

Appendices

Appendix I City of Anaheim: General Plan Focused Update Biological Resources Assessment

Appendices

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Biological Resources Assessment of the City of Anaheim General Plan Focused Update City of Anaheim, Orange County, California

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SECTION 1: INTRODUCTION

At the request of the City of Anaheim (City), FirstCarbon Solutions (FCS) conducted a Biological Resource Assessment (BRA) for the proposed General Plan Focused Update (Plan). The purpose of the BRA was to (1) document existing and potentially occurring biological resources in the City and immediately adjacent areas; (2) summarize relevant local, State and federal regulations; (3) analyze potential impacts that projects implemented under the Plan could have on regulated biological resources as required under the California Environmental Quality Act (CEQA); and (4) recommend appropriate measures to mitigate potential impacts of projects implemented under the Plan on biological resources to less than significant levels. This BRA was prepared to support the Environmental Impact Report (EIR) for the Plan prepared by RRM Design Group, LLC.

1.1 - Project Location and Setting

The plan area encompasses the City of Anaheim, which is approximately 35 miles southeast of downtown Los Angeles and 7 miles north of Santa Ana (Exhibit 1). The City is surrounded by the cities of Fullerton, Placentia, and Yorba Linda to the north; Riverside County to the east; the cities of Orange, Garden Grove, and Stanton and unincorporated Orange County to the south; and the cities of Cypress and Buena Park to the west (Exhibit 2). The City encompasses approximately 34,703 acres, oriented in an east-to-west configuration, largely along State Route (SR) 91. The City is located on the *Los Alamitos, California; Anaheim, California; Orange, California; and Black Star Canyon, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Maps.

Anaheim is known for tourist destinations and developments, including the Disneyland Resort, the Anaheim Convention Center, and professional sports venues. The City also includes more than 4,000 acres of passive and active parks and open space areas. Topographically, the western and central portions of the City are characterized by nearly flat ground that slopes gently to the southwest. This portion of the City is also characterized by a mix of suburban and urban development and is mostly urbanized. The eastern portion of the City, called the Hill and Canyon Area, extends generally along the Santa Ana River to the Riverside County line and includes a mixture of developed and undeveloped hillside terrain (Exhibit 3). Residential development in the Hill and Canyon Area largely consists of the various hillside communities in the Anaheim Hills neighborhood situated south of the Riverside Freeway (SR-91) and the Eastern Transportation Corridor (SR-241). Other relatively flat areas of the Anaheim Hills neighborhood are located north of the Santa Ana River and east of Imperial Highway, and generally south of the Santa Ana River at the intersection of the Riverside (SR-91) and Costa Mesa (SR-55) freeways. The Canyon Area is located north side of the Riverside Freeway (SR-91) between the Orange Freeway (SR-57) and Imperial Highway (Exhibit 3). The Canyon Area contains protected parks and open spaces, including the Santa Ana River Trail, Yorba Regional Park, Santiago Oaks Regional Park, Weir Canyon National Preserve, Gypsum Canyon Nature Preserve, Chino Hills State Park, and Coal Canyon Ecological Reserve. Together, the Anaheim Hills neighborhood situated south of SR-91 and the Canyon Area encompass the Hill and Canyon Area. Much of the Hill and Canyon Area is under jurisdiction of the County of Orange Natural Community Conservation Plan and Habitat Conservation Plan (CONCCP/HCP)(Exhibit 2).

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Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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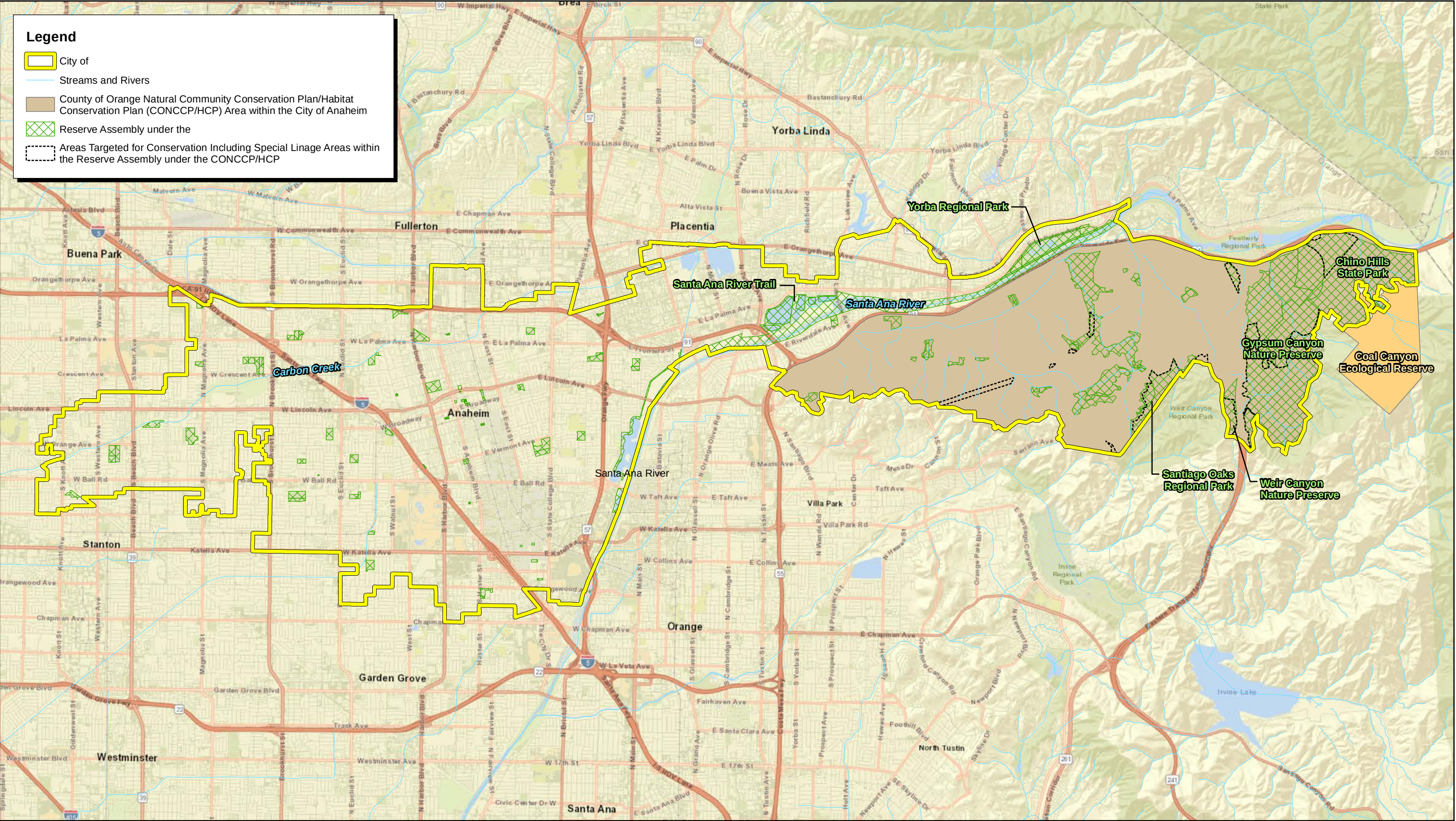
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Exhibit 1 Regional Location Map

CITY OF ANAHEIM
ANAHEIM CENTER CITY CORRIDORS
BIOLOGICAL RESOURCES ASSESSMENT

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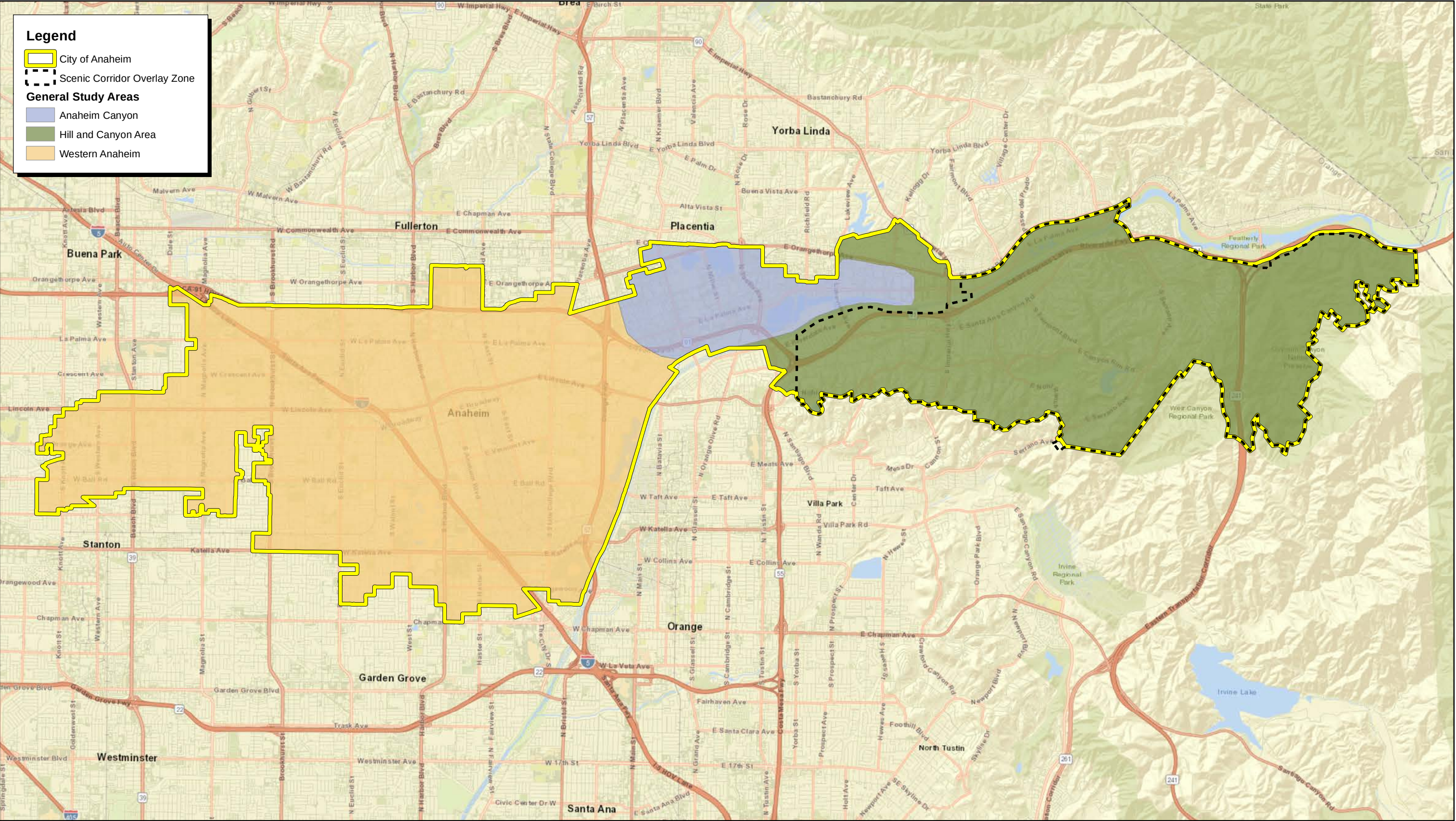


Source: ESRI World Street Map. City of Anaheim. Natural Community Conservation Program (NCCP) and Habitat Conservation Plan (HCP). California Protected Areas Database. California Department of Fish and Wildlife (CDFW)



Exhibit 2
City and Local Vicinity Map

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Source: ESRI World Street Map. City of Anaheim.



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1.2 - General Plan Focused Update Description

1.2.1 - Objectives of the General Plan Focused Update

The Plan is an effort by the City to update the existing General Plan for the next 20 years through the year 2045. The Plan will bring select elements (chapters) into compliance with State housing mandates; conform with new State laws related to community health, environmental justice, climate adaption, resiliency, and mobility; and bring long-term growth and fiscal projections into alignment with current economic conditions.

The following objectives have been established for the Plan and will aid decision-makers in their review of the project and associated environmental impacts:

- Provide a focused update to the City’s General Plan and Zoning Code to deal more effectively with State law housing and other requirements facing the City.
- Provide for the implementation of the Housing Element’s Housing Policy Consideration 8.0, Infill and Redevelopment, to rezone properties identified as “housing opportunities sites” in the 2021-2029 Housing Element, and apply the Mixed-Use Overlay Zone to facilitate “by right” housing development in these locations.
- Provide for a wide range of housing opportunities in close proximity to existing and future employment centers and transportation facilities, consistent with the need identified in the City’s 2021-2029 Housing Element and local and regional jobs/housing balance policies.
- Supporting intensification of the historic downtown Anaheim (Center City Corridors or C3) through the C3 Implementation Plan (C3IP), which identifies new and amended land use designations and zoning classifications.
- Focus multifamily residential development in key high-resource areas, thereby preserving single-family neighborhoods and supporting a reduction in VMT.
- Establish clear design standards to be employed in future development of multifamily and mixed-use projects citywide.
- Facilitate future use of the statutory infill housing exemption and other streamlining provisions allowed under CEQA by providing updated community-level environmental review.

1.2.2 - Project Background

The purpose of the City of Anaheim General Plan is to create a policy framework that articulates a vision for the City’s long-term physical form and development while preserving and enhancing the quality of life for Anaheim’s residents. In 2004, the Anaheim City Council adopted a comprehensive update of the General Plan and certified EIR No. 330 as the environmental documentation. The City also certified Supplemental EIR No. 346 for the Housing Opportunities Sites Rezoning Project. Since the 2004 comprehensive update, a number of changes to the General Plan and regulatory environment have occurred.

- The City has amended the General Plan over 75 times. These amendments continue to follow current General Plan policies and objectives, providing flexibility to enhance and guide development in diverse areas of the City.
- The City developed a new version of the Anaheim Traffic Analysis Model (ATAM).
- Updates to State density bonus law and State accessory dwelling unit (ADU) law, passage of Senate Bill (SB) 1000, SB 6, and Assembly Bill (AB) 2011.

Additionally, the City initiated preparation of the Center City Corridors Specific Plan (C3SP) in 2022. The C3SP was intended to guide future development within the 2,600-acre plan area by establishing a community-driven vision implemented by new land use designations and development standards that would build upon and improve conditions and attract economic investment in the plan area. A Notice of Preparation (NOP) was issued in support of an EIR that was to be prepared for the C3SP project. Subsequently, the City determined that any changes proposed for this area, which includes many of the candidate sites in the 2021-2029 Housing Element, could be incorporated into this General Plan Update.

1.2.3 - Project Description

The proposed project involves a focused update to specific elements of the City of Anaheim General Plan, as well as targeted updates to the City's Zoning Code and Zoning Map. The project area encompasses the City of Anaheim, which is approximately 35 miles southeast of downtown Los Angeles and 7 miles north of Santa Ana. Anaheim is surrounded by the cities of Fullerton, Placentia, and Yorba Linda to the north; Riverside County to the east; the cities of Orange, Garden Grove, and Stanton and unincorporated Orange County to the south; and the cities of Cypress and Buena Park to the west. The City encompasses over 32,00 acres of land, stretching nearly 20 miles along SR-91.

The proposed project involves a focused update of the City of Anaheim General Plan that reflects zoning and land use updates resulting from the 2021-2029 Housing Element to address the City's Regional Housing Needs Assessment (RHNA) growth allocation of 17,453 housing units. In addition to updates to the City's Zoning Code and Zoning Map to implement the 2021-2029 Housing Element, the City is updating the Circulation Element to reflect changes in transportation needs, new technologies, and future projects; and has prepared a new Environmental Justice Element, as required by State law (SB 1000).

SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the Endangered Species Act. Section 9 of the Endangered Species Act protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

A proposed project may acquire permission to “take” listed and candidate species through implementation of sections of the Endangered Species Act. If the proposed project is funded by, authorized by, or otherwise involves a federal agency, Section 7 requires those agencies to consult with the USFWS to ensure that the project does not jeopardize the future existence of any listed species. The consultation results in either a concurrence letter from USFWS stating that the proposed action does not jeopardize the species, or a Biological Opinion issued by USFWS that includes a defined limit of “take” of listed species that is authorized for the action. When there is no federal nexus to pursue Section 7 permissions, USFWS may authorize “take” of listed species through Section 10, which allows private landowners, corporations, Native American Tribes, States, cities, and counties to implement projects that could affect listed species. Under this process, the project proponent seeks “take” permissions through completing and submitting for approval an HCP approved by the USFWS. The HCP defines the project and potential for “take” of species, and outlines measures to mitigate or compensate for impacts that would occur during implementation of the project. Often a draft Implementing Agreement (IA) is included with the permit application for larger HCPs, such as a regional plan. An IA is a contract that describes the roles and responsibilities of the permit holder, the federal wildlife agency, and any other parties responsible for implementing the HCP.

2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq.*).

2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

2.1.4 - Clean Water Act

Section 404

The agencies are in receipt of the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in the *Sackett* case. In *Sackett*, the Supreme Court adopted the Rapanos plurality's test for adjacent wetlands: only those wetlands with a continuous surface connection to other regulated waters, such that the two are indistinguishable.

