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BIOTIC RESOURCES REPORT FOR THE CLAIREMONT COMMUNITY PLAN UPDATE

San Diego, California

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1 INTRODUCTION

This Biological Resources Report (BRR) provides a summary of current biological resources within the Clairemont Community Plan Update (CCPU) area. Clairemont is located in the north central portion of the City of San Diego within San Diego County. For clarity, the proposed project area described throughout this BRR consists of all lands within the boundaries of the Clairemont Community Planning Area, consisting of approximately 8,500 acres. The CCPU area is bounded by State Route (SR) 52 on the north, Interstate (I-) 805 on the east, I-5 on the west, and the Linda Vista community and I-8 to the south. Surrounding communities include University and the Marine Corps Air Station (MCAS) Miramar to the north; Kearny Mesa to the east; Linda Vista to the south; and La Jolla, Pacific Beach, and Mission Beach to the west (Figure 1). The CCPU area is located on United States Geological Survey (USGS), 7.5-minute series La Jolla (2018) Quadrangle Map (Figure 2).

Clairemont was one of the first post-World War II suburban developments in the City of San Diego, with many of its homes built in the 1950s and 1960s and is predominantly comprised of single-family residential neighborhoods. Developed areas of Clairemont occur primarily atop mesas punctuated by several major canyon systems, including Tecolote Canyon that traverses the center of the CCPU area, San Clemente Canyon in the north, and Stevenson Canyon in the western portion of the CCPU area. Several community and neighborhood-serving commercial centers are located at the intersections of major transportation corridors, such as Clairemont Drive and Clairemont Mesa Boulevard, as well as Balboa Avenue and Genesee Avenue. Smaller pockets of commercial development are interspersed throughout the community and within corridors along Morena Boulevard and Clairemont Mesa Boulevard.

Transit service currently consists of a number of local and express bus lines. The Mid-Coast Trolley, now under construction, will extend the Blue Line Trolley from Downtown San Diego to the Clairemont community and beyond to the University community.

The CCPU is a comprehensive update to the Clairemont Community Plan, which was originally adopted in 1989. The purpose of the CCPU is to continue to guide the future growth and development of Clairemont. The proposed CCPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network; urban design guidelines; recommendations to preserve and enhance natural open space and historic and cultural resources; strategies to plan for the recreational needs of the community; and the prioritization and provision of public facilities within the Clairemont community. The overall vision of the proposed CCPU is to guide the development of active, pedestrian-oriented nodes, corridors, districts, and unique villages that contribute to strong sense of place and community identity, connected through a balanced transportation network that not only emphasizes walking, biking, and transit use, but acknowledges the natural network of canyons and open spaces as an integral part of intra-community connectivity.

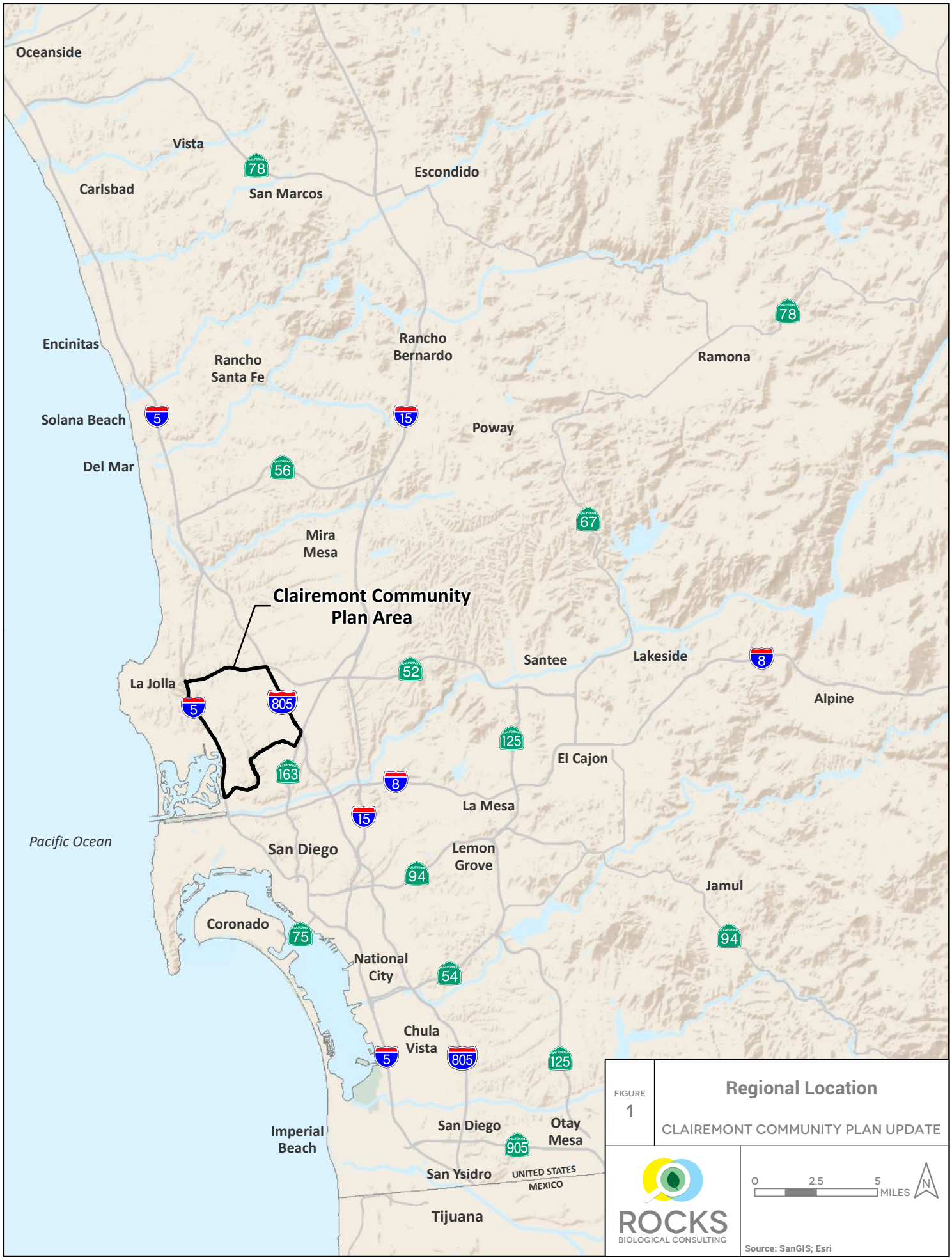

FIGURE 1

Regional Location

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0 2.5 5 MILES

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Source: SanGIS; Esri

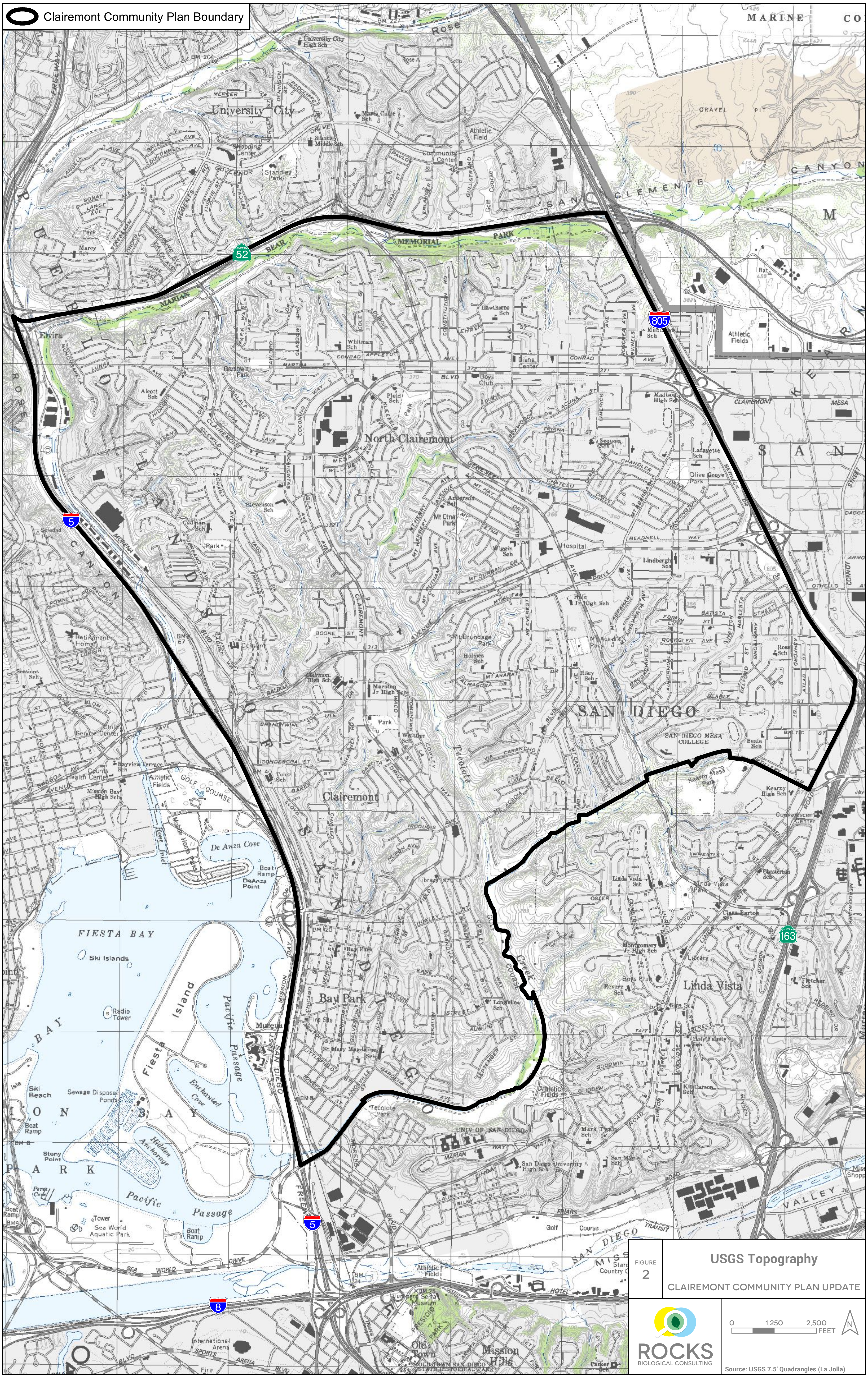


FIGURE 2

USGS Topography

CLAIREMONT COMMUNITY PLAN UPDATE

2 REGULATORY FRAMEWORK

In addition to jurisdictional resource regulations, the CCPU is governed by federal, state, and local policies and regulations. This section provides a summary of applicable regulations to the CCPU area. Based on a cursory review of the draft Clairemont CPU policies, the proposed CPU policies do not appear to conflict with local, state, or biological regulations. Note that all individual projects within the planning area would undergo project review to ensure conformance with all relevant biological regulations and policies.

2.1 FEDERAL

2.1.1 FEDERAL ENDANGERED SPECIES ACT

Administered by the USFWS, the Federal Endangered Species Act (FESA) provides the legal framework for the listing 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 a "take" under the FESA. Section 9(a) of the FESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. Section 10(a) generally describes a process for preparation of a Habitat Conservation Plan and issuance of an incidental take permit. Pursuant to Section 10(a), the City was issued a take permit for their adopted MSCP Subarea Plan and Vernal Pool Habitat Conservation Plan (VPHCP).

2.1.2 MIGRATORY BIRD TREATY ACT

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

2.2 STATE OF CALIFORNIA

2.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

2.2.2 CALIFORNIA ENDANGERED SPECIES ACT

The California Endangered Species Act (CESA) established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met. The City was issued a take permit for their adopted MSCP Subarea Plan pursuant to Section 2081.

2.2.3 CALIFORNIA FISH AND GAME CODE

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

2.3 CITY OF SAN DIEGO

Development in natural areas is regulated through the Environmentally Sensitive Lands (ESL) permit process and CEQA review. Development is directed towards the least biologically sensitive areas. The ESL permit is recorded with the County recorder and runs with the land and protects sensitive resources remaining in the area post-development. All amendments to the CCPU must be consistent with the General Plan and the MSHP prior to adoption.

2.3.1 ENVIRONMENTALLY SENSITIVE LANDS

ESL include sensitive biological resources (e.g., MHPA), steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains. Mitigation requirements for sensitive biological resources follow the requirements of the City's *Biology Guidelines* (2018) as outlined in the City's Municipal Code ESL Regulations (Chapter 14, Article 3, Division 1). Impacts to biological resources within and outside the MHPA must comply with the City's ESL Regulations, which serve to implement standards and requirements of CEQA and the MSCP Subarea Plan.

The purpose of the ESL Regulations is to "protect, preserve and, where damaged, restore the ESL of San Diego and the viability of the species supported by those lands." The regulations require that development avoid impacts to certain sensitive biological resources as much as possible including but not limited to MHPA lands; wetlands and vernal pools in naturally occurring complexes; federal and state listed, non-MSCP Covered Species; and MSCP Narrow Endemic species. Furthermore, the ESL Regulations state that wetlands impacts should be avoided, and unavoidable impacts should be minimized to the maximum extent practicable. In addition to protecting wetlands, the ESL Regulations require that a buffer be maintained around wetlands, as appropriate, to protect wetland-associated functions and values. While a 100-foot buffer width is generally required in the coastal zone and recommended in areas outside the coastal zone, this width may be increased or decreased on a case-by- case basis in consultation with the City, CDFW, USACE, and USFWS (City 2018). Future development within the CCPU area would be required to comply with all applicable City ESL Regulations.

In addition, future development must comply with the City's Steep Hillside Guidelines (2004) when "development is proposed on a site containing any portions with a natural gradient of at least 25 percent (25 feet of vertical distance for every 100 feet of horizontal distance) and a vertical elevation of at least 50 feet. The steep hillside regulations are also applicable if a portion of the site contains a natural gradient of at least 200 percent (200 feet of vertical distance for every 100 feet of horizontal distance) and a vertical elevation of at least 10 feet."

Specifically, areas adjacent to Tecolote Canyon within the CCPU area must comply with specific measures outlined below:

- Structures should be set back or placed at staggered distances from the canyon rim to avoid a "wall effect" along the rim. In cases where the Tecolote Canyon Natural Park boundary is at a lower elevation than the canyon rim, structures should still maintain setbacks from the rim and utilize the area between the rim and park property lines as a landscaped buffer.
- The facades of structures should be angled at varying degrees to follow the course of the canyon rim.
- When viewed from the opposite rim of Tecolote Canyon, the structures should emphasize the line of the canyon rim.
- Rooflines of structures should vary in angle and height to provide a changing profile along the Tecolote Canyon rim when viewed from the opposite rim. A changing roofline will emphasize the verticality of the canyon walls and help blend the structures into the natural hillside environment.

