHM 2023) were used to provide additional data on the locations of sensitive plant species within the UCPA. Furthermore, supplemental data was obtained through analysis of the recent biological resources reports listed in Section 3.1, above (Alden 2023; HELIX 2022; RECON 2021; Rincon 2019).

Common and scientific names for plant species are those presented in the CDFW CNDDB State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2023b).

3.4 SENSITIVE WILDLIFE SPECIES

Sensitive wildlife species locations were obtained from database queries of the USFWS sensitive species database, CNDDB (CDFW 2023a), and SanBIOS database (County 2023). In addition, the San Diego County Bird Atlas (Unitt 2004) and the San Diego County Mammal Atlas (Tremor et al. 2017) were used to provide additional data on the locations of sensitive wildlife species within the UCPA. Furthermore, supplemental data was obtained through analysis of the recent biological resources reports listed in Section 3.1, above (Alden 2023; HELIX 2022; RECON 2021; Rincon 2019). In addition, for species with limited available data from the above databases, information from other reputable biological data sources (e.g., Center for Biological Diversity [2023], iNaturalist [2023], Xerces Society for Invertebrate Conservation [2023]) were utilized to obtain species specific information.

Common and scientific names for wildlife species are those presented in the CDFW CNDDB State and Federally Listed Endangered and Threatened Animals of California (CDFW 2023c).

SECTION 4.0 – EXISTING CONDITIONS

The existing conditions for the UCPA that are presented in this section are based on the most current data available at the time this report was written from the sources listed in Section 3.1, above. No field surveys were conducted because this biological resources report is intended to provide a broad-scale analysis of biological resources within the UCPA for UCPU, which is a programmatic document. All future proposed projects within the UCPA will be required on a case-by-case basis to provide a detailed evaluation of existing biological resources during the project permitting process.

4.1 PLAN AREA DESCRIPTION

This section provides a brief description of the topography, land uses, and soil types within the UCPA.

4.1.1 Topography

The topography within the UCPA ranges from the lowest elevation, which is approximately 2 feet above mean sea level and is located in the far northwestern corner of the UCPA in Torrey Pines State Reserve, to the highest elevation, which is approximately 450 feet above mean sea level in the northern portion of the UCPA, east of Torrey Pines Golf Course and east of North Torrey Pines Road. The topography within the UCPA is highly varied and includes coastal bluffs within the Torrey Pines State Reserve and Torrey Pines City Park; canyons (e.g., the majority of Torrey Canyon, Sorrento Canyon, and Rose Canyon as well as the central portion of Miramar Canyon); rolling topography and mesa tops in the vicinity of University Towne Centre, where side canyons and rounded ridges transition from the more major canyons to the mesa tops that are generally located along Miramar Road, north of University Towne Centre, and north of UCSD.

The entire UCPA is in the Los Peñasquitos Creek Hydrologic Unit (HU). Hydrologic subareas divide HUs into smaller areas of relatively similar topography and land use. Thus, more specifically, the UCPA is located within three hydrologic subareas, including the Miramar Hydrologic Subarea, Miramar Reservoir Hydrologic Subarea, and Scripps Hydrologic Subarea. The Los Peñasquitos Creek HU is approximately 162 square miles and contains much of the cities of San Diego and Poway as well as a small portion of unincorporated areas within the County. This HU includes multiple large canyons both within and adjacent to the UCPA, such as Carmel Canyon, Los Peñasquitos Canyon, Carroll Canyon, Rose Canyon, San Clemente Canyon, and Tecolote Canyon. Carmel Creek and Carroll Canyon Creek merge with Los Peñasquitos Creek in Soledad Canyon downstream of I-5 and ultimately terminate in the Los Peñasquitos Lagoon. Rose Canyon and San Clemente Canyon merge near I-5 and ultimately feed into Mission Bay. Tecolote Canyon feeds directly into Mission Bay (River Focus 2020).

The only major canyon within the UCPA is Rose Canyon, in which Rose Creek flows from east to west before turning south towards Mission Bay as it approaches I-5. Portions of several smaller canyons – Torrey Canyon, Sorrento Canyon, Carroll Canyon, Miramar

Canyon – occur in the northern portion of the UCPA, and San Clemente Canyon is just outside the southern UCPA boundary (see Figure 6; River Focus 2020).

4.1.2 Land Use

The UCPA currently supports a mix of public, private, and governmental land uses that include educational facilities, low- to high-density residential developments, industrial and commercial facilities, and a variety of parks and open space areas as well as transportation and utility infrastructure. UCSD has been the focal point of the UCPA and has encouraged the scale, intensity, and pace of the private development within much of the UCPA. University Towne Centre serves as a social center for residents within the UCPA and as a major regional commercial center as well. In addition, the research, corporate headquarters, and medical centers in the northern portion of the UCPA as well as the urbanized south University residential area round out the urbanized portion of the UCPA. The UCPA also includes parks, open spaces, and recreational areas, such as Torrey Pines State Reserve, Torrey Pines City Park, and Torrey Pines Golf Course, as well as the majority of Rose Canyon and portions of Torrey Canyon, Carroll Canyon, Sorrento Canyon, and Miramar Canyon.

4.1.3 Soils

A query of the USDA NRCS Soil Survey Geographic Database (USDA NRCS 2020) indicated that 23 soil types have been mapped within the UCPA. Of these, only one – Olivenhain cobbly loam, 2 to 9 percent slopes – is associated only with urban/developed lands but is not associated with native habitats within the UCPA, whereas four – coastal beaches, Corralitos loamy sand (9 to 15 percent slopes), Marina loamy coarse sand (9 to 30 percent slopes), and tidal flats – are associated only with native habitats and not associated with urban/developed lands in the UCPA. The 21 soil types associated with both native and urban/developed lands include:

- Altamont clay (9 to 15, 15 to 30 [some eroded], and 30 to 50 percent slopes)
- Carlsbad gravelly loamy sand (2 to 5, 5 to 9, and 9 to 15 percent slopes)
- Carlsbad-Urban land complex (2 to 9 percent slopes)
- Chesterton fine sandy loam (2 to 5, 5 to 9, and 9 to 15 [eroded] percent slopes)
- Chesterton-Urban land complex (2 to 9 percent slopes)
- Chino silt loam, saline (0 to 2 percent slopes)
- Corralitos loamy sand (0 to 5 and 5 to 9 percent slopes)
- Gaviota fine sandy loam (9 to 30 and 30 to 50 percent slopes)
- Huerhuero loam (5 to 9 [eroded], 9 to 15 [eroded], and 15 to 30 [eroded] percent slopes)
- Huerhuero-Urban land complex (9 to 30 percent slopes)
- Loamy alluvial land-Huerhuero complex (9 to 50 percent slopes)
- Made land
- Marina loamy coarse sand (2 to 9 percent slopes)
- Olivenhain cobbly loam (30 to 50 percent slopes)
- Redding cobbly loam (9 to 30, 15 to 50 [dissected] percent slopes)

- Redding gravelly loam (2 to 9 percent slopes)
- Redding-Urban land complex (9 to 30 percent slopes)
- Riverwash
- Salinas clay loam (2 to 9 percent slopes)
- Steep gullied land
- Terrace escarpments

4.2 VEGETATION COMMUNITIES AND LAND COVER TYPES

The approximately 8,676-acre UCPA supports 26 vegetation communities and land cover types based on review of available data sources described in Section 3.2 (see Figures 7a and 8b; County 2020). These vegetation communities and land cover types are summarized in Table 1, below.

Table 1. Vegetation Communities and Land Cover Types in the UCPA

Vegetation Community/Land Cover Type	Approximate Acres*
Upland Vegetation Communities	
Torrey Pines Forest	104.9
Southern Coastal Bluff Scrub	98.4
Maritime Succulent Scrub	446.3
Diegan Coastal Sage Scrub	595.6
Chaparral / Southern Mixed Chaparral	354.3
Chamise Chaparral	45.0
Southern Maritime Chaparral	255.3
Scrub Oak Chaparral	6.5
Valley and Foothill Grassland/Valley Needlegrass Grassland	509.3
Non-Native Grassland	111.4
Upland Land Cover Types	
Disturbed Land	367.2
Eucalyptus Woodland	94.7
Urban/Developed	5,451.3
Total Uplands	**8,440.3**
Wetland Vegetation Communities/Land Cover Types	
Southern Riparian Forest	18.1
Southern Coast Live Oak Riparian Forest	6.5
Southern Sycamore-Alder Riparian Woodland	88.8
Southern Riparian Scrub	56.9
Southern Willow Scrub	0.1
Southern Coastal Salt Marsh	12.8
Coastal and Valley Freshwater Marsh	0.2
Freshwater Seep	0.9
Vernal Pools	1.1
Beach	43.8
Subtidal Ocean	3.8
Non-Vegetated Channel or Floodway	0.5
Disturbed Wetland	2.8
Total Wetlands	**236.1**
*Acreages are approximate based on publicly available data sources. Acreages are rounded to the nearest tenth of an acre. Total acreages represent the actual acreages without the rounding error.	

The upland vegetation communities and land cover types and the wetland vegetation communities are discussed in this section.

4.2.1 Upland Communities

Based on available public data sources, 13 upland vegetation communities and land cover types occur within the UCPA, including Torrey pines forest, southern coastal bluff scrub, maritime succulent scrub, Diegan coastal sage scrub, chaparral/southern mixed chaparral, chamise chaparral, southern maritime chaparral, scrub oak chaparral, valley and foothill grassland/valley needlegrass grassland, non-native grassland, disturbed land, eucalyptus woodland, and urban/developed. Other vegetation categories may be present and future site-specific biological surveys would be required at the project-level to confirm the extent of resources present. A brief description of each of these vegetation communities and land cover types is provided below.

4.2.1.1 Torrey Pines Forest

Torrey pines forest is an open to moderately dense forest that can grow up to about 65 feet in height in sheltered areas but that is much shorter in areas that are wind-blown and exposed. It typically occurs on rocky sandstone soils in mild, frost-free climates with low precipitation and seasonal fog. The dominant species in this vegetation community is the Torrey pine (*Pinus torreyana*). The understory varies greatly. On dry, rocky sites where the Torrey pines create a dense tree canopy and needles accumulate on the ground, there are few or almost no understory species. However, where the Torrey pines are more sparse, a fairly dense understory of grasses and shrubs can occur.

Within the UCPA, there are approximately 104.9 acres of Torrey pine forest. Torrey pine forest occurs within the northernmost portion of the UCPA, primarily within and immediately adjacent to Torrey Pines State Reserve (see Figure 7a).

4.2.1.2 Southern Coastal Bluff Scrub

Southern coastal bluff scrub is a low-growing scrub community that grows in exposed, windy areas on rocky, poorly developed soils and is dominated by woody and/or succulent species that are typically less than 7 feet in height. This vegetation community can either form a continuous, closed canopy or can be more scattered. Typical shrubs that occur within southern coastal bluff scrub include salt bush (*Atriplex* spp.), bush sunflower (*Encelia californica*), prickly pear (*Opuntia littoralis*), and lemonadeberry (*Rhus integrifolia*) with an understory of morning glory (*Calystegia macrostegia* ssp.), Indian paintbrush (*Castilleja affinis* ssp.), sea dahlia (*Coreopsis maritima*), dudleya (*Dudleya* spp.), and wild cucumber (*Marah macrocarpa*).

Within the UCPA, there are approximately 98.4 acres of southern coastal bluff scrub. Southern coastal bluff scrub occurs along the northwestern border of the UCPA, within Torrey Pines State Reserve and adjacent to Torrey Pines Golf Course (see Figure 7a).

4.2.1.3 Maritime Succulent Scrub

Maritime succulent scrub is a low-growing (1 to 3 feet high), open scrub community that is dominated by drought deciduous, woody shrubs and a diverse mixture of stem and leaf succulents, often with a high proportion of cacti. This vegetation community grows on thin rocky or sandy soils, often on steep slopes along coastal bluffs. Typical species within

maritime succulent scrub include Shaw's agave (*Agave shawii*), California sagebrush (*Artemisia californica*), bush sunflower, cliff spurge (*Euphorbia misera*), San Diego barrel cactus (*Ferocactus viridescens*), California box thorn (*Lycium californicum*), prickly pear, lemonadeberry, and San Diego sunflower (*Bahiopsis laciniata*); the areas between these species is usually bare.

Within the UCPA, there are approximately 446.3 acres of maritime succulent scrub. Maritime succulent scrub occurs in the northern half of the UCPA, west of I-5 (see Figures 7a and 7b).

4.2.1.4 Diegan Coastal Sage Scrub

Diegan coastal sage scrub (including the disturbed phase) consists mainly of low, soft-woody sub-shrubs (approximately 3 feet high) that are most actively growing in winter and early spring. Many taxa are facultatively drought-deciduous. Stem- and leaf-succulents are also often present but are usually not conspicuously dominant species. This association is typically found on dry sites, such as steep, south-facing slopes or clay-rich soils that are slow to release stored water. Dominant shrub species in this vegetation type may vary, depending on local site factors and levels of disturbance, but often include a variable mix of California sagebrush, California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), deerweed (*Acmispon glaber*), broom baccharis (*Baccharis sarothroides*), coyote brush (*Baccharis pilularis*), California sunflower, and occasionally live-forevers (*Dudleya* spp.), San Diego barrel cactus, and needlegrass (*Stipa* spp.).

Within the UCPA, there are approximately 595.6 acres of Diegan coastal sage scrub. Diegan coastal sage scrub occurs in many locations within the UCPA, along the eastern and southern boundaries (see Figures 7a and 7b).

4.2.1.5 Chaparral / Southern Mixed Chaparral

Chaparral is a broad-scale vegetation community category and, in San Diego, typically refers to southern mixed chaparral. Southern mixed chaparral is composed of broad-leaved sclerophyll shrubs that grow to between 5 and 10 feet in height. It occurs on dry, rocky, steep, north-facing slopes with little soil and moderate temperatures. This vegetation community type typically has high species diversity but is dominated by ceanothus species. In the County, mixed chaparral is usually dominated by Ramona lilac (*Ceanothus tomentosus* var. *olivaceous*) but may also include other ceanothus species, such as chaparral whitethorn (*C. leucodermis*); however, the presence of other ceanothus species typically indicates other chaparral types. In addition to ceanothus, other species often associated with this vegetation community include chamise (*Adenostoma fasciculatum*), Eastwood's manzanita (*Arctostaphylos glandulosa*), toyon (*Heteromeles arbutifolia*), Nuttall's scrub oak (*Quercus dumosa*), laurel sumac, lemonadeberry, spiny redberry (*Rhamnus crocea*), and yucca species (*Yucca* spp.).

Within the UCPA, there are approximately 354.3 acres of chaparral/southern mixed chaparral, including approximately 327.9 acres of chaparral and approximately 26.4 acres

of southern mixed chaparral. Chaparral/southern mixed chaparral primarily occurs scattered through the central and eastern portions of the UCPA (see Figures 7a and 7b).

4.2.1.6 Chamise Chaparral

Chamise chaparral is a chaparral community ranging from about 3 to 9 feet in height and overwhelmingly dominated by chamise. Other shrub species, such as black sage, mission manzanita (*Xylococcus bicolor*), laurel sumac, and felt-leaved yerba santa (*Eriodictyon crassifolium*), may be present but typically contribute little to the overall cover. Mature stands of chamise chaparral have a dense overstory with very little herbaceous understory or leaf litter.

Within the UCPA, there are approximately 45.0 acres of chamise chaparral. Chamise chaparral occurs in a few small patches in the eastern portion of the UCPA, east of I-805, south of Miramar Road, and west of MCAS Miramar (see Figure 7b).

4.2.1.7 Southern Maritime Chaparral

Southern maritime chaparral is a low, fairly open chaparral community that grows on weathered sands within the coastal fog belt. It is typically dominated by wart-stemmed ceanothus (Ceanothus *verrucosus*) and Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*). Other shrub species associated with this vegetation community include chamise (*Adenostoma fasciculatum*), smooth mountain mahogany (*Cercocarpus minutiflorus*), bushrue (*Cneoridium dumosum*), summer-holly (*Comarostaphylis diversifolia*), sea dahlia, toyon, Torrey pine, Nuttall's scrub oak, sugar bush (*Rhus ovata*), and Mojave yucca (*Yucca schidigera*). Many of these species require fire for continued reproduction.

Within the UCPA, there are approximately 255.3 acres of southern maritime chaparral. Southern maritime chaparral occurs within the northernmost portion of the UCPA, primarily within and immediately adjacent to Torrey Pines State Reserve (see Figure 7a).

4.2.1.8 Scrub Oak Chaparral

Scrub oak chaparral is a dense, evergreen chaparral association that grows to 20 feet in height and is dominated by Nuttall's scrub oak and/or oak hybrids such as *Quercus xacutidens*. This habitat occurs on more mesic sites (such as east and north facing slopes and ravines) than the other chaparral associations and often at slightly higher elevations. These more favorable sites often allow scrub oak chaparral to recover from fire more quickly than other chaparral types. Additional shrub species found in scrub oak chaparral include chamise, mission manzanita, and bushrue.

Within the UCPA, there are approximately 6.5 acres of scrub oak chaparral. Scrub oak chaparral occurs in a few small patches in the eastern portion of the UCPA, east of I-805, south of Miramar Road, and west of MCAS Miramar (see Figure 7b).

4.2.1.9 Valley and Foothill Grassland / Valley Needlegrass Grassland

Valley and foothill grassland is the general heading that does not have a definition of its own but includes valley needlegrass grassland; therefore, it is assumed that valley and

foothill grassland that has been mapped within the UCPA is synonymous with valley needlegrass grassland. Valley needlegrass grassland is characterized by mid-height (up to 2 feet), relatively low (greater than 20 percent) to dense herbaceous cover of perennial, tussock-forming bunchgrasses, such as purple needle grass (*Nassella pulchra*). Native and non-native annual and perennial forbs – such as blue-eyed grass (*Sisyrinchium bellum*), California poppy (*Eschscholzia californica*), and goldfields (*Lasthenia californica*) – grow between the perennial grasses and often exceed the bunchgrass in cover. This vegetation community generally occurs on fine-textured, clay soils that are moist or wet in winter, but very dry in summer. Shrubs are infrequent, probably as a result of unstable soils. The degree of habitat quality in native grasslands varies greatly, depending on the history of grazing, cultivation, or other disturbance factors, and it has been replaced in many areas by non-native grassland, which is dominated by exotic annual grass species.

Within the UCPA, there are approximately 509.3 acres of valley and foothill grassland. Valley and foothill grassland occurs in many patches around the UCPA, with the majority scattered along the northern UCPA boundary and within Rose Canyon, in the southern portion of the UCPA (see Figures 7a and 7b).

4.2.1.10 Non-Native Grassland

Non-native grassland is characterized by a dense to sparse cover of annual grasses, often with showy-flowered native and non-native annual forbs. This vegetation community generally occurs on fine-textured loam or clay soils that are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. This habitat is a disturbance-related community most often found in old agricultural fields or openings in native scrub habitats; it has replaced native grassland and coastal sage scrub at many localities throughout southern California. Typical non-native grasses found within this vegetation community include red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), wild oat (*Avena barbata*), and soft chess (*Bromus hordeaceus*). Characteristic forbs include red-stem filaree (*Erodium cicutarium*), mustard (*Brassica* spp.), tar plant (*Deinandra* spp.), and goldfields (*Lasthenia* spp.).

Within the UCPA, there are approximately 111.4 acres of non-native grassland. Non-native grassland occurs mixed with Diegan coastal sage scrub along Miramar Road, in the eastern portion of the UCPA (see Figure 7b).

4.2.1.11 Disturbed Land

Disturbed land refers to areas that retain a soil substrate but on which the native vegetation has been significantly altered by previous human activity, such that the species composition and site conditions are no longer recognizable as a native or naturalized vegetation community. Vegetation, if present, is typically composed of predominantly non-native species – such as Russian-thistle (*Salsola tragus*), horseweed (*Conyza* spp.), mustard (*Hirschfeldia incana*), and non-native grasses – that have been introduced and established through human action. These areas are not typically artificially irrigated but receive water from precipitation and runoff. Examples of disturbed land include areas that have been graded, cleared for fuel management purposes, recently graded firebreaks, graded construction pads and staging areas, off-road vehicle trails, and old home sites.

Within the UCPA, there are approximately 367.2 acres of disturbed land. Disturbed land is scattered throughout the UCPA, both within the open space/canyons as well as within the more urbanized areas (see Figures 7a and 7b).

4.2.1.12 Eucalyptus Woodland

Eucalyptus woodland is typically characterized by dense stands of gum trees (*Eucalyptus* spp.), often monotypic and dominated by either blue gum (*Eucalyptus globulus*) or river red gum (*E. camaldulensis*); however, sparse eucalyptus woodland also occurs. In many areas with eucalyptus woodland, there is little understory, as very few plants are able to tolerate the chemical compounds in the bark and leaf litter. Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many regions of coastal California as a potential source of lumber and building materials, for their use as windbreaks, and for their horticultural novelty. They have increased their cover through natural regeneration, particularly in moist areas sheltered from strong coastal winds. Gum trees naturalize readily in the state of California and, where they form dense, monotypic stands, tend to completely supplant native vegetation, greatly altering community structure and dynamics.

Within the UCPA, there are approximately 94.7 acres of eucalyptus woodland. Eucalyptus woodland occurs in the central portion of the UCPA, primarily on and adjacent to the UCSD campus (see Figures 7a and 7b).

4.2.1.13 Urban/Developed

Urban/developed lands have been constructed upon or physically altered such that they support no naturally occurring native vegetation and are characterized by the presence of permanent or semi-permanent human-made structures, such as buildings or roads. The level of soil disturbance is such that only the most ruderal plant species would be expected. In many areas, ornamental plantings are included in developed lands where they are immediately adjacent and part of the residential and/or commercial development. Developed land can also describe areas where no natural land is evident as a result of a large amount of debris or other man-made materials, such as a recycling plant or quarry.

Within the UCPA, there are approximately 5,451 acres of urban/developed lands. The majority of the UCPA is classified as urban/developed lands (see Figures 7a and 7b).

4.2.2 Wetland Communities

Based on available public data sources, 13 wetland vegetation communities occur within the UCPA, including southern riparian forest, southern coast live oak riparian forest, southern sycamore-alder riparian woodland, southern riparian scrub, southern willow scrub, southern coastal salt marsh, coastal and valley freshwater marsh, freshwater seep, vernal pools, beach, subtidal ocean, non-vegetated channel or floodway, and disturbed wetland. Wetland delineations would be required at the project-level to confirm the extent of resources present. A brief description of each of these vegetation communities and land cover types is provided below.

4.2.2.1 Southern Riparian Forest

Southern riparian forest is a general vegetation community classification used for dense riparian forests that cannot be categorized into a more defined vegetation community description. It is composed of winter-deciduous, broad-leaved tree species that require water near the soil surface and is most often found along stream courses. This community typically contains a dense canopy of trees located within moist canyons and drainage bottoms and is dominated by species such as willows (*Salix* spp.), cottonwoods (*Populus* sp.), and western sycamore (*Platanus racemosa*). Associated understory species can include species such as mulefat (*Baccharis salicifolia*), stinging nettle (*Urtica dioica* ssp. *holosericea*), and wild grape (*Vitis girdiana*).

Within the UCPA, there are approximately 18.1 acres of southern riparian forest. Southern riparian forest occurs along in the southwestern portion of the UCPA in two small arms of Rose Canyon (see Figure 7b).