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The term "waters of the United States" is defined in USACE regulations at 33 Code of Federal Regulations Part 328.3(a) as:

1. Waters which are:
 - a. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
 - b. The territorial seas; or
 - c. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
3. Tributaries of waters identified in paragraphs (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
 - a. Waters identified in paragraph (a)(1) of this section; or
 - b. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

The following are not "waters of the United States":

1. Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
2. Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean

Water Act, the final authority regarding Clean Water Act jurisdiction remains with the United States Environmental Protection Agency (EPA);

3. Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
4. Artificially irrigated areas that would revert to dry land if the irrigation ceased;
5. Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
6. Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
7. Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
8. Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA and/or USACE.

"Wetland" refers to 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 conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM).

In general, a USACE permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the impacted acreage, the purpose of the proposed fill, and other factors.

Section 401

Section 401 of the CWA states that "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

2.2 - State

2.2.1 - CEQA Guidelines

The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or State Habitat Conservation Plan.

2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081). Under CESA, the California Fish and Game Commission may authorize taking of candidate species, and the CDFW may recommend that the Commission authorize (or not authorize) the taking of listed or candidate species (FGC § 2084).

2.2.3 - California Fish and Game Code

Rare, Threatened, and Endangered Species

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA, and Fish and Game Code Section 2081 established an Incidental Take Permit program for State-listed species. The CDFW maintains a list of "candidate species" which it formally notices as being under review for addition to the list of endangered or threatened species.

Fully Protected Species

Fish and Game Code Sections 3500–5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Species of Special Concern

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a "Species of Special Concern." The CDFW maintains lists of "Species of Special Concern" that serve as species "watch lists." Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Other Sensitive Species

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Native Bird Protection

Sections 3503, 3503.5, and 3513 protect native birds. Under Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any native bird. Under Fish and

Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird. Under Fish and Game Code Section 3513, it is unlawful to take or possess any native, migratory bird as designated in the MBTA except as provided by rules and provisions of the MBTA. Mitigation for avoidance of impacts to nesting birds is typically included in CEQA and other permitting documents to ensure project compliance with these Fish and Game Code Sections.

Native Plant Protection Act

The Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right-of-way.” Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

Lake or Streambed Alteration

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

Natural Community Conservation Planning Act

Section 2800 of the California Fish and Game Code establishes the Natural Community Conservation Planning Act (NCCP Act), which allows the CDFW to authorize Natural Community Conservation Plans (NCCPs) to allow “take” of species listed under CESA and other sensitive species and vegetation communities on a regional scale. The primary objective of the NCCP Act is to conserve covered natural communities and species at the ecosystem scale while accommodating compatible land uses, or covered activities. NCCPs must provide conservation and management of natural communities and species and in perpetuity within the area covered by permits. Each NCCP provides measures necessary to conserve and manage sensitive biological resources, including natural vegetation communities and the plant and wildlife species they support, within a Reserve System, while also allowing compatible developments and other projects to take species and habitats under special conditions outside of areas targeted for conservation. NCCPs are different from HCPs because the NCCP Act requires that conservation actions improve the long-term conservation of species, whereas HCPs typically only require avoidance of adverse impacts to species. Additionally, while HCPs can be implemented at a

project or regional scale, an NCCP must be applied across regional scales to promote the long-term recovery of species, protection of habitats and natural communities, and maintenance of species diversity at the landscape level.

2.2.4 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the State” (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the State” (Water Code § 13050(e)).

2.2.5 - California Native Plant Society Rare Plant Rankings

The CNPS maintains a rank of plant species native to California that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere
- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations.¹

2.2.6 - California Oak Woodlands Conservation Act (AB 242)

The State of California enacted the California Oak Woodlands Conservation Act in 2001. It established requirements for the preservation and protection of oak woodlands and trees, and allocated funding to be managed by the Wildlife Conservation Board that would support a variety of ways to preserve oak woodlands throughout the State. In order to qualify to use these funds, counties were required to adopt an oak woodland conservation management plan. In 2004, SB 1334 (Public Resources Code Section 21083.4) expanded this preservation effort by requiring that a county, “in determining whether CEQA requires an EIR, Negative Declaration (ND), or Mitigated Negative Declaration (MND), to determine whether a project in its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment, and would require the county, if it determines there may be a significant effect to oak woodlands, to require

¹ California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. January 21, 2020.

one or more of specified mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands.”

2.3 - Regional and Local

2.3.1 - City of Anaheim General Plan

The City of Anaheim General Plan contains goals and policies in the Green Element concerned with protecting and preserving natural resources and open space areas. These natural resources and open space areas include wetland and riparian areas, fish and wildlife habitat, and vegetation specific goals and policies.²

Goal 14.1 Conserve natural habitat and protect rare, threatened, and endangered species.

Policy 14.1-1 Support efforts to preserve natural habitat through continued participation in the County of Orange Central and Coastal Subregion Natural Communities Conservation Plan.

Goal 14.2 Support educational outreach programs related to habitat resources and conservation efforts.

Policy 14.2-1 Encourage and support regional efforts to educate the public about habit resources and conservation efforts.

Goal 14.3 Ensure that future development near regional open space resources will be sensitively integrated into surrounding sensitive habitat areas.

Policy 14.3-1 Require new development to mitigate light and glare impacts on surrounding sensitive habitat and open space areas, where appropriate.

2.3.2 - City of Anaheim Municipal Code

Chapter 11.12 Designation of Landmark Trees

11.12.010 Landmark Trees Designated by City Council

Upon recommendation of the Director of Community Services, the City Council may designate as a Landmark Tree any tree on public property. In making such a designation, the City Council shall consider the age, size, shape, species, location, historical association, visual quality or other contribution which the tree makes to the City’s character.

11.12.020 Removal of Landmark Trees Prohibited

No Landmark Tree shall be removed without prior approval of the City Council, which approval shall be based upon one or more of the following findings:

² City of Anaheim. 2004. City of Anaheim General Plan - Green Element, Biological Resources. Website: <https://www.anaheim.net/DocumentCenter/View/2185/53-Biological-Resources-?bidId=>. Accessed November 27, 2024.

- The Landmark Tree poses a threat to the public health or safety due to its general condition, the potential of the tree falling, the tree's proximity to existing or proposed structures, the tree's interference with utility services, and/or the tree's status as a host for parasitic plants, pests or diseases endangering other species of trees or plants with infection or infestations;
- Removal is necessary to allow construction of improvements or otherwise allow economic or other reasonable enjoyment of adjoining property;
- The Landmark Tree has or will have an adverse effect on soil retention, water retention, and/or diversion or increased surface water;
- Removal of the Landmark Tree will not have an adverse effect on shade areas, air pollution, historic values, scenic beauty and the general welfare of the City as a whole given the number, species, size and location of existing trees in the area of the Landmark Tree; and
- Removal of the Landmark Tree is consistent with good forestry practices such as, but not limited to, consideration of the number of healthy trees a given parcel of land will support.

Chapter 13.12 Street Trees

13.12.080 Interference with Street Trees—Permission Required

- No person shall top or in any other manner injure or damage any street tree. For purposes of this section, the term "top" shall mean to damage a tree by the practice of severely cutting back large diameter branches and/or the trunk of a tree which results in substantially reducing the overall size of the tree and/or destroying the symmetrical appearance or structural shape of the tree.
- No person shall cut, trim, prune, plant, remove, spray, or in any other manner interfere with any street tree within the City of Anaheim without first having secured written permission from the Director of Community Services or his or her designee.

18.18.040 Tree Preservation

- Established, single specimen trees within the Scenic Corridor (SC) Overlay Zone require a Specimen Tree Removal Permit. Specimen trees are any tree of the oak variety (*Quercus spp.*) with a trunk measuring twenty-five (25) inches or greater in circumference, pepper (*Schinus spp.*), and sycamore (*Platanus spp.*), with trunks measuring fifty (50) inches or greater in circumference. The removal of specimen trees require an Administrative Specimen Tree Removal Permit under Section 18.18.040.030 of the Tree Preservation Ordinance.
- Any Specimen Trees that are removed before an application is approved must obtain a Discretionary Specimen Tree Removal Permit by the City's Planning and Building Department to remove or "top" selected specimen trees under Section 18.18.040.040 of the Tree Preservation Ordinance.
- Any specimen trees destroyed pursuant to a permit issued by the City shall be replaced on the same parcel, or in the public right-of-way located in the immediate vicinity, as directed by the City.

2.3.3 - County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan

The CONCCP/HCP is one of the first regional plans developed and implemented in California under the NCCP Act. It was designed to conserve coastal sage scrub communities and species on a regional scale, as well as to assemble a reserve and linkage system that would facilitate wildlife movements between conserved areas and through the region. The CONCCP/HCP is authorized by the CDFW through the NCCP Act (California Fish and Game Code Section 2800) and Sections 2081 and 2084 of CESA, and by the USFWS through Sections 7 and 10 of the Endangered Species Act. Within the City of Anaheim, the CONCCP/HCP covers the eastern portion of the City, encompassing the Hill and Canyon Area (Exhibit 2). Under the CONCCP/HCP plan, lands in this area of the City include the Reserve System, Special Linkage Areas, and Existing Use Areas (Exhibit 4). The Reserve System consists of lands that are permanently preserved to conserve coastal sage scrub resources and associated habitats in the northern and southern portions of the City. Special Linkage Areas are private lands in the northern and southern portions of the City, adjacent to Reserve System lands, owned by Participating Landowners that are targeted for conservation within the Reserve System. Participating Landowners are parties that have committed to making land contributions to the Reserve System. Existing Use Areas in the northwestern and southern portions of the City are private lands owned by Non-participating Landowners that contain open space areas occupied by resources covered by the plan. Non-participating Landowners are private landowners that are not signatories to the CONCCP/HCP.

The CONCCP/HCP was designed primarily to address protection and management of Identified Species, coastal sage scrub (CSS), and other Covered Habitats, including oak woodlands, chaparral (for the Coastal Subregion of the CONCCP/HCP only), Tecate cypress forest, and cliff and rock habitats.

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The CONCCP/HCP originally covered 39 Identified Species, but has been updated (as recently as April 2023) to cover 44 Identified Species, including:

- American peregrine falcon (*Falco peregrinus anatum*)
- aboreal salamander (*Aneides lugubris*)
- Arroyo toad (*Anaxyrus californicus*)
- blackbelly slender salamander (*Batrachoseps nigriventris*)
- Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)
- Catalina mariposa lily (*Calochortus catalinae*)
- cliff spurge (*Euphorbia misera*)
- coast horned lizard (*Phrynosoma coronatum blainvillii*)
- coastal cactus wren (*Campylorhynchus brunneicapillus cousei*)
- coastal California gnatcatcher (*Polioptila californica californica*)
- San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*)
- Coronado Island skink (*Plestiodon skiltonianus interparietalis*)
- Coulter's matilija poppy (*Romneya coulteri*)
- coyote (*Canis latrans*)
- golden eagle
- gray fox (*Urocyon cinereoargenteus*)
- heart-leaved pitcher sage (*Lepichinia cardiophylla*)
- intermediate mariposa lily (*Calochortus weedii* var. *intermedius*)
- Laguna Beach dudleya (*Dudleya stolonifera*)
- least Bell's vireo (*Vireo bellii pusillus*)
- northern harrier (*Circus cyaneus*)
- Nuttall's scrub oak (*Quercus dumosa*)
- orange-throated whiptail (*Aspidoscelis hyperythra*)
- pacific pocket mouse (*Perognathus longimembris pacificus*)
- Palmer's grapplinghook (*Harpagonella palmeri*)
- prairie falcon (*Falco mexicanus*)
- Quino checkerspot butterfly (*Euphydryas editha quino*)
- red-diamond rattlesnake (*Crotalus ruber*)
- red-shouldered hawk (*Buteo lineatus*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- rosy boa (*Charina trivirgata*)
- rough-legged hawk (*Buteo lagopus*)
- San Bernadino ringneck snake (*Diadophis punctatus modestus*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- San Diego fairy shrimp (*Branchinecta sandiegonensis*)
- Santa Monica Mountains dudleya (*Dudleya cymosa* spp. *ovatifolia*)
- scrub oak (*Quercus berberidifolia*)
- sharp-shinned hawk (*Accipiter striatus*)
- small-flowered mountain mahogany (*Cercocarpus minutiflorus*)
- southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)

- Tecate cypress (*Hesperocyparis forbesii*)
- western dichondra (*Dichondra occidentalis*)
- western spadefoot (*Spea hammondi*)

Three species, including orange-throated whiptail, coastal California gnatcatcher, and coastal cactus wren, are identified as Target Species under the plan, as these species are obligate CSS species, meaning they are restricted to occupying this vegetation community/habitat type. Several species are considered conditionally covered under the CONCCP/HCP, including intermediate mariposa lily, arroyo toad, least Bell's vireo, southwestern willow flycatcher, Riverside fairy shrimp, San Diego fairy shrimp, golden eagle, and prairie falcon. Take of these species is authorized only when certain conditions are met, including, but not limited to, consultation with USFWS, species surveys, avoidance and minimizations measures, project redesign, or mitigation and monitoring plans.

The County of Orange is the lead agency in implementing the CONCCP/HCP under a Memorandum of Understanding (MOU) and IA with the CDFW and USFWS. Eleven cities within Orange County are also signatories to the MOU and IA. The Reserve System that would be assembled under the CONCCP/HCP includes portions of the following jurisdictions:

- City of Anaheim
- City of Costa Mesa
- City of Irvine
- City of Laguna Beach
- City of Newport Beach
- City of Orange
- City of San Juan Capistrano
- Unincorporated Orange County

Participating Landowners are public and private landowners that contribute significant land and/or funding toward implementing the Reserve System and their activities and developments are covered under the CONCCP/HCP through their participation in it. Participating Landowners include:

- Southern California Edison
- Metropolitan Water District of Southern California
- Irvine Ranch Water District
- Santiago County Water District
- Transportation Corridor Agencies
- M.H. Sherman Company/Chandis Securities Company/Sherman Foundation
- The Irvine Company
- University of California, Irvine
- California Department of Parks and Recreation
- California Department of Fish and Wildlife
- County of Orange

Other landowners in the CONCCP/HCP plan area who are not contributing significant land or funding toward implementing the Reserve System are Non-participating Landowners. Non-participating

Landowners may take Identified and Target Species, CSS, and Covered Habitats within city jurisdictions either through payment of the CONCCP/HCP Mitigation Fee or, alternatively, through acquisition of State and/or federal Incidental Take Permits, as applicable. The CONCCP/HCP Mitigation fees are paid to the NCCP Not-Profit Corporation that uses the funds to manage the Reserve System lands and resources.

Signatory cities are required, under the CONCCP/HCP and as applicable to:

- 1) Consider amending general plans, zoning ordinances, or other implementing ordinances to comply with State planning and zoning requirements;
- 2) Adopting fuel modification ordinances that are consistent with CONCCP/HCP fuel modification policies in areas bordering the Reserve System, and within Special Linkage Areas and Special Use Areas;
- 3) Reviewing projects proposed within the Reserve System on city-owned lands to verify project compliance with the CONCCP/HCP;
- 4) Ensuring that Non-participating Landowners provide evidence of payment of the CONCCP/HCP Mitigation Fee to the NCCP Nonprofit Organization if they choose this option for take of covered species;
- 5) Recording and compiling information about Identified Species, CSS, and other Covered Habitats occurrences and reporting losses and mitigation of these resources to the County annually;
- 6) Ensure that construction-related minimization measures contained within the CONCCP/HCP EIR/EIS are implemented by project owners;
- 7) Making efforts to acquire conservation easements in Existing Use Areas owned by Non-participating Landowners;
- 8) Formally committing and managing city-owned lands within the Reserve System;
- 9) Accepting and using the CONCCP/HCP EIR/EIS to guide CEQA mitigation of impacts of Planned Activities to CSS, other Covered Habitats, and Identified Species;
- 10) Recognize the mitigating values of preservation of non-CSS resources in the Reserve System; and
- 11) Committing to the CSS, Identified Species, and Covered Habitat mitigation assurances.

The reserve that will be assembled for conservation in the CONCCP/HCP plan area includes existing protected lands (parks and designated open space) and unprotected lands that contain Target Species habitat, habitat linkages, biodiversity habitat, and areas with restoration opportunities. The plan also identifies Special Linkages and Management Areas where proposed develop projects or existing land uses provides either an opportunity to voluntarily conserve Target Species in an area that would otherwise be difficult to acquire for the reserve or an area where land uses are compatible with conservation. The goal of the COHCCP/HCP would be to enhance connectivity functions in these areas. Lands identified as Special Linkages provide opportunities to conserve

habitat linkages for Target Species while also permitting projects or land uses that are compatible with conservation.

The CONCCP/HCP was executed in 1996 and has a term of 75 years.

2.3.4 - Orange County General Plan

Land Use Element

The Land Use Element designates an Open Space and Open Space Reserve land use categories to support the open space and natural resource plans contained within the Resources Element and establishes standards for typical intensity, population density, characteristics, and uses of these land categories. The Land Use Element identifies major parks, beaches, forests, harbors, and other territory that will always remain open space, including urban regional parks, wilderness regional parks, and County wilderness areas. The Land Use Element achieves internal consistency with all other General Plan elements by incorporating and implementing their land use concerns and recommendations, including the CONCCP/HCP.