- In larger scale development projects, pedestrian facilities rather than auto facilities should be located adjacent to Tecolote Canyon rim as the scale of pedestrian facilities is more adaptable to the varying landforms of the canyon rim.
- Larger scale developments should provide appropriate pedestrian access to Tecolote Canyon rim. Pedestrian facilities, such as lookout points and pathways, should be located in areas adjacent to the canyon rim, but should not provide access into Tecolote Canyon Natural Park.
- Where it is appropriate to locate roadways and driveways along Tecolote Canyon rim, they should follow the natural course and contours of the rim. Landscaping should be provided to buffer roadways and driveways from the canyon. These buffered roadways and driveways would then provide open edges between the canyon and development.
- Where it is appropriate to locate parking facilities adjacent to the rim, they should be minimal in size and buffered from the canyon by landscaping.
- Traffic flow should be parallel to or directed away from the canyon rim. Adequate access for service and emergency vehicles into Tecolote Canyon Natural Park must be considered, but illegal off-road vehicles shall be excluded. Street layout and design should not create any pressure to construct new public roads through any part of Tecolote Canyon Natural Park.
- Grading should not occur within Tecolote Canyon. If any areas within the canyon are disturbed by grading occurring adjacent to the canyon, or by minor grading necessary for the provision of services such as sewers or runoff control facilities, the disturbed areas should be repaired to blend in with natural slopes and contours and should be revegetated with native plants. Additionally, grading operations should not occur during the rainy season between October 1 and April 1 of any year.

2.3.2 MULTIPLE SPECIES CONSERVATION PROGRAM

The City, USFWS, CDFW and other local jurisdictions joined together in the late 1990s to develop the MSCP, a comprehensive regional program to preserve a network of habitat and open space and ensure the viability of sensitive species, while still permitting some level of continued development. The Program was developed pursuant to the outline developed by USFWS and CDFW to meet the requirements of the State Natural Communities Conservation Planning Act of 1992.

2.3.2.1 Multiple Species Conservation Program Subarea Plan

The MSCP Subarea Plan is broken into several sections that address requirements and guidelines of the plan including Section 1.4 Land Use Considerations and Section 1.5 Framework Management Plan. Other sections of the Subarea Plan that may apply include those for boundary line adjustments (Section 1.1.1); Compatible Land Uses, General Planning Policies/Design Guidelines, and MHPA Land Use Adjacency Guidelines (Sections 1.4.1-1.4.3) as well as general and specific management policies where applicable as well as Section 1.5.7 (Urban Habitat Lands under the Framework Management Plan). Since there is undeveloped land in the CCPU area, and that land supports sensitive plant and wildlife species both within and outside the MHPA, the City's CCP Subarea Plan and Implementing Agreement are applicable to development of the CCPU area

The City's portion of the MSCP Program was adopted through the City's MSCP Subarea Plan (1997a). The MSCP Subarea Plan forms the basis to carry out the mandates of the MSCP Implementing Agreement, which is the contract for the 50-year incidental take permit (ITP) between the City, USFWS, and CDFW (City 1997b). The Implementing Agreement ensures implementation of the Subarea Plan and thereby allows the City to issue "take" permits under the federal and State Endangered Species Acts to address impacts at the local level. Under the federal Endangered Species Act, an ITP is required when non-federal activities would result in "take" of a threatened or endangered species.

With the ITP for the MSCP Subarea Plan issued pursuant to Section 10(a), the City has incidental "take" authority over 85 rare, threatened, and endangered species including regionally sensitive species that it aims to conserve (i.e., "MSCP Covered Species"). "MSCP Covered" species are considered to be adequately protected within the City's Preserve, the MHPA, and via application of all relevant elements of the MSCP Subarea Plan, including Appendix A – Species evaluated for coverage under the MSCP which lists any required conditions for each species to be applied to assure coverage such as modifying project design to avoid impacts, evoking various controls at the urban/wildlife interface, etc. Additional MSCP Subarea Plan discussion is located below under Section 4.3.2.3.

2.3.2.2 Multi-Habitat Planning Area

The MHPA is the area within the City from which the permanent MSCP preserve will be assembled and managed for its biological resources. The City's MHPA areas are defined by "baseline" maps, wherein development is limited based on the development area allowance of the open space residential zone (City 1997a) and MSCP Subarea Plan requirements.

The MHPA consists of public and private lands, where much of the required 90 percent of lands has already been conserved or assured for conservation by legal agreement (i.e., Cornerstone Lands). According to the MSCP Annual Report for 2017, over 96 percent of the required acreage has been conserved/assured (City 2018d). Conserved lands shown on the SanGIS database can include lands that have been set aside for baseline conservation and or lands purchased for mitigation both within and outside of the MHPA. These lands may be owned by the City (i.e., dedicated lands) or other agencies, and may or may not show up on legally recorded documents such as final parcel maps as open space, conservation, or building restricted easements. In addition, they may or may not have associated covenant of easements, irrevocable offers to dedicate or have other legal restrictions associated with them.

In general, a maximum 25 percent encroachment into the MHPA is allowed for development. If 25 percent of the site is outside the MHPA development could be restricted to this area. In addition, development is required to be located in the least biologically sensitive area feasible. Should more than 25 percent encroachment be desired, an MHPA boundary line adjustment may be proposed. The City's MSCP Subarea Plan states that adjustments to the MHPA boundary line are permitted without the need to amend the City's Subarea Plan, provided the boundary adjustment results in an area of equivalent or higher biological value. To meet this standard, the area(s) proposed for addition to the MHPA must meet the six functional equivalency criteria set

forth in Section 5.4.2 of the Final MSCP Plan (City 1998). All MHPA boundary line adjustments require City discretionary approval and Wildlife Agencies approval.

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 a MHPA boundary line correction (BLC) which is reviewed by City MSCP staff and provided to the Wildlife Agencies for review and comment. A MHPA correction 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 results in inclusion of existing developed areas in the MHPA due to the regional scale of the MHPA mapping.

For a MHPA correction 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 March 1997 OR 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 Land Use Adjacency Guidelines.

For parcels located outside the MHPA, "there is no limit on the encroachment into sensitive biological resources, with the exception of wetlands, and listed non-covered species' habitat (which are regulated by State and federal agencies) and narrow endemic species." However, "impacts to sensitive biological resources must be assessed and mitigation, where necessary, must be provided in conformance" with the City's ESL Ordinance as implemented through compliance with the City's *Biology Guidelines* (City 2018).

2.3.2.3 Applicable Multiple Species Conservation Program Subarea Plan Policies, Guidelines, Directives and Objectives

MSCP Subarea Plan compliance is required by projects in and adjacent to the MHPA. MHPA compliance is considered a regulatory requirement with associated indirect impacts averted via the required compliance. Standard compliance measures are therefore included as discretionary permit requirements rather than in the CEQA Mitigation Monitoring and Reporting Plan and as project features for ministerial projects. Depending on the circumstances, some covered species-specific requirements (i.e., required conditions of coverage found in Appendix A of the MSCP Subarea Plan) may, however, be required to be included as CEQA mitigation measures.

Multiple Species Conservation Program Section 1.4

According to Section 1.4.1 of the City's MSCP Subarea Plan (1997a), the following land uses are considered conditionally compatible with the biological objectives of the MSCP and, thus, will be allowed within the MHPA: passive recreation, utility lines and roads in compliance with policies in Section 1.4.2, limited water facilities and other essential public facilities, limited low-density residential uses, brush management (zone 2), and limited agriculture.

Section 1.4.2 lists general planning policies and design guidelines that should be applied in the review and approval of development projects within or adjacent to the MHPA. The following guidelines may be applicable to the CCPU area:

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 of the MSCP.

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 (e.g., use of 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. Signage will be limited to access and litter control and educational purposes.

Materials Storage

1. 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.

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.

Multi-Habitat Planning Area Land Use Adjacency Guidelines

Section 1.4.3 of the MSCP SAP addresses land uses planned or existing adjacent to the MHPA (MHPA Land Use Adjacency Guidelines) including single and multiple family residential, active recreation, commercial, industrial, agricultural, landfills, and extractive uses. Per this section, land uses adjacent to the MHPA must be managed to ensure minimal impacts to the MHPA. Good planning principles in relation to adjacent land uses as described below are required in these areas. The following MHPA Land Use Adjacency Guidelines are guidelines that must be addressed, on a project-by-project basis, during either the planning (new development) or management (new and existing development) stages to minimize impacts and maintain the function of the MHPA. Implementation of these guidelines is addressed further in Section 1.5, Framework Management

Plan which is further described below. These issues will be identified and addressed through the CEQA process for subsequent specific projects within the CCPU area: MHPA Land Use Adjacency Guidelines to be applied to applicable projects are as follows:

Drainage

1. 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.

Toxics

2. Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, or 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.

Lighting

3. 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.

Noise

4. 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.

Barriers

5. 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.

Invasives

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

Brush Management

7. 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. Zone 2 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. Brush management zones will not be greater in size that is currently required by the City's Municipal Code 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 (i.e., to avoid the nesting season and preferentially remove non-natives over natives) 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.

Framework Management Plan Section 1.5

The MSCP Subarea Plan Framework Management Plan, included in Section 1.5.1 of the City's MSCP Subarea Plan, sets management goals and objectives that apply to the CCPU area. Compliance with this section is to achieve the overarching MSCP goal to maintain and enhance biological diversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats, thereby preventing local extirpation and ultimate extinction, and minimizing the need for future listings, while enabling economic growth in the region. Based on an initial review of the draft Clairemont CPU policies, they do not appear to conflict with framework management plan objectives. Further, all individual projects within the planning area would undergo project review to ensure conformance with all MSCP policies.

To assure that the goals of the MHPA is attained and fulfilled, management objectives for the MHPA 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 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.

To support the objectives, Section 1.5.2 provides general management directives that apply throughout the Subarea Plan area that are therefore applicable to the CCPU area as follows:

Mitigation

Mitigation, when required as part of project approvals, shall be performed in accordance with the City's ESL Regulations and Biology Guidelines.

Restoration

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

Trails will meet requirements outlined in the Preserve Trail Guidelines: Resource Management Guidelines for Trails in Preserves (County of San Diego Department of Parks and Recreation 2008).

Priority 1:

1. Trails will be the minimum width necessary to preserve corridors (approximately two to four feet wide), will utilize native soil when it provides good draining capabilities, and will out-slope 3-8% to prevent erosion.
2. 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 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 requirements.
3. 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 due to the typically heightened resource sensitivity in those locations.

4. 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 crossjoints, edge plantings of native grasses, and mulching of the trail.
5. Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are for 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.
6. Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical or allow to regenerate.
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 (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.

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, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to 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

The following management directives are in addition to those outlined in Section 1.4.3, and refer more specifically to management and monitoring requirements.

Priority 1:

1. Enforce, prevent, and remove illegal intrusions into the MHPA (e.g., orchards, decks, etc.) 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 (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, as well as on 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 reinvasion.

Priorities for removal should be based on invasive species' biology (time of flowering, reproductive capacity, etc.), the immediate need of a specific area, and where removal could increase the habitat available for use by covered species such as the least Bell's vireo and gnatcatcher. Avoid removal activities during the reproductive seasons of 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. Assess 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.
2. 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.

3. 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

The following management directives are in addition to the general planning policies and guidelines outlined in Section 1.4.2.

Priority 1:

1. Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting 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.

Multiple Species Conservation Program Subarea Plan-Urban Area

Within the MSCP Subarea Plan, the CCPU area is identified respectively within Section 1.2.3 and 1.5.7 as being in an “Urban Area” and as containing “Urban Habitat Lands”. The urban habitat areas within the City’s MHPA consist mainly of vernal pool areas, urbanized canyons and stream areas, and associated hillsides which support native habitats and species and promote wildlife movement.

Section 1.5.7 also discusses Overall Management Policies and Directives for Urban Habitats as follows:

1. Where MHPA is incorporated as part of natural resource park, the City Park and Recreation Department shall govern management of those lands in accordance with a Natural Resource Management Plan (NRMP). Current NRMPs in the Urban Lands include: Mariam Bear NRMP, Tecolote Canyon Natural Park Natural Resource. Management Plan, Mission Bay Park NRMP, First San Diego River Improvements Project, and the Los Peñasquitos Canyon Preserve NRMP.

2. All urban lands that are designated as MHPA shall be managed according to the Subarea Plan general policies and directives.
3. Special needs or issues within the Urban Habitat MHPA shall be addressed and resolved by the corresponding MHPA Preserve Managers according to an adaptive management strategy and in coordination with the MHPA management committee.

Future development within areas identified as Urban Habitats, including the CCPU area, is required to support the overall goals and objectives for urban habitat lands as follows:

> The optimum future condition for the urban habitat lands scattered throughout the City of San Diego is as a system of canyons that provide habitat for native species remaining in urban areas; i.e., as "stepping stones" for migrating birds and those establishing new territories and providing environmental educational opportunities for urban dwellers of all ages. The system of urban habitat canyons and natural open space throughout the City provides important areas for people to enjoy and learn about the natural world and local environment. These areas also afford visual beauty and psychological relief from urbanization, while supporting habitat for the maintenance of both common and rare species. These habitats; surrounded by development and modified by urban edge effects; also present unique opportunities for research into habitat fragmentation, viability, and urban wildlife ecology.

Covered species found in the urban habitat lands include those known to be in the CCPU area or those having a high to moderate potential to be found in the CCPU area are analyzed in Section 3 and 4. Species known to be in the CCPU area are indicated with **, and species with a high to moderate potential to occur in the CCPU area are indicated with *. Covered plant species include: San Diego goldenstar**, Orcutt's brodiaea**, San Diego thorn mint, San Diego mesa mint, wart-stemmed ceanothus**, and willowy monardella**

Covered wildlife species include: Belding's savannah sparrow, Belding's savannah sparrow, rufous-crowned sparrow**, burrowing owl**, northern harrier**, American peregrine falcon**, southwestern willow flycatcher**, coastal California gnatcatcher**, California least tern, coastal cactus wren*, least Bell's vireo, loggerhead shrike**, light-footed clapper rail, mule deer, and orange-throated whiptail*, coast horned lizard**, and two-striped garter snake**

Note that all MSCP covered species have area specific management directives (ASMDs) that are conditions of coverage under the MSCP program. Many of these relate to MHPA land management activities; however, some must be addressed during project processing. All projects within the Clairemont planning area will be assessed for compliance with MSCP policies, including ASMDs, during project permitting.