4.2.2.2 Southern Coast Live Oak Riparian Forest

Southern coast live oak riparian forest refers to a dense riparian forest that is dominated by coast live oak trees, which can reach from 30 feet to over 80 feet in height, and that typically has a closed or nearly closed canopy. This vegetation community often has a poorly developed understory of shrubs but a richer herbaceous understory. Understory shrubs may include toyon, blue elderberry *(Sambucus nigra* ssp. *caerulea*), and lemonadeberry, among others. The herb layer often includes California wild rose (*Rosa californica*), California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), and nettles (*Urtica* spp.), and various native and non-native grasses. This habitat can be found on well-drained bottomlands and outer floodplains on fine-grained, rich alluvium.

Within the UCPA, there are approximately 6.5 acres of southern coast live oak riparian forest. Southern coast live oak riparian forest occurs in several small patches in Miramar Canyon along the northeastern boundary of the UCPA (see Figure 7b).

4.2.2.3 Southern Sycamore-Alder Riparian Woodland

Southern sycamore-alder riparian woodland is a tall, open, broad-leaved, winter deciduous woodland found along very rocky streams (sometimes with seasonally high-intensity flooding) and is dominated by western sycamore but often also has white alder (*Alnus rhombifolia*). This vegetation community rarely forms a closed canopy and sometimes occurs as scattered trees in a shrubby thicket of sclerophyllous and deciduous species. Other species characteristic of this vegetation community include California mugwort (*Artemisia douglasiana*), blue elderberry, poison oak, California bay (*Umbellularia californica*), and stinging nettle.

Within the UCPA, there are approximately 88.8 acres of southern sycamore-alder riparian woodland. Southern sycamore-alder riparian woodland occurs primarily in the southern portion of the UCPA in Rose Canyon with several small patches along the northeastern boundary of the UCPA in Miramar Canyon (see Figures 8a and 7b).

4.2.2.4 Southern Riparian Scrub

Southern riparian scrub refers to riparian zones that are dominated by small trees or shrubs but that lack larger, taller riparian trees. It is usually found along river systems where flood scour occurs, and its distribution has expanded from increased urban and agricultural run-off. It varies from a dense, broad-leafed, winter-deciduous association dominated by several species of willow (*Salix* spp.) to an herbaceous scrub dominated by mulefat. Understory vegetation is usually composed of non-native, weedy species or is lacking altogether. This association may represent a successional stage leading to riparian woodland or forest, or it may be a stable vegetation community.

Within the UCPA, there are approximately 56.9 acres of southern riparian scrub. Southern riparian scrub occurs in many scattered patches within the UCPA and east of I-5 (see Figures 7a and 7b).

4.2.2.5 Southern Willow Scrub

Southern willow scrub (including the disturbed phase and disturbed willow scrub) is a dense, broad-leaved, winter deciduous riparian thicket that is found on loose, sandy, or fine gravelly alluvium deposited near stream channels during floods. This vegetation community is typically dominated by several willow species (*Salix* spp.), sometimes with scattered, emergent western sycamore and/or Fremont cottonwood (*Populus fremontii*). Most southern willow scrub stands are too dense to allow much understory to develop.

Within the UCPA, there is approximately 0.1 acre of southern willow scrub. Southern willow scrub occurs in a tiny patch located in Rose Canyon, just east of I-805 (not visible on Figure 7b because of its small size).

4.2.2.6 Southern Coastal Salt Marsh

Southern coastal salt marsh is a low-growing (up to 3 feet in height) and highly productive vegetation community composed of herbaceous and suffrutescent, salt-tolerant hydrophytes that typically form moderate to dense vegetative cover. This vegetation community is typically found along sheltered margins of bays, lagoons, and estuaries along the coast that are subject to regular tidal inundation by salt water for at least part of the year. The species found within southern coastal salt marsh are usually segregated horizontally by elevation. Species that typically occur along the upper, landward edges include alkali heath (*Frankenia salina*), seablite (*Suaeda* spp.), and/or pickleweed and glasswort (*Salicornia* spp.). Species that occur along the middle elevations typically include pickleweed, glasswort, and saltwort (*Batis maritima*), and species that occur closest to open water include cordgrass (*Spartina* spp.).

Within the UCPA, there are approximately 12.8 acres of southern coastal salt marsh. Southern coastal salt marsh occurs in several patches along the northernmost boundary of the UCPA (see Figure 7a).

4.2.2.7 Coastal and Valley Freshwater Marsh

Coastal and valley freshwater marsh is dominated by perennial, emergent monocots that grow up to about 15 feet in height that often form a completely closed canopy. Freshwater

marsh occurs in wetlands that are permanently flooded by standing fresh water that lacks a significant current and, thus, prolongs saturation and permits the accumulation of deep, peaty soils. Characteristic plant species associated with this vegetation community include cattails (*Typha* spp.), rushes (*Juncus* spp.), sedges (*Carex* spp., *Cyperus* spp., *Eleocharis* spp.), bulrushes (*Scirpus* spp.), and other perennial herbs.

Within the UCPA, there is approximately 0.2 acre of coastal and valley freshwater marsh. Coastal and valley freshwater marsh occurs in one small patch in the eastern portion of the UCPA, east of I-805, south of Miramar Road, and west of MCAS Miramar (see Figure 7b).

4.2.2.8 Freshwater Seep

Freshwater seep is a vegetation community classification that applies to portions of grasslands or meadows with permanently moist or wet soils. This vegetation community is dominated by perennial herbs, especially low-growing sedges and grasses that typically form a complete cover. Characteristic species include sedges (*Carex* spp.), rushes (*Juncus* spp.), watercress (*Nasturtium officinale*), mulefat, and prairie mallow (*Sidalcea malviflora*).

Within the UCPA, there is approximately 0.9 acre of freshwater seep. Freshwater seep occurs in several patches in the eastern portion of the UCPA, east of I-805, south of Miramar Road, and west of MCAS Miramar (see Figure 7b).

4.2.2.9 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. 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 (City 2019).

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 (City 2019). The claypan or the hardpan subsurface creates the perched water table that is required for the presence of ponding (Greenwood and Abbot 1980). From a geomorphological level, most of the 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).

The VPHCP considers a seasonally flooded depression to be a vernal pool if it includes one or more of the vernal pool indicator species (City 2018b). Consistent with Attachment II, A.3 of the City’s Biology Guidelines (City 2018b), depressions that are man-made, such

as tire tracks or road ruts, may still be considered vernal pools if they contain at least one indicator 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. The VPHCP also applies to these man-made road ruts and other seasonal depressions if they contain one or more of the covered species.

Within the UCPA, the 'vernal pool' classification includes all areas mapped as vernal pools (City 2019) and includes approximately 1.1 acres of vernal pools of which 0.1 acre occurs in Diegan coastal sage scrub, less than 0.1 acre occurs in chaparral, 0.1 acre occurs in chamise chaparral, 0.4 acre occurs in valley and foothill grassland / valley needlegrass grassland, 0.2 acre occurs in non-native grassland, 0.1 acre occurs in disturbed land, and less than 0.1 acre occurs in urban/developed. Vernal pools occur primarily in the eastern portion of the UCPA, along Miramar Road, with one additional occurrence in the western portion of the UCPA, near the Torrey Pines Gliderport (see Figures 7a and 7b).

4.2.2.10 Beach

Beach is a land cover type that refers to sandy and/or cobbly habitat along coastal strands, lagoons, or lakes. Ocean beaches are formed by wave and tidal action off the coast and consist primarily of deposited sand. These beaches are mostly unvegetated; however, the upper portions may be thinly populated with herbaceous species, and marine sea grasses from the Posidoniaceae, Zosteraceae, Hydrocharitaceae, and Cymodoceaceae families may be exposed during low tides.

Within the UCPA, there are approximately 43.8 acres of beach. Beach occurs along the northwestern boundary of the UCPA and includes the beach portions of Torrey Pines State Reserve and Blacks Beach, just west of Torrey Pines Golf Course (see Figures 7a and 7b).

4.2.2.11 Subtidal Ocean

The subtidal ocean zone extends from the low tide line into the ocean to the depth that supports canopy-forming kelps, typically to about 120 feet below the ocean surface. This area supports a variety of aquatic marine plants, phytoplankton, algae, and macroalgae when there is suitable substrate.

Within the UCPA, there are approximately 3.8 acres of subtidal ocean. Subtidal ocean occurs in a narrow strip along the far northwestern UCPA boundary inside the Torrey Pines State Reserve (not visible on Figures 7a or 7b because of its small size).

4.2.2.12 Non-Vegetated Channel or Floodway

Non-vegetated channel or floodway is the land cover classification given to the sandy, gravelly, or rocky fringe of waterways or flood channels that are unvegetated on a relatively permanent basis. Small amounts of vegetation (less than 10 percent total cover) may occur, typically composed of weedy grass species. This land cover classification

does not apply to areas that are unvegetated as a result of a very recent or uncommon flood event in the upper parts of watersheds.

Within the UCPA, there is approximately 0.5 acre of non-vegetated channel or floodway. Non-vegetated channel or floodway occurs in Rose Canyon, immediately east of I-805 and immediately south of the railroad track (see Figures 7a and 7b).

4.2.2.13 Disturbed Wetland

Disturbed wetlands are areas that are permanently or periodically inundated by water and that have been significantly modified by human activity, preventing an accurate description of the vegetation community that may have been present prior to the disturbance. These areas are frequently unvegetated, but if vegetation is present, there is a predominance of non-native plants, such as bristly ox tongue (*Helminthotheca echioides*), cocklebur (*Xanthium strumarium*), giant reed (*Arundo donax*), salt cedar (*Tamarix* spp.), gum trees (*Eucalyptus* spp.), Pampas grasses (*Cortaderia* spp.), and Bermuda grass (*Cynodon dactylon*). Examples of disturbed wetlands include lined channels, Arizona crossings, detention basins, culverts, and ditches.

Within the UCPA, there are approximately 2.8 acres of disturbed wetland. Disturbed wetland occurs in one small location in the central portion of the UCPA, just west of I-805 and just south of La Jolla Village Drive (see Figure 7b).

4.3 SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources are defined in Chapter 11, Article 3, Division 1 of the SDMC and in the City's Biology Guidelines (City 2018b). These include lands that satisfy one or more of the following criteria:

1. Lands within the City's MSCP Preserve (i.e., the MHPA);
2. Wetlands;
3. Lands outside the City's MHPA that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;
4. Lands supporting species or subspecies listed as rare, endangered, or threatened under Section 670.2 or 670.5, Title 14, California Code of Regulations, or the Federal Endangered Species Act, Title 50, Code of Federal Regulations, Section 17.11 or 17.12, or candidate species under the California Code of Regulations;
5. Lands containing habitats with Narrow Endemic Species as listed in the City's Biology Guidelines (City 2018b); and/or
6. Lands containing habitats of covered species as listed in the City's Biology Guidelines (City 2018b).

According to the above criteria, sensitive biological resources include sensitive vegetation communities, sensitive plant and wildlife species, critical habitat, jurisdictional resources, and wildlife movement corridors. Assessments for the potential occurrence of sensitive biological resources are based upon known ranges, habitat associations, historical species occurrence records from the vicinity of the UCPA (Calflora 2023; CDFW 2023a; County 2023; SDNHM 2023; USFWS 2023a), and data from several recent biological

resources reports for projects within the UCPA (Alden 2023; HELIX 2022; RECON 2021; Rincon 2019). No updated vegetation mapping or focused sensitive species surveys were conducted for the UCPU.

The following sections provide definitions for each of these sensitive biological resources and describe the sensitive biological resources that are known to occur or have a potential to occur within and/or adjacent to the UCPA.

4.3.1 Sensitive Vegetation Communities

Sensitive vegetation communities are vegetation assemblages, associations, or subassociations that have cumulative losses throughout the region, have relatively limited distribution, support or potentially support sensitive species, or have a particular value to other wildlife. Typically, sensitive vegetation communities are considered sensitive whether or not they have been disturbed. Within the UCPA, there are both sensitive upland vegetation communities and sensitive wetland communities.

The City's Biology Guidelines (City 2018b) divide upland vegetation communities into four different tiers based on their sensitive and ecological value – Tier I: Rare Uplands; Tier II: Uncommon Uplands; Tier IIIA and IIIB: Common Uplands; and Tier IV: Other Uplands. In most cases, upland vegetation communities classified as Tier I, II, IIIA, and IIIB are considered sensitive vegetation communities, while vegetation communities and land cover types classified as Tier IV are not considered sensitive.

Wetland communities are not assigned a tier classification; however, all wetland vegetation communities are considered sensitive under the City's Biology Guidelines (City 2018b). More specifically, City wetlands are defined in Chapter 11, Article 3, Division 1 of the SDMC and include areas characterized by the following conditions:

1. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation;
2. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities; and/or
3. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology resulting from non-permitted filling of previously existing wetlands.

Based on these definitions of sensitive vegetation communities, the UCPA supports 23 sensitive vegetation communities/land cover types – 10 upland vegetation communities and 13 wetland vegetation communities/land cover types (including marine cover types). These sensitive vegetation communities are summarized in Table 2, below, and shown on Figures 7a and 8b.

Table 2. Sensitive Vegetation Communities and Land Cover Types in the UCPA

Vegetation Community/Land Cover Type	Tier
Upland	
Torrey Pines Forest	I
Southern Coastal Bluff Scrub	I
Maritime Succulent Scrub	I
Southern Maritime Chaparral	I
Scrub Oak Chaparral	I
Valley and Foothill Grassland/Valley Needlegrass Grassland	I
Diegan Coastal Sage Scrub	II
Chaparral / Southern Mixed Chaparral	IIIA
Chamise Chaparral	IIIA
Non-Native Grassland	IIIB
Wetland*	
Southern Riparian Forest	N/A
Southern Coast Live Oak Riparian Forest	N/A
Southern Sycamore-Alder Riparian Woodland	N/A
Southern Riparian Scrub	N/A
Southern Willow Scrub	N/A
Southern Coastal Salt Marsh	N/A
Coastal and Valley Freshwater Marsh	N/A
Freshwater Seep	N/A
Vernal Pools	N/A
Beach	N/A
Subtidal Ocean	N/A
Non-Vegetated Channel or Floodway	N/A
Disturbed Wetland	N/A
*Wetland does not refer to USACE wetlands or WoUS. N/A = not applicable.	

4.3.2 Sensitive Plants

Based on the definitions provided in Chapter 11, Article 3, Division 1 of the SDMC, sensitive plant species include those that are (1) considered rare, endangered, or threatened by USFWS and/or CDFW; (2) proposed for listing by USFWS and/or CDFW; (3) California Rare Plant Ranks (CRPR) List 1A (plants presumed extirpated in California and either rare or extinct elsewhere), CRPR List 1B (plants rare, threatened, or endangered in California and elsewhere), CRPR List 2A (plants presumed extirpated in California but common elsewhere), or CRPR List 2B (plants rare, threatened, or endangered in California but more common elsewhere) species (CNPS 2023); and/or (4) MSCP-covered species and Narrow Endemic Species. In addition, a plant species that is included on the CNPS Inventory of Rare and Endangered Plants (CNPS 2023) but with no other listing may also be considered sensitive based on its CRPR ranking; however, CRPR List 3 (plants about which more information is needed) and CRPR List 4 (plants of limited distribution) species are considered noteworthy species but are not considered sensitive and are not included in this report.

No focused sensitive plant species surveys were conducted for the UCPU. A database search and literature review resulted in 70 sensitive plant species that are either known to occur within the vicinity of the UCPA and/or are MSCP-covered species. Assessments for the potential for occurrence of these sensitive plant species are based upon known

ranges (geographic and elevational), habitat associations, historical species occurrence records from the vicinity of the UCPA (CDFW 2023a; County 2023; Calflora 2023; SDNHM 2023; USFWS 2023a), and data from several recent biological resources reports for projects within the UCPA (Alden 2023; HELIX 2022; RECON 2021; Rincon 2019).

Based on this data, 23 of the 70 sensitive plant species were excluded from the analysis in this report not only because there are no recent historical occurrence records within the UCPA or within the 1-mile buffer but also because the UCPA is outside of the known range for these species (Alden 2023; Calflora 2023; CDFW 2023a; City 1997; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023, USFWS 2023a). Table 3 below provides the plant species that were excluded from the analysis in this report, their status, and additional rationale for excluding these species. These species are not discussed further in this report.

Table 3. Sensitive Plant Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
San Diego ambrosia (*Ambrosia pumila*)	FE CRPR 1B.1 MSCP NE	UCPA is well outside the known geographic range for this species. Most of the historical occurrences in the County are to the southeast of the UCPA with a few to the north of the UCPA. (Calflora 2023, SDNHM 2023).
Otay manzanita (*Arctostaphylos otayensis*)	CRPR 1B.2 MSCP	UCPA is outside the known geographic range for this species. All historical occurrences in the County are southeast of the UCPA (Calflora 2023, SDNHM 2023).
coastal dunes milk-vetch (*Astragalus tener* var. *titi*)	FE SE CRPR 1B.1 MSCP NE	Species extremely rare. Known only from one historical location from 1882 within the 1-mile buffer, just outside the central northern boundary of the UCPA (Calflora 2023); however, no recent historical locations are known from the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). Only one recent location the County is known, and it is located south of the San Diego Bay (SDNHM 2023).
thread-leaved brodiaea (*Brodiaea filifolia*)	FT SE CRPR 1B.1 MSCP	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are north of the UCPA. (Calflora 2023, SDNHM 2023).
Dunn's mariposa lily (*Calochortus dunnii*)	CRPR 1B.2 MSCP	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are east and southeast of the UCPA. (Calflora 2023, SDNHM 2023).
Lakeside ceanothus (*Ceanothus cyaneus*)	CRPR 1B.2 MSCP	Known only from one historical location from 1938 within the UCPA (Calflora 2023); however, no recent historical locations are known from the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). All other occurrences in the County are far well outside the UCPA (Calflora 2023, SDNHM 2023) with the majority far to the east of the UCPA (SDNHM 2023).

Table 3. Sensitive Plant Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
southern tarplant (*Centromadia parryi* ssp. *australis*)	CRPR 1B.1	UCPA is outside the known geographic range for this species. All historical occurrences in the County are north or northeast of the UCPA (Calflora 2023, SDNHM 2023).
salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*	FT SE CRPR 1B.2 MSCP	While there is a single, vague historical location point for the USGS La Jolla Quadrangle (Calflora 2023), the majority of the historical occurrence data shows that the UCPA is outside the known geographic range for this species. Most historical occurrences in the County are south of the UCPA (Calflora 2023, SDNHM 2023).
San Miguel savory (*Clinopodium chandleri*)	CRPR 1B.2 MSCP	UCPA is outside the known geographic range for this species. All historical occurrences in the County are east and southeast of the UCPA (Calflora 2023, SDNHM 2023).
Otay tarplant (*Deinandra conjugens*)	FT SE CRPR 1B.1 MSCP NE	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are southeast of the UCPA (Calflora 2023, SDNHM 2023).
Orcutt's bird's-beak (*Dicranostegia orcuttiana*)	CRPR 2B.1 MSCP	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are south of the UCPA, except for one just south of the Riverside County border (Calflora 2023, SDNHM 2023).
sessile-leaved yerba santa (*Eriodictyon sessilifolium*)	CRPR 2B.1	UCPA is well outside the known geographic range for this species. Very few historical occurrences in the County and all are east of the UCPA (Calflora 2023, SDNHM 2023).
Tecate cypress (*Hesperocyparis forbesii*)	CRPR 1B.1 MSCP	UCPA is well outside the known geographic range for this species. The majority of historical occurrences in the County are southeast of the UCPA, with scattered occurrences to the east and northeast (Calflora 2023, SDNHM 2023).
heart-leaved pitcher sage (*Lepechinia cardiophylla*)	CRPR 1B.2 MSCP	UCPA is well outside the known geographic range for this species. Only a few historical occurrences in the County and all are northeast of the UCPA (Calflora 2023, SDNHM 2023).
Gander's pitcher sage (*Lepechinia ganderi*)	CRPR 1B.3 MSCP	UCPA is well outside the known geographic range for this species. Only a few historical occurrences in the County and all are northeast of the UCPA (Calflora 2023, SDNHM 2023).
felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*)	CRPR 1B.2 MSCP	UCPA is outside the known geographic range for this species. Historical occurrences in the County are primarily northeast, east, and southeast of the UCPA (Calflora 2023, SDNHM 2023).
Dehesa beargrass (*Nolina interrata*)	CRPR 1B.1 MSCP	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are southeast of the UCPA (Calflora 2023, SDNHM 2023).
Gander's butterweed (*Packera gander*)	CRPR 1B.2 MSCP	UCPA is outside the known geographic range for this species. All historical occurrences in the County are northeast, east, and southeast of the UCPA (Calflora 2023, SDNHM 2023).
small leaved rose (*Rosa minutifolia*)	SE CRPR 2B.1 MSCP	UCPA is well outside the known geographic range for this species. All historical occurrences in the County are south and southeast of the UCPA along the U.S./Mexico border (Calflora 2023, SDNHM 2023).

Table 3. Sensitive Plant Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	UCPA is outside the known geographic range for this species. Very few historical occurrences are documented in the County and all are outside of the UCPA (Calflora 2023, SDNHM 2023).
salt spring checkerbloom (*Sidalcea neomexicana*)	CRPR 2B.2	Species extremely rare. Known only from one historical location from 1961 within the UCPA (Calflora 2023); however, no recent historical locations are known from the UCPA or anywhere else in the County (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a).
purple stemodia (*Stemodia durantifolia*)	CRPR 2B.1	UCPA is outside the known geographic range for this species. Historical occurrences in the County are primarily to the east and southeast of the UCPA, with only a few from the northeast of the UCPA (Calflora 2023, SDNHM 2023).
Parry's tetracoccus (*Tetracoccus dioicus*)	CRPR 1B.2 MSCP	UCPA is outside the known geographic range for this species. All historical occurrences in the County are north, east, and southeast of the UCPA (Calflora 2023, SDNHM 2023).
NOTE: Refer to Appendix A for an explanation of status codes for sensitive plant species.		