Resources Element

The Resources Element contains official County policies on the conservation and management of resources, including natural and water resources. The Natural Resources Component of the Resources Element contains policies and programs which are designed to protect and conserve these areas. The Resources Element outlined Goals and Objectives to managing resources, including:

Goal 1 Protect wildlife and vegetation resources and promote development that preserves these resources.

Objective 1.1 To prevent the elimination of significant wildlife and vegetation through resource inventory and management strategies.

Programs included in the Resource Element to achieve these goals and objectives include:

- The County's Oak Resources Management Program, which seeks to preserve oak woodland areas through regional park and open space acquisitions.
- The CONCCP/HCP, which seeks to conserve CSS and other Covered Habitats and Identified Species.

The Resource Element also includes an Open Space Component that defines goals, objectives, policies, and programs to promote the preservation and protection of resource areas.

SECTION 3: METHODS

3.1 - Desktop Analysis

FCS Biologists conducted a desktop analysis that included a review of literature, maps, and aerial imagery and queries of databases. The information obtained during the desktop analysis provided a baseline from which to evaluate potential impacts of projects implemented under the Plan on biological resources in the City and adjacent areas.

3.1.1 - Existing Documentation

As part of the desktop analysis, FCS Biologists examined existing environmental documentation for the City and immediate vicinity. This documentation included literature regarding habitat requirements of special-status species with the potential to occur in the City and listing documents, protocols, and species data provided by the USFWS and CDFW.

3.1.2 - Topographic Maps and Aerial Photographs

FCS Biologists reviewed current USGS 7.5-minute topographic quadrangle map(s)³ and aerial photographs as a preliminary analysis of the existing conditions within the city limits and immediate vicinity. Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations. FCS Biologists also accessed the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).⁴ Google Earth imagery and aerial photographs provided additional perspectives of the current conditions within the City relative to land use, natural vegetation community locations, potential jurisdictional features, and potential locations of wildlife movement corridors.

3.1.3 - Soil Surveys

FCS Biologists also reviewed United States Department of Agriculture (USDA) soil surveys to establish if soil conditions in City are suitable for supporting populations of special-status plant species.⁵ These soil profiles include soil series with similar thickness, arrangement, and other important characteristics. The soil series consist of separate soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the City and to establish if soil conditions are suitable for occurrence any special-status plant species.

³ United States Geological Survey (USGS). 2023. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed November 27, 2024.

⁴ United States Environmental Protection Agency (EPA). 2023. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed November 27, 2024.

⁵ Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed November 27, 2024.

3.1.4 - Special-status Species Database Search

FCS Biologists compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the City and immediate vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,⁶ the CNDDDB, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California.^{7,8} The CNDDDB search focused on species records from the *Anaheim, California* and *Orange, California* USGS 7.5-minute Topographic Quadrangle Maps and the 10 surrounding quadrangles. The CNPSEI search also focused on records from *Anaheim, California* and *Orange, California* USGS 7.5-minute Topographic Quadrangle Maps and the 10 surrounding quadrangles. The CNDDDB Biogeographic Information and Observation System (BIOS 6) was accessed to determine additional information about the locations of species occurrences.⁹

The potential for occurrence of special-status species in the City was assessed for each species identified in the database searches. Occurrence potential was assessed based on ecological conditions in the City, habitat requirements of special-status species, and number of recent (< 20 years old) occurrences in the City and vicinity.

3.1.5 - Vegetation Mapping

FCS Biologists reviewed several sources of information to describe and map vegetation communities and land cover types in the City. These sources included CONCCP/HCP plan documents, Aerial Information Systems, Inc. (AIS) Final Vegetation Mapping Report, the CDFW Vegetation Classification and Mapping Program (vegCAMP), and aerial photography.^{10,11} Vegetation communities were categorized and described following Manual of California Vegetation (MCV) and cross-referenced with the CDFW Natural Communities List.¹²

Trees and Native Vegetation

FCS Biologists reviewed applicable City, County, and State ordinances and laws pertaining to tree and native vegetation preservation and protection and ascertained whether projects implemented under the Plan would require measures or permits to remove, replace, or transplant protected trees or native vegetation.

⁶ United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed November 27, 2024.

⁷ California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed November 27, 2024.

⁸ California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed November 27, 2024.

⁹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

¹⁰ Aerial Information Systems, Inc. (AIS). 2015. Final Vegetation Mapping Report. Website: <https://occonservation.org/wp-content/uploads/2020/03/AIS-Final-Revised-Report-5-12-15.pdf>. Accessed November 27, 2024.

¹¹ California Department of Fish and Wildlife (CDFW). 2023. Vegetation Classification and Mapping Program. Website: <https://wildlife.ca.gov/Data/VegCAMP>. Accessed November 27, 2024.

¹² Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento.

3.1.6 - Jurisdictional Waters and Wetlands

FCS Biologists reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.¹³ In general, all surface drainage features identified as blue line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. This information was used to determine whether and where projects implemented under the Plan would be subject to these regulations.

¹³ United States Fish and Wildlife Service (USFWS). 2019. Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*). Website: <https://ipac.ecosphere.fws.gov/location/X3274CQKMZEYBOBDWKNITOS454/documents/generated/6342.pdf>. Accessed November 27, 2024.

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SECTION 4: RESULTS

This section summarizes the results of the literature search, map reviews, and aerial imagery reviews conducted during the desktop analysis. The results of the database queries of sensitive biological resources records and an analysis for the potential for occurrence of these resources in the City are presented in Section 5.

4.1 - Desktop Analysis

4.1.1 - Environmental Setting

The City of Anaheim is mostly urbanized and is largely surrounded by other developed cities. In this portion of Orange County, there are few remaining areas of natural habitat. The developed areas of the City support predominantly non-native species of plants that are associated with landscaping or disturbed areas and animals that are tolerant of human-altered landscapes. The Hill and Canyon Area, located in the eastern portion of the City, includes undeveloped areas that support the majority of remaining significant biological resources in the City, including natural vegetation communities and special-status species.¹⁴

The Hill and Canyon Area are topographically complex areas with steep, wooded and forested canyons and intervening scrub and chaparral-covered ridges. Significant portions of the Hill and Canyon Area are relatively undisturbed. Several blue line streams occur in this area of the City, as do several natural vegetation communities considered sensitive CDFW due to their scarcity and their ability to support special-status species. Sensitive vegetation communities found within this area of the City and its immediate vicinity include CSS communities, coast live oak communities (oak savanna and oak woodland), Tecate cypress communities, nolina chaparral, needlegrass grassland, and riparian communities, described further below.

Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) mapped numerous soils series types in the undeveloped portions of the City that are part of one of the following orders: Alfisols, Entisols, Inceptisols, Mollisols, and Vertisols. Alfisols are in semi-arid to moist areas and are soils that have an argillic, a kandic, or a natric horizon and a base saturation of 35 percent or greater. Entisols are soils that show little or no evidence of pedogenic horizon development and many are sandy or very shallow. Inceptisols are soils of semi-arid to humid environments that generally exhibit only moderate degrees of soil weathering and development. Mollisols are soils that have a dark colored surface horizon relatively high in content of organic matter and are base rich throughout and therefore quite fertile. Vertisols have a high content of expanding clay minerals and they undergo pronounced changes in volume with changes in moisture. These soil types are primarily found in the undeveloped areas, including the Hill and Canyon Area. Soils in the developed areas would be classified as Anthrosols due to the heavy modification by humans.

¹⁴ City of Anaheim. 2015. City of Anaheim General Plan Update Final EIR. Website: <https://www.anaheim.net/DocumentCenter/View/2185/53-Biological-Resources-?bidId=>. Accessed November 27, 2024.

Vernal Pool Soils

There are soils series present in the Hill and Canyon Area that are known to support vernal pool development. These soil series include Alo, Balcom, Bosanko, Calleguas, Cieneba, Cropley, and Myford soils series. If present, vernal pools could support certain rare plant species, special-status fairy shrimp species, and other vernal pool-dependent special-status species.

4.1.2 - Vegetation Communities and Land Use

The vegetation communities and land cover types recorded in the City and its immediate vicinity are described below. A map showing vegetation communities and land cover types is presented in Exhibit 5

Grassland Communities

Grassland communities consist of low, herbaceous vegetation that are dominated by grasses but generally also harbor native forbs and bulbs as well as annual forbs. Topographic factors that contribute to grassland presence include lower slopes, swales, rocky hills, flat ridges, talus slopes, and, and in canyons, and on sandy or gravelly alluvial fans in areas below 3,000 feet in elevation. Soils are coarse textured with no profile development.¹⁵ The species richness of grassland communities is dependent upon a number of land use factors, including intensity and duration of natural or anthropogenic disturbances such as grazing. Heavily grazed grasslands have a lower species richness. Common grassland alliances are described below. Other grassland alliances may be present in the Hill and Canyon Area and potentially other areas of the City.

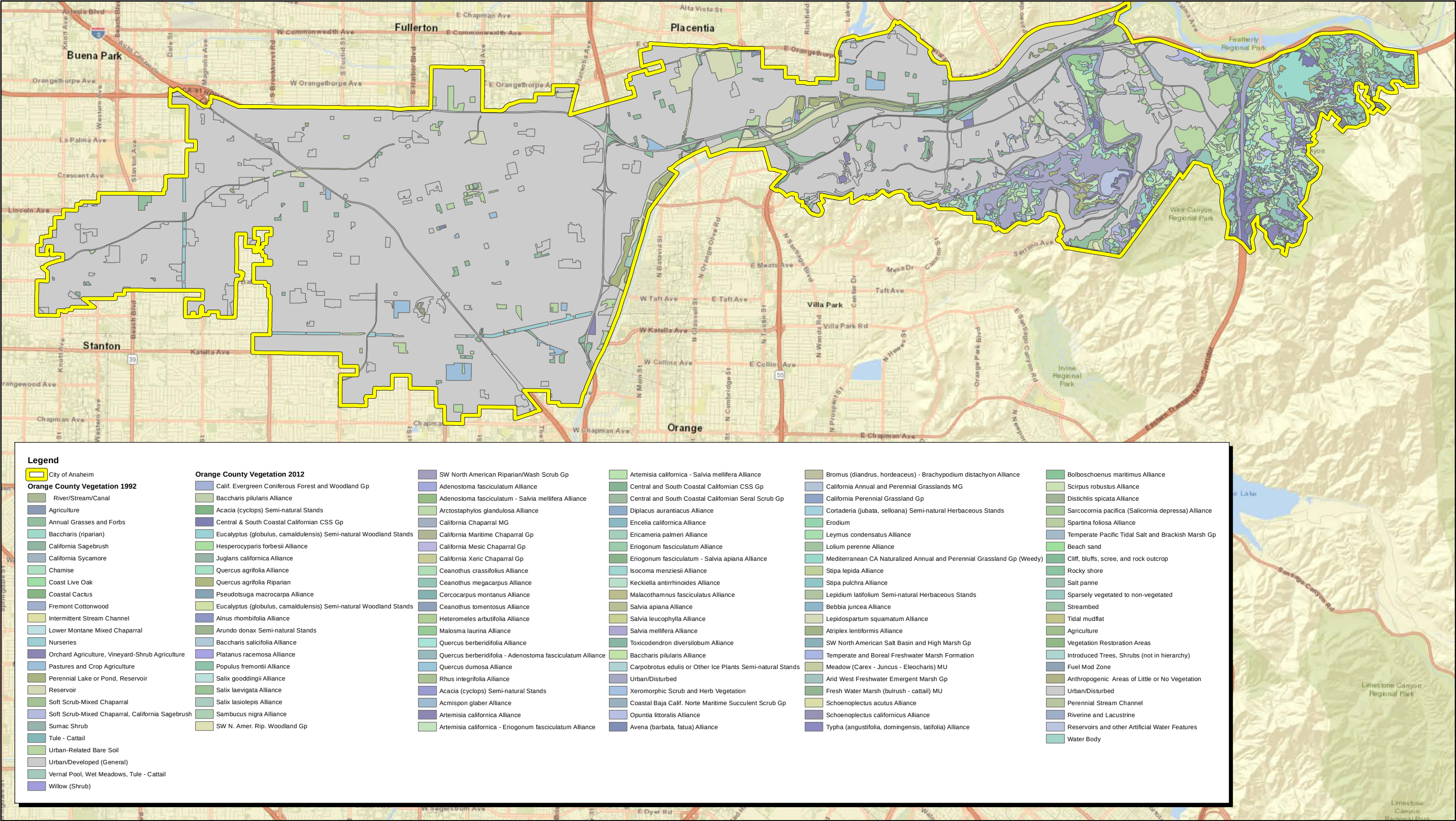
Wild Oats and Brome Grasslands

Many of the grasslands in the City are likely comprised of wild oats and annual brome grasslands (MCV: *Avena* spp.–*Bromus* spp. Herbaceous Semi-Natural Alliance), particularly in areas that were previously disturbed or support historically grazed lands. This community is found in foothills, waste places, rangelands, openings in woodlands. It includes stands of primarily annual, non-native species, including slender wild oat (*Avena barbata*), common wild oat (*Avena fatua*), rip-gut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), red brome (*Bromus madritensis* ssp. *rubens*), and/or foxtail barley (*Hordeum murinum*), with other non-natives in the herbaceous layer.

Needle Grass–Melic Grass Grassland

Needle grass–melic grass grassland (MCV: *Nassella* spp.–*Melica* spp. Herbaceous Alliance) is found in relatively undisturbed areas, particularly those that contain deep soils derived from mudstone, sandstone, or serpentine substrates. These perennial grasslands include predominantly native species, including nodding needlegrass (*Stipa cernua*), foothill needlegrass (*Stipa lepida*) and/or purple needlegrass (*Stipa pulchra*), with other perennial grasses and herbs in the herbaceous layer.

¹⁵ California Native Plant Society. 2023. CNPS Manual of California Vegetation. Website: <https://vegetation.cnps.org/>. Accessed November 27, 2024.



Source: ESRI World Street Map. California Department of Fish and Wildlife Vegetation Classification and Mapping Program (VegCAMP)



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Exhibit 5 Vegetation Community/Land Cover Map

CITY OF ANAHEIM
ANAHEIM CENTER CITY CORRIDORS
BIOLOGICAL RESOURCES ASSESSMENT

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Chaparral Communities

Chaparral communities consist of evergreen, medium height to tall sclerophyllous shrubs that form a dense cover on steep slopes. The dense, almost impenetrable, cover allows very little to no understory growth and usually consists mostly of leaf litter. Several types of chaparral exist within the Hill and Canyon Area depending upon the dominant species. Chaparral communities found within the City include nolina scrub, scrub-chaparral ecotone/sere, chamise-sagebrush, chamise-sage scrub, mixed chaparral, chamise chaparral, bigpod chaparral, scrub oak chaparral, and toyon-sumac chaparral.

Nolina Scrub

Nolia scrub (MCV: *Nolina (bigelovii, parryi)* Shrubland Alliance) occurs in the Canyon Area of the City, where it may be found on slopes and ridges with rocky soils, derived from bedrock or colluvium, with substrates largely granitic or crystalline metamorphic materials, including calcareous substrates. Chaparral nolina is dominant in the shrub canopy, which is characterized as open to intermittent.

Chamise Chaparral

Chamise chaparral (MCV: *Adenostoma fasciculatum* Shrubland Alliance) is a widespread and common chaparral association that is found in varied topographies with shallow soils over colluvium derived from many kinds of bedrock. Chamise (*Adenostoma fasciculatum*) is dominant in the shrub canopy, with other common species represented, including Eastwood manzanita (*Arctostaphylos glandulosa*), ceanothus (*Ceanothus* spp.), inland scrub oak, black sage (*Salvia mellifera*), and chaparral yucca (*Hesperoyucca whipplei*).

Chamise–Sage Chaparral

Chamise–sage chaparral (MCV: *Adenostoma fasciculatum*–*Salvia* spp. Shrubland Alliance) is found on lower to upper east-facing slopes in areas with rocky, shallow soils. Chamise, white sage (*Salvia apiana*) and black sage are co-dominant in the shrub canopy. Other species commonly found in this community include thicket yerba santa (*Eriodictyon crassifolium*), chaparral yucca, and California buckwheat (*Eriogonum fasciculatum*), and deerweed (*Acmispon glaber*), among others.

Scrub Oak Chaparral

Scrub oak chaparral (MCV: *Quercus berberidifolia* Shrubland Alliance) is primarily found on north-facing, steep slopes with deep to shallow rocky soils. Inland scrub oak is the dominant species in a typically continuous shrub canopy, with other co-dominants that include chamise, mountain mahogany (*Cercocarpus betuloides*), ceanothus species, and manzanita species (*Arctostaphylos* spp.), among others. Scrub oak chaparral may qualify, in some instances, as oak woodlands that are considered Covered Habitats protected under the CONCCP/HCP.