Of particular note to the Clairemont CPU, a trail plan has not been developed but several references to new trails are included. For instance, the final proposed alignment for the potential trail connection "through Tecolote Canyon south of Mount Acadia Boulevard and adjacent to the Tecolote Canyon Golf Course" (ME-1.4; Draft CPU, 2020) has not been identified. Species in all proposed new trail areas should be assessed and all relevant ASMDs should be assessed for compliance during trail planning. For instance, Coastal California gnatcatcher have been reported

in close proximity to the Tecolote Canyon Golf Course and should be considered during project planning and trail location planning.

Other issues to be addressed in Urban Areas (pursuant to the MSCP Subarea Plan Section 1.5.7) and to be supported by polices for the CCPU area include the following:

- 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), invasive plants and animals; and
- Urban runoff and water quality.

Because the majority of natural areas within the CCPU area are addressed within the City's MHPA, CCPU policies foster MHPA Management Objectives. Policies currently included provide for restoration of habitat, removal of invasive plant species, avoiding impacts to natural habitat, and protection of drainages.

2.3.3 VERNAL POOL HABITAT CONSERVATION PLAN

In October 2017, the City completed the VPHCP (City 2017). The VPHCP is a comprehensive plan to provide conservation of vernal pool habitats and seven sensitive species that do not have coverage under the City's MSCP Subarea Plan. The VPHCP encompasses the entire City and MSCP Subarea Plan coverage area of approximately 206,124 acres and includes some lands owned by the City that are within unincorporated San Diego County (e.g., Cornerstone Lands which include water supply areas for the City). Some lands within the City limits are not under City jurisdiction (e.g., school districts, water districts, federal and state lands, etc.) and are not automatically covered by the VPHCP; however, those landowners can seek coverage under the VPHCP through a Certificate of Inclusion.

In addition to authorizing take of sensitive vernal pool species, the VPHCP serves to expand the City's MHPA (see Section 4.1.2 below), with focus on management and conservation of vernal pool habitats and their associated species, particularly the covered species of the VPHCP. The VPHCP is comprised of three Planning Units (PUs); north, central, and south. The CCPU area is located within the central PU of the VPHCP. No vernal pool resources are mapped within the CCPU area, but do occur within Linda Vista to the southeast of the CCPU.

The seven species covered under the VPHCP include five plants and two animals, as listed below, that have potential to occur in vernal pool habitat, should it occur within the CCPU in areas that have not been formally mapped. The CCPU area has the potential to support these covered VPHCP species if vernal pool habitat exists—the most likely place for these to occur would be on clay soils in the northern portion of the CCPU. One species, San Diego mesa mint, is known to occur in this area in the San Clemente Canyon near the NE intersection of I 805 and Clairemont Mesa Boulevard. Species known to be in the CCPU area are indicated with **, and species with a high to moderate potential to occur in the CCPU area are indicated with * as follows:

- Otay Mesa mint (*Pogogyne nudiuscula*); FE and SE

- San Diego mesa mint (*Pogogyne abramsii*); FE and SE**
- Spreading navarretia (*Navarretia fossalis*); FT
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*); FE and SE
- California Orcutt grass (*Orcuttia californica*); FE and SE
- Riverside fairy shrimp (*Streptocephalus woottoni*); FE
- San Diego fairy shrimp (*Branchinecta sandiegonensis*); FE

The VPHCP identifies four covered projects and three planned projects, none of which are located within the CCPU area. Any future proposed development not included as one of the four covered projects or three planned projects, and actions not included in the list of covered activities (i.e., land use and public infrastructure and conservation activities) are required to undergo project specific analyses (including applicable public environmental review) to identify vernal pool resources and evaluate impacts and provide any required avoidance/mitigation relative to the provisions of the VPHCP. A list of covered activities and the allowable conditions within the VPHCP are described in Section 4 of the VPHCP. If a future proposed project is determined by the City to be consistent with the requirements of the VPHCP, the project could be authorized to impact vernal pools and covered species through the City's VPHCP ITP.

Regardless of impact authorization, the VPHCP first requires all feasible impacts to be avoided and/or minimized to limit any impact to vernal pools and their associated species. Such measures include, but are not limited to redesigning a project to avoid resources; performing pre-construction biological surveying; translocating soils, propagules, and/or species; conducting biological monitoring throughout project construction; conducting contractor environmental awareness training; directing project run-off away from vernal pools; installing temporary construction fencing to protect off-site vernal pools; installing artificial watering to control/eliminate fugitive dust; conducting seasonally timed grading operations; top soil salvaging; installing permanent protective fencing; and conducting other typical general construction BMPs.

2.3.4 GENERAL PLAN

The City's General Plan presents goals and policies for biological resources in the Conservation Element (City 2008). Relevant excerpts from this element are included in Table 1. The CCPU will incorporate the City's current General Plan Conservation Element policies and goals (which cover biological resource and were updated with the adoption of the VPHCP in 2018).

Table 1. City of San Diego General Plan Conservation Element Policies Relating to Biological Resources

Policy	Description
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 urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A). d. Minimize or avoid impacts to canyons and other environmentally sensitive land by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting sewage discharge away from canyons and other environmentally sensitive lands. e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves. f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan and VPHCP. g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.
CE-B.2	Apply the appropriate zoning and 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-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 (see also Land Use Element, Policy LU-E-1).
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 Section H, Wetlands, for natural flood control and preservation of landforms.
CE-C.6	Implement watershed management practices designed to reduce runoff and improve the quality of runoff discharged into coastal waters.
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 historic resources, or create hazardous conditions (e.g., erosion, sedimentation, flooding and subsidence). b. Improve and maintain drinking water quality and urban runoff water quality through implementation of Source Water Protection Guidelines for New Development.

	c. Improve and maintain urban runoff water quality through implementation of storm water protection measures (see also Urban Runoff Management, Section E).
CE-D.4	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 implementation of Best Management Practices (BMPs) 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 the use of vegetation in drainage design. e. Maintain landscape design standards that minimize the use of pesticides and herbicides. f. 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. g. Apply land use, site development, and zoning regulations that limit impacts on, and protect the natural integrity of topography, drainage systems, and water bodies. h. Enforce maintenance requirements in development permit condition.
CE-E.3	Require contractors to comply with accepted storm water pollution prevention planning practices for all projects. Minimize the amount of graded land surface exposed to erosion and enforce erosion control ordinances. 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. Incorporate water quality objectives into existing regular safety inspections. Follow BMPs and hold training sessions to ensure that employees are familiar with those practices. Educate City employees on sources and impacts of pollutants on urban runoff and actions that can be taken to reduce these sources. Ensure that contractors used by the City are aware of and implement urban runoff control programs. 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. Promote the provision of used oil recycling and/or hazardous waste recycling facilities and drop-off locations. Review plans for new development and redevelopment for connections to the storm drain system. Follow up on complaints of illegal discharges and accidental spills to 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.
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. Educate the public about the impacts invasive plant species have on open space. Remove, avoid, or discourage the planting of invasive plant species. Pursue funding for removal of established populations of invasive species within the MHPA, VPHCP, and open space.
CE-G.2	Prioritize, fund, acquire, and manage the MHPA, VPHCP, and open spaces that preserve important ecological resources and provide habitat connectivity.
CE-G.3	Implement the conservation goals/policies of the City's MSCP Subarea Plan 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 regulations and development guidelines.
CE-G.5	Promote aquatic biodiversity and habitat recovery by reducing hydrological alterations, such as grading a stream channel.
CE-H.1	Use a watershed planning approach to preserve and enhance wetlands.
CE-H.2	Facilitate public-private partnerships that improve private, federal, state and local coordination through removal of jurisdictional barriers that limit effective wetland management.
CE-H.3	Seek state and federal legislation and funding that support efforts to research, classify, and map wetlands including vernal pools and their functions, and improve restoration and mitigation procedures.

CE-H.4	Support the long-term monitoring of restoration and mitigation efforts to track and evaluate changes in wetland acreage, functions, and values.
CE-H.5	Support research and demonstration projects that use created wetlands to help cleanse urban and storm water runoff, where not detrimental to natural upland and wetland habitats.
CE-H.6	Support educational and technical assistance programs for planning and development professionals and the general public on wetlands protection in the land use planning and development process.
CE-H.7	Encourage site planning that maximizes the potential biological, historic, hydrological, and land use benefits of wetlands.
CE-H.8	Implement a "no net loss" approach to wetlands conservation in accordance with all city, state, and federal regulations.
CE-J.1	Develop, nurture, and protect a sustainable urban/community forest.

2.4 CLAIREMONT COMMUNITY PLAN POLICIES

The adopted Clairemont Community Plan presents goals and policies for biological resources in the Conservation Element and included in the CCPU Community Discussion Draft (January 2020) which are consistent with all City regulations and policies and goals of the General Plan. The General Plan is the foundation for all land use decision in San Diego, while the Clairemont Community Plan is a part of the Land Use element of the General plan and covers the specific geographic boundary of Clairemont. Regulations covered above are applicable within the CCPU and discussed in further detail within Section 3 and 4 of this document.

Relevant excerpts from this element for the CCPU area are included in Table 2 below.

Table 2. Clairemont Community Plan Update Policies and Recommendations Pertaining to Biological Resources

Policy	Description
ME-1.4	Enhance pedestrian access to natural recreational areas and parks. Of particular interest, is a possible new trail connection through Tecolote Canyon south of Mount Acadia Boulevard and adjacent to the Tecolote Canyon Golf Course.
LUEP-10.1	Protect designated open space from development and secure public use where desirable by obtaining necessary property rights through public acquisition of parcels or easements
LUEP-10.2	Allow development of limited, low intensity uses in a manner that respects the natural environment and conserves environmentally sensitive lands and resources on parcels within designated open space.
LUEP-10.3	Locate structures within the least visually prominent portion of a lot and/or away from the edge of designated open space, when all or a portion of a property is within privately-owned, designated open space.
LUEP-10.4	Obtain conservation or no-build easements for the protection of environmentally sensitive resources through review and approval of discretionary development permits for private property within designated open spaces.
LUEP-10.5	Utilize publicly-controlled open space for passive recreation where desirable and feasible.

LUEP-10.6	Vacate public rights-of-way under the following conditions: The City has determined that the right-of-way is not needed for public access in any form, either physical or visual. Any right-of-way that is not needed for access but has important visual access quality may be closed to vehicular traffic, but should be left open to pedestrian traffic and view access. That the vacated public right-of-way would not be used to intensify development on a site, unless a specific finding is made that the intensification will not result in a negative cumulative impact to the surrounding development or environment.
LUEP-10.7	Maintain the following streets for access into Tecolote Canyon Natural Park: 1) South end of Mt. Culebra Avenue (dedicated street) 2) South end of Mt. Bagot Avenue (street reservation) 3) West end of Mt. Ashmun Drive (dedicated street) 4) West end of Mt. Ariane Drive (dedicated street) 5) South end of Mt. Carol Drive (dedicated street) 6) North end of Goldboro Street (dedicated street)
CE-2.1	Support the preparation of a Marian Bear Memorial Park Master Plan to establish a long-term comprehensive park program for the management and preservation of the resource-based park.
CE-2.2	Consult the Marian Bear Memorial Park Natural Resource Management Plan for guidance in the protection of natural and cultural resources in the park.
CE-2.3	Consult the Tecolote Canyon Natural Park Master Plan and Natural Resource Management Plan for the management and preservation of the resource- based park.
CE-2.4	Promote education, interpretive programs, and stewardship of the community's canyons through public and private partnerships.
CE-2.5	Support the enhancement of the Rose Creek Watershed.
CE-2.6	Pursue opportunities for open space acquisition of privately- owned canyon parcels.
CE-2.7	Encourage development especially adjacent to canyons and open space to include pervious areas that include, but are not limited to: bio-swales, pervious pavers and cement, green roofs, and cisterns to better manage storm water runoff.
CE-2.8	Re-vegetate or restore graded and disturbed lands, and areas with invasive plant species with native vegetation to restore biological diversity and minimize soil erosion.
CE-2.9	Utilize appropriate low-fuel load natives in Brush Management Zone 2 and over utility easement in native areas. Refer to Public Safety section in the Public Facilities Element.
CE-2.10	Restore or enhance natural biological values and improve visual aesthetics where streets and storm drain systems abut or cross canyon landforms or steep hillsides. Habitat restoration efforts should aid wildlife movement by providing vegetative cover and controlling and directing access to designated trails.
CE-2.11	Support canyon habitat restoration efforts and invasive species removal by seeking grant funding and working with neighborhood and community groups involved in these efforts.
CE-2.12	Continue communication between the community and the City to report sewer spills or other potential problems to minimize environmental damage and scope of repair.

3 METHODS

3.1 GENERAL BIOLOGICAL DATABASE AND LITERATURE REVIEW

Rocks Biological Consulting (RBC) conducted reviews of biological resource databases and of pertinent literature to inform discussions and conclusions of this report. Sources utilized for the review included, but were not limited to the following:

- California Department of Fish and Wildlife (CDFW) Natural Diversity Data Base (CNDDB)
- California Native Plant Society (CNPS) Online Rare Plan Inventory
- Consortium of California Herbaria online records of plant occurrences
- Rare plants of San Diego County (Reiser 2001)
- CNPS Vegetation Program VegCamp data in the online Manual of California Vegetation
- Manual of California Vegetation (Sawyer and Evens 2009)
- U.S. Fish and Wildlife Service (USFWS) species and critical habitat databases (USFWS 2020 b,c,d)
- Multiple Species Conservation Program (MSCP) (County of San Diego Final MSCP Program; and City of San Diego MSCP Subarea Plan)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2020)
- USFWS National Wetlands Inventory
- San Diego County Special Animals List (2014)
- San Diego County Bird Atlas (Unitt 2004)
- San Diego County Mammal Atlas (Tremor, Stokes, Spencer, et al. 2017)
- San Diego Geographic Information Source (SanGIS) Vegetation Information in the San Diego Region (2012, 2015; data compiled 1992)
- City Vernal Pool Habitat Conservation Plan (VPHCP)
- San Diego Association of Governments San Diego Management and Monitoring Program

3.2 SOURCES REVIEWED TO DETERMINE HABITATS, FLORA, AND FAUNA

In addition to the use of the above generalized databases and literature sources, several Clairemont Mesa or City-wide projects and their California Environmental Quality Act (CEQA) review information were utilized to further verify and refine information about the community plan area habitats, flora, fauna, and their relative sensitivity. Contributing projects include: Morena Pipeline Project No. 583432 Mitigated Negative Declaration (MND; City of San Diego 2011); Morena Corridor Specific Plan (City of San Diego 2019); Balboa Station Specific Plan (City of San Diego 2019); Mount Etna Community Plan Amendment and Rezone Project Draft Environmental Impact Report (DEIR [City of San Diego 2019]); Pure Water San Diego North City Project Final Environmental Impact Report (FEIR [City of San Diego 2018]); and the Municipal Waterways Maintenance Plan DEIR (City of San Diego 2019).