Based on the most recent data available for the UCPA (Alden 2023; Calflora 2023; CDFW 2023; City 1997; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023, USFWS 2023), 47 sensitive plant species have been reported within the UCPA and/or within a 1-mile buffer of the UCPA and include:

- **San Diego thorn-mint** (*Acanthomintha ilicifolia*; Federally Threatened, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **Nuttall's acmispon** (*Acmispon prostratus*; previously Nuttall's Lotus (*Lottus nuttallianus*) CRPR 1B.1, MSCP-covered)
- **California adolphia** (*Adolphia californica*; CRPR 2B.1)
- **Shaw's agave** (*Agave shawii* var. *shawii*, CRPR 2B.1, MSCP-covered Narrow Endemic)
- **aphanisma** (*Aphanisma blitoides*; CRPR 1B.2, MSCP-covered Narrow Endemic)
- **Del Mar manzanita** (*Arctostaphylos glandulosa* ssp. *crassifolia*; Federally Endangered, CRPR 1B.1, MSCP-covered)
- **south coast saltscale** (*Atriplex pacifica*; CRPR 1B.2)
- **Encinitas baccharis** (*Baccharis vanessae*; Federally Threatened, State Endangered, CRPR 1B.1, MSCP-covered)
- **Nevin's barberry** (*Berberis nevinii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- **golden-spined cereus** (*Bergerocactus emoryi*; CRPR 2B.2)
- **San Diego goldenstar** (*Bloomeria clevelandii*; CRPR 1B.1, MSCP-covered)
- **Orcutt's brodiaea** (*Brodiaea orcuttii*; CRPR 1B.1, MSCP-covered)
- **fire reedgrass** (*Calamagrostis koelerioides*; formerly dense reed grass [*Calamagrostis densa*]; MSCP-covered)
- **slender-pod jewelflower** (*Caulanthus heterophyllus*, MSCP-covered)
- **wart-stemmed ceanothus** (*Ceanothus verrucosus*; CRPR 2B.2, MSCP-covered)

- **Orcutt's pincushion** (*Chaenactis glabriuscula* var. *orcuttiana*; CRPR 1B.1)
- **Orcutt's spineflower** (*Chorizanthe orcuttiana*; Federally Endangered, State Endangered, CRPR 1B.1)
- **long-spined spineflower** (*Chorizanthe polygonoides* var. *longispina*; CRPR 1B.2)
- **summer-holly** (*Comarostaphylis diversifolia* ssp. *diversifolia*; CRPR 1B.2)
- **San Diego sand aster** (*Corethrogyne filaginifolia* var. *incana*; CRPR 1B.1)
- **Del Mar Mesa sand aster** (*Corethrogyne filaginifolia* var. *linifolia*; CRPR 1B.1, MSCP-covered)
- **snake cholla** (*Cylindropuntia californica* var. *californica*; CRPR 1B.1, MSCP-covered Narrow Endemic)
- **short-leaved dudleya** (*Dudleya brevifolia*; State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic)
- **variegated dudleya** (*Dudleya variegata*; CRPR 1B.2, MSCP-covered Narrow Endemic)
- **sticky dudleya** (*Dudleya viscida*; CRPR 1B.2, MSCP-covered)
- **Palmer's ericameria** (*Ericameria palmeri* var*. palmeri*; CRPR 1B.1, MSCP-covered)
- **San Diego button-celery** (*Eryngium aristulatum* var. *parishii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered, VPHCP-covered Species)
- **sand-loving wallflower** (*Erysimum ammophilum*; CRPR 1B.2, MSCP-covered)
- **cliff spurge** (*Euphorbia misera*; CRPR 2B.2)
- **San Diego barrel cactus** (*Ferocactus viridescens*; CRPR 2B.1, MSCP-covered)
- **Campbell's liverwort** (*Geothallus tuberosus*; CRPR 1B.1)
- **beach goldenaster** (*Heterotheca sessiliflora* ssp. *sessiliflora*; CRPR 1B.1)
- **decumbent goldenbush** (*Isocoma menziesii* var. *decumbens*; CRPR 1B.2)
- **San Diego marsh-elder** (*Iva hayesiana*; CRPR 2B.2)
- **Coulter's goldfields** (*Lasthenia glabrata* ssp. *coulteri*; CRPR 1B.1)
- **sea dahlia** (*Leptosyne maritima*; CRPR 2B.2)
- **willowy monardella** (*Monardella viminea*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered)
- **spreading navarretia** (*Navarretia fossalis*; Federally Threatened, CRPR 1B.1, MSCP-covered Narrow Endemic, VPHCP-covered Species)
- **coast woolly-heads** (*Nemacaulis denudata* var. *denudata*; CRPR 1B.2)
- **California Orcutt grass** (*Orcuttia californica*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic, VPHCP-covered Species)
- **Brand's star phacelia** (*Phacelia stellaris*; CRPR 1B.1)
- **Torrey pine** (*Pinus torreyana* ssp. *torreyana*; CRPR 1B.2, MSCP-covered)
- **San Diego mesa mint** (*Pogogyne abramsii*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered Narrow Endemic, VPHCP-covered Species)
- **Otay mesa mint** (*Pogogyne nudiuscula*; Federally Endangered, State Endangered, CRPR 1B.1, MSCP-covered, Narrow Endemic, VPHCP-covered)
- **Nuttall's scrub oak** (*Quercus dumosa*; CRPR 1B.1)
- **narrow-leaved nightshade** (*Solanum xanti*; MSCP-covered)
- **bottle liverwort** (*Sphaerocarpos drewei*; CRPR 1B.1)

The 47 sensitive plant species that are known historically from the UCPA and vicinity were evaluated for their potential for occurrence within the UCPA. Species were classified as "Present" if the species has recently verified historical records within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). Because no focused surveys for sensitive plants were conducted for this UCPU, several species were classified as "Potential" if the species has (1) only very old and unconfirmed historical records within the UCPA, (2) only historical records within 1 mile of the UCPA but not within the UCPA, and/or (3) potentially suitable habitat within in the UCPA. "Potential" is an important category, because there may be areas within the UCPA that have not been surveyed previously and may support a sensitive plant species that does not currently have historical occurrence records within the UCPA.

Based on the above criteria for the 47 sensitive plant species, 38 are present within the UCPA while 9 have a potential to occur. The sensitivity status, species information, and potential for occurrence for each of these 47 plant species are summarized in Table 4, below. Please see Appendix A for an explanation of status codes for sensitive plant species.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT SE CRPR 1B.1 MSCP NE	Annual herb. Blooms Apr-Jun. Clay soils associated with vernal pools in chaparral, coastal sage scrub, grassland. Elev 165-2,920 ft. (Calflora 2023)	**Potential.** One historical record occurs just outside and to the north of the UCPA within the Torrey Pines State Reserve (Calflora 2023); however, no other historical locations reported within or adjacent to the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in suitable habitat within the UCPA.	Area specific management directives and the SPA for the Otay Lakes Resort area must include specific measures to protect against detrimental edge effects from the surrounding development.
Nuttall's acmispon (*Acmispon prostratus*) [previously Nuttall's lotus; *Lottus nuttallianus*]	CRPR 1B.1 MSCP	Annual herb. Blooms Mar-Jun. Coastal sage scrub and coastal strand within coastal dunes. Elev 0-35 ft. (Calflora 2023)	**Present.** Known from several historical locations within the northern portion UCPA in Torrey Pines State Reserve (Calflora 2023; SDNHM 2023) and from a couple historical locations within the 1-mile buffer, just north of the UCPA boundary and just north of the Torrey Pines State Reserve (CDFW 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects.
California adolphia (*Adolphia californica*)	CRPR 2B.1	Deciduous shrub. Blooms Dec-May. Chaparral, coastal sage scrub, grassland. Elev 15-1,115 ft. (Calflora 2023)	**Potential.** Known only from several very old historical locations within the UCPA (Calflora 2023) and from several historical locations within the 1-mile buffer, just outside the central northern boundary of the UCPA (Calflora 2023; CDFW 2023a; SDNHM 2023), but no other historical locations reported within or adjacent to the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
Shaw's agave (*Agave shawii* var. *shawii*)	CRPR 2B.1 MSCP NE	Leaf succulent. Blooms Sep-May. Coastal bluff scrub, coastal sage scrub. Elev 0-425 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects.
aphanisma (*Aphanisma blitoides*)	CRPR 1B.2 MSCP NE	Annual herb. Blooms Mar-Jun. Coastal bluff scrub, coastal sage scrub. Elev 0-625 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and from a couple historical locations along the cliffs just south of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*)	FE CRPR 1B.1 MSCP	Evergreen shrub. Blooms Dec-Jun. Sandy soils in maritime chaparral. Elev 165-690 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and from several historical locations within the 1-mile buffer, just north of the UCPA boundary and just north of the Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
south coast saltscale (*Atriplex pacifica*)	CRPR 1B.2	Annual herb. Blooms Mar-Oct. Playas, coastal dunes, coastal bluff scrub, coastal sage scrub. Elev 100-1,575 ft. (Calflora 2023)	**Present.** Known from one historical location within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
Encinitas baccharis (*Baccharis vanessae*)	FT SE CRPR 1B.1 MSCP	Deciduous shrub. Blooms Aug-Nov. Maritime chaparral. Elev 280-2,985 ft. (Calflora 2023)	**Potential.** Known from one historical location within the 1-mile buffer, just outside the central northern boundary of the UCPA (Calflora 2023; CDFW 2023a; SDNHM 2023); however, no historical locations occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in suitable habitat within the UCPA.	Based on BMPs, area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire; and appropriate male/female plant ratios. Management measures to accomplish this may include prescribed fire.
Nevin's barberry (*Berberis nevinii*)	FE SE CRPR 1B.1 MSCP	Shrub. Blooms Mar-Jun. Coastal sage scrub, chaparral, foothill woodland. Elev 130-7,480 ft. (Calflora 2023)	**Present.** Known from one historical location within the UCPA in Torrey Pines State Reserve (Calflora 2023; SDNHM 2023) and several other occurrences scattered around in the western portion of the County (Calflora 2023). May occur in other suitable habitat within the UCPA.	N/A
golden-spined cereus (*Bergerocactus emoryi*)	CRPR 2B.2	Stem succulent. Blooms May-Jun. Chaparral, coastal sage scrub, closed-cone coniferous forest. Elev 15-935 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (CDFW 2023a, Calflora 2023; SDNHM 2023) and from one old historical location within the 1-mile buffer, just south of the UCPA boundary and just south of Torrey Pines Golf Course (Calflora 2023; CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
San Diego goldenstar (*Bloomeria clevelandii*)	CRPR 1B.1 MSCP	Perennial, bulbiferous herb. Blooms Apr-May. Typically clay soils in vernal pools in chaparral, coastal sage scrub, grassland. Elev 100-5,710 ft. (Calflora 2023)	**Present.** Known from one historical location within the UCPA in Torrey Pines State Reserve (Calflora 2023) and from several locations in the eastern portion of the UCPA, along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023). Also known from a couple historical locations within the 1-mile buffer, just east of the UCPA boundary along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives must include monitoring of the transplanted population(s), and specific measures to protect against detrimental edge effects to this species.
Orcutt's brodiaea (*Brodiaea orcuttii*)	CRPR 1B.1 MSCP	Perennial, bulbiferous herb. Blooms May-Jul. Typically mesic, clay soils (sometimes serpentine) in vernal pools associated with chaparral, cismontane woodland, closed-cone coniferous forest, meadows and seeps, grassland. Elev 35-5,250 ft. (Calflora 2023)	**Present.** Known from several historical locations within the eastern portion of UCPA along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023) and from multiple historical locations within the 1-mile buffer, also along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	The San Vincente population is identified as a critical population in the MSCP Subarea Plan and must be 100 percent conserved. Area specific management directives must include specific measures to protect against detrimental edge effects.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
dense reed grass (*Calamagrostis densa*)	MSCP	Perennial grasslike herb. Blooms Jun-Aug. Chaparral, yellow pine forest, many other vegetation communities. Elev 245-7,085 ft. (Calflora 2023)	**Potential.** Known from several historical locations just north of the UCPA (Calflora 2023; SDNHM 2023); however, no historical locations occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in suitable habitat within the UCPA.	Trail maintenance/ placement to avoid human impacts must be addressed in area specific management directives. Enhancement opportunities using prescribed fire should be evaluated in the management plans. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.
slender-pod jewelflower (*Caulanthus heterophyllus*)	MSCP	Annual herb. Blooms Mar-May. Typically found in disturbed places in coastal sage scrub, chaparral, weed patches. Elev 130-5,575 ft. (Calflora 2023)	**Present.** Known from several historical locations scattered within the UCPA along (Calflora 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
wart-stemmed ceanothus (*Ceanothus verrucosus*)	CRPR 2B.2 MSCP	Evergreen shrub. Blooms Jan-Apr. Chaparral. Elev 0-1,180 ft. (Calflora 2023)	**Present.** Known from many historical locations within the UCPA and within the 1-mile buffer (Calflora 2023; CDFW 2023a; HELIX 2022; RECON 2021; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Revegetation efforts within appropriate habitats must include restoration of this species. Area specific management directives for the protected populations must include specific measures to increase populations. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire. Any newly found populations should be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.
Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*)	CRPR 1B.1	Annual herb. Blooms Jan-Aug. Sandy soils in coastal dunes, coastal bluff scrub. Elev 0-195 ft. (Calflora 2023)	**Present.** Known from many historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and from several historical locations within the 1-mile buffer, just north of the UCPA boundary and just north of the Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
Orcutt's spineflower (*Chorizanthe orcuttiana*)	FE SE CRPR 1B.1	Annual herb. Blooms Mar-May. Sandy openings in coastal chaparral, coastal sage scrub, closed-cone coniferous forest. Elev 115-3,935 ft. (Calflora 2023)	**Present.** Known from several historical locations in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and from several historical locations within the 1-mile buffer, north of and southeast of the UCPA (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)	CRPR 1B.2	Annual herb. Blooms Apr-Jul. Clay soils, vernal pools in chaparral, coastal sage scrub, grassland. Elev 0-4,460 ft. (Calflora 2023)	**Present.** Known from many historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and in the eastern portion of the UCPA, along Miramar Road (Calflora 2023; SDNHM 2023). Also known from several historical locations within the 1-mile buffer, just north of the UCPA boundary and just north of the Torrey Pines State Reserve (CDFW 2023a) as well as east of the UCPA along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
summer-holly (*Comarostaphylis diversifolia* ssp. *diversifolia*)	CRPR 1B.2	Evergreen shrub. Blooms Apr-Jun. Chaparral. Elev 115-2,560 ft. (Calflora 2023)	**Present.** Known from one historical location in the eastern portion of the UCPA along Miramar Road (CDFW 2023a) and from several historical locations within the 1-mile buffer southwest, southeast, and east of the UCPA boundary (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
San Diego sand aster (*Corethrogyne filaginifolia* var. *incana*)	CRPR 1B.1	Perennial herb. Blooms Jun-Sep. Coastal sage scrub. Elev 50-492 ft. (NatureServe 2023)	**Present.** Known from one historical location within the UCPA, southeast of Torrey Pines Golf Course (CDFW 2023a); however, no other historical locations are known from or adjacent to the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in other suitable habitat within the UCPA.	N/A
Del Mar Mesa sand aster (*Corethrogyne filaginifolia* var. *linifolia*)	CRPR 1B.1 MSCP	Perennial herb. Blooms May-Sep. Openings in coastal bluff scrub, maritime chaparral, coastal sage scrub. Elev 50-492 ft. (NatureServe 2023)	**Present.** Known from many historical locations within the UCPA, mainly in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). Also known from several historical locations within the 1-mile buffer, just north of the UCPA boundary and just north of the Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; County 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives for the protected populations must include specific measures to protect against detrimental edge effects to this species. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
snake cholla (*Cylindropuntia californica* var. *californica*)	CRPR 1B.1 MSCP NE	Stem succulent. Blooms Apr-Jul. Sandy soils or sandy loam soils in chaparral and coastal sage scrub. Elev 165-1,015 ft. (Calflora 2023)	**Present.** Known from one historical record within the central northern portion of the UCPA (CDFW 2023a); however, no other locations are known within the UCPA or within the 1-mile buffer (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects to this species, and promote translocation opportunity where appropriate. The Otay Ranch project GDP and RMP require protection of 80 percent of existing occurrences, and transplantation of any impacted occurrences to restored areas of comparable size.
short-leaved dudleya (*Dudleya brevifolia*)	SE CRPR 1B.1 MSCP NE	Perennial herb. Blooms Apr-May. Sandstone, openings in chaparral, coastal sage scrub. Elev 98-820 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a) and from several locations in the central northern portion of the UCPA, just west of I-805 (Calflora 2023; CDFW 2023a), and from the western portion of the UCPA (Calflora 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives must include 1) specific measures to protect against detrimental edge effects to this species, 2) species-specific monitoring and 3) maintenance of surrounding habitat for pollinators.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
variegated dudleya (*Dudleya variegata*)	CRPR 1B.2 MSCP NE	Perennial herb. Blooms Apr-Jun. Clay soils associated with vernal pools in chaparral, foothill woodland, coastal sage scrub, grassland. Elev 180-785 ft. (Calflora 2023)	**Present.** Known from one historical location within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a) and from one location in the central northern portion of the UCPA, just west of I-805 (Calflora 2023; CDFW 2023a). Also known from one historical record within the 1-mile buffer, just outside the boundary south of the Torrey Pines Golf Course (CDFW 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must include species-specific monitoring and specific measures to protect against detrimental edge effects to this species, including effects caused by recreational activities. Some populations now occur within a major amendment area (Otay Mountain) and at the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included. (Proposed take authorization amendments will have public review through CEWX and NEPA processes and require approval by CDFG and USFWS.)
sticky dudleya (*Dudleya viscida*)	CRPR 1B.2 'MSCP	Perennial herb. Blooms May-Jun. Rocky areas in coastal bluff scrub, chaparral, coastal scrub, cismontane woodland. Elev 15-1,905 ft. (Calflora 2023)	**Present.** Known from one historical record within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a) and from one location in the central northern portion of the UCPA, just west of I-805 (Calflora 2023); however, no other locations are known within the UCPA or within the 1-mile buffer (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must address specific measures to protect against detrimental edge effects.

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
Palmer's ericameria (*Ericameria palmeri* var. *palmeri*)	CRPR 1B.1 MSCP	Shrub. Blooms Sep-Nov. Coastal sage scrub. Elev 130-930 ft. (Calflora 2023)	**Potential.** Known from one historical location just north of the UCPA (Calflora 2023, SDNHM 2023); however, no historical locations occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a), and the majority of the historical locations are to the south and southeast of the UCPA (Calflora 2023, SDNHM 2023). May occur in suitable habitat within the UCPA.	N/A
San Diego button-celery (*Eryngium aristulatum* var. *parishii*)	FE SE CRPR 1B.1 MSCP VPHCP	Annual/perennial herb. Blooms Apr-Jun. Vernal pools in coastal sage scrub, grassland. Elev 230-2,065 ft. (Calflora 2023)	**Present.** Known from one historical location in the central portion of the UCPA and from multiple locations within the eastern portion of the UCPA along Miramar Road (CDFW 2023a) as well as from several locations within the 1-mile buffer, east of the UCPA along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects.
sand-loving wallflower (*Erysimum ammophilum*)	CRPR 1B.2 MSCP	Perennial herb. Blooms Feb-Jun. Sandy openings in coastal dunes, chaparral, coastal sage scrub. Elev 0-295 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) and from several historical locations within the 1-mile buffer, north of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
cliff spurge (*Euphorbia misera*)	CRPR 2B.2	Shrub. Blooms Dec-Aug. Rocky areas in coastal bluff scrub, coastal sage scrub. Elev 0-295 ft. (Calflora 2023)	**Present.** Known from several historical locations along the northwestern boundary of the UCPA in Torrey Pines State Reserve (CDFW 2023a; Calflora 2023; SDNHM 2023) and from one historical location within the 1-mile buffer, south of the UCPA along the immediate coast from La Jolla Shores to La Jolla Cove (CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A
San Diego barrel cactus (*Ferocactus viridescens*)	CRPR 2B.1 MSCP	Stem succulent. Blooms May-Jun. Found in sandy or gravelly soils in chaparral, coastal sage scrub, grassland. Elev 15-1,085 ft. (Calflora 2023)	**Present.** Known from many historical locations scattered throughout the UCPA and 1-mile buffer (Calflora 2023; CDFW 2023a; County 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Area specific management directives must include measures to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle.
Campbell's liverwort (*Geothallus tuberosus*)	CRPR 1B.1	Bryophyte/liverwort. Wet soil in coastal sage scrub. Elev 130-195 ft. (Calflora 2023, NatureServe 2023)	**Present.** Known from several historical locations within the central northern and eastern UCPA near Eastgate Mall and Miramar Road (Calflora 2023; CDFW 2023a) and from one historical location within the 1-mile buffer, southeast of the UCPA in San Clemente Canyon (CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
beach goldenaster (*Heterotheca sessiliflora* ssp. *sessiliflora*)	CRPR 1B.1	Perennial herb. Blooms Mar-Dec. Coastal dunes, beaches. Elev 0-950 ft. (Calflora 2023)	**Present.** Known from several historical locations within the UCPA in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a) and from several historical locations within the 1-mile buffer, north of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	CRPR 1B.2	Shrub. Blooms Apr-Nov. Sandy soils in chaparral, coastal sage scrub, landward side of dunes, flats, hillsides, and arroyos. Elev below 656 ft. (Jepson Flora Project 2023 as referenced on NatureServe 2023)	**Present.** Known from several historical locations scattered within the UCPA Calflora 2023; CDFW 2023a; SDNHM 2023) and from several historical locations within the 1-mile buffer, to the north, southwest, and southeast of the UCPA boundary (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
San Diego marsh-elder (*Iva hayesiana*)	CRPR 2B.2	Perennial herb. Blooms Apr-Oct. Marshes, playas. Elev 10-655 ft. (Calflora 2023)	**Present.** Known from several historical locations along the northern UCPA boundary in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a) and from Rose Canyon (CDFW 2023a). Also known from several historical locations within the 1-mile buffer, to the north and northeast of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CRPR 1B.1	Annual herb. Blooms Feb-Jun. Coastal salt marsh, playas, vernal pools. Elev 5-4,005 ft. (CNPS 2023)	**Potential.** Known only from one historical record in Torrey Pines State Reserve from 1939 (Calflora 2023) and from several old historical records occur within the 1-mile buffer from 1969, one to the east of Torrey Pines State Reserve and one south of Miramar Road (CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A
sea dahlia (*Leptosyne maritima*)	CRPR 2B.2	Perennial herb. Blooms Mar-May. Coastal bluff scrub, coastal sage scrub. Elev 0-425 ft. (Calflora 2023)	**Present.** Known from many historical locations within the UCPA, mainly in Torrey Pines State Reserve and south along the coast (Calflora 2023; CDFW 2023a; SDNHM 2023). Also known from several historical locations within the 1-mile buffer, north and south of the UCPA boundary along the coast (Calflora 2023; CDFW 2023a; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
willowy monardella (*Monardella viminea*)	FE SE CRPR 1B.1 MSCP	Perennial herb. Blooms Jun-Aug. Sandy soils along alluvial, ephemeral washes in chaparral, coastal sage scrub, riparian habitats. Elev 180-855 ft. (Calflora 2023)	**Potential.** While no historical records occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a), this species is known from several historical locations along the UCPA boundary and within the 1-mile buffer, mainly immediately adjacent to the southern boundary of the UCPA in San Clemente Canyon (Calflora 2023; CDFW 2023a). This species' distribution is well documented, but it may occur in suitable habitat within the UCPA adjacent to known historical locations.	Area specific management directives must include specific measures to protect against detrimental edge effects.
spreading navarretia (*Navarretia fossalis*)	FT CRPR 1B.1 MSCP NE VPHCP	Annual herb. Blooms Apr-Jun. Clay soils associated with marshes, playas, vernal pools. Elev 310-4,690 ft. (Calflora 2023)	**Present.** Known from several historical locations within the eastern portion of UCPA, mainly along Miramar Road (Calflora 2023; CDFW 2023a), and from a couple historical locations within the 1-mile buffer, south of Miramar Road (CDFW 2023a). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects to this species and must incorporate measures to conserve and maintain surrounding habitat for (1) pollinators and (2) as part of the hydrological system for the vernal pools.
coast woolly-heads (*Nemacaulis denudata* var. *denudata*)	CRPR 1B.2	Annual herb. Blooms Apr-Sep. Coastal dunes. Elev 0-100 ft. (Calflora 2023)	**Present.** Known from several historical records in Torrey Pines State Reserve (Calflora 2023) and from several historical records within the 1-mile buffer, to the north of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a; SDNHM 2023) May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
California Orcutt grass (*Orcuttia californica*)	FE SE CRPR 1B.1 MSCP NE VPHCP	Annual grass. Blooms Apr-Aug. Vernal pools. Elev 45-2,000 ft. (NatureServe 2023)	**Potential.** No historical records occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). Several historical locations occur in the 1-mile buffer, east of the UCPA and on MCAS Miramar (CDFW 2023a). May occur in suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects to this species and measures to maintain surrounding habitats for pollinators.
Brand's star phacelia (*Phacelia stellaris*)	CRPR 1B.1	Annual herb. Blooms Mar-Jun. Coastal bluff scrub, coastal sage scrub. Elev 0-50 ft. (Calflora 2023)	**Present.** Known from one recent historical record in Torrey Pines State Reserve (Calflora 2023; CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A
Torrey pine (*Pinus torreyana* ssp. *torreyana*)	CRPR 1B.2 MSCP	Evergreen tree. Sandstone areas in chaparral, closed-cone coniferous forest. Elev 15-460 ft. (Calflora 2023)	**Present.** Known from many historical records in the UCPA, primarily in Torrey Pines State Reserve (Calfora 2023; CDFW 2023a; SDNHM 2023) but also scattered in the western portion of the UCPA (Calfora 2023; CDFW 2023a; HELIX 2022). Also known from many historical records within the 1-mile buffer, to the north of Torrey Pines State Reserve (Calflora 2023; CDFW 2023a). May occur in scattered patches in other suitable habitat within the UCPA and within ornamental landscaping and restoration sites.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
San Diego mesa mint (*Pogogyne abramsii*)	FE SE CRPR 1B.1 MSCP NE VPHCP	Annual herb. Blooms Mar-Jul. Vernal pools in chaparral and coastal sage scrub. Elev 360-4,005 ft. (Calflora 2023)	**Present.** Known from several historical locations within the eastern portion of UCPA along Miramar Road (Calflora 2023; CDFW 2023a; SDNHM 2023) and from many historical locations within the 1-mile buffer also along Miramar Road (Calflora 2023; CDFW 2023a). May occur in other suitable habitat within the UCPA.	Preserve management plan must include measures to: (1) protect against detrimental effects; (2) maintain surrounding habitat for pollinators; and (3) maintain pool watershed areas.
Otay mesa mint (*Pogogyne nudiuscula*)	FE SE CRPR 1B.1 MSCP NE VPHCP	Annual herb. Blooms May-Jul. Wetlands in coastal sage scrub and chaparral. Elev 490-590 ft. (Calflora 2023)	**Present.** Known from two historical locations on the eastern border of the UCPA along Miramar Road (Calflora 2023; SDNHM 2023); however, no other historical locations occur within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a), and the majority of the historical locations are to the east and southeast of the UCPA (Calflora 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	Preserve management plan must include measures to: protect against detrimental edge effects; maintain surrounding habitat for pollinators; and maintain pool watershed areas.
Nuttall's scrub oak (*Quercus dumosa*)	CRPR 1B.1	Evergreen shrub. Blooms Feb-Mar. Sandy or clay loam soils associated with chaparral and coastal sage scrub. Elev 0-4,530 ft. (Calflora 2023)	**Present.** Known from many historical locations scattered throughout the UCPA and 1-mile buffer (Alden 2023; Calflora 2023; CDFW 2023a; HELIX 2022; RECON 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A