Hollyleaf Cherry–Toyon–Greenbark Ceanothus Chaparral

Holly leaf cherry–toyon–greenbark ceanothus chaparral (MCV: *Prunus ilicifolia*–*Heteromeles arbutifolia*–*Ceanothus spinosus* Shrubland Alliance) is found on steep north-facing slopes with an open or continuous canopy. Greenbark ceanothus (*Ceanothus spinosus*), toyon (*Heteromeles arbutifolia*) and/or hollyleaf cherry (*Prunus ilicifolia*) are dominant or co-dominant in the shrub

canopy. Other species commonly found in this community include mountain mahogany, inland scrub oak, and California buckwheat, among others.

Birch Leaf Mountain Mahogany Chaparral

Birch leaf mountain mahogany chaparral (MCV: *Cercocarpus montanus* Shrubland Alliance) is found on upper slopes with shallow, rocky soils. Birch leaf mountain mahogany (*Cercocarpus cercocarpus*) is dominant or co-dominant in the shrub or small tree canopy. Other species commonly found in this community include chamise, manzanitas, ceanothus, chaparral yucca, inland scrub oak, toyon, laurel sumac (*Malosma laurina*), and hollyleaf cherry, among others.

Coastal Scrub Communities

CSS communities consist of drought-deciduous, low, soft-leaved shrubs and herbs on gentle to steep slopes below 3,000 feet in elevation. Several dominant species occur within coastal scrub communities and some areas may be overwhelmingly dominated by one or two species. In addition, several coastal scrub communities support representative dominant species of two separate communities and are designated as such. CSS communities are Covered Habitats that are protected under the CONCCP/HCP.

California Sagebrush—(Purple Sage) Scrub

California sagebrush—(purple sage) scrub (MCV: *Artemisia californica*—[*Salvia leucophylla*] Shrubland Alliance) is found on steep slopes, low-gradient deposits along streams. California sagebrush (*Artemisia californica*) and/or San Luis purple sage (*Salvia leucophylla*) are dominant or co-dominant in the shrub canopy. Other species commonly found in this community include chamise, coyote brush (*Baccharis pilularis*), California buckwheat, ashyleaf buckwheat (*Eriogonum cinereum*), deerweed, coast prickly pear (*Opuntia littoralis*), sugar bush (*Rhus ovata*), orange bush monkeyflower (*Diplacus aurantiacus*), and Menzies' goldenbush (*Isocoma menziesii*), among others.

California Sagebrush—Black Sage Scrub

California sagebrush—black sage scrub (MCV: *Artemisia californica*—*Salvia mellifera* Shrubland Alliance) is found on steep, east- to southwest-facing slopes in soils that are usually derived from colluvial. California sagebrush and black sage are co-dominant, and other species commonly found in this community include chamise, orange bush monkeyflower, California brittlebush (*Encelia californica*), California buckwheat, chaparral yucca, deerweed, laurel sumac, sugar bush, lemonade berry (*Rhus integrifolia*), and white sage, among others.

California Buckwheat—White Sage Scrub

California buckwheat—white sage scrub (MCV: *Eriogonum fasciculatum*—*Salvia apiana* Shrubland Alliance) is found on rocky, south-facing slopes in sandy loam soils. California buckwheat and white sage dominate the shrub canopy. Other species commonly found in this community include chamise, California sagebrush, sugar bush, and white sage, among others.

White Sage Scrub

White sage scrub (MCV: *Salvia apiana* Shrubland Alliance) is found on dry slopes, benches, and rarely flooded low-gradient deposits along streams in shallow, coarse loams. Stands are dominated by

white sage. Other species commonly found in this community include California sagebrush, orange bush monkeyflower, brittlebush (*Encelia farinosa*), California buckwheat, chaparral yucca, Menzies' goldenbush, chaparral bush mallow (*Malacothamnus fasciculatus*), and sugar bush, among others.

Black Sage Scrub

Black sage scrub (MCV: *Salvia mellifera* Shrubland Alliance) is found on dry slopes and alluvial fans in shallow soils. Black sage is the dominant species. Other species commonly found in this community include chamise, California sagebrush, coyote brush, orange bush monkeyflower, California brittlebush, California buckwheat, chaparral yucca, coast prickly pear, sugar bush, and white sage, among others.

California Buckwheat Scrub

California buckwheat scrub (MCV: *Eriogonum fasciculatum* Shrubland Alliance) is found on upland slopes, in intermittently flooded arroyos, channels and washes in coarse, well drained soils. California buckwheat or chaparral yucca are dominant or co-dominant in the shrub layer. Other species commonly found in this community include California sagebrush, coyote brush, orange bush monkeyflower, California brittlebush, deerweed, Menzies' goldenbush, black sage, and white sage, among others.

Coast Prickly Pear Scrub

Coast prickly pear scrub (MCV: *Opuntia littoralis*–*Opuntia oricola*–*Cylindropuntia prolifera* Shrubland Alliance) is found on south-facing slopes in shallow, loam and clay soils that may be rocky. Coast prickly pear is the dominant species. Other species commonly found in this community include California sagebrush, California brittlebush, chaparral yucca, California buckwheat, lemonade berry, and black sage, among others.

California Brittle Bush–Ashy Buckwheat Scrub

California brittle bush–ashy buckwheat scrub (MCV: *Encelia californica*–*Eriogonum cinereum* Shrubland Alliance) is found on sunny, steep slopes that are often rocky or eroded, in soils developed from sandstone, shale, or volcanic substrates. California brittlebush and ashyleaf buckwheat are dominant or co-dominant. Other species commonly observed in this community include California sagebrush, coyote brush, bladderpod (*Cleome isomeris*), orange bush monkeyflower, California buckwheat, chaparral yucca, and coast prickly pear, among others.

Quailbush Scrub

Quailbush scrub (MCV: *Atriplex lentiformis* Shrubland Alliance) is found on gentle to steep southeast- and southwest-facing slopes in clay soils. Big saltbrush (*Atriplex lentiformis*) is dominant in the shrub layer. Other species commonly found in this community include California sagebrush, coyote brush, California brittlebush, and laurel sumac, among others.

Coyote Brush Scrub

Coyote brush scrub (MCV: *Baccharis pilularis* Shrubland Alliance) is found in coastal bluffs, terraces, stabilized dunes of coastal bars, spits along the coastline, river mouths, stream sides, open exposed slopes, ridges, and gaps in forest stands on sandy to heavy clay soils. Coyote brush, California

coffeeberry (*Frangula californica*), and/or silk tassel bush (*Garrya elliptica*) are dominant to co-dominant in the shrub canopy. Other species commonly found in this community include California sagebrush, California buckwheat, orange bush monkeyflower, deerweed, white sage, and purple sage, among others.

Lemonade Berry Scrub

Lemonade berry scrub (MCV: *Rhus integrifolia* Shrubland Alliance) is found on slopes and coastal bluffs in loam and clay soils. Lemonade berry is dominant or co-dominant in the shrub canopy. Other species commonly found in this community include chamise, California sagebrush, orange bush monkeyflower, California brittlebush, ashleaf buckwheat, California buckwheat, chaparral yucca, toyon, chaparral mallow, laurel sumac, coast prickly pear, and purple sage, among others.

Riparian Scrub Communities

Riparian scrub communities are considered early succession stage communities that occur along washes or other watercourses that receive seasonal flooding and typically in recently or frequently disturbed or scoured areas. Structurally, riparian scrub communities range from sparse to dense in coverage with lower canopy heights that observed in Riparian woodlands and forests. Riparian scrub communities in the Hill and Canyon Area include salt bush, mule fat scrub, willows, and mixed riparian communities.

Mulefat Thickets

Mulefat thickets Scrub (MCV: *Baccharis salicifolia* Shrubland Alliance) are found in canyon bottoms, floodplains, irrigation ditches, lake margins, stream channels. Mulefat is dominant or co-dominant in the shrub canopy. Other species commonly found in this community include western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), oak (*Quercus* spp.) or willow (*Salix* spp.).

Arroyo Willow Thickets

Arroyo willow thickets (MCV: *Salix lasiolepis* Shrubland Alliance) are found along stream banks and benches, slope seeps, and stringers along drainages. Arroyo willows are dominant or co-dominant in the shrub canopy. Other species commonly found in this community include bigleaf maple, coyote brush, mule fat, American dogwood (*Cornus sericea*), western sycamore, Fremont cottonwood, black cottonwood (*Populus trichocarpa*), and blue elderberry (*Sambucus mexicana*).

Sandbar Willow Thickets

Sandbar willow thickets (MCV: *Salix exigua* Shrubland Alliance) are found in temporarily flooded floodplains, depositions along rivers and streams, and at springs. Sandbar willow (*Salix exigua*) is dominant or co-dominant in the shrub canopy. Other species commonly found in this community include coyote brush, California brickellbush (*Brickellia californica*), California wild rose (*Rosa californica*), blackberry, and arroyo willow.

Riparian Woodland and Forest Communities

Riparian woodland and forest communities in the Hill and Canyon Area include California sycamore coast live oak woodland and red willow woodland and forest.

California Sycamore Coast Live Oak Riparian Woodlands California sycamore coast live oak riparian woodlands (MCV: *Platanus racemosa* and/or *Quercus agrifolia* Woodland Alliance) are found in gullies, intermittent streams, springs, seeps, stream banks, and terraces adjacent to floodplains that are subject to high-intensity flooding California sycamore and/or coast live oak is dominant or co-dominant in the tree canopy. Other species commonly found in this community include white alder (*Alnus rhombifolia*), southern California black walnut (*Juglans californica*), Fremont cottonwood, valley oak (*Quercus lobata*), sandbar willow, Goodding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), and arroyo willow. California sycamore coast live oak riparian woodlands may qualify, in some instances, as oak woodlands that are considered Covered Habitats protected under the CONCCP/HCP.

Goodding's Willow–Red Willow Riparian Woodland and Forest

Goodding's willow–red willow riparian woodland and forest (MCV: *Salix gooddingii*–*Salix laevigata* Forest and Woodland Alliance) is found on terraces along large rivers, canyons, along floodplains of streams, seeps, springs, ditches, floodplains, lake edges, low-gradient depositions. Goodding's willow and/or red willow are dominant or co-dominant in the tree canopy. Other species commonly found in this community include mule fat, American dogwood, California wild rose, sandbar willow, arroyo willow, and blue elderberry.

Cismontane Woodland Communities

Cismontane woodland communities are primarily upland communities associated with multi-layered vegetation canopies with tree canopies that are at least 20 percent open, an open to intermittent shrub layer, and a sparse or grassy herbaceous layer. Cismontane woodland communities may be associated with watercourses and are common in canyons and hillsides. Cismontane woodland communities in the Hill and Canyon Area include coast live oak woodland, California walnut groves, southern coast live oak riparian forest, and blue elderberry.

Coast Live Oak Woodland

Coast live oak woodland (MCV: *Quercus agrifolia* Forest and Woodland Alliance) is found in canyon bottoms, slopes, and flats with deep soils. Coast live oak is dominant or co-dominant in the upland tree canopy. Other species commonly found in this community include bigleaf maple (*Acer macrophyllum*), Southern California black walnut, Engelmann oak (*Quercus engelmannii*), valley oak, and California laurel (*Umbellularia californica*). Coast live oak woodlands are considered Covered Habitats protected under the CONCCP/HCP.

California Walnut Groves

California walnut groves (MCV: *Juglans californica* Forest and Woodland Alliance) are found in riparian corridors. Southern California black walnut is dominant or co-dominant in the tree canopy. Other species commonly found in this community include white alder, California ash (*Fraxinus dipetala*), toyon, coast live oak, red willow, arroyo willow, blue elderberry, and laurel sumac.

Tecate Cypress–Piute Cypress Woodland

Tecate Cypress–Piute cypress woodland (MCV: *Hesperocyparis forbesii*–*Hesperocyparis nevadensis* Woodland Alliance) is found in dry, exposed hillsides and ridgetops, stream banks, and arroyos.

Tecate cypress is dominant or co-dominant in the tree canopy. Other species commonly found in this community include chamise, manzanitas, ceanothus (*Ceanothus* spp.), and laurel sumac, among others. Tecate Cypress–Piute cypress woodlands are considered Covered Habitats protected under the CONCCP/HCP.

Cliff and Rock Communities

Cliff and rock habitat is a Covered Habitat in the CONCCP/HCP. Communities in this habitat type are characterized by an assortment of vascular plants and lichens scattered on steep cliffs and rock outcrops. Cliff and rock communities within the Hill and Canyon Area include xeric cliffs, vascular plant xeric cliffs, and rock outcrops.

Liveforever–lichen/moss sparse herbaceous rock outcrop

Liveforever–lichen/moss sparse herbaceous rock outcrop (MCV: *Dudleya cymose*–*Dudleya lanceolata*/Lichen–Moss Sparsely Vegetated Alliance) is found on steep slopes, cliffs, and rocky outcroppings. Moss and/or lichen are often abundant and well-developed. Other species commonly found in this community include canyon liveforever (*Dudleya cymosa*), lanceleaf liveforever (*Dudleya lanceolata*), birchleaf mountain mahogany, orange bush monkeyflower, California buckwheat, and toyon. Liveforever–lichen/moss sparse herbaceous rock outcrop is considered cliff and rock habitat, which is a Covered Habitat under the CONCCP/HCP.

Developed

Developed, urbanized lands are characteristic of the western and central portions of the City. Developed areas are characterized by urbanization that includes a combination of a developed and hardscaped features, landscaped and manicured vegetation, and disturbed areas with bare soil surfaces supporting ruderal vegetation. Developed and hardscaped areas include buildings, paved roads, parking lots, and sidewalks. Manicured, landscaped areas typically feature street/shade trees, lawns, and shrubs with little or no exposed soil substrates. Irrigation and fertilization of landscaped areas allow for tropical and other non-native and ornamental species to flourish in urban areas. Trees are often grown in a spaced pattern with an open understory, and lawns are typically one species maintained at a continuous, uniform height. Shrubs are grown as spaced individuals or in tight rows that are hedged. Developed areas often include areas with bare soil surfaces and weedy vegetation primarily composed of non-native, annual plant species. Developed areas provide habitat to a low diversity of wildlife that are tolerant of human-modified environments.

4.1.3 - Common Wildlife

The vegetation community and land cover types discussed above provide habitat for wildlife species that are tolerant of urban environments and human activities. The following discussions regarding the wildlife species that have a potential to occur within the City are organized by area of the City and taxonomic group. Each discussion contains representative examples of a particular taxonomic group expected to occur in different areas of the City.

Undeveloped Areas of the City

A number of wildlife species are known to occur or have the potential to occur in undeveloped portions of the Hill and Canyon Area in the eastern portion of the City. Land within this area contains natural vegetation communities that have the potential to support diverse wildlife populations and important foraging, dispersal, migratory, and wildlife corridors for many sensitive species.

Amphibians

Amphibian species that have the potential to occur within the Hill and Canyon Area include Pacific chorus frog (*Pseudacris regilla*), or the western toad (*Anaxyrus boreas*), may be present at times in the Santa Ana River.

Birds

Avian species that have the potential to occur in the Hill and Canyon Area include red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk, turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), California scrub jay (*Aphelocoma californica*), common raven (*Corvus corax*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), Costa's hummingbird (*Calypte costae*), ash-throated flycatcher (*Myiarchus cinerascens*), western kingbird (*Tyrannus verticalis*), Say's phoebe (*Sayornis saya*), yellow warbler (*Setophaga petechia*), yellow-rumped warbler (*Setophaga coronata*), California thrasher (*Toxostoma redivivum*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), lark sparrow (*Chondestes grammacus*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorrhous mexicanus*), and lesser goldfinch (*Spinus psaltria*).

Mammals

Mammalian species that have the potential to occur in the Hill and Canyon Area include coyote, gray fox, bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), California ground squirrel (*Otospermophilus beecheyi*), desert cottontail rabbit (*Sylvilagus audubonii*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

Reptiles

Reptilian species that have the potential to occur in the Hill and Canyon Area include San Diegan tiger whiptail, western fence lizard (*Sceloporus occidentalis*), California kingsnake (*Lampropeltis getula californiae*), San Diego gophersnake (*Pituophis catenifer annectens*), and southern Pacific rattlesnake (*Crotalus oreganus helleri*).

Developed Areas of the City

The vegetation communities and land cover types in the developed portions of the City provide habitat for wildlife species that are tolerant of urbanized areas.

Amphibians

Common disturbance-tolerant amphibian species that have the potential to occur in the City include Pacific chorus frog, or the western toad, may be present at times in the Santa Ana River.

Birds

Common, native, disturbance-tolerant passerines and corvids that have the potential to occur in the City include mourning dove, northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), common raven, black phoebe (*Sayornis nigricans*), bushtit (*Psaltiriparus minimus*), house finch, lesser goldfinch, and others. Several non-native avian species occur in developed areas of the City, including Eurasian collared dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), and house sparrow (*Passer domesticus*), among others.

Mammals

Common disturbance-tolerant mammalian species that have the potential to occur in the City include coyote, desert cottontail rabbit, California ground squirrel, and striped skunk (*Mephitis mephitis*).