As this BRR was prepared to support a programmatic community plan rather than a specific project within the community plan, comprehensive observed species lists were not prepared, and site visits were not conducted. Future projects located within the CCPU area would be required to

undergo standard City Development Services Department environmental review, including site-specific biological surveys and impact analysis for projects with potential biological impacts.

3.2.1 VEGETATION COMMUNITIES

The vegetation community mapping for this report was primarily sourced from the San Diego Geographic Information Source (SanGIS 2012, 2015) digital file for the MSCP. Where more current or detailed vegetation mapping exists from sources listed Section 2.2 above, the data was reviewed and incorporated into the vegetation discussion to provide further detail and updated information on Clairemont biology. Additionally, some vegetation communities were lumped where appropriate and biologically sound, e.g., 'coastal sage scrub' was lumped with 'Diegan coastal sage scrub' for clearer resource representation.

Vegetation community descriptions in this report follow Oberbauer et al. (2008) with habitat sensitivity tier categories derived from wetland and upland mitigation ratio tables in the City's *Biology Guidelines* (2018) and review of CNPS vegetation information available through VegCamp and the Manual of California online (CNPS 2020). Field surveys were not conducted as part of this BRR preparation; however, as noted above, relevant survey data was used to inform this report.

3.2.2 SENSITIVE PLANTS

Locations of sensitive plant species within the CMCPU area discussed herein were primarily sourced from the CNDDB (CDFW 2020) with additional information gleaned from documents listed in Section 2.2, above, and 1992 MHPA vegetation maps, which include MSCP species codes with known spatial locations. The sensitivity status of plants are based on federal and state endangered, threatened, and sensitive status lists, as well as local sensitivity designations such as the MSCP covered species and CNPS (California Native Plant Society [CNPS] 2018) rare species.

3.2.3 SENSITIVE WILDLIFE

The locations of sensitive wildlife species were sourced from the CNDDB (CDFW 2020) and the USFWS species occurrence database (USFWS 2018a-b). The sensitivity status information for animals is based on federal and state endangered, threatened, and sensitive status lists, as well as local sensitivity designated by the MSCP covered species list (i.e., the CDFW Special Animals List (CDFW 2018e) and animals mentioned in the City *Biology Guidelines* (2018).

4 EXISTING CONDITIONS

4.1 PLAN AREA DESCRIPTION

4.1.1 TOPOGRAPHY

The CCPU area has varying elevations from approximately 20 feet above mean sea level (AMSL) in the southwest portion of the CCPU area at the southern end of Bay Park near Mission Bay, and up to approximately 410 feet AMSL in the eastern portion of the plan area along I-805. The majority of the CCPU area is developed, primarily with residential housing. Topography generally increases moving east, and is relatively level (i.e., mesa top, less than 10 percent slopes). Natural,

undeveloped areas associated with Tecolote, Stevenson, and San Clemente Canyons are present in the northern portion of the CCPU area (San Clemente Canyon) and in the center of the CCPU, running north and south (Tecolote Canyon and Stevenson Canyon). Current aerial imagery of the CCPU area is presented on Figure 3). Portions of the CCPU adjacent to Tecolote Canyon are covered in the City's Steep Hillside Guidelines (2004),

The CCPU area is located within portions of the Mission Bay and La Jolla Watersheds, including the Rose Creek Watershed, which drain west towards the Pacific Ocean. These watersheds capture approximately 67 square miles. Specifically, the CCPU area lies within the Penasquitos Hydrologic Unit and the Miramar (906.40), and Tecolote (906.50) Hydrologic Areas of the San Diego Region Basin Plan (Regional Water Quality Control Board 2016) (Figure 4).

4.1.2 LAND USE

The CCPU area includes a mixture of land uses, including but not limited to industrial and commercial complexes, business parks, institutional facilities, residential dwellings of various densities, parks and open space, preserve areas, military facilities, and various transportation structures (e.g., arterial roadways and public transportation facilities).

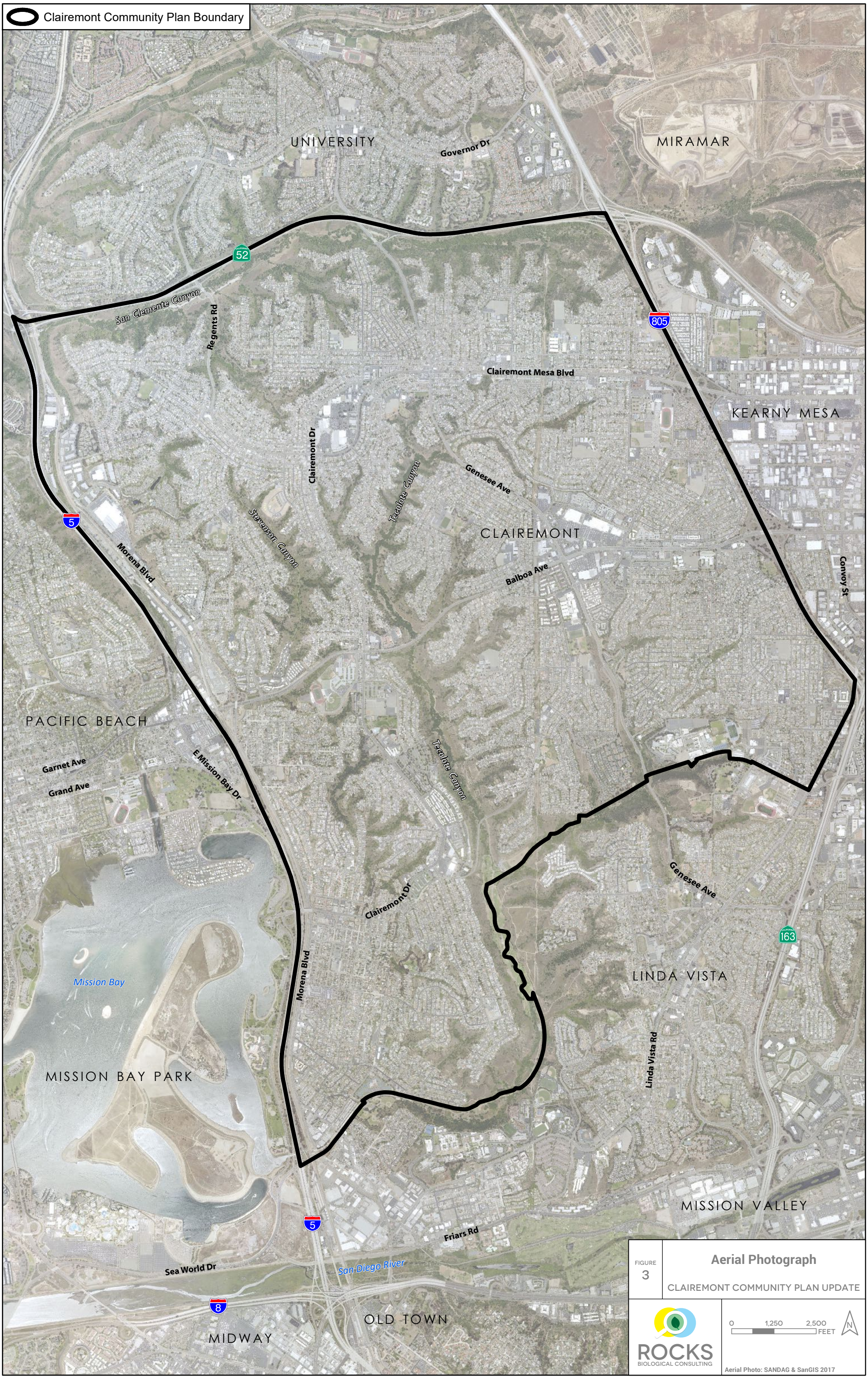
4.1.3 SOILS

The USDA NRCS (U.S. Department of Agriculture [USDA] 2020) identifies 22 soil types within the CCPU area. The soil series present include Altamont clay, Carlsbad-Urban, Chesterton, Corralitos, Gaviota fine sandy loam, Huerhuero loam, made land, Olivenhain cobbly loam, Reiff fine sandy loam, riverwash, Salinas clay loam, and terrace escarpments.

There are two relatively small area of clay soils (i.e., Altamont clay, Salinas clay loam) that are typically associated with vernal pool complexes, which occur in the northern area of the CCPU within the San Clemente Canyon.

4.2 VEGETATION COMMUNITIES/LANDCOVER TYPES

This BRR identifies 15 generalized vegetation communities/land cover types within the CCPU area, which correspond to Oberbauer (2008) and the City's *Biology Guidelines* (2018, as listed below. In some cases, vegetation communities were grouped into broader categories if they met similar function for analysis of biological impacts (e.g., areas of coastal scrub were grouped with Diegan coastal sage scrub as they function in the same capacity for the purposes of this analysis).


Clairemont Community Plan Boundary
UNIVERSITY
Governor Dr
MIRAMAR
52
San Clemente Canyon
Regents Rd
805
Clairemont Mesa Blvd
KEARNY MESA
Clairemont Dr
Tecolote Canyon
Genesee Ave
5
Stevenson Canyon
CLAIREMONT
Morena Blvd
Balboa Ave
Convoy St
PACIFIC BEACH
Garnet Ave
Grand Ave
E Mission Bay Dr
Tecolote Canyon
Clairemont Dr
Genesee Ave
Mission Bay
Morena Blvd
163
LINDA VISTA
MISSION BAY PARK
Linda Vista Rd
MISSION VALLEY
5
Friars Rd
Sea World Dr
San Diego River
8
MIDWAY
OLD TOWN
FIGURE
3
Aerial Photograph
CLAIREMONT COMMUNITY PLAN UPDATE
ROCKS
BIOLOGICAL CONSULTING
0
1,250
2,500
FEET
N
Aerial Photo: SANDAG & SanGIS 2017

Clairemont Community Plan Boundary
Hyrologic Unit (HU)
Hydrologic Area (HA)

National Wetland Inventory

Estuarine and Marine Deepwater
Estuarine and Marine Wetland
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Riverine

UNIVERSITY
Governor Dr
MIRAMAR
52
San Clemente Canyon
Regents Rd
PEÑASQUITOS HYDROLOGIC UNIT
Miramar Hydrologic Area
805
Clairemont Mesa Blvd
KEARNY MESA
Clairemont Dr
Tecolote Canyon
Genesee Ave
5
Stevenson Canyon
CLAIREMONT
Morena Blvd
Balboa Ave
Convoy St
PEÑASQUITOS HYDROLOGIC UNIT
Tecolote Hydrologic Area
PACIFIC BEACH
Garnet Ave
Grand Ave
E Mission Bay Dr
Tecolote Canyon
Clairemont Dr
Genesee Ave
163
Mission Bay
LINDA VISTA
Morena Blvd
Linda Vista Rd
MISSION BAY PARK
SAN DIEGO HYDROLOGIC UNIT
Lower San Diego Hydrologic Area
MISSION VALLEY
Friars Rd
Sea World Dr
San Diego River
8
OLD TOWN
MIDWAY

FIGURE 4

Hydrology

CLAIREMONT COMMUNITY PLAN UPDATE

ROCKS BIOLOGICAL CONSULTING

0 1,250 2,500 FEET

N

Aerial Photo: SANDAG & SanGIS 2017

The approximate acreages of these vegetation communities and land cover types are presented in Table 3 and their spatial distributions within the CCPU area are presented on Figure 5; open space and conserved lands are shown on Figure 6..

Table 3. Vegetation Communities and Land Cover Types in the Clairemont Community Plan Update Area

Vegetation Community or Land Cover Type	Acreage*	Ratio (Minimum) or Tier ***
Wetland**		
Southern Riparian Forest	406.66	3:1
Riparian Woodland	0.28	3:1
Riparian Scrub	47.24	2:1
Non-Native Riparian (disturbed riparian)	11.68	2:1
Subtotal Wetland Communities	465.86	
Sensitive Upland		
Diegan Coastal Sage Scrub (including baccharis-dominated, coastal, and disturbed forms)	622.13	II
Maritime Succulent Scrub	159.09	I
Chaparral	78.04	IIIA
Scrub Oak Chaparral	25.27	I
Southern Maritime Chaparral***	26.02	IIIA
Native Grassland	0.48	I
Non-Native Grassland	67.77	IIIB
Subtotal Sensitive Upland Communities	978.80	
Other Uplands^		
Eucalyptus Woodland	4.44	IV
Non-Native Vegetation	5.34	IV
Disturbed Habitat (Disturbed Land)	140.29	IV
Urban/Developed	6,944.49	IV
Subtotal Other Uplands	7,094.56	
TOTAL	8,539.22	

* Rounded to the nearest 0.1 acre.

** Wetland here does not imply/define U.S. Army Corps of Engineers "wetlands or waters of the U.S." All wetlands listed considered sensitive habitats per City's *Biology Guidelines* (2018). City wetlands typically support wetland plant species but also include areas lacking wetland vegetation due to non-permitted filling of previously existing wetlands.

*** Mitigable subtypes (e.g., Southern Maritime Chaparral) will be further distinguished with applicable site- specific surveys. Tiers and habitats are per City's *Biology Guidelines* (2018)—minimum ratio given only because ratios are dependent on whether the impacts and mitigation site are inside or outside of the MHPA.

^ May be sensitive if they support sensitive species.