Table 4. Sensitive Plant Species with a Potential to Occur within the UCPA

Species	Status[1]	Description	Potential for Occurrence	MSCP Conditions of Coverage
narrow-leaved nightshade (*Solanum xanti*)	MSCP	Perennial herb or shrub. Blooms Feb-Jul. Chaparral, yellow pine forest, red fir forest, lodgepole forest, northern oak woodland, southern oak woodland, foothill woodland. Elev 0-8,465 ft. (Calflora 2023)	**Present.** Known from several locations within the UCPA and immediate vicinity and is somewhat commonly scattered around the County (Calflora 2023; SDNHM 2023). May occur in other suitable habitat within the UCPA.	N/A
bottle liverwort (*Sphaerocarpos drewei*)	CRPR 1B.1	Bryophyte/liverwort. Shady spots in coastal sage scrub. Elev 295-1,970 ft. (CNPS 2023)	**Potential.** Known from several historical locations within the central northern and eastern portions of the UCPA (Calflora 2023; CDFW 2023a). No other historical locations are known from the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). May occur in suitable habitat within the UCPA.	N/A

[1]Refer to Appendix A for an explanation of status codes for sensitive species.

4.3.3 Sensitive Wildlife

For the purposes of this report, sensitive wildlife species include those that are (1) listed as threatened or endangered or proposed for listing by USFWS or CDFW; (2) designated as "Fully Protected" by CDFW, (3) considered a Species of Special Concern by CDFW, and/or (4) MSCP-covered species. In addition, a wildlife species that is considered a Watch List species (CDFW 2023c) but with no other listing is not considered sensitive and is not included in this report. Similarly, species that are covered by the federal MBTA were also considered. As the list of species covered under the MBTA is extensive, these species are not included in the sensitive wildlife species table.

No focused sensitive wildlife surveys were conducted for the UCPU. A database search and literature review conducted in October 2023 resulted in 66 sensitive wildlife species that are either known to occur within the vicinity of the UCPA. Assessments for the potential occurrence of these sensitive wildlife species are based upon known ranges (geographic and elevational), habitat preferences for the species, historical species occurrence records from the from the vicinity of the UCPA (CDFW 2023a; County 2023; Tremor et al. 2017; Unitt 2004; USFWS 2023a), and data from several recent biological resources reports for private development projects within the UCPA (Alden 2023; HELIX 2022; RECON 2021; Rincon 2019). In addition, for species with limited available data from the above databases, information from other reputable biological data sources (e.g., Center for Biological Diversity, iNaturalist, Xerces Society for Invertebrate Conservation) were utilized to obtain species specific information.

Based on this data, 29 of the 66 sensitive wildlife species (2 invertebrates, 2 amphibians, 1 reptile, 17 birds, and 7 mammals) were excluded from the analysis in this report because there are no recent historical occurrence records within the UCPA or within the 1-mile buffer (Alden 2023; Calflora 2023; CDFW 2023a; City 1997; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023, USFWS 2023a).Table 5 below provides the wildlife species that were excluded from the analysis in this report, their status, and additional rationale for excluding these species. Although these species were excluded from analysis and not discussed further in this report, future survey reports for specific projects would verify species present regardless of the species analyzed in this report.

Table 5. Sensitive Wildlife Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
Invertebrates		
Thorne's hairstreak (*Callophrys thornei*)	MSCP	UCPA is outside the known range for this species, which is known only from the vicinity of Otay Mountain (Center for Biological Diversity 2023).
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE	UCPA occurs outside of the USFWS Recommended Quino Survey Area.

Table 5. Sensitive Wildlife Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
Amphibians		
arroyo toad (*Anaxyrus californicus*)	FE SSC MSCP	UCPA is well outside the known range for this species.
California red-legged frog (*Rana draytonii*)	FT SSC MSCP	UCPA is well outside the known range for this species.
Reptiles		
southwestern pond turtle (*Emys marmorata*)	SSC MSCP	Known from one historical location within the 1-mile buffer, to the northeast of the UCPA in Los Peñasquitos Canyon (County 2023). Limited suitable habitat for this species is present in the UCPA, and the occurrence locations in the County are well documented.
Birds		
American white pelican (*Pelecanus erythrorhynchos*)	SSC (nesting colony)	Nonbreeding winter visitor, migrant. No nesting colonies expected in the UCPA (Unitt 2004).
California brown pelican (*Pelecanus occidentalis californicus*)	MSCP (nesting colony and communal roosts)	Nonbreeding year round visitor to San Diego. While this species may occur within the UCPA in winter or during migration, no nesting colonies or communal roosts are present within the UCPA (Unitt 2004).
white-faced ibis (*Plegadis chihi*)	CDFW WL MSCP (nesting colony)	Migrant and winter visitor, rare in summer. Very localized breeding. While this species may occur within the UCPA in winter or during migration, no nesting colonies are present within the UCPA (Unitt 2004).
golden eagle (*Aquila chrysaetos*)	SFP CDFW WL MSCP (nesting and wintering)	Breeding resident. Breeding adjacent to and southwest of the UCPA was confirmed only before 1997 (Unitt 2004) but not since. Wintering documented adjacent to and southeast of UCPA but not in the UCPA (Unitt 2004).
ferruginous hawk (*Buteo regalis*)	CDFW WL MSCP (wintering)	Uncommon winter visitor. UCPA outside current known range for this species (Unitt 2004); therefore, it is not expected to winter in the UCPA.
Swainson's hawk (*Buteo swainsoni*)	ST MSCP (nesting)	Rare migrant. UCPA outside current known range for this species (Unitt 2004); therefore, it is not expected to nest in the UCPA.
bald eagle (*Haliaeetus leucocephalus*)	SE SFP MSCP (nesting and wintering)	Rare but annual winter visitor to lakes in the foothills and mountains. UCPA outside current known range for this species (Unitt 2004); therefore, it is not expected to nest or winter in the UCPA.
California black rail (*Laterallus jamaicensis coturniculus*)	ST SFP	Resident populations thought to be extirpated. Only one historical location from 1954 occurs in the 1-mile buffer to the north of the UCPA (CDFW 2023a). This species was last documented breeding in the County in 1954, and the last vagrant was detected in 1983 (Unitt 2004).

Table 5. Sensitive Wildlife Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
mountain plover (*Charadrius montanus*)	SSC MSCP (wintering)	Extremely rare winter migrant. Regular wintering ended in 1991, with only a single migrant documented since then (Unitt 2004). Therefore, not expected to winter.
western snowy plover (*Charadrius nivosus nivosus*)	FT SSC MSCP (nesting)	Migrant and winter resident with localized breeding. Several historical locations are known from the 1-mile buffer, immediately adjacent to the northern UCPA boundary (USFWS 2023a, CDFW 2023a, Unitt 2004). Species likely present during winter; however, it is not expected to nest in the UCPA (Unitt 2004).
long-billed curlew (*Numenius americanus*)	CDFW WL MSCP (nesting)	Fall and spring migrant, winter resident, rare in summer. Species likely present during winter and migration; however, it is not expected to nest in the UCPA (Unitt 2004).
California least tern (*Sternula antillarum browni*)	FE SE SFP MSCP (nesting colony)	Resident. Localized breeding. Several historical locations are known from the 1-mile buffer to the north of the UCPA boundary (USFWS 2023a, CDFW 2023a, Unitt 2004); however, this species is only expected to migrate/forage within the UCPA, and no nesting colonies are anticipated (Unitt 2004).
elegant tern (*Thalasseus elegans*)	CDFW WL MSCP (nesting colony)	Summer resident. Localized breeding. Species only expected to migrate/forage within the UCPA, and no nesting colonies are anticipated (Unitt 2004).
burrowing owl (*Athene cunicularia*)	SSC MSCP (burrow sites and some winter sites)	Declining resident. Rare, localized resident, with additional winter visitors. Species unlikely to be present during migration, and it is not expected to winter or nest in the UCPA (Unitt 2004).
southwestern willow flycatcher (*Empidonax traillii extimus*)	FE SE MSCP (nesting)	Rare spring and fall migrant, rare summer resident. Species unlikely to be present during migration, and it is not expected to nest in the UCPA (Unitt 2004).
least Bell's vireo (*Vireo bellii pusillus*)	FE SE MSCP (nesting)	Migrant. Several historical locations are known from the 1-mile buffer, immediately adjacent to the northern UCPA boundary (USFWS 2023a, CDFW 2023a, Unitt 2004); however, this species is only expected to migrate/forage within the UCPA, and no nesting colonies are anticipated (Unitt 2004).
tricolored blackbird (*Agelaius tricolor*)	ST (nesting colony)	Localized resident. Species is only expected to migrate/forage within the UCPA, and no nesting colonies are anticipated (Unitt 2004).
Mammals		
Mexican long-tongued bat (*Choeronycteris mexicana*)	SSC	All of the historical locations are located well outside the UCPA (Tremor et al. 2017).
lesser long-nosed bat (*Leptonycteris yerbabuenae*)	SSC	Known from only a single specimen from urban Oceanside from 1996 (Tremor et al. 2017).

Table 5. Sensitive Wildlife Species Excluded from Analysis

Species	Status	Additional Rationale for Excluding
California leaf-nosed bat (*Macrotus californicus*)	SSC	UCPA is well outside of known range for this species (Tremor et al. 2017).
pallid bat (*Antrozous pallidus*)	SSC	All of the historical locations are located well outside the UCPA (Tremor et al. 2017).
Townsend's big-eared bat (*Corynorhinus townsendii*)	SSC	All of the historical locations are located well outside the UCPA (Tremor et al. 2017).
spotted bat (*Euderma maculatum*)	SSC	Known from only four historical locations in the County, only two of which are certain (Tremor et al. 2017).
American badger (*Taxidea taxus*)	SSC MSCP	Known from only one historical location in the 1-mile buffer, to the west of the UCPA (CDFW 2023a; County 2023; Tremor et al. 2017).

Based on the most recent data available for the UCPA (Alden 2023; Calflora 2023; CDFW 2023; City 1997; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023, USFWS 2023), 37 sensitive wildlife species (5 invertebrates, 1 amphibian, 6 reptiles, 17 birds, and 8 mammals) have been reported within the UCPA and/or within a 1-mile buffer of the UCPA and include:

- **San Diego fairy shrimp** (*Branchinecta sandiegonensis*; Federally Endangered, MSCP-covered, VPHCP-covered Species)
- **Riverside fairy shrimp** (*Streptocephalus woottoni*; Federally Endangered, MSCP-covered, VPHCP-covered Species)
- **monarch** (*Danaus plexippus plexippus* pop. 1; Candidate Species for Federal Listing [California overwintering populations])
- **wandering (=saltmarsh) skipper** (*Panoquina errans*; MSCP-covered)
- **Crotch's bumble bee** (*Bombus crotchii*; Candidate Species for State Endangered Listing)
- **western spadefoot** (*Spea hammondii*; California Species of Special Concern)
- **coast horned lizard** (*Phrynosoma blainvillii*; California Species of Special Concern, MSCP-covered)
- **Belding's orange-throated whiptail** (*Aspidoscelis hyperythra beldingi*; CDFW Watch List, MSCP-covered)
- **coastal whiptail** (*Aspidoscelis tigris stejnegeri*; California Species of Special Concern)
- **Southern California legless lizard** (*Anniella stebbinsi*; California Species of Special Concern)
- **two-striped garter snake** (*Thamnophis hammondii*; California Species of Special Concern)
- **red diamond rattlesnake** (*Crotalus ruber*; California Species of Special Concern)
- **Canada goose** (*Branta canadensis*; MSCP-covered)
- **reddish egret** (*Egretta rufescens*; MSCP-covered)
- **Cooper's hawk** (*Accipiter cooperii*; CDFW Watch List [nesting], MSCP-covered)

- **northern harrier** (*Circus hudsonius*; California Species of Special Concern [nesting], MSCP-covered)
- **white-tailed kite** (*Elanus leucurus*; State Fully Protected [nesting])
- **American peregrine falcon** (*Falco peregrinus anatum*; State Fully Protected [nesting], MSCP-covered)
- **light-footed Ridgway's rail** (*Rallus obsoletus levipes*; Federally Endangered, State Endangered, State Fully Protected, MSCP-covered)
- **western bluebird** (*Sialia Mexicana*; MSCP-covered)
- **loggerhead shrike** (*Lanius ludovicianus*; California Species of Special Concern [nesting])
- **coastal cactus wren** (*Campylorhynchus brunneicapillus sandiegensis*; California Species of Special Concern, MSCP-covered)
- **coastal California gnatcatcher** (*Polioptila californica californica*; Federally Threatened, California Species of Special Concern, MSCP-covered)
- **Southern California rufous-crowned sparrow** (*Aimophila ruficeps canescens*; CDFW Watch List, MSCP-covered)
- **grasshopper sparrow** (*Ammodramus savannarum*; California Species of Special Concern [nesting])
- **Belding's savannah sparrow** (*Passerculus sandwichensis beldingi*; State Endangered, MSCP-covered)
- **large-billed savannah sparrow** (*Passerculus sandwichensis rostratus*; California Species of Special Concern [wintering], MSCP-covered)
- **yellow-breasted chat** (*Icteria virens*; California Species of Special Concern [nesting])
- **yellow warbler** (*Setophaga petechia*; California Species of Special Concern [nesting])
- **western red bat** (*Lasiurus frantzii*; California Species of Special Concern)
- **western yellow bat** (*Dasypterus xanthinus*; California Species of Special Concern)
- **western mastiff bat** (*Eumops perotis californicus*; California Species of Special Concern)
- **pocketed free-tailed bat** (*Nyctinomops femorosaccus*; California Species of Special Concern)
- **big free-tailed bat** (*Nyctinomops macrotis*); California Species of Special Concern)**San Diego desert woodrat** (*Neotoma lepida intermedia*; California Species of Special Concern)
- **southern mule deer** (*Odocoileus hemionus*; MSCP-covered)
- **mountain lion** (*Puma concolor*; MSCP-covered)

The 37 sensitive wildlife species that are known historically from the UCPA and vicinity were evaluated for their potential for occurrence within the UCPA. Species were classified as "Present" if the species has recently verified historical records within the UCPA (Alden 2023; Calflora 2023; CDFW 2023a; County 2023; HELIX 2022; RECON 2021; Rincon 2019; SDNHM 2023; USFWS 2023a). Because no focused surveys for sensitive wildlife were conducted for this UCPU, several species were classified as "Potential" if the species has (1) only very old and unconfirmed historical records within the UCPA, (2) only

historical records within 1 mile of the UCPA but not within the UCPA, and/or (3) potentially suitable habitat within in the UCPA. "Potential" is an important category, because there may be areas within the UCPA that have not been surveyed previously and may support a sensitive wildlife species that does not currently have historical occurrence records within the UCPA.

Based on the above criteria for the 37 sensitive wildlife species, 24 are present within the UCPA while 13 have a potential to occur. The sensitivity status, species information, and potential for occurrence for each of these 37 wildlife species are summarized in Table 6, below. Please see Appendix A for an explanation of status codes for sensitive wildlife species.

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
Invertebrates				
San Diego fairy shrimp (*Branchinecta sandiegonensis*)	FE MSCP VPHCP	Vernal pools, swales, ditches, road ruts. Adults emerge typically mid-December to early May.	**Present.** Known from several historical locations within the eastern portion of UCPA (CDFW 2023a; USFWS 2023a) and from multiple historical locations within the 1-mile buffer, mainly on MCAS Miramar (CDFW 2023a) but with a few locations also to the north (CDFW 2023a; USFWS 2023a). May occur in other suitable vernal pool habitat within the UCPA. Critical habitat for this species occurs in the eastern portion of the UCPA, along Miramar Road (USFWS 2023a).	Area specific management directives must include specific measures to protect against detrimental edge effects to this species.
Riverside fairy shrimp (*Streptocephalus woottoni*)	FE MSCP VPHCP	Vernal pools, swales, ditches, road ruts that are long-lasting (i.e., several months).	**Potential.** No historical locations are known from the UCPA (CDFW 2023a, County 2023; USFWS 2023a). However, this species could occur in suitable vernal pool habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects to this species.
monarch (*Danaus plexippus plexippus* pop. 1)	FC (California overwintering populations)	Overwintering in San Diego typically occurs in eucalyptus groves.	**Present.** Known from several historical locations within the northern and western portions of UCPA and from multiple historical locations within the 1-mile buffer, mainly around the UCSD campus (CDFW 2023a). May occur in other suitable eucalyptus groves within the UCPA.	N/A
wandering (=saltmarsh) skipper (*Panoquina errans*)	MSCP	Salt marshes in coastal southern California as well as Baja California and the western coast of Mexico.	**Potential.** While no historical records occur within the UCPA or within the 1-mile buffer (CDFW 2023a, County 2023), several historical records are shown on the species report in iNaturalist.	Area specific management directives must include measures to: control exotic weeds and invertebrate predators (where appropriate), and control access to saltmarsh habitat