Reptiles

Common disturbance-resistant reptilian species that have the potential to occur in the City include gopher snake (*Pituophis catenifer*) and western fence lizard.

SECTION 5: SENSITIVE BIOLOGICAL RESOURCES DATABASE REVIEWS

The following section discusses the results of the database reviews for sensitive biological resources and an analysis of the potential for these resources to occur in the City based on existing biological conditions on and adjacent to the City.

5.1 - Sensitive Natural Communities and Riparian Habitats

5.1.1 - Sensitive Plant Communities

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural vegetation communities found in California and ranks them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.¹⁶

The CNDDDB identified nine sensitive natural communities—Southern Dune Scrub, Southern Foredunes, Southern Interior Cypress Forest, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, Southern Willow Scrub, Riversidian Alluvial Fan Sage Scrub, and California Walnut Woodland— within the 12-quadrangle search area.¹⁷ Four of these communities, including [Southern Cottonwood Willow Riparian Forest, Southern Willow Scrub, Riversidian Alluvial Fan Sage Scrub, and California Walnut Woodland] have been recorded within city limits. Some of these occurrences were recorded in the Hill and Canyon Area, while others were recorded in other parts of the City, such as California the Oak Canyon Nature Center (Exhibit 6).

5.1.2 - Riparian Habitats

Riparian vegetation communities have been recorded along Gypsum Creek and Coal Creek in the Hill and Canyon Area of the City. Communities in this area include California sycamore coast live oak riparian woodland, red willow riparian woodland scrub, and mixed riparian communities. The CNDDDB also contains records of coast live oak riparian forest and sycamore alder riparian woodland in this area along creeks. There are riparian areas associated with Santa Ana River in the eastern portion of the City. However, the Santa Ana River is mostly channelized within city limits.

5.2 - Special-status Plant Species

A query of the databases determined that 75 special-status plant species have been recorded in the CNDDDB,^{18,19} within the 12-quadrangle search area of the CNPSEI,²⁰ in the IPaC (Appendix B, Table 1),

¹⁶ California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. July 5, 2022. Accessed November 27, 2024.

¹⁷ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

¹⁸ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed November 27, 2024.

¹⁹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

²⁰ California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed November 27, 2024.

or are Identified Species covered by the CONCCP/HCP. Table 1 in Appendix B includes the species' status, required habitat, and a summary analysis of the potential for each species to occur in the City. The assessments of potential for occurrence of each species was based on current biological conditions in the City and presence and locations of suitable habitats, soil types, and proximity and number of occurrences recorded in the CNDDDB.^{21,22,23}

5.2.1 - Potential for Occurrence of Special-status Plants

Urbanization of the western and central portions of the City has eliminated the potential for persistence and occurrence of populations of special-status plant species, but undeveloped areas in the Hill and Canyon Area, which are topographically complex and contain natural vegetation communities and undisturbed surface soils, provide potential for occurrence of many special-status plant species. Lands to the east of this area support additional undeveloped and undisturbed open space areas with similar habitats.

Appendix B, Table 1 includes special-status plant species that were determined to have low or no potential to occur in the City, along with the justification for their exclusion from further discussion. Those assessed as having moderate to high potential are discussed further below.

5.2.2 - High Potential for Occurrence

The Hill and Canyon Area of the City contains suitable soils, vegetation communities, and other habitat conditions that provide high potential for occurrence for 17 special-status plant species, as well as two additional Identified Species covered by the CONCCP/HCP:

- Tecate cypress
- Branton's milk-vetch (*Astragalus brauntonii*)
- paniculate tarplant (*Deinandra paniculata*)
- western dichondra
- many-stemmed dudleya (*Dudleya multicaulis*)
- Mesa horkelia (*Horkelia cuneata* var. *puberula*)
- southern California black walnut
- heart-leaved pitcher sage (*Lepechinia cardiophylla*)
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- small-flowered microseris (*Microseris douglasii* ssp. *platycarpa*)
- intermediate monardella (*Monardella hypoleuca* ssp. *intermedia*)
- Hubby's phacelia (*Phacelia hubbyi*)
- Engelmann oak (*Quercus engelmannii*)
- Coulter's matilija poppy
- Fish's milkwort (*Polygala cornuta* var. *fishiae*)
- white rabbit-tobacco (*Pseudognaphalium leucocephalum*)
- Catalina mariposa lily

²¹ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed November 27, 2024.

²² California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed November 27, 2024.

²³ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

- intermediate mariposa lily
- ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*)
- chaparral nolina (*Nolina cismontana*)

Tecate Cypress

The Tecate cypress is a perennial, evergreen tree in the family Cupressaceae. This species occurs in clay and sometimes gabbroic soils in closed-cone coniferous forest and chaparral communities. The Tecate cypress is ranked as 1B.1 in the CNPS Inventory of Rare Plants and is covered under the CONCCP/HCP. There are five recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6). This species is known to occur within the Hill and Canyon Area in Tecate cypress woodland vegetation community.

Braunton's Milk-vetch

Braunton's milk-vetch is a perennial herb in the family Fabaceae. This species occurs in carbonate and sandstone soils in chaparral, coastal scrub, and valley and foothill grassland communities. It blooms between January and August. Braunton's milk-vetch is listed as Endangered under the Endangered Species Act and ranked as 1B.1 in the CNPS Inventory of Rare Plants. It is not covered under the CONCCP/HCP. There are seven recent records in the 12-quadrangle search area encompassing the City, including three recent (2019, 2020, 2020) records within city limits (Exhibit 6). Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Paniculate Tarplant

The paniculate tarplant is an annual herb in the family Asteraceae. This species occurs in sandy soils (sometimes) and usually in vernal mesic soils in coastal scrub, valley and foothill grassland, vernal pool communities. It blooms between April and November. The paniculate tarplant is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in coastal scrub and grassland communities in the Hill and Canyon Area.

Western Dichondra

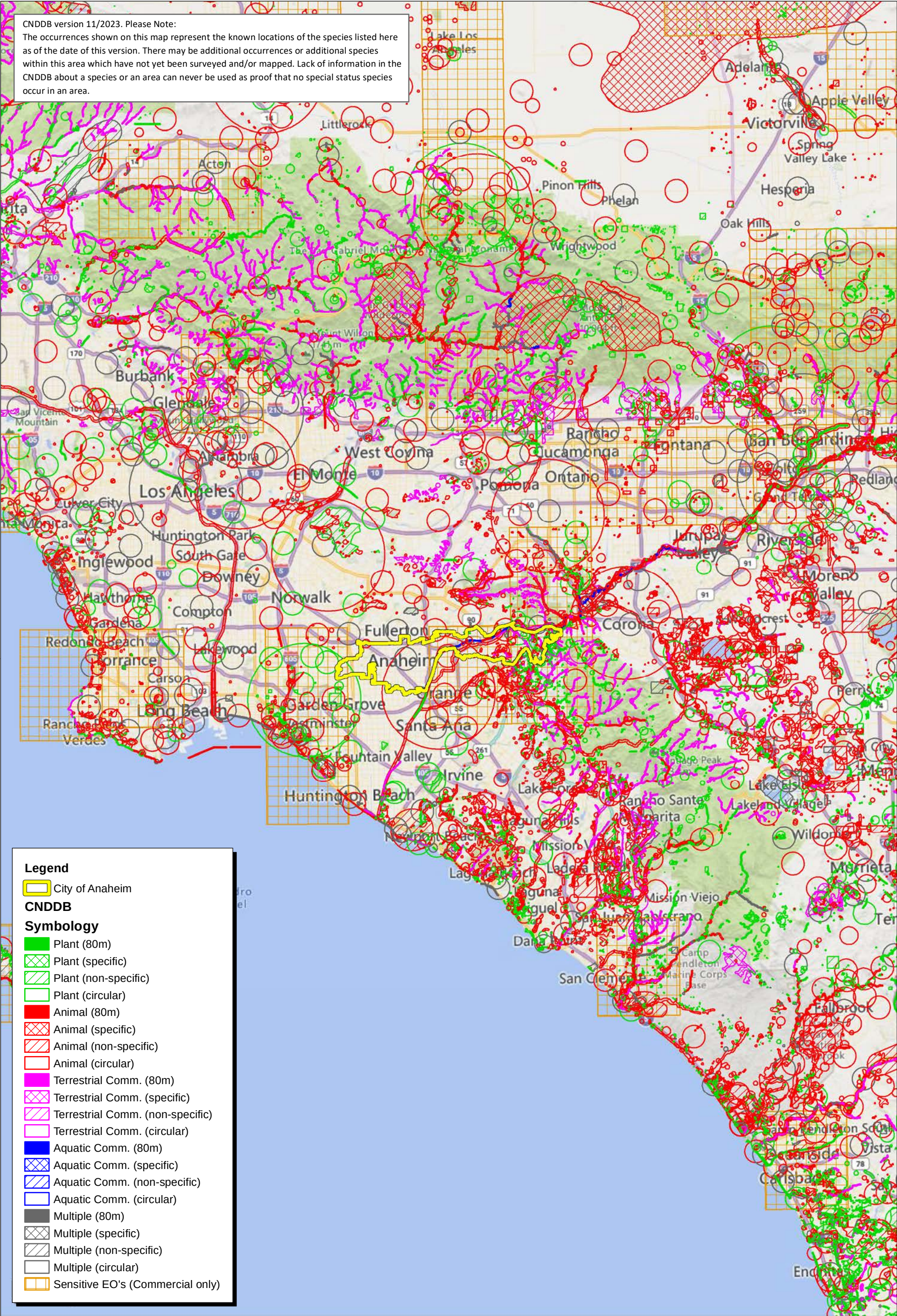
The western dichondra is a perennial rhizomatous herb in the family Convolvulaceae. This species occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. It blooms between March and July. The western dichondra is ranked as 4.2 in the CNPS Inventory of Rare Plants and it is covered under the CONCCP/HCP. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Many-stemmed Dudleya

The many-stemmed dudleya is a perennial herb in the family Crassulaceae. This species occurs usually in clay soils in chaparral, coastal scrub, and valley and foothill grassland communities. It blooms between April and July.

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CNDDDB version 11/2023. Please Note:
The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.



Source: Bing Street Imagery. California Natural Diversity Database (CNDDDB), November 2023.

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The many-stemmed dudleya is ranked as 1B.2 in the CNPS Inventory of Rare Plants. There are 15 recent and 30 historical records in the 12-quadrangle search area encompassing the City (Exhibit 6). This species is known to occur in the Hill and Canyon Area where suitable habitat is located within grassland, coastal scrub, coastal bluff scrub, and chaparral communities.

Mesa Horkelia

Mesa horkelia is a perennial herb in the family Rosaceae. This species occurs in chaparral, coastal scrub, and cismontane woodland communities. It blooms between February and July. Mesa horkelia is ranked as 1B.1 in the CNPS Inventory of Rare Plants. There is one recent (2008) record in the 12-quadrangle search area encompassing the City, which falls within city limits (Exhibit 6). Suitable habitat for this species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

Southern California Black Walnut

Southern California black walnut is a perennial, deciduous tree in the family Juglandaceae. This species occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. It blooms between March and August. Southern California black walnut is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, coastal scrub, and riparian woodland communities within the Hill and Canyon Area.

Heart-leaved Pitcher Sage

Heart-leaved pitcher sage is a perennial shrub in the family Lamiaceae. This species occurs in closed-cone coniferous forest, chaparral, and cismontane woodland communities. It blooms between April and July. Heart-leaved pitcher sage is ranked as 1B.2 in the CNPS Inventory of Rare Plants and it is covered under the CONCCP/HCP. There are seven recent and three historical records in the 12-quadrangle search area encompassing the City, including one recent (2003) record within city limits (Exhibit 6). Suitable habitat for this species is in chaparral community in the Hill and Canyon Area.

Robinson's Pepper-grass

Robinson's pepper-grass is an annual herb in the family Brassicaceae. This species occurs in dry soils in chaparral and coastal scrub communities. It blooms between January and July. Robinson's pepper-grass is ranked as 4.3 in the CNPS Inventory of Rare Plants. There are five recent and one historical records in the 12-quadrangle search area encompassing the City, including one recent (2008) record within city limits (Exhibit 6). Suitable habitat for this species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

Small-flowered Microseris

Small-flowered microseris is an annual herb in the family Asteraceae. This species occurs in clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool communities. It blooms between March and May. Small-flowered microseris is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in coastal scrub and grassland communities in the Hill and Canyon Area.

Intermediate Monardella

Intermediate monardella is a perennial rhizomatous herb in the family Lamiaceae. This species occurs in chaparral, cismontane woodland, and lower montane coniferous forest communities. It blooms between April and September. Intermediate monardella is ranked as 1B.3 in the CNPS Inventory of Rare Plants. There are four recent and five historical records in the 12-quadrangle search area encompassing the City, including one recent (2008) record within city limits (Exhibit 6). Suitable habitat for this species is in chaparral communities in the Hill and Canyon Area.

Hubby's Phacelia

Hubby's phacelia is an annual herb in the family Hydrophyllaceae. This species occurs in gravelly, rocky, and talus soils in chaparral, coastal scrub, and grassland communities. It blooms between April to July. Hubby's phacelia is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Engelmann Oak

Engelmann oak is a perennial, deciduous tree in the family Fagaceae. This species occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland communities. It blooms between March and June. Engelmann oak is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, grassland, and riparian woodland communities in the Hill and Canyon Area.

Coulter's Matilija Poppy

The Coulter's matilija poppy is a perennial, rhizomatous herb in the family Papaveraceae. This species occurs in chaparral and coastal scrub, often in burned areas. It blooms between March and July. The Coulter's matilija poppy is ranked as 4.2 in the CNPS Inventory of Rare Plants and is covered under the CONCCP/HCP. The CNDDDB does not track occurrences of this species. This species is known to occur in the Hill and Canyon Area where suitable habitat is located within coastal scrub and chaparral communities.

Fish's Milkwort

Fish's milkwort is a perennial deciduous shrub in the family Polygalaceae. This species occurs in chaparral, cismontane woodland, and riparian woodland communities. It blooms between May and August. Fish's milkwort is ranked as 4.3 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral and riparian woodland communities in the Hill and Canyon Area.

Catalina Mariposa Lily

Catalina mariposa lily is a perennial, bulbiferous herb in the family Liliaceae. This species occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. It blooms between March and June. Catalina mariposa lily is ranked as 4.2 in the CNPS Inventory of Rare Plants and is covered under the CONCCP/HCP. The CNDDDB does not track occurrences of this

species. Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

White Rabbit-tobacco

White rabbit-tobacco is a perennial herb in the family Asteraceae. This species occurs in gravelly and sandy soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. It blooms between August and November. White rabbit-tobacco is ranked as 2B.2 in the CNPS Inventory of Rare Plants. There are one recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6). Suitable habitat for this species is in chaparral, coastal scrub, and riparian woodland communities in the Hill and Canyon Area.

Intermediate Mariposa Lily

Intermediate mariposa lily is a perennial, bulbiferous herb in the family Liliaceae. This species occurs in calcareous soils on rocky areas in coastal scrub, chaparral, and valley and foothill grassland communities. It blooms between May and July. Intermediate mariposa lily is ranked as 1B.2 in the CNPS Inventory of Rare Plants and is covered under the CONCCP/HCP. There are 66 recent and 11 historical records in the 12-quadrangle search area encompassing the City, including nine recent and two historical records within city limits (Exhibit 6). Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Ocellated Humboldt Lily

Ocellated Humboldt lily is a perennial, bulbiferous herb in the family Liliaceae. This species occurs in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland communities. It blooms between March and July. Ocellated Humboldt lily is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, coastal scrub, and riparian woodland communities in the Hill and Canyon Area.

Chaparral Nolina

Chaparral nolina is a perennial, evergreen shrub in the family Ruscaceae. This species occurs in gabbroic soils and sometimes in sandstone in chaparral and coastal scrub communities. It blooms between May and July. Chaparral nolina is ranked as 1B.2 in the CNPS Inventory of Rare Plants. There are 28 recent and four historical records in the 12-quadrangle search area encompassing the City (Exhibit 6). This species is known to occur in the Hill and Canyon Area where suitable habitat is located within coastal scrub and chaparral communities.

5.2.3 - Moderate Potential for Occurrence

The Hill and Canyon Area of the City contains suitable soils, vegetation communities, and other habitat conditions that provide moderate potential for occurrence for 14 special-status plant species:

- Brewer's calandrinia (*Calandrinia breweri*)
- Lewis' evening-primrose (*Camissoniopsis lewisii*)
- long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*)

- small-flowered morning-glory (*Convolvulus simulans*)
- Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*)
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*)
- Palmer’s grapplinghook
- southern California black walnut
- Coulter’s goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- small-flowered microseris (*Microseris douglasii* ssp. *platycarpa*)
- south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*)
- Fish’s milkwort
- San Diego County viguiera (*Viguiera laciniata*)
- Plummer’s mariposa lily (*Calochortus plummerae*)

Brewer’s Calandrinia

Brewer’s calandrinia is an annual herb in the family Montiaceae. This species occurs in burned (sometimes) and in disturbed areas (sometimes) in loam (sometimes) and sandy (sometimes) soils in chaparral and coastal scrub communities. It blooms between March and June. Brewer’s calandrinia is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

Lewis’ Evening-primrose

Lewis’ evening-primrose is an annual herb in the family Onagraceae. This species occurs in clay (sometime) and sandy (sometimes) soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland communities. It blooms between March and May. Lewis’ evening-primrose is ranked as 3 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in coastal scrub and grassland communities in the Hill and Canyon Area.