Clairemont Community Plan Boundary

Vegetation Communities/Land Cover Types

- Southern Riparian Forest
- Riparian Woodland
- Riparian Scrub
- Non-Native Riparian
- Diegan Coastal Sage Scrub
- Maritime Succulent Scrub
- Chaparral
- Scrub Oak Chaparral
- Southern Maritime Chaparral
- Native Grassland
- Non-Native Grassland
- Non-Native Vegetation
- Eucalyptus Woodland
- Disturbed Habitat
- Urban/Developed
- Vernal Pool [1]

[1] No vernal pools are found within the Clairemont community plan boundary.
(Source: City of San Diego Vernal Pool Habitat Conservation Plan)

MIRAMAR
KEARNY MESA
CLAIREMONT
PACIFIC BEACH
MISSION BAY PARK
LINDA VISTA
MISSION VALLEY
OLD TOWN
MIDWAY

52
805
5
163
8

San Clemente Canyon
Regents Rd
Clairemont Mesa Blvd
Clairemont Dr
Tecolote Canyon
Genesee Ave
Stevenson Canyon
Morena Blvd
Balboa Ave
Convoy St
Garnet Ave
Grand Ave
E Mission Bay Dr
Mission Bay
Linda Vista Rd
Friars Rd
Sea World Dr
San Diego River

Vernal Pools
Vernal Pools

FIGURE 5

Vegetation Communities and Land Cover Types

CLAIREMONT COMMUNITY PLAN UPDATE

ROCKS BIOLOGICAL CONSULTING

0 1,250 2,500 FEET

N

Aerial Photo: SANDAG & SanGIS 2017
Source: SANDAG 2012, 1995

Clairemont Community Plan Boundary
Multi-Habitat Planning Area (MHPA)
Conserved Lands

UNIVERSITY
MIRAMAR
KEARNY MESA
CLAIREMONT
PACIFIC BEACH
MISSION BAY PARK
LINDA VISTA
MISSION VALLEY
MIDWAY
OLD TOWN

Governor Dr
Regents Rd
San Clemente Canyon
Clairemont Mesa Blvd
Clairemont Dr
Genesee Ave
Tecolote Canyon
Stevenson Canyon
Balboa Ave
Convoy St
Morena Blvd
Linda Vista Rd
Garnet Ave
Grand Ave
E Mission Bay Dr
Mission Bay
Sea World Dr
San Diego River
Friars Rd

52
805
5
163
8

FIGURE 6

Conserved Lands and Open Space

CLAIREMONT COMMUNITY PLAN UPDATE

ROCKS BIOLOGICAL CONSULTING

0 1,250 2,500 FEET

N

Aerial Photo: SANDAG & SanGIS 2017

4.2.1 WETLAND COMMUNITIES

Wetlands vegetation, including riparian areas, are low-lying lands where association (i.e., saturation or inundation) with water is the primary constituent in soil development and the types of plant and animal species living in the soil and on its surface. Wetland vegetation communities vary widely due to regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors (Environmental Protection Agency 2013). The individual vegetation types mapped within the CCPU area that are typically recognized as wetlands communities are described below, including their locations within the CCPU area.

4.2.1.1 Southern Riparian Forest

Southern riparian forest is a general riparian community composed of winter-deciduous trees often found along streams and rivers. Willow (*Salix sp.*), cottonwood (*Populus sp.*), and western sycamore (*Platanus racemosa*) are typical species found in this community with no one species substantially dominating. Associated understory species may include mule fat (*Baccharis salicifolia*), stinging nettle (*Urtica dioica ssp. holosericea*), and wild grape (*Vitis girdiana*; Beauchamp 1986).

Southern riparian forest is mapped in both San Clemente Canyon and Tecolote Canyon.

4.2.1.2 Riparian Woodland

Riparian woodland is very similar to southern riparian forest (3.2.1.3 above); however, the differences between woodlands and forests are physiognomic rather than compositional. Woodlands have less canopy cover than forests. In woodlands, there may be large canopy gaps within the upper tree stratum. In forests, the canopies of individual tree species do overlap so that a canopy cover exceeding 100 percent may occur in the upper tree stratum.

Riparian woodland is mapped in one area within the CCPU area: near the east border within San Clemente Canyon.

4.2.1.3 Riparian Scrub

Riparian scrub is a generic term for several shrub dominated communities that occur along drainages and/or riparian corridors including southern willow scrub (See Section 3.2.1.7), mule fat scrub, and tamarisk scrub. This community lacks taller riparian tree species.

Southern riparian scrub occurs in discrete patches throughout the CCPU area.

4.2.1.4 Non-Native Riparian (Disturbed Wetland)

Oberbauer describes Disturbed Wetland (vegetation type 12200) as areas permanently or periodically inundated by water, which have been significantly modified by human activity. Site factors include portions of wetlands with obvious artificial structures such as concrete lining, barricades, riprap, piers, or gates. Often these areas are unvegetated but may contain scattered native or non-native vegetation. Examples include lined channels, Arizona crossings, detention basins, culverts, and ditches. Characteristic species include giant reed (*Arundo donax*), tamarisk (*Tamarix* spp.), eucalyptus (*Eucalyptus* spp.), palm trees (*Phoenix* and *Washingtonia* spp.), pampas grass (*Cortaderia* spp.), artichoke thistle (*Cynodon dactylon*), and may also contain native wetland species including willow (*Salix* spp.) and cattail (*Typha* spp.).

Within the CCPU area disturbed wetland is mapped in the northwest boundary near I-5. Unmapped disturbed wetlands are also likely to be found in pockets within more pristine habitat adjacent to developed areas.

4.2.2 SENSITIVE UPLAND COMMUNITIES

Upland vegetation communities are found in dry landforms and do not occur in wetland situations (e.g., inundated or containing saturated soils). In the CCPU area, sensitive upland vegetation communities consist of scrub, chaparral, and grasslands. These communities are mostly located along the perimeter of the CCPU area within undeveloped lots and along the hillsides of San Clemente and Tecolote Canyons. The majority of grasslands within the CCPU area are located adjacent to San Clemente and Tecolote canyons. The individual upland vegetation types mapped within the CCPU area are described below.

4.2.2.1 Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a low, soft-woody, subshrub that may be dominated by a variety of species depending upon soil type, slope, and aspect. Typical species found within Diegan coastal sage scrub include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum ssp. fasciculatum*), laurel sumac, lemonadeberry (*Rhus integrifolia*), and black sage (*Salvia mellifera*).

The coastal form of Diegan coastal sage scrub is nearly identical to Diegan coastal sage scrub, except that it is known to occur at lower elevations below 1000 feet AMSL. According to Oberbauer et al., baccharis scrub is a subtype of coastal sage scrub, but chiefly supports baccharis species such as broom baccharis (*Baccharis sarothroides*) and coyote bush (*Baccharis pilularis*) (2008). Areas mapped as disturbed likely contain many of the same shrub species as the undisturbed community, but vegetation cover is sparser and has a higher proportion of non-native, annual plant species.

Within the CCPU area, Diegan coastal sage scrub (including baccharis-dominated, coastal, and disturbed forms) is one of the most abundant natural vegetation communities. It is found along the undeveloped hillsides near and within San Clemente, Tecolote, and Stevenson Canyon, and within undeveloped lands adjacent to roadways. Most of San Clemente and Tecolote Canyon are protected as conservation areas and parks, preserving much of this habitat type within the CCPU area.

4.2.2.2 Maritime Succulent Scrub

Maritime succulent scrub, rare subtype of Diegan coastal sage scrub, is a low open scrub community that is dominated by a mixture of stem and leaf succulent species and drought deciduous species that also occur within sage scrub communities. This vegetation community occurs on thin, rocky or sandy soils, on steep (west or southern) slopes of coastal headlands and bluffs. Maritime succulent scrub is generally restricted to the reach of the coastal fog belt and extends north to south from about Torrey Pines to southern Baja with island sub-types on San Clemente and Catalina islands. The dominant species typically found within this vegetation community include coast barrel cactus (*Ferocactus viridescens*), velvet cactus (*Bergerocactus*

emoryi), prickly pear cactus (*Opuntia littoralis*), cliff spurge (*Euphorbia misera*), dudleya (*Dudleya spp.*), desert thorn (*Lycium californicum*), and California sunflower (*Bahiopsis laciniata*) (Oberbauer et al. 2008).

Within the CCPU area maritime succulent scrub is mapped in the central portion of San Clemente Canyon and in large areas of the Tecolote Canyon.

4.2.2.3 Chaparral

Chaparral is a one- to three-meters tall vegetation community overwhelmingly dominated by drought-tolerant, fire-resistant shrubs like chamise (*Adenostoma fasciculatum*) with little to no herbaceous understory (Oberbauer et al. 2008). Associated species of this community may include ceanothus (*Ceanothus spp.*), manzanita (*Arctostaphylos* spp.), laurel sumac (*Malosma laurina*), scrub oak (*Quercus dumosa*), deerweed (*Acmispon glaber*), and sages (*Salvia spp.*), although they contribute little to cover. This vegetation is adapted to repeated fires by stump sprouting and mature stands are densely interwoven with very little herbaceous understory or litter.

In the CCPU area, chamise chaparral is mapped in discrete areas throughout open space, this generalized habitat may also be considered southern mixed or maritime chaparral at the time site specific surveys are performed.

4.2.2.4 Scrub Oak Chaparral

Scrub oak chaparral is a dense, evergreen shrub up to 20 feet tall, dominated by scrub oak (*Quercus dumosa*) with considerable mountain mahogany (*Cercocarpus betuloides*). Scrub oak chaparral occurs in somewhat more mesic areas than many other chaparrals, such as north facing slopes, and recovers more rapidly from fires than other chaparrals due to resprouting capabilities of scrub oak. This vegetation community often occurs at slightly higher elevations (to 5,000 feet) and substantial leaf litter accumulates (Oberbauer et al. 2008).

Within the CCPU area scrub oak chaparral is mapped in central portions of San Clemente and Tecolote Canyons.

4.2.2.5 Southern Maritime Chaparral

Southern mixed chaparral is composed of broad-leaved sclerophyllous shrubs that can reach 6 to 10 feet in height and form dense often nearly impenetrable stands with poorly developed understories. In this mixed chaparral the shrubs are generally tall and deep rooted, with a well-developed soil litter layer. This vegetation community occurs on dry, rocky, often steep north-facing slopes with lower soil temperatures (Oberbauer et al. 2008). As conditions become more mesic, broad-leaved sclerophyllous shrubs that resprout from underground root crowns become dominant. Depending upon relative proximity to the coast, southern mixed chaparral is dominated by chamise (*Adenostoma fasciculatum*), mission manzanita (*Xylococcus bicolor*), Ramona lilac (*Ceanothus tomentosus*), white-stem wild-lilac (*Ceanothus leucodermis*), and big-berry manzanita (*Arctostaphylos glauca*).

This vegetation community provides important habitat for wide-ranging, larger wildlife species such as mule deer (*Odocoileus hemionus*), mountain lion (*Felis concolor*), and golden eagle (*Aquila chrysaetos*). Depending on present species, this generalized habitat may also be considered

chamise or maritime chaparral. When coast white lilac (*Ceanothus verrucosus*) and/or scrub oak is present with or without other indicator species present, this habitat could be considered Tier I southern maritime chaparral per City's *Biology Guidelines* (2018).

Southern maritime chaparral is mapped in the northeastern portion of the CCPU, along the undeveloped hillsides within San Clemente Canyon.

4.2.2.6 Native Grassland

Valley and foothill grassland, a rare native grass, is a native grassland community dominated by perennial native bunchgrasses such as purple needle grass (*Nassella pulchra*) with annual and perennial forbs such as common golden stars (*Bloomeria crocea ssp. crocea*) and California blue-eyed grass (*Sisyrinchium bellum*). Native grasslands generally occur on fine-textured soils that exclude the annual, exotic grasses. Almost all of the native grasslands in California have been displaced by non-native grassland dominated by introduced annual species. Native grasslands occur throughout California as small isolated islands.

Within the CCPU area native grasslands occur as isolated, small areas primarily in Tecolote Canyon, although other areas likely occur, but were too small to be identified in this mapping.

4.2.2.7 Non-Native Grassland

Non-native grassland occurs seasonally in response to winter and spring rains and is a dense to sparse cover of annual, non-native grasses, sometimes associated with species of showy-flowered, native, annual forbs. This community characteristically occurs on gradual slopes with deep, fine-textured, usually clay soils. Characteristic species in non-native grassland include oats (*Avena spp*.), red brome (*Bromus madritensis ssp. rubens*), ripgut grass (*Bromus diandrus*), ryegrass (*Lolium sp*.), and mustard (*Brassica sp*.). Most of the annual, introduced species that comprise the majority of species and biomass within non-native grassland originated from the Mediterranean region, an area with a long history of agriculture and a climate similar to California's climate. These two factors, in addition to intensive grazing and agricultural practices in conjunction with severe droughts, contributed to the successful invasion and establishment of these species and the replacement of native grasses with an annual- dominated, non-native grassland (Jackson 1985). These grasslands occur throughout San Diego County and serve as valuable raptor foraging habitat.

Broadleaf-dominated non-native grassland is a subtype of non-native grassland but is dominated greater than 50 percent by one or several invasive annual broadleaf species, such as: mustard, fennel (*Foeniculariurn vulgare*), or thistle (*Centaurea spp*.).

Non-native grasslands (including broadleaf-dominated) are abundant within the CCPU area and have been mapped along the central portion of San Clemente Canyon; other areas that are not mapped likely occur adjacent to undeveloped hillsides near and within San Clemente and Tecolote Canyons, and within undeveloped lands adjacent to roadways.

4.2.3 OTHER UPLANDS

Other uplands in this BRR consist of various vegetation communities/land cover types within the CCPU area that are typically a result from some level of disturbance (e.g., development,

encroachment, or other anthropogenic disturbances). These habitats can also be considered sensitive if they support a sensitive species (i.e., a hawk in a eucalyptus tree).

4.2.3.1 Eucalyptus Woodland

Eucalyptus woodland is a community dominated by eucalyptus (*Eucalyptus sp*.), an introduced genus that has often been planted purposely for wind blocking, ornamental, and hardwood production purposes. Most groves are monotypic with the most common species being either the blue gum (*Eucalyptus gunnii*) or red gum (*E. camaldulensis ssp. obtusa*). The understory within well-established groves is usually very sparse due to the closed canopy and allelopathic nature of the abundant leaf and bark litter. If sufficient moisture is available, this species becomes naturalized and is able to reproduce and expand its range. The sparse understory offers only limited wildlife habitat; however, as a wildlife habitat, these woodlands can provide excellent nesting sites for a variety of raptors if the woodlands are not located in highly urbanized environments. During winter migrations, a large variety of warblers may be found feeding on the insects that are attracted to eucalyptus flowers.