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
Crotch's bumble bee (*Bombus crotchii*)	SCE	Found between San Diego and Redding in a variety of habitats including open grasslands, shrublands, chaparral, desert margins including Joshua tree and creosote scrub, and semi-urban settings. It is near endemic to California, with only a few records from Nevada and Mexico.	**Present.** Known from one historical record within the northern portion of the UCPA from 1983 (CDFW 2023a). May occur in other suitable habitat within the UCPA.	N/A
Amphibians				
western spadefoot (*Spea hammondii*)	SSC	Washes, river floodplains, alluvial fans, playas, alkali flats, temporary ponds, vernal pools in mixed woodlands, grasslands, coastal sage scrub, and chaparral. Surface activity October to April. Oviposition late February to May in temporal pools and slow-moving sections of streams.	**Present.** Known from several historical locations within the southern half of UCPA (CDFW 2023a; County 2023) and from a single historical location within the 1-mile buffer, to the east of the UCPA boundary along Miramar Road (CDFW 2023a). May occur in other suitable habitat in the UCPA.	N/A
Reptiles				
coast horned lizard (*Phrynosoma blainvillii*)	SSC MSCP	Open chaparral, coastal sage scrub with sandy, loose soil. Partially dependent on harvester ants for forage.	**Present.** Known from several historical locations in the northern portion of the UCPA in Torrey Pines State Reserve (CDFW 2023a; County 2023). Also known from several historical locations in the 1-mile buffer, one to the southwest (County 2023), one to the southeast (CDFW 2023a), and several to the north of the northern UCPA boundary (CDFW 2023a; County 2023).	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)	CDFW WL MSCP	Pristine open coastal sage scrub, chaparral, and streamside growth with loose sandy soils, revegetation sites.	**Present.** Known from many historical locations in the northern portion of the UCPA, mainly in Torrey Pines State Reserve, but with other scattered locations (CDFW 2023a; County 2023). Also known from several historical locations in the 1-mile buffer to the east and southeast of the UCPA. (CDFW 2023a; County 2023). May occur in other suitable habitat in the UCPA.	Area specific management directives must address edge effects
coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	Arid areas with sparse, open foliage in forests, woodland, chaparral, riparian areas.	**Present.** Known from many historical locations in the northern portion of the UCPA in Torrey Pines State Reserve but with a couple other scattered locations in the UCPA (CDFW 2023a, County 2023) as well as from the 1-mile buffer (CDFW 2023a). May occur in other suitable habitat in the UCPA.	N/A
Southern California legless lizard (*Anniella stebbinsi*)	SSC	Found in leaf litter and loose soil on beaches and in coastal scrub, chaparral, and open riparian habitats. Sandy washes and beach dunes are used for burrowing, while logs and leaf litter are used for cover and feeding.	**Present.** Known from many historical locations in the northern portion of the UCPA and from several historical locations within the 1-mile buffer, to the west and east of the UCPA (CDFW 2023a, County 2023). May occur in other suitable habitat in the UCPA.	N/A
two-striped garter snake (*Thamnophis hammondii*)	SSC	Permanent fresh water, inhabiting streams, ponds, vernal pools. Occupies adjacent coastal sage scrub and grasslands during the winter.	**Present.** Known from one historical location within the UCPA (County 2023) and several historical within the 1-mile buffer (CDFW 2023a; County 2023). May occur in other suitable habitat in the UCPA.	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
red diamond rattlesnake (*Crotalus ruber*)	SSC	Coastal sage scrub, open chaparral, woodland, grassland, and cultivated areas.	**Present.** Known from two historical locations within the UCPA, one in the northern portion and one in the southern portion (County 2023). May occur in other suitable habitat within the UCPA.	N/A
Birds				
Canada goose (*Branta canadensis*)	MSCP	Common winter visitor. Habitats with fresh or brackish water with low grass or succulent leaves for grazing.	**Potential.** Species documented wintering in the vicinity of Torrey Pines State Reserve in the northwestern portion of the UCPA and in the eastern portion of the UCPA (Unitt 2004). May occur in suitable habitat within the UCPA.	N/A
reddish egret (*Egretta rufescens*)	MSCP	Rare, nonbreeding visitor. Wetlands and lagoons.	**Present.** One historical location within the northwestern portion of the UCPA in the Torrey Pines State Reserve (County 2023; Unitt 2004). May occur in other suitable habitat within the UCPA.	N/A
Cooper's hawk (*Accipiter cooperii*)	CDFW WL MSCP (nesting)	Resident with additional winter visitors. Mature forest, open woodlands, wood edges, and river groves. Parks and residential areas.	**Present.** While only a single historical location has been reported in the UCPA (Rincon 2019) and only a single historical location has been reported within the 1-mile buffer in Carroll Canyon northeast of the UCPA (County 2023), this species is widespread in mature forests along the County's coastal slopes and is well adapted to City landscapes (Unitt 2004). It is known to occur in both urban and natural habitats spread across the UCPA. May nest in suitable woodland and forest habitats.	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
northern harrier (*Circus hudsonius*)	SSC MSCP (nesting)	Uncommon resident with additional winter visitors. Coastal lowland, marshes, grassland, agricultural fields.	**Present.** Known from a couple locations within the southern portion of the UCPA as well as from a couple locations within the 1-mile buffer, along the northern boundary of the UCPA (County 2023). This species is found year-round in grassland and marsh habitats in the County and nesting is probable within the UCPA in suitable habitat (Unitt 2004).	Area specific management directives must: manage agricultural and disturbed lands (which become part of the preserve) within four miles of nesting habitat to provide foraging habitat; include an impact avoidance area (900 foot or maximum possible within the preserve) around active nests; and include measures of maintaining winter foraging habitat in preserve areas in Proctor Valley, around Sweetwater Reservoir, San Miguel Ranch, Otay Ranch east of Wueste Road, Lake Hodges, and San Pasqual Valley. The preserve management coordination group shall coordinate efforts to manage for wintering northern harriers' foraging habitat within the MSCP preserves.
white-tailed kite (*Elanus leucurus*)	SFP (nesting)	Resident. Nest in riparian woodland, oaks, sycamores. Forage in open, grassy areas.	**Present.** Known from one historical location in the southern portion of the UCPA in Rose Canyon (County 2023). Potential to nest at this location and in other suitable habitat within the UCPA because this species occurs in the County year-round, is widespread over the coastal slope of the County, and breeding has been confirmed within the UCPA (Unitt 2004).	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
American peregrine falcon (*Falco peregrinus anatum*)	MSCP (nesting)	Rare resident with additional winter visitors. Nests on cliff ledges, old raptor or raven nests, and man-made structures. Forages in open coastal areas, mud flats. Rare inland. Rare fall and winter resident, casual in late spring and early summer.	**Present.** While only one historical location has been reported within the northern UCPA in Torrey Pines State Reserve (County 2023, Unitt 2004) and only two historical locations have been reported in the 1-mile buffer, one to the north and one to the south of Torrey Pines State Reserve (County 2023), this species is known to occur more frequently in the UCPA. This species is likely just a migrant/non-breeder in most of the UCPA; however, it may nest in suitable habitat along the cliff ledges in the coastal portion of the UCPA, which occur in Torrey Pines State Reserve and south.	N/A
light-footed Ridgway's rail (*Rallus obsoletus levipes*)	FE SE SFP MSCP	Localized resident. Typically found in salt marshes primarily dominated by cordgrass but also in brackish and freshwater marsh vegetation upstream from bays/estuaries.	**Potential.** No historical locations are known within the UCPA; however, known from several historical locations within the 1-mile buffer, just north of the UCPA boundary along Sorrento Valley Road (USFWS 2023a, CDFW 2023a, County 2023, Unitt 2004). Could occur in the limited suitable habitat within the UCPA.	Area specific management directives must include active management of wetlands to ensure a healthy tidal saltmarsh environment, and specific measures to protect against detrimental edge effects to this species.
western bluebird (*Sialia mexicana*)	MSCP	Common resident. Foothills and mountains with meadows among oak or pine groves. Also urban areas with mature trees and wide lawns.	**Present.** Known to breed and winter in the UCPA and 1-mile buffer (Unitt 2004). May occur in other suitable habitat within the UCPA.	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
loggerhead shrike (*Lanius ludovicianus*)	SSC (nesting)	Uncommon resident. Open country with short vegetation such as pastures with fence rows, agricultural fields and open woodlands.	**Potential.** No historical locations are known within the UCPA or within the 1-mile buffer (USFWS 2023a, CDFW 2023a, County 2023). However, it has fragmented distribution along the coastal slope of the County and has been recorded as a breeder in or adjacent to the northernmost portion of the UCPA (Unitt 2004).	N/A
coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)	SSC MSCP	Rare localized resident. Maritime succulent scrub, coastal sage scrub with Opuntia thickets.	**Potential.** Known from one historical occurrence in the northern portion of the UCPA in Torrey Pines State Reserve (County 2023); however, this species has not been observed at this location or in any other areas within the UCPA or 1-mile buffer since before 1997 (Unitt 2004). May occur in suitable habitat within the UCPA.	The restoration of maritime succulent scrub habitat as specified in the Otay Ranch RMP and GDP must occur at the specified 1:1 ratio. Area specific management directives must include restoration of maritime succulent scrub habitat, including propagation of cactus patches, active/adaptive management of cactus wren habitat, monitoring of populations within preserves and specific measures to reduce or eliminate detrimental edge effects. No clearing of occupied habitat may occur from the period February 15 through August 15.

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
coastal California gnatcatcher (*Polioptila californica californica*)	FT SSC MSCP	Resident. Coastal sage scrub, maritime succulent scrub.	**Present.** Known from many historical locations scattered throughout the UCPA and 1-mile buffer (Alden 2023; USFWS 2023a, CDFW 2023a, County 2023, Unitt 2004). May occur in other suitable habitat within the UCPA.	Area specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No cleaning of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	CDFW WL MSCP	Common resident. Coastal sage scrub, chaparral, grassland. Resident.	**Present.** Known from many historical locations throughout the northern portion of the UCPA as well as many historical locations in the 1-mile buffer, mainly to the north and west of the UCPA (CDFW 2023a, County 2023, Unitt 2004). May occur in other suitable habitat throughout the UCPA.	Area specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.
grasshopper sparrow (*Ammodramus savannarum*)	SSC (nesting)	Localized summer resident, rare in winter. Tall grass areas.	**Present.** Known from one historical location in the southern portion of the UCPA, in Rose Canyon, as well as from two historical locations in the 1-mile buffer, to the north of the UCPA in Lopez Canyon (County 2023). Species likely to winter in small numbers, and breeding is probable within the UCPA (Unitt 2004).	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
Belding's savannah sparrow (*Passerculus sandwichensis beldingi*)	SE MSCP	Resident. Salt marshes, lagoons, and upstream rivers/tributaries dominated by *Salicornia*.	**Present.** Known from several historical locations within in the Torrey Pines State Reserve along the northern border of the UCPA as well as from multiple locations within the 1-mile buffer, just north of the Torrey Pines State Reserve (CDFW 2023a, County 2023, Unitt 2004). May occur in other suitable habitat within the UCPA.	Area specific management directives must include specific measures to protect against detrimental edge effects to this species.
large-billed savannah sparrow (*Passerculus sandwichensis rostratus*)	SSC MSCP (wintering)	Winters in coastal areas and marshes where it is seldom seen far from the intermediate shoreline, marshes. Very rare in the County, typically south of Mission Bay.	**Potential.** No historical breeding locations are known within the UCPA or the 1-mile buffer (USFWS 2023a, CDFW 2023a, County 2023); however, this species winters along coastal areas of the County and could occur within suitable habitat in the UCPA (Unitt 2004).	Area specific management directives must include specific measures to protect against detrimental edge effects to this species.
yellow-breasted chat (*icteria virens*)	SSC (nesting)	Locally common summer visitor. Dense riparian woodland.	**Potential.** Historical data suggests breeding is possible/probable in suitable habitat the UCPA (Unitt 2004).	N/A
yellow warbler (*Setophaga petechia*)	SSC (nesting)	Common resident, with additional migrants. Well-developed riparian habitats, often with mature willows.	**Potential.** No historical locations are known within the UCPA or within the 1-mile buffer (USFWS 2023a, CDFW 2023a, County 2023). However, it breeds in riparian corridors along the coastal slope of the County and has been recorded as a breeder in and adjacent to the UCPA (Unitt 2004). May nest in suitable habitat within the UCPA.	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
Mammals				
western red bat (*Lasiurus frantzii*)	SSC	Roosts in small colonies in the foliage of trees and shrubs in edge areas adjacent to streams and open fields, preferring foraging areas that are distant from human habitation	**Present.** Known from two locations in the UCPA, one in the north and one in the southeast, but no historical locations in the 1-mile buffer (Tremor et al. 2017). May occur in other suitable habitat within the UCPA.	N/A
western yellow bat (*Dasypterus xanthinus*)	SSC	Roosts in the skirts of dead frons of both native and non-native fan palms. Also known to roost in cottonwood trees and yucca. Strongly associated with native grows of California fan palms where there is spring-fed, open water.	**Potential.** Known from one location along the southern boundary of the UCPA in San Clemente Canyon (Tremor et al. 2017); however, no additional historical locations have been reported in or adjacent to the UCPA (CDFW 2023a; County 2023; Tremor et al. 2017). May occur in other suitable habitat within the UCPA.	N/A
western mastiff bat (*Eumops perotis californicus*)	SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, trees, and tunnels. Travels widely when foraging.	**Potential.** Known from one historical location in 1-mile buffer east of the southeastern portion of the UCPA (County 2023, Tremor et al. 2017). May occur in other suitable habitat within the UCPA.	N/A
pocketed free-tailed bat (*Nyctinomops femorosaccus*)	SSC	Habitat generalist. Forages over many types of vegetation communities. Roosts in crevices and fractures on steep, rocky cliffs and in boulder outcrops. Also found in abandoned quarries.	**Potential.** Known from two historical locations in 1-mile buffer east of the southeastern portion of the UCPA (County 2023, Tremor et al. 2017). May occur in other suitable habitat within the UCPA.	N/A

Table 6. Sensitive Wildlife Species with a Potential to Occur in the UCPA

Common Name	Status[1]	Habitat	Potential for Occurrence	MSCP Conditions of Coverage
big free-tailed bat (*Nyctinomops macrotis*)	SSC	Rugged, rocky terrain. Roost in crevices, buildings, caves, tree holes. Very rare in the County. Colonial, migratory.	**Present.** Known from one location in the northeastern portion of the UCPA but no historical locations in the 1-mile buffer (Tremor et al. 2017). May occur in other suitable habitat within the UCPA.	N/A
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Coastal sage scrub and chaparral	**Present.** Known from one historical location in western portion of UCPA along Miramar Road as well as from one historical location in the 1-mile buffer to the north of the central portion of the UCPA (CDFW 2023a, County 2023). May occur in other suitable habitat within the UCPA.	N/A
southern mule deer (*Odocoileus hemionus*)	MSCP	Requires relatively large, undisturbed tracts of chaparral, coastal sage scrub, and mixed grassland/shrub habitats.	**Present.** Known from many historical locations throughout the UCPA as well as from many locations scattered in the 1-mile buffer in all directions except west (County 2023, Tremor et al. 2017).	N/A
mountain lion (*Puma concolor*)	MSCP	Typically in remote, hilly or mountainous areas but can occasionally be found in the urban/wild land interface.	**Potential.** No historical locations occur within the UCPA (CDFW 2023a, County 2023, Tremor et al. 2017); however, multiple locations occur within the 1-mile buffer, primarily in Los Peñasquitos, Lopez, Rose, and San Clemente Canyons.	N/A

[1]Refer to Appendix A for an explanation of status codes for sensitive species.

4.3.4 Critical Habitat

Under the FESA, USFWS designates certain areas as "critical habitat" if they determine that these geographic areas are essential for the conservation and/or recovery of a federally listed threatened or endangered species, whether or not the species currently occupies the area. Critical habitat areas often require special management and protection to assure they will remain suitable for the federally listed species for which they have been designated. While federally listed species are protected by the FESA whether or not they are in an area that is designated as critical habitat, projects proposed within or adjacent to critical habitat must demonstrate that implementation of the project would not destroy or significantly impact the functions and values of the critical habitat.

Within the UCPA, USFWS has designated critical habitat for spreading navarretia in the eastern portion of the UCPA, in a portion of Rose Canyon located immediately west of I-805 and south of Nobel Drive, and for San Diego fairy shrimp in the eastern portion of the UCPA, along Miramar Road (USFWS 2023b; Figure 8).

4.4 JURISDICTIONAL RESOURCES

Jurisdictional resources are considered sensitive biological resources and are regulated by the USACE, RWQCB, CDFW, CCC, and/or the City pursuant to federal, state, and local regulations, outlined below.

4.4.1 U.S. Army Corps of Engineers Jurisdiction

USACE regulates the discharge of dredged and/or fill material, both temporary and permanent, into Wetland and Non-Wetland WoUS, pursuant to Section 404 of the CWA. USACE Non-Wetland WoUS are delineated by the lateral and upstream/downstream extent of the ordinary high water mark. USACE Wetland WoUS are areas that contain wetland hydrology, hydric soils, and hydrophytic vegetation. Swales and erosional features (e.g., gullies; small washes characterized by low volume, infrequent, and short duration flow) are generally not considered WoUS because they are not tributaries or they do not have a significant nexus to downstream TNWs.

4.4.2 State Regional Water Quality Control Board Jurisdiction

RWQCB regulates wastewater discharge, dredged and/or fill material, or other alterations of Wetland and Non-Wetland WoS, including isolated waters such as vernal pools and other waters showing lack of connectivity to a TNW, pursuant to Section 401 of the CWA and Section 13000 et seq. of the California Water Code under the Porter-Cologne Water Quality Control Act.

Image Source: NearMap (flown September 2023)

University Community Plan Boundary

USFWS Critical Habitat

Spreading Navarretia

San Diego Fairy Shrimp

FIGURE 8
USFWS Critical Habitat

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4.4.3 California Department of Fish and Wildlife Jurisdiction

CDFW regulates activities that would substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, pursuant to CFGC Section 1600 et seq. CDFW typically extends its jurisdictional limit to the top of a stream, the bank of a lake, or the outer edge of the riparian vegetation, whichever is wider. CDFW Streambeds include watercourses having a surface or subsurface flow that supports riparian vegetation. In addition, CDFW asserts jurisdiction over vernal pools when California state threatened and/or endangered species are present.

4.4.4 California Coastal Commission Jurisdiction

CCC regulates all wetlands (isolated or non-isolated) in the coastal zone and areas designated as ESHAs. The CCC defines a wetland as land "which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The absence of hydrophytic vegetation or hydric soils is not enough to exclude an area from jurisdiction.

4.4.5 City of San Diego Jurisdiction

The City regulates ESLs, including wetlands (and other sensitive vegetation communities) pursuant to SDMC Section 143.0101. Naturally occurring wetland vegetation communities dominated by hydrophytic plant species are typically considered by the City to be characteristic of wetland areas. Areas lacking naturally occurring wetland vegetation communities are considered to be wetlands when (a) hydric soil or wetland hydrology are present and (b) either past human activities have occurred to remove the historical vegetation, or catastrophic or recurring natural events preclude the establishment of wetland vegetation. The City does not regulate areas that contain wetland vegetation, soils, or hydrology created by human activities in historically non-wetland areas unless they have been delineated as wetlands by the USACE and/or the CDFW.

Within the UCPA, City wetlands include the following 10 habitats that are presented in Tables 1 and 2, above, and shown on Figures 7a and 7b: southern riparian forest, southern coast live oak riparian forest, southern sycamore-alder riparian forest, southern riparian scrub, southern willow scrub, southern coastal salt marsh, coastal and valley freshwater marsh, freshwater seep, vernal pools, and disturbed wetland. Beach, subtidal ocean, and non-vegetated channel or floodway do not qualify as City wetlands but would be under the jurisdiction of other resource agencies.

4.5 WILDLIFE MOVEMENT CORRIDORS

Wildlife corridors are essential to maintain populations of healthy and genetically diverse plant and wildlife species. Wildlife corridors are considered sensitive by municipal, state, and federal resource conservation agencies. These corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated due to habitat fragmentation urbanization, rugged terrain, and/or changes in vegetation (Beier and Loe 1992). There are no designated wildlife corridors within the University

Community Plan area. However, there are core biological resource areas that connect wildlife from inland to the coast as described further in this section.

Wildlife corridors can be classified as either regional corridors or local corridors. Regional corridors are defined as those linking two or more large areas of natural open space, and local corridors are defined as those allowing resident animals to access critical resources (e.g., food, cover, water) in a smaller area that might otherwise be isolated by some form of urban development (e.g., roads, housing tracts).

The UCPA is located within the Northern Area and Urban Area as defined in the MSCP Subarea Plan. As detailed in the MSCP Subara Plan Section 1.2.4 for the Northern Area, Los Peñasquitos Canyon, which is located northeast of the UCPA, is a regional corridor linking coastal habitats to inland habitats on Black Mountain, in Poway, and in other open space areas farther east. The MHPA in the Northern Area is largely comprised of regional linkages leading to biological core areas within existing reserves and parks. In relation to the portion of the Northern Area in the UCPA, the MSCP Subarea Plan states:

> The southwestern portion of this area contains Torrey Pines State Park, Crest Canyon, Los Peñasquitos Lagoon, and Los Peñasquitos Canyon Preserve which are core biological resource areas with high to moderate habitat values. Los Peñasquitos Canyon Preserve contains large expanses of nonnative grassland, and contains some restoration opportunities within its boundaries. This portion of the MHPA also contains linkages and habitat within the southern Carmel Valley neighborhoods (e.g., 8, 8A and 10) and the Carmel Valley Restoration and Enhancement Project (CVREP), which is intended to serve as a wildlife linkage to the Los Peñasquitos Lagoon and Torrey Pines State Park. Carmel Valley Neighborhood 10 contains two major wildlife corridors that converge at CVREP, where they link to adjacent core habitat on and north of Neighborhood 8A. Neighborhood 8, where CVREP is located, also contains existing houses, ranches, and rural-oriented businesses. These are incorporated within the MHPA boundary as low-density areas conditionally compatible with the MHPA. The linkages to Torrey Pines State Reserve and Los Peñasquitos Lagoon from the east are tentative at best. In the south, a rip-rap channel winds west from Los Peñasquitos Canyon, underneath freeways, local roads and railroad tracks to gain access to the lagoon and state park. The northern connection to the lagoon is located at the western terminus of CVREP, with six to eight feet of clearance under the I-5 freeway to allow for Carmel Creek to drain into the lagoon. This wildlife connection is constrained as well.

Based on a review of the MSCP Subarea Plan, the canyon networks within the UCPA are local wildlife movement corridors that support regional wildlife corridors including Los Peñasquitos Lagoon, Los Peñasquitos Canyon, and Lopez Canyon located immediately adjacent to the UCPA to the northwest (see Figure 6). The local canyon networks within the UCPA are important to maintain healthy plant and wildlife populations in the highly urbanized UCPA by providing connectivity from the coast to natural areas further east which serve as regional wildlife corridors in the MSCP Subarea Plan. Torrey Pines State

Reserve and Los Peñasquitos Lagoon, located within and adjacent to the northernmost portion of the UCPA, provide local wildlife movement and connections to regional wildlife movement opportunities. The habitats found within these open space and canyon areas allow local wildlife movement and provide connectivity from the Pacific Ocean and coastal region to inland open space. Rose Canyon, located in the southern portion of the UCPA within the Urban Area of the MSCP Subarea Plan, is considered an urban habitat area. Similarly, San Clemente Canyon, located just south of and outside of the UCPA, is considered an urban habitat area.

SECTION 5.0 – MSCP CONSISTENCY ANALYSIS

When a biological resources report is required for a project within the UCPA, the report shall include an MSCP Consistency Analysis that documents compliance with applicable sections of the MSCP Subarea Plan that pertain to biological resources within the UCPA and the specific project area. This section provides information to inform the MSCP consistency analysis for future projects within the UCPA and for the UCPU itself through compliance with applicable portions of the MSCP Subarea Plan, including the General Planning Policies and Design Guidelines (Section 1.4.2 of the MSCP Subarea Plan); Land Use Adjacency Guidelines (Section 1.4.3 of the MSCP Subarea Plan); General Management Goals and Objectives (Section 1.5.1 of the MSCP Subarea Plan); General Management Directives (Section 1.5.2 of the MSCP Subarea Plan); Specific Management Policies and Directives for Urban Habitat Lands (Section 1.5.7 of the MSCP Subarea Plan); and Specific Management Policies and Directives for the Northern Area (Section 1.5.7 of the MSCP Subarea Plan).

5.1 MHPA BOUNDARY LINE CORRECTIONS

A comprehensive community-wide MHPA BLC is proposed as part of the UCPU. The proposed MHPA BLC is consistent with the goals of the MSCP Subarea Plan to conserve biological resources and to exclude legally developed and required uses (i.e., structures, streets, Brush Management Zone 1). The MHPA BLC would result in an addition of 25.97 acres to the MHPA. The original MHPA boundary within the UCPA was established as part of the regional MSCP mapping efforts, which became effective in March 1997. MHPA BLCs are allowed under the MSCP Subarea Plan to rectify minor mapping inaccuracies at the project level, and can be processed with the project's discretionary review. Preservation of sensitive habitat is consistent with the goals of the MSCP, the Conservation Element for the University Community Plan, and the City's ESL regulations. The MHPA BLC removes existing development (e.g., structures, streets) as well as the 35-foot Brush Management Zone 1, as required in accordance with the City's Land Development Code, Section 142.0412.

A majority of the BLCs remove developed and disturbed land while adding sensitive habitats. City-owned lands within designated UCPA open space adjacent to the existing MHPA have also been added to the MHPA. In a few cases, sensitive habitat located within designated UCPA open space on private land was added to the MHPA to expand a local wildlife corridor and increase the viability and connectivity of sensitive habitat within the existing MHPA. Regardless of the MHPA BLC location, these additional areas are regulated through ESL for sensitive biological resources and steep slopes. The MPHA BLC does not add or increase any regulations associated with City projects, such as sewer line repairs within the canyons. These projects would continue to be conducted in accordance with the Canyon Sewer Cleaning Program (LDR No. 6020), Council Policies 400-13 and 400-14, and University Community Plan policies related to this program. The MHPA BLCs also do not relieve projects from having to otherwise comply with the City's MHPA Land Use Adjacency Guidelines, described below. The MHPA BLCs result in an overall benefit to the MHPA and is consistent with the goals and policies of the MSCP and the UCPU.

5.2 GENERAL PLANNING POLICIES AND DESIGN GUIDELINES

Section 1.4.2 of the MSCP Subarea Plan provides general planning and design guidelines for development projects as they relate to the MHPA and provides recommendations for projects within or adjacent to the MHPA. The guidelines relate to construction and maintenance of roads and utilities; fencing, lighting, and signage; material storage, mining, extraction, and processing facilities, and flood control. The language from the MSCP Subarea Plan is presented below in italics followed by the consistency analysis for future projects within the UCPA and for the UCPU itself.