Long-spined Spineflower

The long-spined spineflower is an annual herb in the family Polygonaceae. This species occurs in valley and foothill grassland, coastal scrub, chaparral, meadows and seeps, and vernal pool communities. It blooms between April and July. The long-spined spineflower is ranked as 1B.2 in the CNPS Inventory of Rare Plants. There is one historical record in the 12-quadrangle search area encompassing the City (Exhibit 6). This species is known to occur within the Hill and Canyon Area of the City where suitable habitat is located within grassland, coastal scrub, and chaparral communities.

Small-flowered Morning-glory

Small-flowered morning-glory is an annual herb in the family Convolvulaceae. This species occurs in clay soils, seeps, and serpentine soils in openings in chaparral, coastal scrub, and valley and foothill grassland communities. It blooms between March and July. Small-flowered morning-glory is ranked as 4.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species.

Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Santa Monica Mountains Dudleya

Santa Monica Mountains dudleya is a perennial herb in the family Crassulaceae. This species occurs in rocky and sometimes volcanic soils in chaparral and coastal scrub. It blooms between March and June. Santa Monica Mountains dudleya is listed as Threatened under the Endangered Species Act and ranked as 1B.1 in the CNPS Inventory of Rare Plants and is covered under the CONCCP/HCP. There are no CNDDDB records in the 12-quadrangle search area encompassing the City (Exhibit 6). Suitable habitat for this species is in the chaparral and coastal scrub communities in the Hill and Canyon Area.

San Diego Button-celery

San Diego button-celery is an annual/perennial herb in the family Apiaceae. This species occurs in mesic soils in coastal scrub, valley and foothill grassland, and vernal pools. It blooms between April and June. San Diego button-celery is listed as Endangered under the Endangered Species Act and a candidate for listing under CESA and ranked as 1B.1 in the CNPS Inventory of Rare Plants. There is one recent record in the 12-quadrangle search area encompassing the City (Exhibit 6). Suitable habitat for this species is in coastal scrub and grassland communities in the Hill and Canyon Area.

Palmer's Grapplinghook

Palmer's grapplinghook is an annual herb in the family Boraginaceae. This species occurs in clay soils and openings in chaparral, coastal scrub, and valley and foothill grassland communities. It blooms between March and May. The western dichondra is ranked as 4.2 in the CNPS Inventory of Rare Plants and it is covered under the CONCCP/HCP. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area.

Coulter's Goldfields

Coulter's goldfields is an annual herb in the family Asteraceae. This species occurs in marshes and swamps, playas, and vernal pools. It blooms between February and June. Coulter's goldfields is ranked as 1B.1 in the CNPS Inventory of Rare Plants. There are one recent and 10 historical records in the 12-quadrangle search area encompassing the City, including one historical record within city limits (Exhibit 6). Suitable habitat for this species in wetland and vernal pool communities in the Hill and Canyon Area.

South Coast Branching Phacelia

South coast branching phacelia is a perennial herb in the family Hydrophyllaceae. This species occurs in rocky (sometimes) and sandy soils in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps. It blooms between March and August. South coast branching phacelia is ranked as 3.2 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

San Diego County Viguiera

San Diego County viguiera is a perennial shrub in the family Asteraceae. This species occurs in chaparral and coastal scrub communities. It blooms between February and June. San Diego County viguiera is ranked as 4.3 in the CNPS Inventory of Rare Plants. The CNDDDB does not track occurrences of this species. Suitable habitat for this species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

Plummer's Mariposa Lily

The Plummer's mariposa lily is a perennial, bulbiferous herb in the family Liliaceae. This species occurs in granitic and rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland communities. It blooms between May and July. The Plummer's mariposa lily is ranked as 4.2 in the CNPS Inventory of Rare Plants. There are six recent and four historical records in the 12-quadrangle search area encompassing the City (Exhibit 6). This species may occur in the Hill and Canyon Area where suitable habitat is located within grassland, coastal scrub, and chaparral communities.

5.2.4 - Potential for Occurrence of Other CONCCP/HCP-Covered Plant Species

Other plant species not detected or tracked in the CNDDDB, CNPSEI, or IPaC searches, but that are Identified Species covered by the CONCCP/HCP may have potential to occur in the City. Of these species, two were assessed to have high potential to occur: inland scrub oak and Nuttall's scrub oak. Suitable habitat for these species is in chaparral and coastal scrub communities in the Hill and Canyon Area.

5.3 - Special-status Wildlife Species

Seventy-six special-status wildlife species were identified as occurring in the 12-quadrangle search area as recorded in the CNDDDB,^{24,25} and an additional species was identified in the USFWS IPaC²⁶ review (Appendix B, Table 2). Four additional species are Identified Species covered by the CONCCP/HCP. Table 2 in Appendix B includes the legal status of each species, their required habitat types and features, and their potential to occur in the City. The table also includes special-status wildlife species that have been determined to have no or low potential to occur in the City, primarily based on the City being situated outside of the range of the species or absence of suitable habitat or the lack of recent records in the vicinity, along with other justification(s) for their exclusion from further discussion. Special-status wildlife species with moderate to high potential to occur in the City

²⁴ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed November 27, 2024.

²⁵ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

²⁶ United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed November 27, 2024.

are analyzed further below. The potential for wildlife to occur in the City was based on presence of suitable habitats and proximity and recency of occurrences recorded in the CNDDDB.^{27,28}

Sensitive wildlife includes those species listed as endangered or threatened under the Endangered Species Act or CESA, candidates for listing by the USFWS or CDFW, Species of Special Concern to the USFWS or CDFW, and Identified Species covered by the CONCCP/HCP. Regardless of their federal or State status, species included in the CONCCP/HCP are considered sensitive because they are associated with sensitive habitat (e.g., CSS), and are covered as though they are listed species.

5.3.1 - Potential for Occurrence of Special-status Wildlife

Many species with records in the vicinity of the City have potential to occur in the Hills and Canyon Area. Species that were assessed as having no or low potential to occur because the City is outside of the known distributional range of the species or because the City does not support suitable habitat are included in the table (Appendix B, Table 2) but are not discussed further. The following species were assessed as having moderate or high potential to occur in the City. These species are discussed further below.

5.3.2 - High Potential for Occurrence

The City contains suitable habitat conditions that provide high potential for occurrence for 15 special-status wildlife species, as well as four additional Identified Species covered by the CONCCP/HCP:

- Crotch's bumble bee (*Bombus crotchii*)
- western spadefoot
- orange-throated whiptail
- San Diegan tiger whiptail
- red-diamond rattlesnake
- coast horned lizard (*Phrynosoma blainvillii*)
- coast patch-nosed snake (*Salvadora hexalepis virgultea*)
- Cooper's hawk
- southern California rufous-crowned sparrow
- coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)
- white-tailed kite (*Elanus leucurus*)
- yellow-breasted chat (*Icteria virens*)
- coastal California gnatcatcher
- yellow warbler
- least Bell's vireo

²⁷ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed November 27, 2024.

²⁸ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

Crotch's Bumblebee

The Crotch's bumblebee is a species of bee in the family Apidae. This species occurs primarily in California, including coastal habitats, western Mojave Desert, San Joaquin Valley, and adjacent foothills through most of southwestern California. It inhabits arid grasslands, desert scrub, and coastal scrub communities, and its food sources include milkweed, pincushion, lupine, clover, phacelia, sage, clarkia, poppy, and buckwheat. Threats to this species include climate change, pesticide use, competition from non-native bees, reduced genetic diversity, and habitat loss and degradation, including agricultural intensification in California's northern Central Valley and rapid urbanization in the southern Central Valley. In June of 2019, the California Fish and Game Commission voted 3-1 that listing the Crotch's bumblebee may be warranted under CESA; however, a Superior Court ruling in January 2021 blocked the listing. The listing decision by the Commission was ultimately upheld and the species' candidacy was reinstated under CESA on September 30, 2022. Suitable habitat and food plants for Crotch's bumblebee occur in coastal scrub and grassland communities in the Hill and Canyon Area. There are seven recent and six historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).²⁹

Western Spadefoot

Western spadefoot is an Anuran amphibian in the family Pelobatidae. This species prefers open areas with sandy or gravelly soils in a variety of habitats including mixed woodlands, grasslands, coastal scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Western spadefoot breed in seasonally ephemeral pools of water that do not contain bullfrogs, fish, or crayfish. Breeding sites include vernal pools and other temporary rain pools, cattle tanks, and occasionally in pools within intermittent streams. Suitable breeding pools must support standing water for at least 4 to 11 weeks for the larval stages of this species to transform. Typically, the pools are turbid with little or no cover. Western spadefoot are nocturnal and almost completely terrestrial, entering water only to breed. They burrow underground using the hardened spades on their hind feet and can remain buried underground for most of the year, emerging during periods of rain for breeding. Breeding may take place from January to May, peaking in February and March, but may breed at any time of the year if conditions are favorable. Western spadefoot eat a variety of invertebrates, including adult beetles, larval and adult moths, crickets, flies, ants, and earthworms, and can consume enough in several weeks to survive the long period of underground dormancy. Western spadefoot is designated as a California Species of Special Concern and is covered under the CONCCP/HCP. Suitable habitat for this species is located in chaparral, coastal scrub, and grassland communities in the Hills and Canyon Area. There are 23 recent and 15 historical records in the 12-quadrangle search area encompassing the City, including two recent (2010, 2010) and one historical record within city limits (Exhibit 6).³⁰

Orange-throated Whiptail

The orange-throated whiptail is a species of lizard in the family Teiidae. This species is found on coarse soils in open coastal scrub communities. This species forages near perennial plants for a

²⁹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

³⁰ Ibid.

variety of small arthropods, especially termites, and will seek cover under rocks, logs, decaying vegetation and boards. The orange-throated whiptail is designated as a California Watch List species and is covered under the CONCCP/HCP and identified as a Target Species in the plan. This species is known to occur within the Hill and Canyon Area of the City where suitable habitat is located within coastal scrub communities. There are five recent and 16 historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³¹

San Diegoan Tiger Whiptail

The San Diegoan tiger whiptail is a species of lizard in the family Teiidae. This species typically occurs in arid desert scrub and coastal scrub communities with sparse vegetation, but may also be found in forests, woodlands, chaparral, and riparian areas. It feeds on small invertebrates, especially spiders, scorpions, centipedes, and termites, as well as other small lizards. The San Diegoan tiger whiptail is designated as a California Species of Special Concern and is covered under the CONCCP/HCP. This species is known to occur in the Hill and Canyon Area where suitable habitat is located in the chaparral, coastal scrub, woodland, and riparian communities. There are four recent and five historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³²

Red-diamond Rattlesnake

Red-diamond rattlesnake is a species of rattlesnake (pit vipers in the family Viperidae) that can be found in southwestern California, from the Morongo Valley west to the coast and south along the peninsular ranges to mid Baja California. This species occurs in chaparral, woodland, grassland, and desert habitats, especially rocky areas with dense vegetation. Microhabitats include rodent burrows, cracks in rocks, or other surface cover. The red-diamond rattlesnake is designated as a California Species of Special Concern and is covered under the CONCCP/HCP. This species is known to occur in the Hill and Canyon Area where suitable habitat is located in chaparral, coastal scrub, woodland, and grassland communities. There are one recent and eight historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³³

Coast Horned Lizard

Coast horned lizard is a lizard in the family Phrynosomatidae. This species occurs primarily in western California, where it frequents a wide variety of habitats, most commonly in grasslands, coniferous forests, woodlands, desert scrub, coastal scrub, and chaparral, with open areas and patches of loose soil. This species requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. Populations of this species are threatened by habitat destruction from human development and agriculture, and the spread of non-native ants, such as Argentine ant (*Linepithema humile*) which displace the native ant food source. Before commercial collecting was banned in 1981, this lizard was extensively exploited by the pet trade and the curio trade. The coast horned lizard is designated as a Special Species of Concern and is covered under the CONCCP/HCP. This species is known to occur in the Hill and Canyon Area where suitable habitat is located in coastal scrub, chaparral, coniferous forest, woodland, and grassland

³¹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

³² Ibid.

³³ Ibid.

communities. There are three recent and 19 historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁴

Coast Patch-nosed Snake

The coast patch-nosed snake is a snake in the family Colubridae. This species occurs in openings in coastal scrub and chaparral communities. It is found in brushy or shrubby vegetation and is dependent on small mammal burrows. The coast patch-nosed snake is designated as a California Special Species of Concern. Suitable habitat for this species is located within coastal scrub and chaparral communities in the Hills and Canyon Area. There are four historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁵

Cooper's Hawk

Cooper's hawk is a hawk in the family Accipitridae. This species occurs in riparian forests and woodlands throughout California, including urban forests. It prefers patchy wooded areas, such as groves with edges with snags for perching. It nests in dense stands with moderate crown-depths, usually nests in second-growth conifer stands, or in deciduous riparian areas, usually near streams. Cooper's hawk prey on mid-sized birds such as pigeons, jays, starlings, and doves, but they also consume small rodents. The species captures prey from cover or while flying quickly through dense vegetation, relying on surprise. The Cooper's hawk is designated as a California Species of Special Concern. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species is known to occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located in the forest and woodland communities. This species may also occur in developed portions of the City where they may forage and nest in areas containing urban forests. There are three recent and two historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁶

Southern California Rufous-crowned Sparrow

Southern California rufous-crowned sparrow is a sparrow in the family Passerellidae. This species occurs in coastal scrub and sparse mixed chaparral habitats, but will also frequent relatively steep, rocky hillsides with grass and forb patches. It forages in the litter beneath shrubs, oak trees, and herbaceous cover. The southern California rufous-crowned sparrow is designated as a California Watch List species and is covered under the CONCCP/HCP. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species is known to occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located in the chaparral and coastal scrub communities. There are four recent and seven historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁷

³⁴ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

Coastal Cactus Wren

The coastal cactus wren is a wren in the family Troglodytidae. This species occurs in coastal scrub. It requires tall opuntia cactus for nesting and roosting. The coastal cactus wren is designated as a California Species of Special Concern, and is covered under the CONCCP/HCP, in which it is listed as a Targeted Species. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species is known to occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located within coastal scrub communities. There are seven recent and 25 historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁸

White-tailed Kite

The white-tailed kite is a hawk in the family Accipitridae. This species inhabits open habitats such as grasslands, marshes, and farmlands, and is often found near agricultural areas. It prefers areas with trees for perching and nesting, and forages in open areas that support diurnal rodent populations. Preferred nesting habitat consists of oak woodlands or trees along marsh edges. Suitable nesting substrates include trees or shrubs of moderate height, such as eucalyptus, cottonwoods, toyons, and coyote bush, with the nests placed near the tops of the shrubs or trees. Nesting occurs in February through August with peak activity in March, April, and May. The white-tailed kite is designated as a California Fully Protected species. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable foraging and nesting habitat is present in coastal scrub and grassland communities in the Hill and Canyon Area. There are 22 recent records in the 12-quadrangle search area encompassing the City (Exhibit 6).³⁹

Yellow-breasted Chat

The yellow-breasted chat is a passerine bird in the family Icteridae. This species is a Neotropical migrant that breeds in California. It frequents thickets along streams and breeds in very dense scrub (such as willow thickets) along streams or at the edges of swamps or ponds. The yellow-breasted chat also inhabits dry, overgrown pastures, hedgerows, and upland thickets near woodland margins. The species is omnivorous, foraging on insects and berries. The yellow-breasted chat is designated as a California Species of Special Concern. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging and nesting habitats are present in the coastal scrub and riparian communities in the Hills and Canyon Area. There are eight recent and four historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁰

Coastal California Gnatcatcher

The coastal California gnatcatcher is a passerine bird in the family Polioptilidae. This species is a year-round, obligatory resident of CSS communities in elevations below 2,500 feet. It is insectivorous, and nests and forages in moderately dense stands of sage scrub occurring on arid hillsides, mesas, and in washes. The coastal California gnatcatcher is listed as a federally threatened species and is

³⁸ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

³⁹ Ibid.