Eucalyptus woodland is mapped in a few relatively small areas of the CCPU area; in the northeastern portion of Tecolote Canyon.

4.2.3.2 Disturbed Habitat (Disturbed Land)

Disturbed habitat is defined by areas that have been physically altered such that native habitat vegetation or structure is no longer present, but the area may still retain some native species or native soil substrate. These areas are not typically artificially irrigated but may receive water from precipitation and man-made runoff. Vegetation present is a preponderance of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (Oberbauer et al. 2008).

Areas within the CCPU area mapped as disturbed land primarily occur in the northern portion of the CCPU area connected to natural habitat or in remnant ravines throughout the CCPU area.

4.2.3.3 Urban/Developed

Developed land consist of areas that have been constructed upon or physically altered to which native vegetation is no longer supported. Typically, developed lands contain structures, impervious surfaces, or landscaped areas that are irrigated (Oberbauer et al. 2008).

Within the CCPU area, developed land is the largest cover type occupying most of the total CCPU area.

4.3 SPECIAL-STATUS BIOLOGICAL RESOURCES

According to City Municipal Code (Chapter 11, Article 3, Division 1) and the City's *Biology Guidelines* (City 2018), sensitive biological resources refers to upland and/or wetland areas that meet any one of the following criteria:

1) Lands that have been included in the City's MSCP Preserve (i.e., the Multi-Habitat Planning Area [MHPA]);
2) Wetlands;

3) Lands 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 MSCP Narrow Endemic species as listed in the City's *Biology Guidelines* (City 2018); or
6) Lands containing habitats of MSCP Covered Species as listed in the City's *Biology Guidelines* (City 2018).

4.3.1 SENSITIVE VEGETATION COMMUNITIES

The City's *Biology Guidelines* (2018) define which vegetation communities are sensitive. Upland vegetation communities are divided into five tiers of sensitivity (the first being the most sensitive, the fifth the least sensitive) based on rarity and ecological importance (City 2018). Tier I includes rare uplands; Tier II includes uncommon uplands; Tiers IIIA and IIIB include common uplands, and Tier IV includes other uplands. Wetland communities are not assigned a tier under the City's Biology Guidelines, but they are considered sensitive and have standard mitigation ratios applied. Additionally, typical non-sensitive habitats may be deemed sensitive if they support a sensitive species such as a burrowing owl or rare/endemic plant species.

Based on the definitions of "sensitive" and Table 3, above, the CCPU area supports 11 sensitive vegetation communities. All of the wetland communities (four habitat types) and seven of the 10 upland communities are considered sensitive.

4.3.2 SPECIAL-STATUS PLANTS

Special-status plant species are those that are federal, State, or CNPS rare, threatened, or endangered; MSCP Covered Species; MSCP Narrow Endemic (NE) species; or California Rare Plant Rank (CRPR) ranked species (Appendix A). More specifically, if a species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1) and MSCP implementing regulations:

a. A species or subspecies is 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;
b. A species is a Narrow Endemic as listed in the *Biology Guidelines* in the Land Development Manual (City 2018); and/or
c. A species is an MSCP Covered Species as listed in the *Biology Guidelines* in the Land Development Manual (City 2018).

A plant species may also be considered special status if it has a CRPR ranking (CNPS 2020).

Special status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less

abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

Per the sources listed above, a total of 18 sensitive plant species have been identified as being within or immediately adjacent to the CCPU area; although most of the known occurrences are within MSCP Baseline Conserved Areas within San Clemente or Tecolote canyons, other areas in the CCPU area may support them.

- South coast saltscale (*Atriplex pacifica*)(CNPS Rare Plant Rank 1B.2)
- San Diego sagewort (*Artemisia palmeri*) (CNPS Rare Plant Rank 4.2)
- San Diego goldenstar (*Bloomeria clevelandii*)(CNPS Rare Plant Rank 1B.1; MSCP Covered Species)
- Orcutt's brodiaea (*Brodiaea orcuttii*)(CNPS Rare Plant 1B.1; MSCP Covered Species)
- wart-stemmed ceanothus (*Ceanothus verrucosus*) (CNPS Rare Plant Rank 2B.2),
- Seaside cistanthe (*Cistanthe maritima*)(CNPS Rare Plant Rank 4.2)
- San Diego barrel cactus (*Ferocactus viridescens*)(CNPS Rare Plant Rank 2B.1)
- Palmer's grapplinghook (*Harpagonella palmeri*) (CNPS Rare Plant Rank 2B.2)
- Decumbent goldenbush (*Isocoma menziesii*)(CNPS Rare Plant Rank 1B.2)
- Southwestern spiny rush (*Juncus acutus* spp. *leopoldii*) (CNPS Rare Plant Rank 4.2)
- Sea dahlia (*Leptosyne maritima*)(CNPS Rare Plant Rank 2B.2)
- California box-thorn (*Lycium californicum*) (CNPS Rare Plant Rank 4.2)
- Small-flowered microseris (*Microseris douglasii* spp. *platycarpha*)(CNPS Rare Plant Rank 4.2)
- Willowy monardella (*Monardella viminea*)(Federal Endangered, California Endangered, CNPS Rare Plant Rank 1B.1; MSCP Covered Species)
- San Diego mesa mint (*Pogogyne abramsii*)(Federal Endangered, California Endangered, CNPS Rare Plant Rank 1B.1; MSCP Covered Species)
- Nuttall's scrub oak (*Quercus dumosa*) (CNPS Rare Plant Rank 1B.1),
- Santa Catalina Island currant (*Ribes viburnifolium*)(CNPS Rare Plant Rank 1B.2)
- Ashy spike-moss (Selaginella cinerascens)(CNPS Rare Plant Rand 4.1)

A search of CNPS and CNDDB records (nine USGS 7.5-minute quadrangle search) was used to develop a matrix of additional sensitive plant species that may have potential to occur in the CCPU area due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, and geographic range, life form/blooming period, etc.). The matrix is presented in Table 4.

Table 4. Special-Status Plant Species and Potential to Occur in the Clairemont Community Plan Update Area

Species	Sensitivity[2] Federal State CNPS City	Habitat(s)/Range and Potential to Occur	Lifeform[3] and Bloom Period
San Diego thorn-mint (*Acanthomintha ilicifolia*)	FT SE CNPS 1B.1 MSCP Covered NE	**Low Potential.** Occurs between 10 and 960 meters AMSL on clay soils in chaparral, coastal sage scrub, valley and foothill grassland, and vernal pools. CNDDB has two records of this species within two miles of the CCPU area; however, these records are historical (1936) and this species is presumed to be extirpated from the majority of this portion of the County as a result of development. Suitable habitat present, but species is likely extirpated within the CCPU area.	Annual herb April to June
Nuttall's acmispon (*Acmispon prostrates*)	-- -- CNPS 1B.1 --	**Low Potential.** Found in coastal dunes and sandy coastal scrub habitat between 0 and 10 meters AMSL. The nearest occurrence is in the Mission Bay area found as part of flood diversion work. Suitable habitat is present, but the species is not likely to be present within the CCPU area.	Annual herb March to June (July)
California adolphia (*Adolphia californica*)	-- -- CNPS 2B.1 --	**High Potential.** Found in clay soils in chaparral, coastal scrub, and valley and foothill grassland vegetation between 10 and 740 meters AMSL. CNDDB has several populations known to occur near the CCPU area along I-8 freeway to the east of the CCPU area and California consortium of herbaria shows one occurrence just north of the CCPU area. Suitable habitat is present in the CCPU area.	Perennial, deciduous shrub December to May
San Diego sagewort (*Artemisia palmeri*)	-- -- CNPS 4.2 --	**Present.** Found in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats at elevations between 15 and 915-meter AMSL. California consortium of herbaria lists three occurrences within Tecolote Canyon.	Perennial deciduous shrub (February)May-September.
Coulter's saltbush (*Atriplex coulteri*)	-- -- CNPS 1B.2 NE	**Not Expected.** Occurs between 3 and 460 meters AMSL in areas of alkaline or clay soils within coastal bluff scrub, coastal dunes, coastal scrub, and native grasslands. CNDDB has one extant population known to occur south of the CCPU area in an undeveloped urban	Perennial herb March to October

		canyon in the community of Serra Mesa. Suitable habitat is present in the CCPU area.	
South coast saltscale (*Atriplex pacifica*)	-- -- CNPS 1B.2 --	**Present.** Occurs between 0 to 140 AMSL in coastal bluff scrub, coastal dunes, coastal scrub, and playa habitat. Records exist from Tecolote Canyon and suitable habitat is present in other areas of the CCPU.	Annual herb March to October
San Diego goldenstar (*Bloomeria clevelandii*)	-- -- CNPS 1B.1 MSCP Covered	**Present.** Occurs in clay soils in chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitat at elevations of 50 to 465 meters AMSL. Observed in Tecolote Canyon and may occur in other areas of the CCPU.	Perennial bulbiferous herb April to May
Orcutt's brodiaea (*Brodiaea orcuttii*)	-- -- CNPS 1B.1 --	**Present.** Occurs in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools at elevations of 30 to 1692 meters AMSL in areas with mesic, clay soils. California consortium of herbaria lists seven records within or near the CCPU.	Perennial bulbiferous herb May to July
Otay Mountain ceanothus (*Ceanothus otayensis*)	-- -- CNPS 1B.2	**Not Expected.** Occurs between 600 and 1100 meters AMSL in areas of metavolcanic or gabbroic soils where chaparral vegetation. CNDDB has one extant population known to occur north of the CCPU area within the MCAS Miramar. Suitable habitat does not occur in the CCPU area.	Perennial shrub January to April
Wart-stemmed ceanothus (*Ceanothus verrucosus*)	-- -- CNPS 2B.2 —	**Present.** Occurs between 1 and 380 meters AMSL in chaparral habitat. There are two occurrences within the California consortium of herbaria within Tecolote Canyon near Mt. Alifan Drive. Suitable habitat occurs in other portions of the CCPU as well.	Perennial evergreen shrub December to May
Seaside calandrinia (*Cistanthe maritima*)	-- -- CNPS 4.2 --	**Present.** Occurs in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland habitat at elevations of 5 to 300 meters AMSL. Observed in Tecolote Canyon and may occur in other areas of the CCPU.	Annual herb (February) March to June (August)
Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*)	-- -- CNPS 1B.1	**Moderate Potential.** Occurs between 300 and 600 meters AMSL in mesic soils and associated with chaparral and coastal scrub vegetation. CNDDB has one extant population known to occur south	Perennial shrub July to November

	-- -- CNPS 2B.1 --	of the CCPU area along I-8 freeway. Suitable habitat is present in the CCPU area.	
San Diego barrel cactus (*Ferocactus viridescens*)		**Present.** Occurs between 3-450 meters AMSL in chaparral, coastal scrub, valley and foothill grassland, and vernal pool habitat and has been observed in Tecolote Canyon (cited in the Marian Bear Resource Management Plan) and could occur in other locations in the CCPU area.	Perennial stem succulent May to June
Palmer's grapplinghook (*Harpagonella palmeri*)	-- -- CNPS 4.2 --	**Present.** Occurs between 20-955 meters AMSL in clay soils that support chaparral, coastal scrub vegetation, and native grasslands. Found in openings within the vegetation. One occurrence listed in the California consortium of herbaria north of end of Mount Ashmun Drive, east of Tecolote Creek. Suitable habitat is present in the CCPU area.	Annual shrub March to May
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	-- -- CNPS 1B.2 --	**Present.** Occurs in chaparral and coastal scrub habitat with sandy soils, often in disturbed areas at elevations of 10-135 meters AMSL. One occurrence near Linda Vista Road just outside of the CCPU area and one occurrence near the southwest corner of Highway 52 and I-805. Similar habitat occurs in other parts of the CCPU area.	Perennial shrub April to November
San Diego marsh-elder (*Iva hayesiana*)	-- -- CNPS 2B.2	**Moderate Potential.** Found in marshes, swamps, plays, and often associated with drainage channels. Found between 10 and 500 meters AMSL in openings within the vegetation. CNDDB has one extant population known to occur within two miles of the CCPU area; located north within Rose Canyon the communities of University and Clairemont. Suitable wetland habitat and drainages that could support this species occur in the CCPU area	Perennial herb April to October
Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*)	-- -- CNPS 4.2 --	**Present.** Occurs in coastal mesic dunes, alkaline meadows and seeps, and coastal salt marshes and swamps between 3 and 900 meters AMSL. One occurrence in Tecolote Canyon south of SW end of Mount Ashmun Drive, in Tecolote Creek from 2008. Suitable habitat that could support the species occurs in the CCPU area.	Perennial rhyizomatous herb (March)May-June
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	-- -- CNPS 4.3	**Moderate Potential.** Occurs in chaparral and coastal scrub vegetation. CNDDB has two extant populations known to occur within Rose Canyon. Suitable habitat is present in the CCPU area.	Annual herb January to July

Sea dahlia (*Leptosyne maritima*)	-- -- CNPS 2B.2 --	**Present.** Occurs in coastal bluff scrub and coastal scrub at elevations of 5 to 150 meters AMSL. Occurrences within Tecolote Canyon. Suitable habitat exists in other portions of the CCPU area.	Perennial herb March to May
California box-thorn (*Lycium californicum*)	-- -- CNPS 4.2 --	**Present.** Occurs in coastal bluff scrub and coastal scrub habitat at elevations from 5 to 150 meters AMSL. California consortium of herbaria lists an occurrence from 2013 within San Clemente Canyon S of SR-52 freeway and slope NE ca. 0.25 miles from intersection of Monongahela St. and Wyandotte Ave. Similar habitat occurs within other areas of the CCPU.	Perennial shrub (December) Marsh, June, July, August
Small-flowered microseris (*Microseris douglasii* subsp. *platycarpha*)	-- -- CNPS 4.2 --	**Present.** Occurs in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool habitat with clay soils at elevations of 15 to 1070 meters AMSL. Known from California Consortium of Herbaria records at the NE intersection of I 805 and Clairemont Mesa Blvd. Similar habitat occurs in other areas of the CCPU.	Annual herb March to May
Willowy monardella (*Monardella viminea*)	FE CE CNPS 1B.1 MSCP Covered	**Present.** Occurs in chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitat within alluvial, ephemeral washes at elevations of 50 to 225 meters AMSL. Known populations in San Clemente Canyon between Genesee and Regent.	Perennial herb June to August
San Diego mesa mint (*Pogogyne abramsii*)	FE CE CNPS 1b.1 MSCP Covered	**Present.** Occurs in vernal pool habitat at elevations of 90 to 200 AMSL. Known populations near the NE intersection of I 805 and Clairemont Mesa Blvd. Other populations may occur within the CCPU.	Annual herb March to June
Nuttall's scrub oak (*Quercus dumosa*)	-- -- CNPS 1B.1 --	**Present.** Found in closed-cone coniferous forest, chaparral, and coastal scrub habitat between 15 and 400 meters AMSL. California consortium of herbaria lists two occurrences near or in Tecolote Canyon, the most recent in 2008 north of Holmes Elementary School on Mount Ararat Drive, west of Mount Brundage Avenue, west-facing slope. Suitable habitat exists in other areas of the CCPU.	Perennial evergreen shrub February-April (August)
Santa Catalina Island currant (*Ribes viburnifolium*)	-- -- CNPS 1B.2	**Present.** Found in chaparral and cismontane woodland habitat at elevations of 30 to 350 AMSL. Known from the San Clemente Canyon near foot of north slope, just west of Genesee Ave. California	Perennial evergreen shrub February to April