5.2.1 Roads and Utilities - Construction and Maintenance Policies

1. *All proposed utility lines (e.g., sewer, water, etc.) should be designed to avoid or minimize intrusion into the MHPA. These facilities should be routed through developed or developing areas rather than the MHPA, where possible. If no other routing is feasible, then the lines should follow previously existing roads, easements, rights-of-way and disturbed areas, minimizing habitat fragmentation.*
2. *All new development for utilities and facilities within or crossing the MHPA shall be planned, designed, located and constructed to minimize environmental impacts. All such activities must avoid disturbing the habitat of MSCP covered species, and wetlands. If avoidance is infeasible, mitigation will be required.*
3. *Temporary construction areas and roads, staging areas, or permanent access roads must not disturb existing habitat unless determined to be unavoidable. All such activities must occur on existing agricultural lands or in other disturbed areas rather than in habitat. If temporary habitat disturbance is unavoidable, then restoration of, and/or mitigation for, the disturbed area after project completion will be required.*
4. *Construction and maintenance activities in wildlife corridors must avoid significant disruption of corridor usage. Environmental documents and mitigation monitoring and reporting programs covering such development must clearly specify how this will be achieved, and construction plans must contain all the pertinent information and be readily available to crews in the field. Training of construction crews and field workers must be conducted to ensure that all conditions are met. A responsible party must be specified.*
5. *Roads in the MHPA will be limited to those identified in Community Plan Circulation Elements, collector streets essential for area circulation, and necessary maintenance/emergency access roads. Local streets should not cross the MHPA except where needed to access isolated development areas.*
6. *Development of roads in canyon bottoms should be avoided whenever feasible. If an alternative location outside the MHPA is not feasible, then the road must be designed to cross the shortest length possible of the MHPA in order to minimize impacts and fragmentation of sensitive species and habitat. If roads cross the MHPA, they should provide for fully-functional wildlife movement capability. Bridges are the preferred method of providing for movement, although culverts in selected locations may be acceptable. Fencing, grading and plant cover should be provided where needed to protect and shield animals, and guide them away from roads to appropriate crossings.*

7. *Where possible, roads within the MHPA should be narrowed from existing design standards to minimize habitat fragmentation and disruption of wildlife movement and breeding areas. Roads must be located in lower quality habitat or disturbed areas to the extent possible.*
8. *For the most part, existing roads and utility lines are considered a compatible use within the MHPA and therefore will be maintained. Exceptions may occur where underutilized or duplicative road systems are determined not to be necessary as identified in the Framework Management Section 1.5.*

Projects within the UCPA that are within or adjacent to the MHPA would be analyzed on a project-by-project basis to ensure compliance with the construction and maintenance policies for roads and utilities, as outlined above. Through implementation of these policies, future development would be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

Furthermore, the UCPU planning and mobility framework is consistent with the General Planning Policies and Design Guidelines because the plan does not propose roads or development within the MHPA.

5.2.2 Fencing, Lighting, and Signage

1. *Fencing or other barriers will be used where it is determined to be the best method to achieve conservation goals and adjacent to land uses incompatible with the MHPA. For example, use chain link or cattle wire to direct wildlife to appropriate corridor crossings, natural rocks/boulders or split rail fencing to direct public access to appropriate locations, and chain link to provide added protection of certain sensitive species or habitats (e.g., vernal pools).*
2. *Lighting shall be designed to avoid intrusion into the MHPA and effects on wildlife. Lighting in areas of wildlife crossings should be of low sodium or similar lighting.*
3. *Signage will be limited to access and litter control and educational purposes.*

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the fencing, lighting, and signage policies, as outlined above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.2.3 Materials Storage

Prohibit storage of materials (e.g., hazardous or toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, especially due to potential leakage.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the materials storage policies, as outlined above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.2.4 Mining, Extraction, and Processing Facilities

1. *Mining operations include mineral extraction, processing and other related mining activities (e.g., asphaltic processing). Currently permitted mining operations that have approved restoration plans may continue operating in the MHPA. New or expanded mining operations on lands conserved as part of the MHPA are incompatible with MSCP preserve goals for covered species and their habitats unless otherwise agreed to by the wildlife agencies at the time the parcel is conserved. New operations are permitted in the MHPA if: 1) impacts have been assessed and conditions incorporated to mitigate biological impacts and restore mined areas; 2) adverse impacts to covered species in the MHPA have been mitigated consistent with the Subarea Plan; and 3) requirements of other City land use policies and regulations (e.g., Adjacency Guidelines, Conditional Use Permit) have been satisfied. Existing and any newly permitted operations adjacent to or within the MHPA shall meet noise, air quality and water quality regulation requirements, as identified in the conditions of any existing or new permit, in order to adequately protect adjacent preserved areas and covered species. Such facilities shall also be appropriately restored upon cessation of mining activities.*
2. *All mining and other related activities must be consistent with the objectives, guidelines, and recommendations in the MSCP plan, the City of San Diego's Environmentally Sensitive Lands Ordinance, all relevant long-range plans, as well as with the State Surface Mining and Reclamation Act (SMARA) of 1975.*
3. *Any sand removal activities should be monitored for noise impacts to surrounding sensitive habitats, and all new sediment removal or mining operations proposed in proximity to the MHPA, or changes in existing operations, must include noise reduction methods that take into consideration the breeding and nesting seasons of sensitive bird species.*
4. *All existing and future mined lands adjacent to or within the MHPA shall be reclaimed pursuant to SMARA. Ponds are considered compatible uses where they provide native wildlife and wetland habitats and do not conflict with conservation goals of the MSCP and Subarea Plan.*
5. *Any permitted mining activity including reclamation of sand must consider changes and impacts to water quality, water table level, fluvial hydrology, flooding, and wetlands and habitats upstream and downstream, and provide adequate mitigation.*

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with policies that apply to mining, extraction, and processing facilities, as outlined above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP

consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.2.5 Flood Control

1. *Flood control should generally be limited to existing agreements with resource agencies unless demonstrated to be needed based on a cost benefit analysis and pursuant to a restoration plan. Floodplains within the MHPA, and upstream from the MHPA if feasible, should remain in a natural condition and configuration in order to allow for the ecological, geological, hydrological, and other natural processes to remain or be restored.*
2. *No berming, channelization, or man-made constraints or barriers to creek, tributary, or river flows should be allowed in any floodplain within the MHPA unless reviewed by all appropriate agencies, and adequately mitigated. Review must include impacts to upstream and downstream habitats, flood flow volumes, velocities and configurations, water availability, and changes to the water table level.*
3. *No riprap, concrete, or other unnatural material shall be used to stabilize river, creek, tributary, and channel banks within the MHPA. River, stream, and channel banks shall be natural, and stabilized where necessary with willows and other appropriate native plantings. Rock gabions may be used where necessary to dissipate flows and should incorporate design features to ensure wildlife movement.*

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the flood control policies, as outlined above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3 LAND USE ADJACENCY GUIDELINES

Section 1.4.3 of the MSCP Subarea Plan provides guidelines that apply to projects adjacent to the MHPA. The language from the MSCP Subarea Plan is presented below in italics followed by the consistency analysis for projects within the UCPA and for the UCPU itself.

5.3.1 Drainage

All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should

be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the drainage guidelines, as discussed above, to assure that new development does not drain directly into the MHPA. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.2 Toxics

Land uses, such as recreation and agriculture, that use chemicals or generate by-products such *as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.*

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the toxics guidelines, as discussed above, to assure that potentially toxic chemicals are not released into the MHPA. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.3 Lighting

Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the lighting guidelines, as discussed above, to assure lighting adjacent to the MHPA is directed away from the MHPA or shielded to protect the MHPA and sensitive species from unnatural night lighting. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.4 Noise

Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the noise guidelines, as discussed above, to minimize noise impacts on wildlife that utilize the MHPA. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.5 Barriers

New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries *to direct public access to appropriate locations and reduce domestic animal predation.*

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the barrier guidelines, as discussed above, to assure new development adjacent to the MHPA provides barriers to direct public access to appropriate locations and reduce domestic animal predation. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.6 Invasives

No invasive non-native plant species shall be introduced into areas adjacent to the MHPA.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the invasive species guidelines, as discussed above, to assure that no invasive, non-native plant species are introduced into the MHPA. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.7 Brush Management

New residential development located adjacent to and topographically above the MHPA (e.g., along canyon edges) must be set back from slope edges to incorporate Zone 1 brush management areas on the development pad and outside of the MHPA. Zones 2 and 3 will be combined into one zone (Zone 2) and may be located in the MHPA upon granting of an easement to the City (or other acceptable agency) except where narrow wildlife corridors require it to be located outside of the MHPA. Zone 2 will be increased by 30 feet, except in areas with a low fire hazard severity rating where no Zone 2 would be required. Brush management zones will not be greater in size that is currently required by the City's regulations. The amount of woody vegetation clearing shall not exceed 50 percent of the vegetation existing when the initial clearing is done. Vegetation clearing shall be done consistent with City standards and shall avoid/minimize impacts to covered species to the maximum extent possible. For all new development, regardless of the ownership, the brush management in the Zone 2 area will be the responsibility of a homeowners association or other private party.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the brush management guidelines, as discussed above, to assure that appropriate set backs and safety measures are in place for residential projects adjacent to the MHPA. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.3.8 Grading/Land Development

Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the grading/land development guidelines, as discussed above, to assure that manufactured slopes within or adjacent to the MHPA are included in the development footprint. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.4 GENERAL MANAGEMENT GOALS AND OBJECTIVES

Section 1.5.1 of the MSCP Subarea Plan outlines the plan's habitat management goals and objectives that apply to the entire subarea. The habitat management component of the MHPA is essential to meeting the overall goal of the MSCP, which is to maintain and enhance the *biological* diversity in the region while also conserving viable populations of sensitive species and their habitats. By doing this, local extirpations and extinctions will be prevented and future species' listings will be minimized while allowing for responsible

economic growth in the region. The MSCP Subarea Plan's management objectives for the MHPA and are as follows:

1. To ensure the long-term viability and sustainability of native ecosystem function and natural processes throughout the MHPA.
2. To protect the existing and restored biological resources from intense or disturbing activities within and adjacent to the MHPA while accommodating compatible public recreational uses.
3. To enhance and restore, where feasible, the full range of native plant associations in strategic locations and functional wildlife connections to adjoining habitat in order to provide viable wildlife and sensitive species habitat.
4. To facilitate monitoring of selected target species, habitats, and linkages in order to ensure long-term persistence of viable populations of priority plant and animal species and to ensure functional habitats and linkages.
5. To provide for flexible management of the preserve that can adapt to changing circumstances to achieve the above objectives.

The general management goals and objectives from Section 1.5.1 of the MSCP Subarea Plan pertain to the entire City MHPA system. In addition, general management directives that apply to all MHPA within the entire MSCP Subarea Plan as well as area specific management directives for each planned area (i.e., Otay Mesa area, the Otay River Valley, the Tijuana River Valley, the Eastern Area, Urban Areas, the Northern Area, Lake Hodges and the San Pasqual Valley, the other Cornerstone Lands) are provided in the MSCP Subarea Plan and are discussed in further detail, below.

Future site-specific projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the general management goals and objectives, as discussed above. Through implementation of these policies, these future projects will be consistent with the MSCP Subarea Plan. By requiring future site-specific projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.5 GENERAL MANAGEMENT DIRECTIVES

Section 1.5.2 of the MSCP Subarea Plan outlines the plan's general management directives that support the objectives listed in Section 1.5.1. These directives are organized by *priority* to assist decisions on where to spend limited funds and direct mitigation efforts. Priority 1 refers to directives that protect resources in the MHPA, including management actions that are necessary to ensure that MSCP-covered species are adequately protected, and Priority 2 refers to directives other than those required for MSCP-covered species status and other long-term conservation actions that can be implemented during the life of the MSCP Subarea Plan as funds become available. The directives outlined in Section 1.5.2 of the MSCP Subarea Plan would apply to projects within the UCPA and are summarized in Table 7, below.

Table 7. Summary of General Management Directives

Priority	Description
Mitigation	
N/A	Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.
Restoration	
N/A	Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.
Public Access, Trails, and Recreation	
Priority 1	1. Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders, or fencing may be necessary to protect highly sensitive areas. Use an appropriate type of barrier based on location, setting, and use. For example, use chain link or cattle wire to direct wildlife movement, and natural rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access to satisfy mitigation.
	2. Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary because of the typically heightened resource sensitivity in those locations.
	3. In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion, including the use of stone or wood cross joints, edge plantings of native grasses, and mulching of the trail.
	4. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than 4 feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley, where other agreements have been made; in Mission Trails Regional Park, where appropriate; and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.
	5. Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300 to 500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.
	6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except when these vehicles are used for law enforcement, preserve management, or emergency purposes. Restore disturbed areas to native habitat where possible or critical, or allow to regenerate.

Table 7. Summary of General Management Directives

Priority	Description
	7. Limit recreational uses to passive uses such as birdwatching, photography, and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (e.g., opossums, raccoons, skunks). Where permitted, restrain pets on leashes.
	8. Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.
	9. Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.
Litter/Trash and Materials Storage	
Priority 1	1. Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.
	2. Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.
	3. Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA as a result of potential leakage.
	4. Keep wildlife corridor undercrossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.
Priority 2	1. Evaluate areas where dumping recurs for the need for barriers. Provide additional monitoring as needed (possibly by local and recreational groups on a “Neighborhood Watch” type program), and/or enforcement.
Adjacency Management Issues	
Priority 1	1. Enforce, prevent and remove illegal intrusions into the MHPA (e.g., orchards, decks) on an annual basis, in addition to complaint basis.
	2. Disseminate educational information to residents adjacent to and inside the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.
	3. Install barriers (e.g., fencing, rocks/boulders, vegetation) and/or signage where necessary to direct public access to appropriate locations.
Invasive Exotics Control and Removal	
Priority 1	1. Do not introduce invasive non-native species into the MHPA. Provide information on invasive plants and animals harmful to the MHPA and prevention methods to visitors and adjacent residents. Encourage residents to voluntarily remove invasive exotics from their landscaping.
	2. Remove giant reed, tamarisk, pampas grass, castor bean, artichoke thistle, and other exotic invasive species from creek and river systems, canyons and slopes, and elsewhere within the MHPA as funding or other assistance becomes available. If possible, it is recommended that removal begin upstream and/or upwind and move downstream/downwind to control re-invasion. Priorities for removal should be based on invasive species’ biology (e.g., time of flowering, reproductive capacity), the immediate need of a specific area, and where removal could increase the habitat available for use by MSCP-covered species such as the least Bell’s vireo and coastal California gnatcatcher. Avoid removal activities during the reproductive seasons of

Table 7. Summary of General Management Directives

Priority	Description
	sensitive species and avoid/ minimize impacts to sensitive species or native habitats. Monitor the areas and provide additional removal and apply herbicides if necessary. If herbicides are necessary, all safety and environmental regulations must be observed. The use of heavy equipment, and any other potentially harmful or impact-causing methodologies, to remove the plants may require some level of environmental or biological review and/or supervision to ensure against impacts to sensitive species.
Priority 2	1. If funding permits, initiate a baseline survey with regular follow-up monitoring to assess invasion or re-invasion by exotics and to schedule removal. Utilize trained volunteers to monitor and remove exotic species as part of a neighborhood, community, school, or other organization's activities program. If done on a volunteer basis, prepare and provide information on methods and timing of removal to staff and the public if requested.
	2. Conduct an assessment of the need for cowbird trapping in each area of the MHPA where cattle, horses, or other animals are kept, as recommended by the habitat management technical committee in coordination with the wildlife agencies.
	3. If eucalyptus trees die or are removed from the MHPA area, replace with appropriate native species. Ensure that eucalyptus trees do not spread into new areas, nor increase substantially in numbers over the years. Eventual replacement by native species is preferred.
	4. On a case by case basis some limited trapping of non-native predators may be necessary at strategic locations, and where determined feasible to protect ground and shrub-nesting birds, lizards, and other sensitive species from excessive predation. This management directive may be considered a Priority 1 if necessary to meet the conditions for species coverage. If implemented, the program would only be on a temporary basis and where a significant problem has been identified and, therefore, needed to maintain balance of wildlife in the MHPA. The program would be operated in a humane manner, providing adequate shade and water, and checking all traps twice daily. A domestic animals release component would be incorporated into the program. Provide signage at access points and noticing of adjacent residents to inform people that trapping occurs, and how to retrieve and contain their pets.
Flood Control	
Priority 1	1. Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid- March.
Priority 2	1. Review existing flood control channels within the MHPA periodically (every 5 to 10 years) to determine the need for their retention and maintenance, and to assess alternatives, such as restoration of natural rivers and floodplains.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the general management directives presented in Table 7, above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.6 SPECIFIC MANAGEMENT POLICIES AND DIRECTIVES FOR URBAN HABITAT LANDS AND THE NORTHERN AREA

Area specific guidelines and recommendations for the MHPA in each planned area (i.e., Otay Mesa area, the Otay River Valley, the Tijuana River Valley, the Eastern Area, Urban Areas, the Northern Area, Lake Hodges and the San Pasqual Valley, the other Cornerstone Lands) are also provided to supplement the general management goals, objectives, and directives that apply to all MHPA within the entire MSCP Subarea Plan area. As with the general management directives, these specific management directives are organized by priority to assist decisions on where to spend limited funds and direct mitigation efforts. Priority 1 refers to directives that protect resources in the MHPA, including management actions that are necessary to ensure that MSCP-covered species are adequately protected, and Priority 2 refers to directives other than those required for MSCP-covered species status and other long-term conservation actions that can be implemented during the life of the MSCP Subarea Plan as funds become available.

Sections 1.5.7 and 1.5.8 of the MSCP Subarea Plan provide the MSCP Subarea Plan's goals and objectives, covered species, major issues, and overall management policies and directives for Urban Habitat Lands and for the Northern Area as well as specific management directives for the Northern Area.

5.6.1 Urban Habitat Lands

Section 1.5.7 of the MSCP Subarea Plan identifies the ideal future condition of the Urban Habitat Lands that are scattered throughout the City and included in the MHPA as being (1) a system of canyons that provide habitat to native species that continue to use these Urban Habitat Lands, (2) habitats that provide 'stepping stones' for migratory bird species and those establishing new territories, and (3) environmental education opportunities for individuals who visit these natural areas. The major issues associated with these Urban Habitat Lands include:

- Intense land uses and activities adjacent to and in MSCP-covered species' habitat.
- Dumping, litter, and vandalism.
- Itinerant living quarters.
- Utility, facility and road repair, construction, and maintenance activities.
- Exotic (non-native) and invasive plants and animals.
- Urban runoff, and water quality.

The overall management policies and directives for Urban Habitat Lands are summarized in Table 8, below. The MSCP Subarea Plan does not include any specific management directives for Urban Habitat Lands.

Table 8. Summary of Management Policies and Directives for Urban Habitat Lands

Priority	Description
N/A	Where the MHPA's Urban Habitat Lands are part of a natural resource park, the City's Parks and Recreation Department shall manage these lands in accordance with a Natural Resource Management Plan (NRMP). The NRMPs for Urban Habitat Lands include the Marian Bear Memorial Park NRMP, Mission Bay Park NRMP, First San Diego River Improvement Project, and Los Peñasquitos Canyon Preserve NRMP.
N/A	All other Urban Habitat Lands included within the MHPA should be managed, to the extent possible, according to the general management policies and directives as described in the MSCP Subarea Plan.
N/A	Special management needs or issues for specific Urban Habitat Lands should be resolved by the MHPA Preserve Managers according to an appropriate adaptive management strategy and through coordination with the MSCP habitat management technical committee. All management actions resolved in this manner should be documented, and all follow up actions, including monitoring, should also be documented in order to determine trends, and gain knowledge and feedback useful for continued management of these lands.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance with the management policies and directives for Urban Habitat Lands presented in Table 8, above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

5.6.2 Northern Area

Section 1.5.8 of the MSCP Subarea Plan describes the goals and objectives of the Northern Area as maintaining the regional wildlife corridors that provide connectivity from the coast to natural areas further east. Key linkages and core areas within the Northern Area include Del Mar Mesa, Los Peñasquitos Canyon Preserve, Los Peñasquitos Lagoon, Torrey Pines State Park, San Dieguito River Valley Regional Park, and Black Mountain Preserve. The major issues associated with these natural areas within the Northern Area include:

- Intense land uses and activities adjacent to and in MSCP-covered species' habitat and linkages.
- Itinerant living quarters.
- Enhancement and restoration needs.
- Exotic (non-native), invasive plants and animals.
- Water drainage issues, including water quality, urban runoff, erosion, sedimentation, and flood control.
- Utility, facility and road repair, construction, and maintenance activities.

The overall management policies and directives for the Northern Area that apply to the UCPA are summarized in Table 9, below.

Table 9. Summary of Overall Management Policies and Directives for the UCPA Portion of the Northern Area

Priority	Description
N/A	San Dieguito River Park Concept Plan (San Dieguito River Park JPA 2002) – While not within the UCPA, the San Dieguito River Park Concept Plan provides a regional planning document that will provide connectivity within the San Dieguito River Valley and to adjacent open space, such as Los Peñasquitos Canyon Preserve. The San Dieguito River Park Concept Plan outlines both general and specific policies, design considerations, and park proposals that should be considered in conjunction with the Framework Management Plan for long-term management of the San Dieguito River Valley.
N/A	Torrey Pines State Park and Los Peñasquitos Lagoon – Torrey Pines State Park is located within the UCPA, and Los Peñasquitos Lagoon is located immediately adjacent to the northern boundary of the UCPA. Both of these areas support wildlife that utilize the natural habitats within the UCPA. Both of these areas are managed by state park rangers and ecologists according to their general plans and management plans.
N/A	Los Peñasquitos Canyon Preserve Master Plan (Van Dell and Associates 1998) – While Los Peñasquitos Canyon Preserve is located outside of the UCPA, there are important wildlife movement corridors and linkages that connect the UCPA with Los Peñasquitos Canyon Preserve, which is managed according to the Los Peñasquitos Canyon Preserve Master Plan. The Los Peñasquitos Canyon Preserve Master Plan contains general policies and guidelines on access, trails, usage, and sensitive species as well as specific management guidelines for natural, cultural, and historical resources for the Los Peñasquitos Canyon Preserve.

One specific management directive for the Northern Area applies to the UCPA, and several specific management directives that apply to the adjacent Torrey Pines Community also apply to the UCPA. These specific management directives are summarized in Table 10, below.

Table 10. Summary of Specific Management Directives for the Northern Area

Priority	Description
Mira Mesa Community, at the edges of Los Peñasquitos Canyon and Lopez Canyon and University City south of Lopez Canyon	
Priority 2	1. Develop a trail system, including appropriate signage and barriers, to direct/redirect human access into the MHPA. Close unapproved trails and access points and provide barriers or signage where necessary.
Torrey Pines Community	
Priority 2	1. In the long term, remove and regularly control the giant reed, castor bean, pampas grass and other invasive non-natives throughout the Sorrento Valley area and Los Peñasquitos Lagoon.
	2. Assess the need for a large detention/sedimentation basin at the mouth of Soledad Creek and Los Peñasquitos Creek in the Los Peñasquitos Lagoon. The purpose would be to capture sediments, pollutants, non-native invasive plant species, and excessive fresh water flows that might affect the estuarine system.
	5. In the long term, if funding becomes available, replace the concrete and riprap channels within the Sorrento Valley area with natural bank and bottom flood channels (of adequate width to contain a 50 to 100-year flood if possible). This includes the channel leading from Los Peñasquitos Canyon into Sorrento Valley. Such channels should be two-tiered, with a deeper low-flow channel area, and a narrow terrace along one bank to allow for wildlife movement. Plant the banks and bottoms with native riparian and wetland species, and plant the terraces with grassland components. The channel bottoms may need occasional maintenance to prevent obstruction of flood flows. Maintenance should consist of selective thinning of variably aged thickets of riparian vegetation, during the non-breeding/nesting season of sensitive bird species.

Projects within the UCPA will be analyzed on a project-by-project basis to assure compliance not only with the overall management policies and directives for the Northern Area presented in Table 9, above, but also with the specific management directives for the Northern Area presented in Table 10, above. Through implementation of these policies, these projects will be consistent with the MSCP Subarea Plan. By requiring projects to include an MSCP consistency analysis in the biological resources report, the UCPU itself, as a programmatic document that guides project analyses, is consistent with the MSCP Subarea Plan.