⁴⁰ Ibid.

designated as a California Species of Special Concern, and is covered under the CONCCP/HCP, under which it is listed as a Target Species. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species is known to occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located in the coastal scrub communities. There are 174 recent and 45 historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴¹

Yellow Warbler

The yellow warbler is a passerine bird in the family Parulidae. This species prefers moist habitats with a high insect abundance, such as wetlands and mature riparian woodlands dominated by cottonwoods, alders, willow, and ash trees. However, it is known to also inhabit drier areas of thickets, orchards, or farmlands. The yellow warbler is designated as a California Species of Special Concern. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging and nesting habitats are present in the riparian woodland communities in the Hills and Canyon Area. There are nine recent records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴²

Least Bell's Vireo

Least Bell's vireo is a passerine bird in the family Vireonidae. This species is a Neotropical migrant that breeds in California. This species occurs and nests in willow-dominated, riparian woodland or scrub habitats in the vicinity of water or in dry river bottoms. Least Bell's vireo is federally and State-listed as an Endangered species and is covered under the CONCCP/HCP. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. There are CNDDB records of this species in the City and suitable habitat is located in riparian woodlands and forests in the Hill and Canyon Area. There are 50 recent and five historical records in the 12-quadrangle search area encompassing the City, including one recent (2017) record within city limits (Exhibit 6).⁴³

5.3.3 - Moderate Potential for Occurrence

The project site contains suitable habitat conditions that provide a moderate potential for occurrence for 17 special-status wildlife species, as well as eight additional CONCCP/HCP-covered species:

- monarch butterfly (*Danaus plexippus*)
- San Diego fairy shrimp
- Riverside fairy shrimp
- southern California legless lizard (*Anniella stebbinsi*)
- California glossy snake (*Arizona elegans occidentalis*)
- western pond turtle (*Emys marmorata*)
- two-striped gartersnake (*Thamnophis hammondi*)
- tricolored blackbird (*Agelaius tricolor*)

⁴¹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁴² Ibid.

⁴³ Ibid.

- grasshopper sparrow (*Ammodramus savannarum*)
- golden eagle (*Aquila chrysaetos*)
- great blue heron (*Ardea herodias*)
- long-eared owl (*Asio otus*)
- burrowing owl (*Athene cunicularia*)
- ferruginous hawk (*Buteo regalis*)
- southwestern willow flycatcher
- California horned lark (*Eremophila alpestris actia*)
- American peregrine falcon
- bank swallow (*Riparia riparia*)
- California least tern (*Sternula antillarum browni*)
- pallid bat (*Antrozous pallidus*)
- northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- western mastiff bat (*Eumops perotis californicus*)
- western yellow bat (*Lasiurus xanthinus*)
- Yuma myotis (*Myotis yumanensis*)
- San Diego desert woodrat
- southern grasshopper mouse (*Onychomys torridus ramona*)
- American badger (*Taxidea taxus*)

Monarch Butterfly

The monarch butterfly is listed as a Candidate for federal listing as a threatened species and wintering roosts are protected under California Fish and Game Code. Preferred monarch foraging habitat includes vegetation communities that offer diverse nectar sources. Native milkweeds (*Asclepias spp.*) and other nectar sources provide monarchs with breeding habitat, resting and refueling stops during migration, and food at overwintering sites. Overwintering begins in September or October. Overwintering typically occurs in tree groves within 1.5 miles of the Pacific coastline. Suitable grove conditions include temperatures above freezing, high humidity, dappled sunlight, access to water and nectar, and protection from high winds and storms. Monarchs will select native tree species when they are available but will also utilize non-native eucalyptus species if other optimal habitat conditions are met. During breeding season in the late spring and summer, female monarch butterflies lay their eggs on the underside of young leaves or flower buds of milkweeds. Larvae (caterpillars) hatch in 3-5 days and transform to pupa (chrysalis) after 11-18 days. Fully formed adults (butterflies) emerge from the pupae in 8-14 days. Foraging habitat for this species is located in coastal scrub and grassland communities in the Hills and Canyon Area. Areas that support milkweed populations would allow the monarch butterfly to breed there. There are seven recent records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁴

San Diego Fairy Shrimp

The San Diego fairy shrimp is a fairy shrimp in the family Branchinectidae. This species is a habitat specialist found in small, shallow (less than 1 meter deep), moderately alkaline vernal pools, which

⁴⁴ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

range in depth from 5 to 30 centimeters (cm) and in water temperature from 10 to 20 degrees Celsius (C). The "resting" or "summer" eggs are capable of withstanding heat, cold, and prolonged drying. When the pools refill in the same or subsequent rainy seasons, some but not all of the eggs may hatch. Adult San Diego fairy shrimp are usually observed from January to March; however, in years with early or late rainfall, the hatching period may be extended. The San Diego fairy shrimp is federally listed as an Endangered species and is covered under the CONCCP/HCP. The City contains suitable habitat, including soils known to support vernal pools, that could support occurrence of this species. There are three recent records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁵

Riverside Fairy Shrimp

The Riverside fairy shrimp is a fairy shrimp in the family Streptocephalidae. This species is only found in deep, cool lowland vernal pools that retain water through the warmer weather of late spring. The minimum habitat size for the vernal pools is 750 square meters, with a minimum depth of 30 cm at maximum filling. When the vernal pools dry, the eggs remain on the surface of the pool or embedded within the top few centimeters of soil. There they survive the hot, dry summers and cold, wet winters that follow until the vernal pools and swales fill with rainwater and conditions are right for hatching. The Riverside fairy shrimp is federally listed as an Endangered species and is covered under the CONCCP/HCP. The City contains suitable habitat, including soils known to support vernal pools, which could support the occurrence of this species. There are two recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁶

Southern California Legless Lizard

The southern California legless lizard is a lizard in the family Anniellidae. This species is found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Much of the coastal dune habitat the species occupied has been destroyed by coastal development. The southern California legless lizard species is designated as a California Special Species of Concern. Suitable habitat for this species is located on the alluvial fans in the Hill and Canyon Area. There are three recent and seven historical records in the 12-quadrangle search area encompassing the City, including two historical records within city limits.

California Glossy Snake

The California glossy snake is a snake in the family Colubridae. This species is found in areas of rocky washes and loose, sandy soils and for burrowing in desert scrub grassland, coastal sage and Riversidean alluvial fan sage scrub, and chaparral habitats. They may be encountered in burrows, under rocks, under artificial cover or buried in soft soil. The California glossy snake is designated as a California Species of Special Concern. Suitable habitat for this species is located in the coastal scrub and chaparral communities in the Hill and Canyon Area. There is one historical record in the 12-quadrangle search area encompassing the City.

⁴⁵ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁴⁶ Ibid.

Western Pond Turtle

The western pond turtle is a turtle in the family Emydidae. This species is aquatic and found in ponds, marshes, rivers, streams, and irrigation ditches with rocks and logs for basking. It only leaves aquatic habitat to reproduce and overwinter. This species requires basking sites and suitable (grassy open fields) upland habitat for egg-laying. Eggs are buried in nests that are usually found within 250 meters of water. The western pond turtle is designated as a California Species of Special Concern. Suitable habitat for this species is located in the water bodies, including Gypsum Creek and Coal Creek, found in the Hill and Canyon Area. There are five recent and 18 historical records in the 12-quadrangle search area encompassing the City.

Two-striped Gartersnake

The two-striped gartersnake is a snake in the family Colubridae. This species occurs in marshes and swamps, riparian scrub, riparian woodlands, and wetlands. This snake is highly aquatic and forages primarily in and along streams. Its primary food source is fish, especially trout and Sculpin and their eggs, and amphibians and amphibian larvae. The two-striped gartersnake is designated as a California Species of Special Concern. Suitable habitat for this species is located in the riparian communities in the Hills and Canyon Area. There are one recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁷

Tricolored Blackbird

Tricolored blackbird is a passerine bird in the family Icteridae. It is often found near fresh water and prefers emergent wetlands with tall, dense cattails or tules, but can also found in thickets of willow, blackberry, wild rose, and other tall herbs. This species is known to forage on the ground in croplands, grassy fields, flooded land, and along the edges of ponds. The tricolored blackbird diet generally consists of insects and spiders as a juvenile, and seeds and cultivated grains, such as rice and oats, as an adult. The tricolored blackbird is State-listed as a Threatened species and is designated as a California Species of Special Concern. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species may occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located in the riparian communities. There are three recent and nine historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁸

Grasshopper Sparrow

The grasshopper sparrow is a passerine bird in the family Passerellidae. This species occurs and nests in dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. The grasshopper sparrow is designated as a California Species of Special Concern. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable habitat for this species is located in the grassland community in the Hill and Canyon

⁴⁷ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁴⁸ Ibid.

Area. There are three recent and one historical records in the 12-quadrangle search area encompassing the City.

Golden Eagle

The golden eagle is an eagle in the family Accipitridae. This species resides in rolling foothills, mountain areas, sage-juniper flats, and deserts from sea level to 11,500 feet (3,833 m). It feeds mostly on lagomorphs and rodents, and occasionally other mammals, birds, reptiles and some carrion. This eagle hunts in open terrain including grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. This species nests in large trees in open areas on cliffs. The golden eagle is designated as a California Fully Protected species and is covered under the CONCCP/HCP. This species is afforded additional protection under the Bald and Golden Eagle Protection Act. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species may occur in the Hill and Canyon Area where suitable foraging habitat is located within coastal scrub and grassland communities. There are one recent and two historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁴⁹

Great Blue Heron

The great blue heron is a heron in the family Ardeidae. This species occurs and nests in tall trees, cliffsides, and sequestered spots on marshes. Foraging areas for this species include marshes, lake margins, tide-flats, rivers and streams, wet meadows. Their rookery sites (colonial nesting areas) are considered a sensitive resource by CDFW and their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Nesting rookeries for this species have been recorded within city limits according to the CNDDDB, and suitable habitat is located in the Hill and Canyon Area in riparian communities. There is one recent (2004) record in the 12-quadrangle search area encompassing the City, which falls within city limits (Exhibit 6).⁵⁰

Long-eared Owl

The long-eared owl is an owl in the family Strigidae. This species nests in riparian habitat, live oak thickets, and other dense stands of trees. This owl feeds mostly on voles and other rodents, occasional birds, and other vertebrates. It usually hunts for prey in open areas, including grasslands, meadows, and shrublands, but is known to hunt in woodland and forested habitats. The long-eared owl is designated as a California Fully Protected species. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable foraging and nesting habitat is present in coastal scrub, chaparral, grassland, and riparian communities in the Hills and Canyon Area. There are three historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵¹

⁴⁹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁵⁰ Ibid.

⁵¹ Ibid.

Burrowing Owl

The burrowing owl is an owl in the family Strigidae. Burrowing owls occur in open, dry, annual, or perennial grasslands, desert scrub, and coastal scrub communities characterized by low growing vegetation and open spaces. This species utilizes, modifies, and nests in burrows created by other species, most notably those of the California ground squirrel but also those excavated by coyotes, desert kit foxes, desert tortoises, American badgers, and other burrowing mammals. Burrowing owl populations are threatened by habitat loss, pesticide use, and ground squirrel eradication programs, which limit suitable burrowing habitat. On October 10, 2024, the California Fish and Game Commission designated the burrowing owl as a Candidate for listing under the California Endangered Species Act (CESA). As a Candidate species, burrowing owls receive full protections under CESA, and any projects or activities that could result in “take” would need to avoid project impacts to avoid taking burrowing owls. Limited take of habitat of this species is currently covered under the CONCCP/HCP under certain conditions; however, CDFW may require that project owners obtain an Incidental Take Permit (ITP) if a project has the potential to take burrowing owls. The nesting burrows of burrowing owls are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species and take permissions are never provided for take of nests. Suitable foraging and nesting habitats are present in coastal scrub and grassland communities that containing California ground squirrels and other medium-sized burrowing mammals in the Hill and Canyon Area. There are 15 recent and eight historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵²

Ferruginous Hawk

The ferruginous hawk is a hawk in the family Accipitridae. This species is migratory and is a somewhat common winter resident of southwestern California, where it frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Ferruginous hawks generally arrive in California in September and depart by mid-April. Urban development may contribute to the loss of suitable wintering habitat in California. This species is on the CDFW Watch List. Suitable foraging habitat is present in coastal scrub and grassland communities in the Hill and Canyon Area City. There are three historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵³

Southwestern Willow Flycatcher

The southwestern willow flycatcher is a passerine bird in the family Tyrannidae. This species occurs on the edges of wet meadows, ponds, or backwaters where dense willow thickets predominate and have low, exposed branches for perching. Threats include loss and degradation of riparian habitats due to development or clearing, disturbance due to grazing, and parasitism by brown-headed cowbirds. The southwestern willow flycatcher is federally and State-listed as an Endangered species and is covered under the CONCCP/HCP. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. This species may occur in the Hill and Canyon Area where suitable foraging and nesting habitat is located in the riparian woodland

⁵² California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://map.dfg.ca.gov/bios/>. Accessed November 27, 2024.

⁵³ Ibid.

communities. There are one recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵⁴

California Horned Lark

The California horned lark is a passerine bird in the family Alaudidae. This species is a common to abundant year-round resident that inhabits a variety of open habitats, such as desert scrub, grasslands, and other open habitats with low, sparse vegetation, and typically where trees and large shrubs are absent. California horned lark nest on the ground, building grass-lined nests in a cup-shaped depression on open ground. This species is very gregarious and often forms large flocks that forage and roost together after the breeding season. California horned larks eat insects, snails, and spiders during breeding season and grass and forb seeds and other plant matter outside of the breeding season. The California horned lark is on the CDFW Watch List. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable foraging and nesting habitats are present in grassland communities in the Hill and Canyon Area. There are five recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵⁵

American Peregrine Falcon

The American peregrine falcon is a falcon in the family Falconidae. This species occurs near bodies of water, including wetlands, lakes, and rivers and in open areas with cliffs, ledges, and canyons nearby for cover and nesting. They also nest on banks, dunes, and mounds. They nest on human-made structures, and occasionally use trees or snag cavities or old nests of other raptors. The American peregrine falcon is Delisted from both federal and State listings but is designated as a California Fully Protected species and is covered under the CONCCP/HCP. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. There are CNDDDB records of this species in the City of Anaheim and suitable habitat is located in riparian communities and rocky bluffs in the Hill and Canyon Area. There is one recent (2015) record in the 12-quadrangle search area encompassing the City, which falls within city limits (Exhibit 6).⁵⁶

Bank Swallow

The bank swallow is a passerine bird in the family Hirundinidae. This species occurs in vertical banks and cliffs with fine-textured or sandy soils near streams, rivers, ponds, lakes, and the ocean for nesting. It feeds primarily over grassland, shrubland, savanna, and open riparian areas during breeding season and over grassland, brushland, wetlands, and cropland during migration. The bank swallow is State-listed as a Threatened species. Their nests are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. Suitable foraging and nesting habitat is present in the coastal scrub, grassland, and riparian communities in the Hill and Canyon Area. There are three historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵⁷

⁵⁴ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

California Least Tern

California least tern is a seabird in the family Laridae. This species occurs and nests on bare or sparsely vegetated, flat substrates, including sand beaches, alkali flats, landfills, or paved areas. Its nests are usually on sandy or gravelly substrates. The California least tern is listed as federally and State Endangered and is designated as a California Fully Protected species. Their nests are protected by the MBTA and California Fish and Game Code pertaining to native nesting avian species. Suitable habitat for this species is located within the Hill and Canyon Area. There are six recent and seven historical records in the 12-quadrangle search area surrounding the project area, including two recent (2016, 2018) records within city limits (Exhibit 6).

Pallid Bat

The pallid bat is a member of the vesper bat family, Vespertilionidae. This species occurs in deserts, grasslands, shrublands, woodlands, and forests and is most common in open, dry habitats with rocky areas for roosting. The pallid bat is designated as a California Species of Special Concern. Suitable habitat is present in the grassland, shrub, and woodland communities in the Hill and Canyon Area. There is one historical record in the 12-quadrangle search area encompassing the City.

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse is a species pocket mouse in the family Heteromyidae. It occurs in chaparral, grasslands, sage scrub, forests, and deserts and prefers low growing vegetation or rocky outcroppings, and sandy soil for burrowing. The northwestern San Diego pocket mouse is designated as a California Species of Special Concern. Suitable habitat is present in the chaparral, coastal scrub, and grassland communities in the Hill and Canyon Area. There is one recent record in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵⁸

Western Mastiff Bat

The western mastiff bat is a member of the free-tailed bat family, Molossidae. This species occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, and roosts in crevices in cliff faces, high buildings, trees, and tunnels. It forages primarily on moths, but also takes crickets and katydids. The western mastiff bat is designated as a California Species of Special Concern. Suitable habitat is present in the coastal scrub, grassland, and chaparral communities in the Hill and Canyon Area. There are 11 historical records in the 12-quadrangle search area encompassing the City, including two historical records within city limits.

Western Yellow Bat

The western yellow bat is a member of the vesper bat family, Vespertilionidae. This species occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats and roosts in skirts of dead fronds in both native and non-native palm trees. The western yellow bat is designated as a California Species of Special Concern. Suitable habitat is present in the riparian communities in the

⁵⁸ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

Hill and Canyon Area. There is one historical record in the 12-quadrangle search area encompassing the City.

Yuma Myotis

Yuma myotis is a member of the vesper bat family, Vespertilionidae. This species occurs in open forests and woodlands with sources of water over which to feed. Suitable habitat is present in woodland communities containing water sources in the Hill and Canyon Area. There is one historical record in the 12-quadrangle search area encompassing the City, which is within city limits.