	-- --	consortium of herbaria lists two records near this location. Similar habitat occurs in other areas of the CCPU.	
Munz's sage (*Salvia munzii*)	-- -- CNPS 2B.2	**Moderate Potential.** Occurs in chaparral and coastal scrub vegetation between 115 and 1,065 meters AMSL. CNDDB has one record of this species within two miles of the CCPU area, located with Ruffin Canyon in the community of Serra Mesa. Suitable habitats are present in the CCPU area.	Perennial shrub February to April
Ashy spike-moss (*Selaginella cinerascens*)	-- -- CNPS 4.1 --	**Present.** Occurs in chaparral and coastal scrub habitat at elevations of 20-640 meters AMSL. Documented within the San Clemente Canyon and included as part of the Marian Bear Resource Management Plan. Suitable habitat occurs in other areas of the CCPU as well.	Perennial rhizomatous herb NA
San Diego County viguiera (*Viguiera laciniata*)	-- -- CNPS 4.2 --	**High Potential.** Found in chaparral and coastal scrub in a variety of soil types at elevations of between 60 to 750 meters AMSL. This species was observed in 2018 adjacent to the CCPU area, located east of I-15 and along Clairemont Mesa Boulevard. Suitable habitat is present in the CCPU area.	Perennial shrub February to August

[1]Sensitive includes MSCP Narrow Endemic and Covered Species.
[2]See Appendix A for an explanation of sensitivity codes.
[3]Lifeform and bloom period are from CNPS (2020).

4.3.3 SPECIAL-STATUS WILDLIFE

Special-status animal species are those that are considered federal or state threatened or endangered; or MSCP Covered Species (Appendix A). More specifically, if animal species is designated with any of the following statuses (a-c below), it is considered sensitive per City Municipal Code (Chapter 11, Article 3, Division 1):

1. A species or subspecies is listed as 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;
2. A species is a MSCP Covered Species as listed in the *Biology Guidelines* in the Land Development Manual (City 2018).

A species may also be considered special-status if it is included on the CDFW's Special Animals List (CDFW 2018a-e) as a candidate for federal or state listing; is on California Species of Special Concern, Watch List Species, or Fully Protected species; or is a federal Bird of Conservation Concern (Appendix A). Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss. Additionally, avian nesting is protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

A total of 19 sensitive wildlife species have been recorded within or adjacent to the CCPU area. Each of these species are listed below.

- Cooper's hawk (*Accipter cooperii*) (CDFW Species of Special Concern)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)(CW, CDFW Species of Special Concern; MSCP Covered)
- burrowing owl (*Athene cunicularia*) (CDFW Species of Special Concern, MSCP Covered)
- Northern harrier (*Circus cyaneus*) (MSCP Covered Species)
- Black-shouldered kite (*Elanus caeruleus mausculos*)(CDFW Protected Species)
- southwestern willow flycatcher (*Empidonax traillii extimus*) (Federally Endangered, State Endangered, MSCP Covered)
- prairie falcon (*Falco mexicanus*) (CDFW watch list)
- American peregrine falcon (*Falco peregrinus anatum*)(MSCP Covered)
- Yellow-breasted chat (*Icteria virens*)(CDFW Species of Special Concern)
- Loggerhead shrike (*Lanius ludovicianus*)(CDFW Species of Special Concern; MSCP Covered)
- coastal California gnatcatcher (*Polioptila californica californica*) (Federally Threatened, CDFW Species of Special Concern, MSCP Covered)
- yellow warbler (*Setophaga petechia*) (USFWS Bird of Conservation Concern, CDFW Species of Special Concern)
- Bewick's wren (*Thryomanes bewickii*)(CDFW Species of Special Concern)

- Quino checkerspot butterfly (*Euphydryas editha quino*) (Federally Endangered; MSCP Covered)
- orange-throated whiptail (*Aspidoscelis hyperythra*) (CDFW watch list, MSCP Covered)
- coast horned lizard (*Phrynosoma blainvillii*) (CDFW Species of Special Concern, MSCP Covered)
- California glossy snake (*Arizona elegans occidentalis*) (CDFW Species of Special Concern)
- Red diamond rattlesnake (*Crotalus exsul*)(CDFW Species of Special Concern)
- two-striped garter snake (*Thamnophis hammondii*)(CDFW Species of Special Concern; MSCP Covered)

Although the wildlife species listed above are recorded in or adjacent to the CCPU area, two of these species have historical occurrence records and are currently presumed to be extirpated or possibly extirpated from the CCPU area; including: prairie falcon and Quino checkerspot butterfly. Additionally, although a single southwestern willow flycatcher was recorded during general biological field surveys for the City's Pure Water Final EIR (City 2018a), this species is not expected to breed within the CCPU area due to lack of suitable habitat.

A search of CNDDB and USFWS records (two-mile radius from the CCPU area) was used to develop a matrix of additional sensitive wildlife species that may have potential to occur in the CCPU area due to the presence of suitable habitat (e.g., vegetation communities, soils, elevation, and geographic range, etc.). The matrix is presented in Table 5 below and includes the additional special status wildlife species, their favorable habitat conditions, and their potential to occur in the CCPU area.

Table 5. Sensitive Wildlife Species and Potential to Occur in the Clairemont Community Plan Update Area

Species	Sensitivity[2] Federal State City	Habitat and Potential to Occur
Amphibians		
Western spadefoot (*Spea hammondii*)	-- SSC --	**Moderate Potential.** Inhabits floodplains, washes, and low hills. In southern California, its habitats include coastal sage scrub, chaparral, and grassland. Important habitat components include temporary pools (which form during winter and spring rains) for breeding and friable soils for burrowing. CNDDB has one record of this species occurring within two miles of the CCPU area, within an SDG&E utility easement northwest of Qualcomm Stadium in the community of Mission Valley. Suitable habitat is present in the wetland and portions of the CCPU area.

Reptiles		
Southern California legless lizard (*Anniella pulchra*)	-- SSC --	**Low Potential.** Occurs in coastal dune, valley foothill grassland, chaparral, and coastal scrub habitats. CNDDB records are near Morena in areas that have since been developed. The species is considered to be extirpated from the area, although suitable habitat may occur within the CCPU area.
Orange-throated whiptail (*Aspidoscelis hyperythra*)	-- WL MSCP Covered	**Present.** Occurs primarily on coarse soils in open coastal sage scrub vegetation. Occurs along the edge of open, dry, riparian areas, along trails, along dirt roads, and in areas of light off-road vehicle use. There are records of the species from Tecolote Canyon. Suitable habitat is present in other areas of the CCPU area.
California glossy snake (Arizona elegans occidentalis)	-- SSC --	**Present.** Occurs primarily in desert habitat types, including chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. There are records of the species from Tecolote Canyon. Suitable habitat is also present in other areas of the CCPU area.
Red diamond rattlesnake (*Crotalus ruberl*)	-- SSC --	**Present.** Occurs in desertscrub, thornscrub, open chaparral, mesquite/cactus, and pine-oak woodland, sometimes also dunes, grassland, and cultivated areas between rock outcrops. it is most common in heavy brush where rocks and rocky outcrops are prevalent. There are records of the species from Tecolote Canyon. Suitable habitat is present in other portions of the CCPU area.
Coast horned lizard (*Phrynosoma coronatum blainvillii*)	-- SSC MSCP Covered	**Present.** Occurs in areas with native ants and few or no Argentine ants, in areas with native chaparral vegetation, and in sites with porous soils relatively free of organic debris. There are records of the species in Tecolote Canyon. Suitable habitat is present in other portions of the CCPU area.
Coronado skink (*Plestiodon skiltonianus interparietalis*)	-- SSC --	**High Potential.** Found in grasslands, coastal sage scrub, open chaparral, pine oak woodland, and coniferous forests. It prefers areas where there is abundant leaf litter or low, herbaceous growth. CNDDB has one record of this species occurring within two miles of the CCPU area, located north within the MCAS Miramar. Suitable habitat for this species is present in the CCPU area.
Two-striped garter snake (*Thamnophis hammondii*)	-- SSC MSCP Covered	**Present.** Occurs primarily along permanent creeks and streams but also around vernal pools and along intermittent streams. It is occasionally found in chaparral or other habitats relatively far from permanent water. CNDDB has one record of this species occurring within two miles of the CCPU area, located northwest within the MCAS Miramar. Suitable

		intermittent aquatic habitat likely exists within the CCPU area; however, this species prefers permanent aquatic habitats, which are limited within the CCPU area.
	Birds	
Cooper's hawk (*Accipter cooperii*)	-- SSC --	**Present.** Occurs in Mature forest, open woodlands, wood edges, river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found among trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist for nest sites. Observed within San Clemente Canyon and referenced in the Marian Bear Resource Management Plan. Suitable habitat is present in the CCPU area.
Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)	-- WL MSCP Covered	**Present.** Occurs in coastal sage scrub and chaparral habitats of moderate density throughout the County. Observed within San Clemente Canyon and referenced in the Marian Bear Resource Management Plan. Suitable habitat is present in the CCPU area.
Burrowing owl (*Athene cunicularia*)	-- SSC MSCP Covered	**Present.** Occurs in grasslands, rangelands, agricultural areas, deserts, or any other open dry area with low vegetation with rodent burrows or cavities. Observed within grassland habitat near Mission Bay. Suitable habitat is present in the CCPU area.
Northern harrier (*Circus cyaneus*)	-- -- MSCP Covered	**Present.** Occurs in marshes, fields, prairies. Found in many kinds of open terrain, both wet and dry habitats, where there is good ground cover. Observed within Tecolote Canyon and San Clemente Canyon and referenced in the Marian Bear Resource Management Plan. Suitable habitat is present in the CCPU area.
Black-shouldered kite (*Elanus caeruleus mausculos*)	-- Protected --	**Present.** Occurs in low bushes and open grassland habitat. Observed within San Clemente Canyon and referenced in the Marian Bear Resource Management Plan. Suitable habitat is present in the CCPU area.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE SE MSCP Covered	**Present.** Occurs in deciduous thickets, especially willows and often near water. Observed within Tecolote Canyon historically. Suitable habitat is present in the CCPU area.
Prairie falcon (*Falco mexicanus*)	-- WL --	**Present.** Occurs in open hills, plains, prairies, deserts. Typically found in fairly dry open country, including grassland and desert. Observed within Tecolote Canyon. Suitable habitat is present in the CCPU area.
American peregrine falcon (*Falco peregrinus anatum*	-- --	**Present.** Occurs in highly variable habitat types; often documented as showing little preference for specific ecological communities. Prefers cliffs and tall, man-

	MSCP Covered	made structures surrounded by open landscapes with nearby riparian areas. Observed Tecolote Canyon. Suitable habitat is present in the CCPU area.
Yellow-breasted chat (*Icteria virens*)	-- SSC --	**High Potential.** In California, this species is found in a variety of dense riparian thickets during its breeding season and is mostly absent during the winter months. Observations of this species were recorded in 2018 adjacent to the CCPU area, located north within the MCAS Miramar. Suitable habitat for this species is present in the CCPU area and the species may move through the CCPU area during migration; however, larger habitat blocks occur outside of the CCPU area and are more likely to be inhabited and used for breeding by this species. Suitable habitat is present in the CCPU area.
Loggerhead shrike (*Lanius ludovicianus*)	-- SSC MSCP Covered	**Present.** Occurs in semi-open country with lookout posts; wires, trees, scrub. Breeds in any kind of semi-open terrain, from large clearings in wooded regions to open grassland or desert with a few scattered trees or large shrubs. Observed within Tecolote Canyon. Suitable habitat is present in the CCPU area in other areas, as well.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT SSC MSCP Covered	**Present.** Occurs in in or near coastal scrub vegetation communities dominated by sage. Density of gnatcatchers is highest in high-quality habitat and decreases as habitat quality decreases. CNDDB records from Tecolote Canyon, Stevenson Canyon, and San Clemente Canyon. Suitable habitat is present in the CCPU area.
Yellow warbler (*Setophaga petechia*)	USFWS Bird of Conservation Concern SSC	**Present.** Occurs in woods and thickets along edges of streams, lakes, swamps, and marshes, favoring willows, alders, and other moisture-loving plants. Observed within San Clemente Canyon and referenced in the Marian Bear Resource Management Plan and observed within Tecolote Canyon. Suitable habitat is present in the CCPU area.
Bewick's wren (*Thryomanes bewickii*)	-- SSC --	**Present.** Occurs in many brushy or wooded habitats at lower elevations, including undergrowth in woods of oak and pine, streamside groves, chaparral, desert washes, suburban areas. Observed within San Clemente Canyon and referenced in the Marian Bear Resource Management Plan. Suitable habitat is present in the CCPU area.
Least Bell's vireo (*Vireo bellii pusillus*)	FE SE MSCP Covered	**Moderate Potential.** The least Bell's vireo is found a variety of riparian scrub, woodland, and forest habitats in California and northern Baja California, Mexico during its breeding season. It winters in southern Baja California, Mexico. CNDDB has several records of this species occurring within two miles of

		the CCPU area. All of these records are south of the CCPU area within the riparian corridor of the San Diego River in the community of Mission Valley. Suitable habitat for this species is present in the CCPU area and the species may move through the CCPU area during migration; however, larger habitat blocks occur outside of the CCPU area and are more likely to be inhabited and used for breeding by this species.
Invertebrates		
Quino checkerspot butterfly (*Euphydryas editha quino*)	FE -- MSCP Covered	**Present.** Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub that support native species of plantain, the butterlfly's primary larval host plant. Records of the species adjacent to the CCPU area exist and similar habitat types occur in the CCPU.
Mammals		
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	-- SSC --	**Potential.** Occurs in coastal sage scrub, grasslands, and sparse chaparral; usually with loams and sandy substrates. CNDDB has one record of this species occurring east in the community of Tierrasanta. Suitable habitat is present in the CCPU area.
Pacific pocket mouse (*Perognathus longimembris pacificus*)	FE	**Not Expected.** The Pacific pocket mouse has occurred on fine-grain, sandy substrates in open coastal sage scrub, coastal strand, coastal dune, and river alluvium habitats. The extant populations at the three known locales occur within open coastal sage scrub habitats. While similar habitat types occur within the CCPU, known populations are not near the site.
Western mastiff bat (*Eumops perotis californicus*)	-- SSC --	**Potential.** Found in chaparral where associated with oak trees. Also prefers cracks and small holes within rocky areas and man-made structures. CNDDB has two records of this species occurring within two miles of the CCPU area, located southeast near San Diego State University in the community of Navajo. Limited suitable chaparral habitat is present in the CCPU area.
Pocketed free-tailed bat (*Nyctinomops femorosaccus*)	-- SSC --	**Potential.** Occurs in desert areas with high cliffs and/or rock outcrops. CNDDB has two records of this species documented within the CCPU and two miles from the CCPU area in the adjacent community of Linda Vista; however, these records are from 1983 and 1987 and are of deceased individuals that were reported to the County Public Health Department.
Big free-tailed bat (*Nyctinomops macrotis*)	-- SSC	**Potential.** Found in rocky rugged areas with canyons and/or cliffs. CNDDB has one record of this species

	--	documented within the CCPU area; however, this record is from 1983 and 1987 and are of deceased individuals that were reported to the County Public Health Department.