SECTION 6.0 – IMPACTS

This section guides the analysis of project impacts on biological resources. This guidance is based on current existing federal, state, and local standards and regulations applicable to biological resources. For projects within the UCPA that may affect sensitive biological resources, potential impacts to such sensitive biological resources must be assessed to determine if they are significant and if avoidance, minimization, and/or mitigation measures are required. The approach to identify and define impacts as well as to determine their significance, as described below, is based on current existing programs, plans, and regulations pertaining to the UCPA. Projects within the UCPA should include an updated literature review and database search to obtain current information for applicable existing programs, plans, and regulations, as these documents are revised frequently to address changing environmental conditions.

6.1 IMPACT DEFINITIONS

A project may result in direct, indirect, and/or cumulative impacts to biological resources. Projects within the UCPA should define potential project impacts according to the CEQA impact definitions presented in the City's Biology Guidelines, which are as follows (City 2018b):

- **Direct Impacts** are defined as "a physical change in the environment which is caused by and immediately related to the project" (City 2018b). For example, vegetation removal resulting from brushing, grubbing, grading, trenching, and excavating is considered a direct impact.
- **Indirect Impacts** are defined as "a physical change in the environment, which is not immediately related to the project, but which is caused indirectly by the project" (City 2018b). Indirect impacts include physical changes in the environment caused by a direct impact. For example, dust from heavy equipment use during grading could settle on nearby vegetation and interfere with photosynthesis and cause an indirect impact, or the noise levels resulting from construction equipment could interrupt reproductive behavior within adjacent sensitive avian breeding habitats during the breeding season and cause an indirect impact.
- **Cumulative Impacts** are defined as "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects" (Association of Environmental Professionals 2020). Examples include the cumulative changes associated with urban development that result in habitat fragmentation; increased traffic, runoff, and noise levels; alteration of natural landscapes; wildlife movement restrictions; and introduction of invasive species.

Projects that conform to the MSCP and VPHCP typically do not result in significant cumulative impacts. However, a rare circumstance could occur where impacts from a future project on a particular species not covered by the MSCP may still result in a cumulative/significant impact. Similarly, all impacts to vernal pools and native grasslands (greater than 0.1 acre) are considered significant. In this case, the project's biological resources report would identify the impacted biological resources and describe why a

cumulative impact still exists regardless of the habitat level protection provided by the MSCP.

6.2 IMPACT IDENTIFICATION AND ANALYSIS

All projects in the UCPA that could result in potentially significant impacts to sensitive biological resources will be required to adequately identify and quantify potential project impacts pursuant to the City's ESL Regulations and Biology Guidelines. Per the City's Biology Guidelines, a biological resources report is required for all proposed development projects which are subject to the ESL Regulations and/or where the CEQA review has determined that there may be a significant impact on other biological resources considered sensitive under CEQA.

Within the UCPA, Figures 7a and 7b depict the locations in the community where sensitive biological resources are known to exist. While future development of the UCPA would be focused outside of the sensitive biological resource areas in accordance with the City's regulations and MSCP Subarea Plan, impacts to sensitive biological resources may occur as a result of development. Where any ESL is present, the City would require a biological resources report to evaluate the significance of impacts and to ensure future development demonstrates consistency with the City's Biology Guidelines, MSCP Subarea Plan, and VPHCP.

The biological resources report for a project should provide all information as required in the most recent version of the City's Biology Guidelines. In the current version of the guidelines (City 2018b), the biological resources report requirements are outlined in Section III.A.1. To summarize, field surveys must be conducted as needed following the guidance provided in Table 1 – Summary of Biological Survey Requirements in the City's Biology Guidelines to obtain the data necessary to adequately identify the biological resources within and adjacent to the project site. Based on the data collected during the surveys, the location and extent of the biological resources present within and adjacent to the project site must be clearly identified on a map of an appropriate scale. Field surveys for state-listed or federally listed sensitive, MSCP-covered, and/or VPHCP-covered species surveys are typically valid for up to 24 months, after which they must be updated, as appropriate, to accurately reflect the biological resources on the project site.

Once the biological resources within and adjacent to the project site have been identified and mapped, the impacts should be analyzed following the guidance provided in the most recent version of the City's Biology Guidelines and the most recent version of the City's CEQA Significance Determination Thresholds. Section III.A.2 of the current version of the guidelines (City 2018b) states that the biological resources report must identify all potential project impacts from the development (both on-site impacts and off-site impacts) to sensitive biological resources and to other significant biological resources as determined by the CEQA process (i.e., sensitive, non-covered species), The biological resources report also should analyze the significance of these impacts, including an analysis of direct impacts, indirect impacts, and cumulative impacts. The City's most current CEQA Significance Determination Thresholds should be used as a reference during the significance determination process.

The City's draft CEQA Significance Determination Thresholds (City 2022b) are used to determine if impacts on biological resources are significant. Per these guidelines, a project could have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by CDFW or the USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or the USFWS;
- Have a substantial adverse effect on state or federally protected wetlands as defined by USACE, CDFW, RWQCB, or CCC, including but not limited to marsh, coastal, etc., through direct removal, filling, hydrological interruption or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites;
- Conflict with the provisions of any adopted Habitat Conservation Plan (HCP), NCCP, or other approved local, regional, or state HCP.

Significance determinations for direct and indirect impacts to biological resources resulting from projects in the UCPA that are presented in the biological resources report would be evaluated by City staff through the CEQA review process using the City's most current CEQA Significance Determination Thresholds at the time of the project. Each impact will be considered in the context of the project to assure all potentially significant impacts are identified and avoided to the extent feasible or, for unavoidable impacts, that appropriate mitigation is implemented to reduce the impact to below a level of significance. This review process is intended to demonstrate the project's consistency with the City's ESL, Biology Guidelines, MSCP Subarea Plan, VPHCP, and with all other applicable federal, state, and local programs, regulations, and documents.

The MSCP Subarea Plan was designed to compensate for the regional loss of biological resources throughout the region. Projects that conform with the MSCP Subarea Plan and other City programs and regulations are not expected to result in a significant cumulative impact for those biological resources adequately covered by the MSCP. These resources include the vegetation communities identified as Tier I through IV and the MSCP-covered plant and wildlife species. However, the following would be considered significant cumulative impacts:

- All direct impacts to vernal pools are significant and cumulatively significant. Impacts to vernal pools may be mitigated in accordance with the criteria in the City's Biology Guidelines and the VPHCP.
- Direct impacts to perennial native grasslands that are greater than 0.1 acre are significant and cumulatively significant. Direct impacts to this habitat type are mitigated via Tier I per the City's Biology Guidelines. Cumulative impacts may be mitigated only via creation at a 1:1 ratio or greater with the feasibility of creation to be evaluated on a case-by-case basis.

- Impacts to species covered by the MSCP (see Appendix A of MSCP Subarea Plan) generally would not be considered cumulatively significant, provided the project is in full compliance with the MSCP Subarea Plan MSCP-covered species conditions of coverage and its implementing regulations.
- Impacts to state-listed or federally-listed species not covered by the MSCP may be considered cumulatively significant. Each future site-specific project will be evaluated on a case-by-case basis.

It is expected that many other sensitive species not analyzed for coverage under the MSCP will be adequately conserved through the MSCP's habitat-based mitigation plan. For projects within the UCPA, the project-specific biological resources report would identify those species and describe why a cumulative impact still exists in light of the habitat level of protection provided by the MSCP. Depending on the size of the impact and the sensitivity of the species, certain non-covered species might be considered rare enough to conclude cumulatively significant impacts and may require additional avoidance, minimization, and/or mitigation measures to reduce these impacts to below a level of significance.

SECTION 7.0 – AVOIDANCE, MINIMIZATION, AND MITIGATION

Mitigation is the process of reducing significant impacts to below a level of significance. The process of identifying biological mitigation under the City's Biology Guidelines, ESL Regulations, and CEQA consists of two parts (1) the identification of significant biological impacts (as described in Section 6.0 above) and (2) the identification of the corresponding mitigation requirements to reduce the impacts to below a level of significance.

For projects within the UCPA that have the potential to impact biological resources, a biological resources report would be required to ensure consistency with the MSCP and City ESL regulations. The project-specific biological analysis would identify avoidance, minimization, and/or mitigation as appropriate, on a project-by-project basis, based on proximity to the MHPA and ESL lands and the resources documented on-site. The avoidance and minimization measures detailed in Section 7.1 are measures that may be applied on a project basis to guide projects to avoid impacts to sensitive biological resources through incorporation of project design features and minimization measures. Through incorporation of avoidance and minimization measures, significant impacts would typically be avoided or minimized to below a level of significance. Typical avoidance and minimization measures are discussed in detail in Section 7.1, below. Avoidance and minimization of impacts to sensitive resources is the preferred approach; however, not all project impacts can be avoided or minimized.

For unavoidable project impacts, the biological resources report will include a Mitigation Program that identifies a plan of action to reduce significant impacts to below a level of significance as required in the most recent version of the City's Biology Guidelines. The City's Biology Guidelines (City 2018b) requires mitigation to be based on the type and location of the impacted habitat, and for uplands, mitigation is also based on the location of the mitigation site. A typical Mitigation Program includes three required elements: (1) Mitigation Element (Section III.B.1 of the City's Biology Guidelines); (2) Protection and Notice Element (Section III.B.2 of the City's Biology Guidelines); and (3) Management Element (Section III.B.3 of the City's Biology Guidelines). The Mitigation Element, which is discussed in detail in Section 7.2.1 below, consists of a discussion of the amount (e.g., quantity) and the type (e.g., method) of mitigation. The Protection Element, which is discussed in Section 7.2.2 below, would identify the specific actions incorporated into the project to protect any areas offered as mitigation. The Management Element, which is discussed in detail in Section 7.2.3 below, would provide assurances that the mitigation would be adequately managed and monitored in a manner consistent with Section 1.5, Preserve Management of the MSCP Subarea Plan and/or Section 5.3.2 and Chapter 7 of the VPHCP, as appropriate.

7.1 AVOIDANCE AND MINIMIZATION MEASURES

Projects within the UCPA should be designed to include the following measures to avoid or minimize potential project impacts to sensitive biological resources to the maximum extent feasible. Prior to issuance of a Notice to Proceed (NTP), the Development Services Department (DSD) Environmental Designee (ED) shall review and approve all construction documents (plans, specifications, details, etc.) to ensure these

requirements, considered either project conditions or part of the project's Mitigation Monitoring and Reporting Program (MMRP), are incorporated.

7.1.1 Pre-Construction Measures

The following avoidance and minimization measures should be incorporated prior to construction.

7.1.1.1 Biologist Verification

The owner/permittee shall provide a letter to the City Mitigation Monitoring Coordination (MMC) section stating that a Project Biologist (Qualified Biologist), as defined in the City's Biology Guidelines, has been retained to implement the project's biological monitoring program. The letter shall include the names and contact information of all persons involved in the biological monitoring of the project.

7.1.1.2 Pre-Construction Meeting

The Qualified Biologist shall attend the pre-construction meeting, discuss the project's biological monitoring program, and arrange to perform any follow up mitigation measures and reporting, including site-specific monitoring, restoration or revegetation, and additional fauna/flora surveys/salvage.

7.1.1.3 Biological Documents

The Qualified Biologist shall submit all required documentation to MMC verifying that any special mitigation reports, including but not limited to maps, plans, surveys, survey timelines, or buffers are completed or scheduled per City's Biology Guidelines, MSCP Subarea Plan, ESL Ordinance, project permit conditions, CEQA, endangered species acts, and/or other local, state, or federal requirements.

7.1.1.4 Biological Construction Mitigation/Monitoring Exhibit

The Qualified Biologist shall present a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes the biological documents mentioned above. In addition, it shall include: (1) resource delineation, (2) avian construction avoidance areas/noise buffers/barriers, (3) other impact avoidance areas (e.g., avoidance of vegetation removal, limit vegetation trampling and trimming), and (4) any subsequent biological monitoring requirements determined by the Qualified Biologist and the City Assistant Deputy Director (ADD)/MMC necessary to assure impact avoidance. The BCME shall include a site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule. The BCME shall be approved by MMC and referenced in the construction documents.

7.1.1.5 Avian Protection Requirements

To avoid any direct impacts to coastal California gnatcatcher or any species identified as listed, candidate, sensitive, or special status in the MSCP, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in

the proposed area of disturbance must occur during the breeding season, the Qualified Biologist shall conduct a pre-construction survey to determine the presence or absence of nesting for sensitive bird species in the proposed area of disturbance. The pre-construction survey shall be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant shall submit the results of the pre-construction survey to the City's DSD for review and approval prior to initiating any construction activities.

If nesting behaviors for any sensitive bird species are detected, a letter report in conformance with the City's Biology Guidelines and applicable state and federal laws (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's MMC Section or Resident Engineer and Biologist shall verify and approve that all measures identified in the report are in place prior to and/or during construction.

7.1.1.6 Resource Delineation

Prior to construction activities, the Qualified Biologist shall supervise the placement of orange construction fencing or equivalent along the limits of disturbance adjacent to sensitive biological habitats and verify compliance with any other project conditions as shown on the BCME. This phase shall include flagging plant specimens and delimiting buffers to protect sensitive biological resources (e.g., habitats/flora and fauna species, including nesting birds) during construction. Appropriate steps/care should be taken to minimize attraction of nest predators to the site.

7.1.1.7 Education

Prior to commencement of construction activities, the Qualified Biologist shall meet with the owner/permittee or designee and the construction crew to conduct an on-site educational session regarding the need to avoid impacts outside of the approved construction area and to protect sensitive flora and fauna (e.g., explain the avian and wetland buffers, flag system for removal of invasive species or retention of sensitive plants, clarify acceptable access routes/methods and staging areas).

7.1.2 Construction Measures

The following avoidance and minimization measures should be incorporated during construction.

7.1.2.1 Monitoring

All construction activities (including access/staging areas) shall be restricted to areas previously identified, proposed for development/staging, or previously disturbed as shown on the construction drawings and/or the BCME. The Qualified Biologist shall monitor construction activities as needed to ensure that construction activities do not encroach into biologically sensitive areas, or cause other similar damage, and that the work plan

has been amended to accommodate any sensitive species located during the pre-construction surveys. In addition, the Qualified Biologist shall document field activity via the Consultant Site Visit Record (CSVR), if needed for the project. If a CSVR is required, it shall be emailed to MMC on the first day of monitoring, the first week of each month, the last day of monitoring, and immediately in the case of any undocumented condition or discovery.

7.1.2.2 Subsequent Resource Identification

The Qualified Biologist shall note/act to prevent any new disturbances to habitat, flora, and/or fauna on site (e.g., flag plant specimens for avoidance during access). If active nests or other previously unknown sensitive resources are detected, all project activities that directly impact the resource shall be delayed until species specific local, state, or federal regulations have been determined and applied by the Qualified Biologist.

7.1.3 Post-Construction Measures

The following avoidance and minimization measures should be completed following construction.

7.1.3.1 Impact Verification

In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with City's Biology Guidelines, ESL Regulations, MSCP Subarea Plan, CEQA, and other applicable local, state, and federal laws.

7.1.3.2 Final BCME and Biological Monitoring Report

The Qualified Biologist shall submit a final BCME and final biological monitoring report to the satisfaction of the City ADD/MMC within 30 days of construction completion.

7.2 MITIGATION PROGRAM

If impacts to biological resources cannot be avoided through implementation of the measures described in Section 6.1, above, then the project will include a Mitigation Program which identifies a plan of action to reduce significant impacts to below a level of significance. The Mitigation Program will consist of three required elements: (1) Mitigation Element, (2) Protection and Notice Element, and (3) Management Element. Each element is further described below. This Mitigation Program must be incorporated in the permit conditions and/or subdivision map and the construction specifications for public projects, and shown on the construction plans as appropriate. The biological resources report must also provide evidence that the nature and extent of the mitigation proposed is reasonably related (nexus) and proportional to the adverse biological impacts of the proposed development.

7.2.1 Mitigation Element

The following guidelines are provided in the City's Biology Guidelines to achieve consistency and equity among projects. Mitigation for specific projects may differ

depending on site-specific conditions as supported by the project-level analysis. This section describes the mitigation requirements for upland and wetland habitats, mitigation methods, and species-specific mitigation requirements.

7.2.1.1 Mitigation for Upland Impacts

The MSCP Subarea Plan identifies the conservation and management of the MHPA. The habitat-based level of protection afforded by the implementation of the MHPA is intended to meet the mitigation obligations of MSCP-covered species and most likely the majority of species determined to be sensitive pursuant to the CEQA review process.

The City has adopted a policy that development should be conserved. While this would result in the depletion (net loss) of the existing inventory of sensitive biological resources, the successful implementation of the MSCP would retain the long-term viability and avoid further extirpation of many of San Diego's sensitive species. Therefore, for upland habitats, measures that contribute towards overall implementation of the MSCP may be considered as mitigation, even when a net loss of the existing inventory of sensitive biological resources occurs.

Upland Impacts Within the MHPA (Outside the Coastal Overlay Zone)

Where the MHPA covers more than 75 percent of a premise, development will be limited to the amount necessary to achieve a development area of 25 percent of the premise, based upon the development area regulations of the Open Space Residential Zone (OR-1-2 Zone). No mitigation will be required for the direct impacts to uplands associated with this development area.

City linear utility projects (i.e., sewer and water pipelines) are exempt from the development area limitation but need to mitigate all direct impacts in accordance with Table 11, below. Likewise, all projects processed through a deviation would need to provide mitigation in accordance with Table 11 for impacts beyond the allowable development area of the OR-1-2 Zone.

Table 11. Upland Mitigation Ratios*

Tier	Habitat Type	Mitigation Ratios
Tier I (Rare Uplands)	Southern Foredunes Torrey Pines Forest Coastal Bluff Scrub Maritime Succulent Scrub Maritime Chaparral Scrub Oak Chaparral Native Grassland Oak Woodlands	Tier I Mitigation Ratios: Location of Impact: Inside MHPA — Preservation: Inside MHPA 2:1, Outside MHPA 3:1; Location of Impact: Outside MHPA — Preservation: Inside MHPA 1:1, Outside MHPA 2:1
Tier II (Uncommon Uplands)	Coastal Sage Scrub CSS/Chaparral	Tier II Mitigation Ratios: Location of Impact: Inside MHPA — Preservation: Inside MHPA 1:1, Outside MHPA 2:1; Location of Impact: Outside MHPA — Preservation: Inside MHPA 1:1, Outside MHPA 1.5:1
Tier IIIA (Common Uplands)	Mixed Chaparral Chamise Chaparral	Tier IIIA Mitigation Ratios: Location of Impact: Inside MHPA — Preservation: Inside MHPA 1:1, Outside MHPA 1.5:1; Location of Impact: Outside MHPA — Preservation: Inside MHPA 0.5:1, Outside MHPA 1:1
Tier IIIB (Common Uplands)	Non-Native Grasslands	Tier IIIB Mitigation Ratios: Location of Impact: Inside MHPA — Preservation: Inside MHPA 1:1, Outside MHPA 1.5:1; Location of Impact: Outside MHPA — Preservation: Inside MHPA 0.5:1, Outside MHPA 1:1
Tier IV (Other Uplands)	Disturbed Land Agriculture Eucalyptus Woodland Ornamental Plantings	Tier IV Mitigation Ratios: Location of Impact: Inside MHPA — Preservation: Inside MHPA 0:1, Outside MHPA 0:1; Location of Impact: Outside MHPA — Preservation: Inside MHPA 0:1, Outside MHPA 0:1

*No mitigation would be required for impacts within the base development area (25 percent) occurring inside the MHPA. Mitigation for any impacts from development in excess of the 25 percent base development area for community plan public facilities or for projects processed through the deviation process would be required at the indicated ratios.

For upland impacts summarized in Table 11, these additional notes apply:

- For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in-kind).
- For impacts to Tier II, IIIA and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I through III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind).
- Mitigation for impacts to occupied burrowing owl habitat (at the MSCP Subarea Plan specified ratio) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management, and enhancement of burrowing owl nesting and foraging requirements.

Upland Impacts Outside of the MHPA (Outside the Coastal Overlay Zone)

Where the MHPA covers less than 75 percent of a premise, no development will be allowed within the MHPA. Upland mitigation, based upon the ratios set forth in Table 11, above, will be required for all significant biological impacts. These ratios are based upon the rarity of the upland resources as characterized by one of the four Tiers listed in the table. Due to the critical nature and high biological value of the MHPA, mitigation should be directed to the MHPA. Thus, a lower mitigation ratio may be applied for projects that propose to mitigate inside of the MHPA. Lands outside the MHPA containing Narrow Endemic Species will be treated as if the land was inside the MHPA for purposes of mitigation.

The mitigation requirement would be evaluated against any portion of the premise within the MHPA that is left undeveloped as a condition of the permit. If the portion of the premise containing the MHPA is equal to or greater than the mitigation requirement, then no further mitigation would be required. Any acreage of the mitigation requirement not satisfied on-site will be required to be mitigated off-site.

Mitigation located inside the MHPA for all Tier I impacts must be in-tier but may be out-of-kind. For impacts to Tier II, IIIA, or IIIB habitats (excluding occupied burrowing owl habitat), the mitigation could (1) include any Tier I, II, IIIA, or IIIB habitats (out-of-kind) within the MHPA or (2) occur outside of the MHPA within the affected habitat type (in-kind). Mitigation for impacts to occupied burrowing owl habitat (at the MSCP Subarea Plan specified ratio/Table 5 of the City's Biology Guidelines) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management, and enhancement of burrowing owl nesting and foraging requirements.

Upland Impacts Within the Coastal Overlay Zone

Within the coastal overlay zone, encroachment into steep hillsides containing sensitive biological resources shall be avoided to the maximum extent possible and permitted only when in conformance with the encroachment limitations set forth in the City's ESL

Regulations (SDMC Section 143.0142[a][4]). Mitigation for permitted impacts shall be required as described above.

7.2.1.2 Mitigation for Wetlands Impacts

The ESL Regulations require that impacts to wetlands be avoided, unless approved through the deviation process. Unavoidable impacts should be minimized to the maximum extent practicable and mitigated to below a level of significance.

As part of the project-specific environmental review pursuant to CEQA, the project design will be evaluated to determine if it is a Biologically Superior Option (see Section III.A.2.ii.C of the City's Biology Guidelines), all unavoidable wetlands impacts will be analyzed, and mitigation will be required in accordance with Table 12 and/or Table 13, below; mitigation should be based on the impacted type of wetland habitat and project design. Mitigation should prevent any net loss of wetland functions and values of the impacted wetland.

Table 12. Standard Wetland Mitigation Ratios for Biologically Superior Design

Habitat Type	Mitigation Ratio
Coastal Wetlands	
Salt Marsh	4:1
Salt Panne	4:1
Riparian Habitats	
Oak Riparian Forest	3:1
Riparian Forest or Woodland	3:1
Riparian Scrub	2:1
Riparian Scrub in the Coastal Overlay Zone	3:1
Freshwater Marsh	2:1
Freshwater Marsh in the Coastal Overlay Zone	4:1
Natural Flood Channel	2:1
Disturbed Wetland	2:1
Vernal Pools	2:1 to 4:1*
Marine Habitats	2:1
Eelgrass Beds	2:1

Mitigation for vernal pool impacts consistent with the VPHCP shall be 2:1 for listed fairy shrimp or when no listed plant species are present, 3:1 for San Diego button celery, and 4:1 when listed species with very limited distributions (e.g., spreading navarretia, San Diego mesa mint, California Orcutt grass, and Otay mesa mint*) are present. While the ratio is applied to the basin area, the mitigation site must include appropriate watershed to support restored and/or enhanced basins.