[1]Sensitive includes MSCP Narrow Endemic and Covered Species.
[2]See Appendix A for an explanation of sensitivity codes.

4.3.4 U.S. FISH AND WILDLIFE SERVICE CRITICAL HABITAT

Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. There is no critical habitat within the CCPU area.

4.4 POTENTIALLY JURISDICTIONAL AQUATIC RESOURCES

Agencies with jurisdictional authority over aquatic resources include the U.S. Army Corps of Engineers (Corps), CDFW, Regional Water Quality Control Board (RWQCB), and the City. In addition, the USFWS may take jurisdiction for areas supporting endangered or sensitive species via consultation with the Corps (i.e., for fairy shrimp in roadway depressions). In general, jurisdictional aquatic resources are grouped into three primary categories: wetlands, non-wetland waters, and associated aquatic vegetation. A formal aquatic resource delineation was not conducted as part of this BRR. Individual assessments of wetland and waters resources within the CCPU area should be conducted at a project- level for all future proposed development projects that potentially jurisdictional aquatic resources on or adjacent to the project area. Furthermore, a formal aquatic resources delineation may be required to identify such jurisdictional features and the corresponding boundary extents of identified jurisdictional areas, and to determine if proposed project impacts would occur. Potentially jurisdictional aquatic resources and features within the CCPU area are described below.

Vegetation communities in the CCPU area that may also be jurisdictional aquatic resources include southern riparian forest, riparian woodland, riparian scrub, and non-native riparian. In addition to the vegetation mapping, the National Wetlands Inventory (NWI; USFWS 2020a) database shows riverine and freshwater areas within the CCPU area; specifically, PEM1A: palustrine, emergent, persistent, temporary flooded; PFO/SSA: palustrine, forested, scrub-shrub, temporary flooded; PFO/SSC: palustrine, forested, scrub-shrub, seasonally flooded; and PSSA: palustrine, scrub-shrub, temporary flooded. There are very few mapped areas within the CCPU in the NWI database; however, many areas are not mapped.

Riverine areas recorded in the NWI database occur as tributaries associated with either San Clemente Canyon along the northern portion of the CCPU area or Tecolote Canyon running north-south through the center of the CCPU area and Stevenson Canyon west of Tecolote Canyon; (see Figure 4). Due to contiguity of linear stream features, most of these reach areas may be considered jurisdictional wetlands and/or waters.

4.4.1 FEDERAL

Wetlands. As stated in the federal regulations for the Clean Water Act, wetlands are defined as: "...those areas that are inundated or saturated by surface or groundwater at a frequency and

duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil...." (EPA, 40 CFR 230.3 and CE, 33 CFR 328.3).

Wetlands are delineated using three parameters: hydrophytic vegetation, wetland hydrology, and hydric soils.

Per Section 404 of the Clean Water Act, a "no net loss of wetlands" policy applies to project with wetland impacts in the United States. This means that in order for a wetland take to occur, mitigation must include a 1:1 replacement component in the form of creation or restoration. A second component (minimum 1:1 ratio) must also occur consisting of preservation, enhancement, or other Agency acceptable form of wetland mitigation.

U.S. Army Corps of Engineers

Wetlands. According to the Corps, indicators for all three parameters must be present to qualify an area as a wetland.

Waters of the U.S. In accordance with Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged or fill material into waters of the U.S. The term "waters of the United States" is defined as:

- All waters currently used, or used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation, or destruction of which could affect foreign commerce including any such waters: (1) which could be used by interstate or foreign travelers for recreational or other purposes; or (2) from which fish or shellfish are, or could be taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industries in interstate commerce;
- All other impoundments of waters otherwise as defined as waters of the United States under the definition;
- Tributaries of waters identified above;
- The territorial seas; and wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the paragraphs above [33 CFR Part 328.3(a)].

The Corps also requires the delineation of non-wetland jurisdictional waters. These waters must have strong hydrology indicators such as the presence of seasonal flows and an ordinary high-water mark. An ordinary high-water mark is defined as:

that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR Part 328.3).

Areas delineated as non-wetland jurisdictional waters may lack wetland vegetation or hydric soil characteristics. Hydric soil indicators may be missing because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the ordinary high-water mark of the particular drainage or depression.

U.S. Fish and Wildlife Service

USFWS jurisdiction may be evoked should the Corps ask for consultation for a given resource (typically a vernal pool). Due to the recent adoption of the City's VPHCP, this may not be required; however, some federal permits are still in process at this writing and therefore USFWS may be involved with potential wetland/waters.

4.4.2 REGIONAL WATER QUALITY CONTROL BOARD

The RWQCB is a regional agency responsible for protecting water quality in California. The RWQCB asserts regulatory jurisdiction over activities affecting wetland and non-wetland Waters of the State (State Water Resources Control Board 2019) pursuant to Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act. The RWQCB requires a delineation of resources to document wetland and non-wetland Waters of the State. The RWQCB issues a Clean Water Act Section 401 Water Quality Certification for projects that affect Waters of the State and requires a Report of Waste Discharge for projects that affect water quality of isolated Waters of the State under Porter-Cologne.

4.4.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Under sections 1600 et. seq. of California Fish and Game Code, CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife and requires a Streambed Alteration Agreement for such activities. The CDFW issues a Streambed Alteration Agreement with any necessary mitigation to ensure protection of the State's fish and wildlife resources. The CDFW has jurisdiction over riparian habitats associated with watercourses. The CDFW jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider.

4.4.4 LOCAL

City of San Diego

According to City Municipal Code (Chapter 11, Article 3, Division 1), areas that are characterized by any of the following conditions are considered wetlands.

a. All areas persistently or periodically containing naturally occurring wetland vegetation communities characteristically dominated by hydrophytic vegetation, including but not limited to salt marsh, brackish marsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodlands, riparian scrub, and vernal pools;

b. Areas that have hydric soils or wetland hydrology and lack naturally occurring wetland vegetation communities because human activities have removed the historic wetland vegetation, or catastrophic or recurring natural events or processes have acted to preclude the establishment of wetland vegetation as in the case of salt pannes and mudflats;
c. Areas lacking wetland vegetation communities, hydric soils, and wetland hydrology due to non- permitted filling of previously existing wetlands; and/or
d. Areas mapped as wetlands on Map No. C-713 as shown in Chapter 13, Article 2, Division 6 (Sensitive Coastal Overlay Zone).

Within the CCPU area, the habitats considered to be City wetlands are presented in Table 3 and Figure 5, and include southern riparian forest, riparian woodland, riparian scrub, and non-native riparian.

4.5 WILDLIFE MOVEMENT CORRIDORS

Wildlife corridors are linear spaces of undeveloped native habitats that connect large natural open space and provide opportunities for wildlife movement either at a regional or local scale. Habitat linkages between wildlife corridors connect isolated blocks of habitat and allow movement or dispersal species over a large scale and the consequent mixing of genes between populations (i.e., gene pool diversity). Wildlife corridors and habitat linkages contribute to species' sustainability by providing access to adjacent habitat areas for dispersal, foraging, and mating. Wildlife movement corridors and linkages are considered sensitive by the City, resource agencies, and conservation groups.

Regional wildlife corridors exist along the northern boundary within San Clemente Canyon. The nearest regional corridor extends from the west to east via San Clemente Canyon south SR-52 then transitions north of SR-52 continuing through MCAS Miramar. Remaining undeveloped lands in the CCPU area occur in Tecolote Canyon, running north-south through the CCPU area. The undeveloped areas in the CCPU area are limited in scope by surrounding existing development, including major freeways, but otherwise serve as stepping stones and local links within and between the remaining habitat in the CCPU area and larger areas of native habitat and MHPA surrounding the CCPU area (i.e., Mission Bay and San Diego River Park open space areas to the south; Mission Trails Regional Park connections to the east, MCAS Miramar and Los Peñasquitos Canyon Preserve and San Diego National Wildlife Refuge to the north (Figure 6).

The CCPU area is likely to support urban adapted and migrating terrestrial wildlife species (i.e., birds, mammals, reptiles and amphibians, etc.), including the coyote (*Canis latrans*), and bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), and mountain lion (*Felis concolor*).

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APPENDIX A

EXPLANATION OF STATUS CODES FOR SENSITIVE PLANT AND WILDLIFE SPECIES

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EXPLANATION OF STATUS CODES FOR SENSITIVE PLANT AND WILDLIFE SPECIES

FEDERAL AND STATE CODES

U.S. FISH AND WILDLIFE SERVICE (USFWS)

1) BCC Bird of Conservation Concern
2) BGEPA Bald and Golden Eagle Protection Act
3) FC Federal candidate species
4) FE Federally listed endangered
5) FPD Federally proposed for delisting
6) FPE Federally proposed endangered
7) FPT Federally proposed threatened
8) FT Federally listed threatened

USFWS BIRDS OF CONSERVATION CONCERN (BCC)

The primary legal authority for Birds of Conservation Concern (2008) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Other authorities include the Endangered Species Act, Fish and Wildlife Act (1956) and 16 USC §701. A FWCA 1988 amendment (Public Law 100-653, Title VIII) requires the Secretary of the Interior through the USFWS to "identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973." The 2008 BCC report is the most recent effort by the USFWS to carry out this proactive conservation mandate.

The BCC report aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the USFWS' highest conservation priorities and draw attention to species in need of conservation action. The USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. Birds of Conservation Concern 2008 lists are available online at https://www.fws.gov/birds/management/managed-species/birds-of- conservation-concern.php.

USFWS FEDERAL CANDIDATE (FC) SPECIES

Federal candidate species are those for which the USFWS has on file "sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher-priority listing actions. [The USFWS] maintain[s] this list for a variety of reasons: to notify the public that these species are facing threats to their survival; to provide advance knowledge of potential listings that could affect decisions of environmental planners and developers; to provide information that may stimulate conservation efforts that will remove or reduce threats to these species; to solicit input from

interested parties to help us identify those candidate species that may not require protection under the [Endangered Species Act] or additional species that may require the Act's protections; and to solicit necessary information for setting priorities for preparing listing proposals" (Federal Register 70:90 [May 11, 2005]).

USFWS FEDERAL PROPOSED ENDANGERED (FPE) SPECIES

Any species the Service has determined is in danger of extinction throughout all or a significant portion of its range and the Service has proposed a draft rule to list as endangered. Proposed endangered species are not protected by the take prohibitions of section 9 of the ESA until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

USFWS FEDERAL PROPOSED THREATENED (FPT) SPECIES

Any species the Service has determined is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and the Service has proposed a draft rule to list as threatened. Proposed threatened species are not protected by the take prohibitions of section 9, consistent with any protective regulations finalized under section 4(d) of the ESA, until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW)

SCE State candidate for listing as endangered

SCT State candidate for listing as threatened

SE State listed endangered

SR State listed rare

ST State listed threatened

SSC State species of special concern

WL Watch List

FP Fully Protected species refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.

Special Animal Refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Database regardless of legal or protection status.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

For plants with no current federal or state legal standing, "CEQA" refers to the fact that under the Act, impacts to species may be found significant under certain circumstances (e.g., the species are regionally sensitive and/or are protected by a local policy, ordinance, or habitat conservation plan;

or the impact involves interference with certain movements or migrations, with wildlife corridors or with nursery sites).

OTHER CODES AND ABBREVIATIONS

CALIFORNIA NATIVE PLANT SOCIETY CALIFORNIA RARE PLANT RANK (CRPR) CODES

LISTS

1A = Presumed extirpated in California and either rare or extinct elsewhere. Eligible for state listing.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2A = Presumed extirpated in California but common elsewhere. Eligible for state listing.

2B = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Review List: Plants about which more information is needed. Some eligible for state listing.

4 = Watch List: Plants of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

LIST/THREAT CODE EXTENSIONS

.1 = Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

A “CA Endemic” entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension.

Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

MULTIPLE SPECIES CONSERVATION PROGRAM (MSCP) COVERED SPECIES

Multiple Species Conservation Program covered species for which the County of San Diego and City of San Diego have take authorization within the MSCP subarea and City of San Diego subarea.

MSCP NARROW ENDEMIC

Narrow endemic species are native species that have “restricted geographic distributions, soil affinities, and/or habitats.” The MSCP participants’ subarea plans have specific conservation measures to ensure impacts to narrow endemics are avoided to the maximum extent practicable.