Table 13. Extraordinary Wetland Mitigation Ratios for Non-Biologically Superior Design

Habitat Type	Mitigation Ratio
Coastal Wetlands (salt marsh, salt panne)	8:1
Riparian Forest or Woodland (oak, sycamore, or willow)	6:1
Riparian Scrub	4:1
Freshwater Marsh	4:1
Natural Flood Channel*	4:1
Disturbed Wetland*	4:1
Vernal Pools	4:1 to 8:1
*Preference for these habitats is out-of-kind mitigation with better habitat. In-kind could be considered where it would clearly benefit sensitive species and result in a biologically superior alternative.	

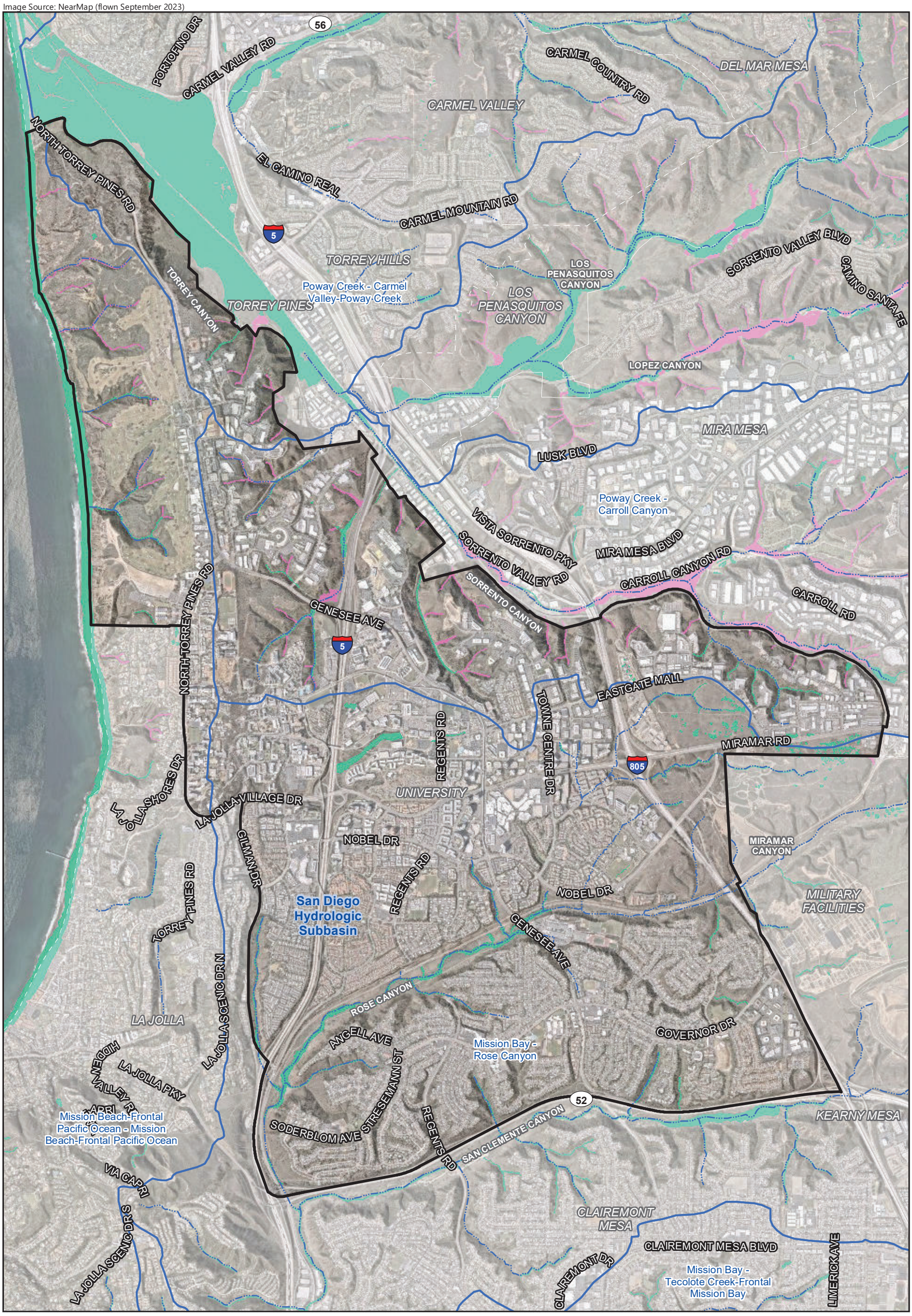
For the Biologically Superior Option, the project and proposed mitigation shall include avoidance, minimization, and compensatory measures which would result in a biologically superior net gain in overall function and values of (a) the type of wetland resource being impacted and/or (b) the biological resources to be conserved; and the Biologically Superior Option mitigation shall include either:

- Standard mitigation per Table 12 including wetland creation or restoration 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):
    - is in a configuration or alignment that optimizes the potential long-term biological viability of the on-site sensitive biological resources, and/or
    - conserves the rarest and highest quality on-site biological resources.
- For a project not consistent with the Biologically Superior Option described above, extraordinary mitigation per Table 13 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 creation plan.

Additional Requirements for Vernal Pool or VPHCP-Covered Species Mitigation

Mitigation for projects impacting vernal pools or VPHCP-covered species shall conform to the VPHCP, including salvage of sensitive species 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. Salvaged material shall not be introduced to existing vernal pools containing the same species outside the vernal pool series absent consultation with and endorsement by vernal pool species experts not associated with the project (e.g., independent expert). The mitigation sites shall include preservation of the entire vernal pool watershed and a buffer based on functions and values; however, if such an analysis is not conducted, there shall be a default of a 100-foot buffer from the watershed.

Image Source: NearMap (flown September 2023)



University Community Plan Boundary

Stream/River

Watershed - Subwatershed

National Wetlands Inventory (NWI)

Wetland

Riparian

FIGURE 9

Jurisdictional Resources

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Types of Wetland Mitigation

The following list provides operational definitions of the four types of activities that constitute wetland mitigation under the City's Biology Guidelines:

- **Wetland creation** is an activity that results in the formation of new wetlands in an upland area. An example is excavation of uplands adjacent to existing wetlands and the establishment of native wetland vegetation.
- **Wetland restoration** is an activity that re-establishes the habitat functions of a former wetland. An example is the excavation of agricultural fill from historic wetlands and the re-establishment of native wetland vegetation.
- **Wetland enhancement** is an activity that improves the self-sustaining habitat functions of an existing wetland. An example is removal of exotic species from existing riparian habitat.
- **Wetland acquisition** may be considered in combination with any of the three mitigation activities above.

Wetland enhancement and wetland acquisition focus on the preservation or the improvement of existing wetland habitat functions and values and do not result in an increase in wetland area; therefore, a net loss of wetland may result. As such, acquisition and/or enhancement of existing wetlands may be considered as partial mitigation only for any balance of the remaining mitigation requirement after restoration or creation if wetland acreage is provided at a minimum of a 1:1 ratio.

For wetland impacts that are unavoidable and minimized to the maximum extent feasible, mitigation shall consist of creation of new, in-kind habitat to the fullest extent possible and at the appropriate ratios. In addition, unavoidable impacts to wetlands located within the coastal overlay zone shall be mitigated on-site, if feasible. If on-site mitigation is not feasible, then mitigation shall occur within the same watershed. All mitigation for unavoidable wetland impacts within the coastal overlay zone shall occur within the coastal overlay zone.

Restoration of illegally filled historical wetland areas will not be considered for mitigation and may result in code enforcement actions and/or may require restoration as a condition of project approval. All restoration proposals should evaluate the reason for the historical wetland loss (e.g., placement of fill, changes in upstream or groundwater hydrology), the approximate date of the loss, and to the maximum extent possible, provide a determination as to whether the historical loss was legally conducted based upon the regulatory requirements at the time of the loss and the property ownership at the time of the loss.

The wetland mitigation ratios, set forth in Tables 12 and 13, above, in combination with the requirements for no-net-loss of functions and values and in-kind mitigation, are adequate to achieve the conservation goals of the MSCP Subarea Plan for wetland habitats and the MSCP-covered species which utilize those habitats.

Wetland mitigation required as part of any federal (USACE 404 permit) or state (CDFW 1601/1603 SAA) wetland permit will supersede and will not be in addition to any mitigation identified in the CEQA document for those wetland areas covered under any federal or state wetland permit. Wetland habitat outside the jurisdiction of the federal and state permits will be mitigated in accordance with the CEQA document. Wetland habitat outside the jurisdiction of the federal and state permits will be mitigated in accordance with the CEQA document.

7.2.1.3 Mitigation Methods

Mitigation requirements may be satisfied by one, or a combination, of the following methods, or other methods determined on a case-by-case basis to reduce impacts to below a level of significance. These methods, described below, allow for greater flexibility in mitigation methodology, including off-site acquisition, on-site preservation, habitat restoration, and in limited cases, monetary compensation.

In all cases, mitigation sites must have long-term viability. Viability will be assessed by the connectivity of the site to larger planned open space, surrounding land uses, and sensitivity of the MHPA resources to environmental change. In general, areas within the MHPA are considered to have long-term viability. Areas outside of the MHPA proposed for mitigation may require additional biological studies to support the determination of long-term viability.

Off-Site Acquisition

The purchase or dedication of land with equal or greater habitat value can be considered as a method of mitigation, however, it must occur within the City's jurisdiction, preferably in the MHPA.

"Mitigation Banks" are privately or publicly held lands that sell mitigation credits instead of fee title for habitat areas on which a conservation easement has been placed. Under this method, a large site can be acquired over time by multiple projects requiring small mitigation needs. Purchase of areas of "credits" from an established bank can be acceptable, as long as the required acreage is subtracted from the remaining credits in the bank and is not available for future projects. All banks must have provisions approved for long-term management, can be part of a regional habitat preserve system, and upon request can provide an updated record of the areas (credits) purchased from the bank and those that are remaining.

New mitigation banks must be established pursuant to the "Official Policy on Conservation Banks" (California Resource Agencies 1995) and the "Supplemental Policy Regarding Conservation Banks within the NCCP Area of Southern California" (USFWS 1996). In general, the purchase of credits from mitigation banks located outside of the City's jurisdiction will not be allowed.

On-Site Preservation

The following provides guidance for evaluating the acceptability of on-site preservation as mitigation with respect to the long-term viability of the site.

- Inside the MHPA: For premises that straddle the MHPA, the on-site preservation of lands inside the MHPA, outside of brush management zones, are considered to have long-term viability due to their connectivity to larger planned open space and their contribution toward regional biodiversity preservation. Areas containing Brush Management Zone 2 will be considered impact neutral (not considered an impact and not considered acceptable as a mitigation area). Lands inside the MHPA, outside of brush management zones, will be considered acceptable as mitigation, and no additional studies to support this determination will be required. (Note: Lands outside the MHPA containing Narrow Endemic Species would be considered acceptable as mitigation and would be treated as if the land was inside the MHPA for purposes of mitigation).
- Outside the MHPA: The on-site preservation of lands outside the MHPA may be considered acceptable as mitigation provided they have long-term biological value. Long-term biological value should be assessed in terms of connectivity to larger areas of planned open space, and any potential current or future indirect impacts associated with the urban interface. As indicated above, areas containing Brush Management Zone 2 will be considered "impact neutral" (not considered an impact and not considered as acceptable as a mitigation area).

    - Connectivity: Isolated habitat patches have been shown to lack the diversity and resilience of connected systems (Noss 1983, Soule et al. 1988, Temple 1983, Wright and Hubbell 1983 as referenced in the City's Biology Guidelines [2018b]). In most cases, the species first to extirpate (disappear) from these isolated areas are rare species that do not adapt well to human influenced environments. Unfortunately, these species are those targeted for conservation by the MSCP.

      Areas preserved on-site, but outside of the MHPA, will generally be considered to be acceptable as mitigation only if connected to the MHPA. As a general guideline, areas completely surrounded by development and areas connected by native vegetation of less than 400 feet wide or greater than 500 feet long will be considered isolated and will not count as mitigation.

      Site-specific studies with field observations which incorporate the best available scientific information and methods would be necessary to provide a basis for any modification to these standards at the project level. Other factors, such as topography (steep slopes), major road systems, or other large public facility and habitat patch size, will also be considered in assessing potential isolation of a site.

Isolated areas may, on a case-by-case basis, be considered for use as mitigation where it can be reasonably demonstrated that the resource can persist in isolation (e.g., Narrow Endemic Species or unique habitats such as vernal pools) or act as "stepping stones" for wildlife movement between portions of the MHPA.

- Urban Interface: The interface (edge) between native plant communities and human-modified areas are considered to be adverse to many native species. Many wildlife species decrease along the edge of habitat due to detrimental conditions, such as increased parasitism (by species such as the brown-headed cowbird), increased nest predation (by species such as jays, raccoons, opossums, and domestic cats and dogs), and increased competition for nesting areas (by starlings and other non-native exotic species) (Brettingham and Temple 1983, Gates and Gysel 1978, Noss 1993, Temple 1987 as referenced in the City's Biology Guidelines [2018b]). Invasion by exotic plants (such as escaped ornamental landscaping) and off-road vehicles also increases along habitat edges (Noss 1983, Alberts et al. 1993, Sauvajot and Buechner 1993, Scott 1993 as referenced in the City's Biology Guidelines [2018b]). Other factors such as increased noise and night-time lighting may also contribute to the adverse conditions. These conditions are collectively called "edge effects."

  Few studies have attempted to quantify the distance of edge effects. The MSCP indicated that edge conditions range from 200 to 600 feet (61 to 183 meters) depending on adjacent land uses. A 1994 article on avian nest success indicates that the most conclusive studies suggest that edge effects are most predominantly documented within 164 feet (50 meters) of an edge (Patron 1994 as referenced in the City's Biology Guidelines [2018b]).

Habitat Restoration

The restoration of degraded habitat may be considered as mitigation. Habitat restoration may include creation of habitat that was previously converted by human activities and/or the enhancement of existing degraded habitat, where the proposed enhancement increases the habitat quality and biological function of the site.

Decompaction and revegetation of existing roads and trails, removal of exotic invasive species in conjunction with the establishment of native species, and the conversion of agricultural and disturbed lands back to native habitat are examples of acceptable restoration efforts. The removal of trash from a site does not constitute restoration in and of itself but may be a component of the restoration. Any area that will continue to be subjected to periodic clearing (e.g., pipeline maintenance) would not be considered as mitigation. Areas proposed for restoration must contain the appropriate site conditions (e.g., hydrology, slope aspect, soils) for the proposed habitat.

All restoration will be required to have a restoration plan that outlines specific species for planting/hydroseeding; timing; irrigation and grading requirements (if any); a long-term maintenance, monitoring, and reporting program; and criteria for success as well as contingency measures in case of failure. It is expected that monitoring of the restoration would be no less than 5 years but could be completed earlier if the 5-year success criteria were met.

The restoration plan, in accordance with the City's Biology Guidelines, will establish appropriate monitoring and reporting periods. In general, it is expected that quarterly reports will be prepared by the applicant's consultant for the first year and annual reports thereafter to document the status of the restoration effort until deemed complete by the City Manager or designee. These reports will identify any necessary remedial measures to be implemented by the applicant upon approval by the City.

A surety bond is required to assure implementation of all restoration efforts. The surety bond can be structured to return certain portions of the bond after demonstrating the successful completion of major restoration milestones (e.g., meeting the success criteria for year three).

The restoration plan should clearly identify the milestones. Further details on CEQA mitigation monitoring can be obtained from the City's MMRP.

Monetary Compensation

In some cases, developments with small impacts may compensate by payment into a fund used to acquire, maintain, and administer the preservation of sensitive biological resources. This fund is intended to be used only for the mitigation of impacts to small, isolated sites with lower long-term conservation value. Use of the fund is determined on a project-by-project basis.

7.2.1.4 Species Specific Mitigation

In general, it is accepted that securing comparable habitat at the required ratio will mitigate for the direct impact to most sensitive species. While this is true for species and generally for those MSCP-covered species conditions of coverage identified in MSCP Subarea Plan Appendix A, with wide geographic distributions and/or large territory sizes, species with very limited geographic ranges (Narrow Endemic Species) would require additional efforts designed to protect these species. A list of Narrow Endemic Species and other MSCP-covered species is provided in Section I of City's Biology Guidelines, and those with a potential to occur in the UCPA are discussed in Section 4.3.2, above. If MSCP-covered species are present then any applicable MSCP SAP conditions of coverage and/or area specific management directives would need to be complied with.

Narrow Endemic Species

The specific actions necessary to protect Narrow Endemic Species must be determined on a case-by-case basis. Transplantation and/or soil salvage are examples of acceptable

mitigation methods for some of these species. Fencing, signage, and management are other examples of mitigation. The Mitigation Program discussion in the biological resources report should identify all specific actions related to the mitigation of these Narrow Endemic Species in addition to any other requirements necessary for the mitigation of their habitats.

Other MSCP-Covered Species

In addition to the protection of Narrow Endemic Species required by the MSCP, certain species are only considered adequately conserved as part of the MSCP (e.g., MSCP-covered species) only if translocation/restoration of the species is provided at the project-level (see Table 3-5 of MSCP and Section 1.3 of the MSCP Subarea Plan). These species are wart-stemmed ceanothus, snake cholla, and burrowing owl. This also applies to the restoration/transplantation of any impacted habitat of coastal cactus wren. The first two of these species are plants and may be transplanted or incorporated into any revegetation plan proposed for the site.

Restoration of impacted coastal cactus wren habitat shall include salvage and transplantation of snake cholla, coast cholla (*Cylindropuntia prolifera*), live-forevers (*Dudleya* spp.), coast barrel cactus, fish-hook cactus (*Mammillaria dioica*), coastal prickly pear (*Opuntia littoralis*), chaparral prickly pear (*Opuntia oricola*), our Lord's candle (*Yucca whipplei*), and Mojave yucca (*Yucca schidigera*) to an on-site or off-site restoration site or a receiver site approved by the City.

Within the MHPA, impacts to burrowing owls must be avoided; outside the MHPA, any impacted individuals must be relocated out of the impact area using passive or active methodologies approved by the wildlife agencies.

Impacts to road pools supporting listed fairy shrimp outside the MHPA are authorized provided they are mitigated at a 2:1 ratio consistent with the VPHCP. Within the MHPA, road pools supporting listed fairy shrimp must be avoided, unless a deviation (e.g., Biologically Superior Option as defined in Section III.A.2.ii.C of the City's Biology Guidelines) is approved by the City and wildlife agencies. Impacts will be mitigated at a 2:1 ratio consistent with the VPHCP.

Species specific analysis for sensitive species not covered by the MSCP may be required as part of the CEQA process. It is expected that the majority of CEQA sensitive species not covered by the MSCP will be adequately mitigated through the habitat based mitigation described in Section III of the City's Biology Guidelines. A rare circumstance may arise, however, when mitigation actions specific to a particular species may be required. The project-level biological resources report will justify why such actions are necessary in light of the habitat level protection provided by the MSCP.

7.2.2 Protection and Notice Element

The Mitigation Program must provide assurances that areas offered for mitigation or remainder areas in the OR-1-2 Zone not developed but indirectly impacted by the

proposed development will be adequately protected from future development. Additionally, adequate notice must be recorded against the title of the property to memorialize the status of mitigation and remainder areas. The Protection and Notice Element will identify the specific actions incorporated into the project to protect any areas offered as mitigation. Dedication and Covenant of Easement are considered to adequately protect mitigation and remainder areas and are discussed in further detail below.

7.2.2.1 Dedication

Dedication in fee title to the City is the preferred method of protecting mitigation areas. It is the City's policy to accept lands being offered for dedication unless certain circumstances prohibit the acceptance, such as the presence of hazardous materials, title problems, unpaid taxes, or unacceptable encumbrances including liens. The City Manager or designee must recommend, and the City Council must accept, all proposed dedications on a case-by-case basis. Dedication of mitigation sites to other conservation entities (e.g., USFWS, Nature Conservancy, Trust for Public Lands) may also be permissible, if acceptable to the City Manager or designee.

For vernal pool properties that are dedicated to the City as part of the VPHCP, a deed restriction consistent with California Civil Code Section 815, et seq. and acceptable to the wildlife agencies will be recorded over the mitigation areas.

7.2.2.2 Covenant of Easement

In lieu of dedication in fee title, or granting of a conservation easement, where a project has utilized all of its development area potential as allowed under the OR-1-2 Zone, then as a condition of permit approval, a Covenant of Easement would be required to be recorded against the title of the property for the remainder area, with USFWS and CDFW named as third party beneficiaries. A Covenant of Easement is a legally binding promise made by the property owner with respect to future use of the land. Identification of those permissible passive activities and other conditions of the permit would be incorporated into the Covenant of Easement. The Covenant of Easement would be recorded against the title of the property and would run with the land. The applicant will allow the City limited right-of-entry to the remainder area to monitor the applicant's management of the area.

7.2.3 Management Element

The Mitigation Program must provide assurances that the mitigation or remainder areas in the OR-1-2 Zone will be adequately managed and monitored in a manner consistent with Preserve Management (Section 1.5 of the MSCP Subarea Plan and/or Section 5.3.2 and Chapter 7 of the VPHCP), as appropriate. The Mitigation Program should identify how the objectives of the City's MSCP and VPHCP Preserve Management recommendations will be met for the area as well as provide any additional management recommendations resulting from site specific information (area specific management directives). The plan must also identify the responsible entity and funding source for the long-term maintenance and management.

7.2.3.1 Management by the City

In general, the entity that holds the fee title or is granted a conservation easement will be responsible for the management of the mitigation area. If the City is the responsible party, then upon acceptance of the property, the area will be managed in accordance with the MSCP Framework Management Plan as modified by the area specific management directives and the Vernal Pool Management and Monitoring Plan, as appropriate. The project applicant would not be responsible for future monitoring reports or maintenance activities.

For all wetland mitigation sites, funding must be provided to cover the costs of the in-perpetuity management and monitoring. Funding may be provided by a variety of means including, but not limited to, the establishment of an endowment or Community Facilities District. The amount of funding shall be calculated through the use of a Property Analysis Record (PAR) or other similar method. For properties that are deeded to the City in fee title, the PAR or equivalent shall be approved by the Park and Recreation Department prior to City's acceptance of the land.

In no case will the City be required to accept any brush management functions that are made a condition of a discretionary project. It is expected that a homeowners association or similar group will be established for any brush management responsibilities.

7.2.3.2 Private Party Management

If the City does not hold fee title, or a Covenant of Easement is not granted, then the project applicant must provide for the management of the mitigation area. For properties that remain in private ownership or that would be managed by a third party, DSD shall approve the managing entity and the PAR or equivalent to ensure adequate funding for the long-term management and monitoring of the site. The Mitigation Program must include documentation on how the project would implement the objectives of the MSCP Preserve Management and the area specific management directives. The Mitigation Program must identify the responsible entity for long-term maintenance and management, the requirements for future management and monitoring reports, and a secure funding source to pay for the management in perpetuity.

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APPENDIX A
EXPLANATION OF STATUS CODES FOR SENSITIVE SPECIES

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EXPLANATION OF STATUS CODES FOR SENSITIVE SPECIES

Status Codes for Sensitive Plants

Federal
FE Federally listed endangered species
FT Federally listed threatened species

California Native Plant Society Rare Plant Ranking
1B Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2B Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
.1 Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2 Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
.3 Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known

City of San Diego
MSCP City of San Diego Multiple Species Conservation Program covered species
NE Narrow Endemic Species
VPHCP Vernal Pool Habitat Conservation Plan covered species

Status Codes for Sensitive Wildlife

Federal
FE Federally listed endangered species
FT Federally listed threatened species
FC Candidate for federal listing

State
SE State-listed endangered species
ST State-listed threatened species
SSC Species of special concern
SFP Fully protected species
WL CDFW watch list species

City of San Diego
MSCP City of San Diego Multiple Species Conservation Program covered species
VPHCP Vernal Pool Habitat Conservation Plan covered species