San Diego Desert Woodrat

San Diego desert woodrat is a subspecies woodrat (pack rat) in the family Muridae. It occurs in Southern California coastal scrub habitats from San Diego County to San Luis Obispo County. This species prefers habitats with moderate to dense shrub canopies. They are particularly abundant in rock outcrops, rocky cliffs, and rocky slopes. The San Diego desert woodrat is designated as a California Species of Special Concern and is covered under the CONCCP/HCP. Suitable habitat is present in coastal scrub and chaparral communities in the Hill and Canyon Area. There are one recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁵⁹

Southern Grasshopper Mouse

The southern grasshopper mouse is a mouse in the family Cricetidae. This species occurs in desert areas, especially scrub habitats with friable soils for digging. It prefers low to moderate shrub cover. The southern grasshopper mouse is designated as a California Species of Special Concern. Suitable habitat is present in the scrub community in the Hill and Canyon Area. There is one recent record in the 12-quadrangle search area encompassing the City.

American Badger

The American badger is a carnivoran in the family Mustelidae. This species occurs in drier open stages of shrubs, forest, and herbaceous habitats with friable soils for burrowing. It preys on rodents, including mice, squirrels, and groundhogs. The American badgers is designated as a California Species of Special Concern. Suitable habitat is present in coastal scrub, grassland, and forest communities in the Hill and Canyon Area. There are one recent and one historical records in the 12-quadrangle search area encompassing the City (Exhibit 6).⁶⁰

5.3.4 - Potential for Occurrence of Other CONCCP/HCP-Covered Wildlife Species

Other wildlife species not detected in the CNDDDB, CNPSEI, or IPaC searches, but that are listed as Identified Species in the CONCCP/HCP may have potential to occur in the City. Of these species, four were assessed to have high potential to occur: sharp-shinned hawk, red-shouldered hawk, coyote, and gray fox. Suitable habitat for these species is in chaparral and coastal scrub, and grassland communities in the Hill and Canyon Area. Suitable nesting and foraging habitats exist there for

⁵⁹ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS). Website: <https://wildlife.ca.gov/Data/BIOS>. Accessed November 27, 2024.

⁶⁰ Ibid.

sharp-shinned hawk and red-shouldered hawk. Coyote are tolerant of human disturbance and have potential to occur throughout the City. Suitable habitat for gray fox is in the chaparral and woodland areas near water features in the Hill and Canyon Area.

Eight other Identified Species were assessed to have moderate potential to occur: arboreal salamander, blackbelly slender salamander, rosy boa, San Bernardino ringneck snake, Coronado Island skink, rough-legged hawk, northern harrier, and prairie falcon. Suitable habitat for each of these species is in the Hill and Canyon Area. For arboreal salamander, habitat is within the oak woodland communities. For blackbelly salamander, habitat is within the chaparral and oak and sycamore woodland communities. For rosy boa, habitat is within the shrub and chaparral communities. For San Bernardino ringneck snake, habitat is within the chaparral, grassland, and riparian woodland communities. For Coronado Island skink, habitat is within the grassland and chaparral communities. For rough-legged hawk, foraging habitat is within the grassland, shrubland, and forest communities. For northern harrier, foraging habitat is within the grassland and wetland communities. For prairie falcon, foraging habitat is within the grassland communities and nesting habitat is in areas supporting cliffs and bluffs.

5.4 - Wildlife Movement Corridors

The open spaces in the Hill and Canyon Area contain significant resources that support wildlife movements through the local area and surrounding region, and many of these areas are conserved or targeted for conservation, per the CONCCP/HCP. Undeveloped lands surrounding Coal Canyon provide an important wildlife movement corridor between the Cleveland National Forest and the Chino Hills State Park. Portions of Coal Canyon located just east of the city limits are preserved in Coal Canyon Ecological Reserve, a State reserve that was established to allow wildlife movement through the area. Adjacent portions of the Hill and Canyon Area in the City also function as part of this wildlife movement corridor. Within developed portions of the Anaheim Hills, undeveloped hillsides and washes likely serve as minor movement corridors for local wildlife populations. Additionally, the Santa Ana River channel may provide a movement corridor between coastal areas and the Santa Ana Mountains for terrestrial wildlife species that are tolerant of anthropogenic landscape, such as coyotes.

5.5 - Wildlife Nursery Sites

The City contains natural vegetation communities in undeveloped areas and trees, shrubs, and anthropogenic nesting platforms (e.g., buildings, utility poles) in developed areas that could provide suitable nesting habitat for bird species protected under the MBTA and the Fish and Game Code. Undeveloped areas of the City support nesting habitat for special-status avian species, such as Cooper's hawk, coastal cactus wren, white-tailed kite, southwestern willow flycatcher, California horned lark, prairie falcon, American peregrine falcon, yellow-breasted chat, coastal California gnatcatcher, bank swallow, yellow warbler, least Bell's vireo, and others, plus many common native avian species. Developed areas of the City support nesting habitat for native bird species that are tolerant of anthropogenic landscapes and activities, such as mourning dove, northern mockingbird, American crow, common raven, black phoebe, bushtit, house finch, lesser goldfinch, and others.

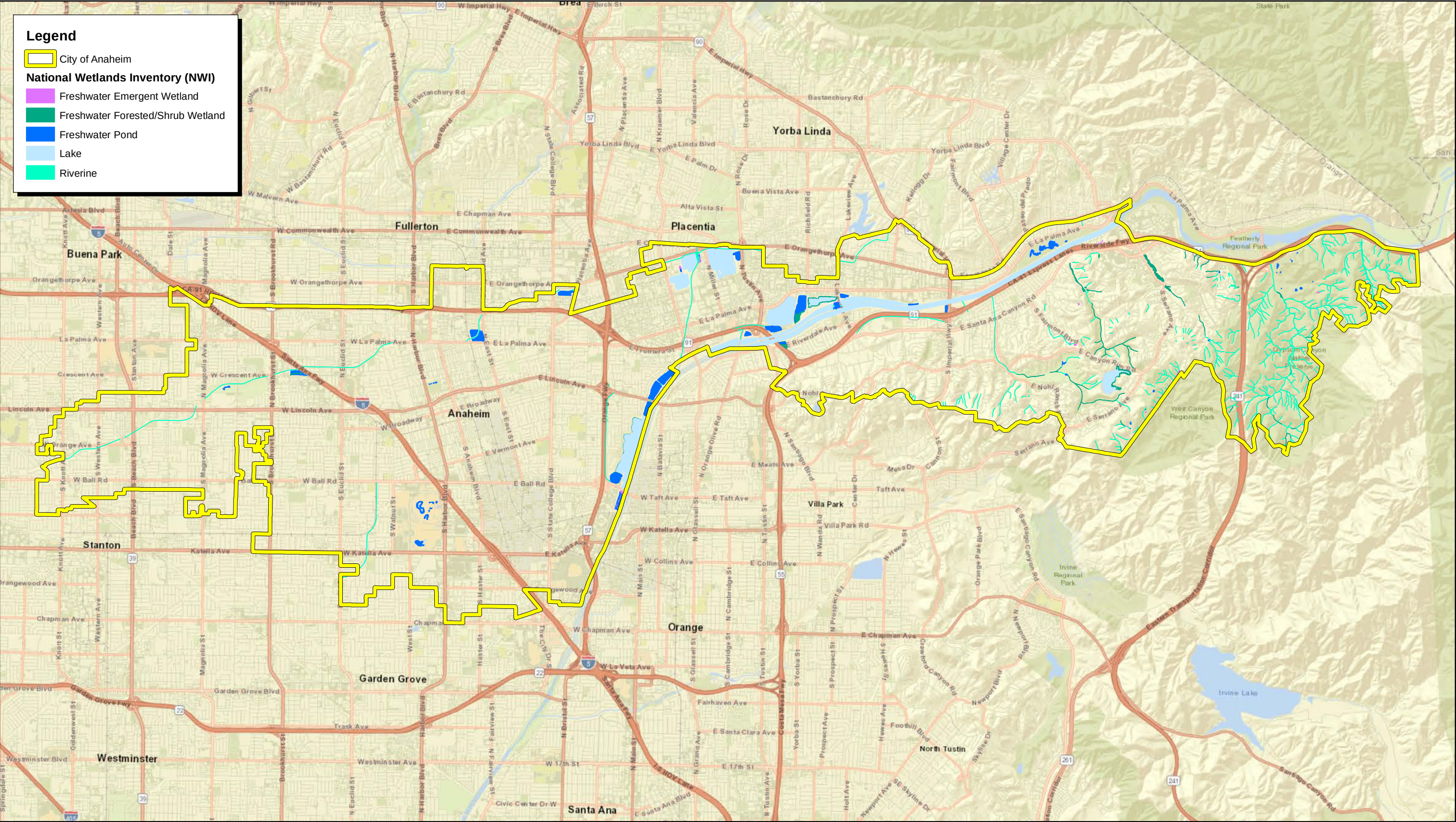
5.6 - Potentially Jurisdictional Water and Wetlands

The Santa Ana River Watershed is the largest in Orange County, covering 153.2 square miles. The river begins almost 75 miles away in the San Bernardino Mountains, crossing central Orange County before emptying into the Pacific Ocean. The Orange County portion of the watershed includes portions of the cities of Anaheim, Brea, Huntington Beach, Orange, Placentia, Santa Ana, Villa Park, and Yorba Linda. The river serves as the main tributary to the watershed with Santiago Creek being the largest tributary within Orange County. Portions of the Santa Ana River provide wetland and riparian habitat.

There are waters and wetland features present in undeveloped and developed areas of the City that would be considered potentially jurisdictional by USACE and potentially jurisdictional by State regulatory agencies including the RWQCB and CDFW. A map showing blue line streams as mapped in the National Wetlands Inventory (NWI) is presented in Exhibit 7. The washes, canyons, drainages, and riparian habitats present in the Hills and Canyon Area of the City are likely jurisdictional under State agency review. Blue line streams, including Gypsum Creek and Coal Creek, in the Hills and Canyon Area may also be jurisdictional under federal agency review. The Santa Ana River runs through the City and is likely jurisdictional under State and federal agency review. Drainage ditches, culverts, and channels in developed areas of the City may be jurisdictional under State agency review, particularly if they connect to waters downstream.

5.7 - Trees and Oak Woodlands

Trees that are protected under City Municipal Ordinances or oak woodlands protected under the California Oak Woodlands Conservation Act, the County Oak Resources Management Plan, and the CONCCP/HCP are present in the City. Undeveloped areas of the City support oak woodlands containing several species, including coast live oak (*Quercus agrifolia*), inland scrub oak, canyon live oak (*Quercus chrysolepis*), and Engelmann oak (*Quercus engelmannii*), among others. Designated Landmark Trees on public lands and Street Trees along City streets are protected from removal or modification (e.g., pruning, topping) under City Municipal Ordinances. Tree species that may be considered Landmark Trees or Street Trees include native species such as oaks (*Quercus* spp.), Fremont cottonwood, western sycamore, elderberry (*Sambucus* spp.), and southern California black walnut, among others. Non-native, ornamental trees are also planted throughout the developed portion of the project area and may be protected under City Municipal Ordinances.



Source: ESRI World Street Map. City of Anaheim. U.S. Fish & Wildlife Service.

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Exhibit 7 Potentially Jurisdictional Waters and Wetlands

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SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on regulated biological resources, including special-status species, riparian habitat or other sensitive natural communities, protected wetlands, wildlife movement corridors or nursery sites, or conflict with any policies such as tree ordinances or NCCP/HCP. Following this analysis, mitigation measures are recommended that would avoid and/or mitigate impacts of any project implemented under the Plan to a less than significant level under CEQA.

6.1 - Impact Analysis

The following CEQA Guidelines Appendix G checklist questions served as thresholds of significance for evaluating the potential impacts on biological resources of projects that would be implemented under the Plan. Impacts are considered significant if a project would:

- Impact BIO-1** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Impact BIO-2** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Impact BIO-3** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Impact BIO-4** Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Impact BIO-5** Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Impact BIO-6** Conflict with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or State Habitat Conservation Plan.

6.1.1 - Impact BIO-1: Potential Impacts to Special-status Species

Areas within the City that are undeveloped or support natural vegetation communities or undisturbed soils have the potential to support special-status plant and/or wildlife species. Areas that contain habitats that could support special-status species occurrence are primarily located in the eastern portion of the City in the Hill and Canyon Areas, but could also be located in other, undeveloped areas of the City, such as some areas along the Santa Ana River. Special-status plant

species that could occur in the City include Tecate cypress, Braunton's milk-vetch, long-spined spineflower, paniculate tarplant, western dichondra, many-stemmed dudleya, mesa horkelia, heart-leaved pitcher sage, Robinson's pepper-grass, intermediate monardella, Hubby's phacelia, Engelmann oak, Coulter's matilija poppy, Catalina mariposa lily, intermediate mariposa lily, ocellated Humboldt lily, chaparral nolina, Brewer's calandrinia, Lewis' evening-primrose, small-flowered morning-glory, Santa Monica Mountains dudleya, San Diego button-celery, Palmer's grapplinghook, Southern California black walnut, Coulter's goldfields, small-flowered microseris, south coast branching phacelia, Fish's milkwort, white rabbit-tobacco, San Diego County viguiera, Plummer's mariposa lily, scrub oak, and Nuttall's scrub oak, and potentially others. Special-status wildlife species that could occur in the City include Crotch's bumble bee, western spadefoot, orange-throated whiptail, San Diegan tiger whiptail, red-diamond rattlesnake, coast horned lizard, coast patch-nosed snake, Cooper's hawk, southern California rufous-crowned sparrow, coastal cactus wren, white-tailed kite, yellow-breasted chat, coastal California gnatcatcher, yellow warbler, least Bell's vireo, monarch butterfly, San Diego fairy shrimp, Riverside fairy shrimp, southern California legless lizard, California glossy snake, western pond turtle, two-striped gartersnake, tricolored blackbird, grasshopper sparrow, golden eagle, great blue heron, long-eared owl, burrowing owl, ferruginous hawk, southwestern willow flycatcher, California horned lark, American peregrine falcon, bank swallow, California least tern, pallid bat, northwestern San Diego pocket mouse, western mastiff bat, western yellow bat, Yuma myotis, San Diego desert woodrat, southern grasshopper mouse, American badger, sharp-shinned hawk, red-shouldered hawk, coyote, gray fox, arboreal salamander, blackbelly salamander, rosy boa, San Bernadino ringneck snake, Coronado Island skink, rough-legged hawk, northern harrier, prairie falcon, and potentially others.

Projects implemented within the City that are in or near areas that could potentially support special-status species occurrences have a potential to cause impacts to these special-status species. An impact to special-status plant or wildlife species would be considered significant if project construction and/or operations result in either (1) direct harm resulting in injury or death; or (2) substantial, adverse changes in any of the physical conditions, including habitat loss/modification within the area affected by the project. Project take of special-status that are covered under the CONCCP/HCP may be allowed in the CONCCP/HCP plan area under certain conditions (see below).

6.1.2 - Impact BIO-2: Potential Impacts to Riparian or Other Sensitive Vegetation Communities

The City contains the Santa Ana River and other significant riparian areas that support riparian vegetation communities, as do canyons and washes in the Hill and Canyons Area. Projects implemented in or adjacent to these areas could impact riparian vegetation communities. The City also likely contains natural vegetation communities that are considered sensitive by CDFW, particularly within the Hill and Canyon Area. Sensitive natural vegetation communities ranked S1 to S3 are protected under CEQA and subject to its environmental review processes. Sensitive riparian habitats and vegetation communities that are present or could occur in the City include Southern Dune Scrub, Southern Foredunes, Southern Interior Cypress Forest, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, Southern Willow Scrub, Riversidian Alluvial Fan Sage Scrub, California Walnut Woodland, CSS communities, coast live oak communities (oak savanna and oak woodland), Tecate cypress communities, nolina chaparral, and

needlegrass grassland, among others. Project sites in the planning area that support sensitive natural vegetation communities could potentially cause impacts to these communities, which may be considered significant under CEQA. An impact to sensitive natural communities or riparian habitat would be considered significant if the proposed construction or operation results in substantial adverse changes to any of the physical conditions, such as the removal of vegetation within the area affected by a project.

6.1.3 - Impact BIO-3: Potential Impacts to Protected Wetlands

The City contains the Santa Ana River and numerous washes, canyons, or drainages that may be considered jurisdictional by the USACE, RWQCB, and/or CDFW and would meet definitions of State- or federally protected waters. These include larger drainages, such as the Santa Ana River, Gypsum Creek, Coal Creek, and Santiago Creek, and many smaller tributaries of these drainages. Projects implemented near these resources could result in direct impacts to these potentially jurisdictional drainages through the loss/modification of these features, as well as have adverse impacts on downstream water quality. An impact to State- or federally protected waters or wetlands would be considered significant if construction or operations of future development projects result in substantial, adverse physical changes (permanent or temporary) as a result of filling, water diversion or other hydrological interruption of protected waters and wetlands within the project site. Physical changes that result in adverse effects to downstream water quality could also be considered significant.

6.1.4 - Impact BIO-4: Potential Impacts to Wildlife Movement Corridors or Nursery Sites

Much of the western and central portions of the City consists of developed or urbanized land and existing barriers to wildlife movements, including buildings, roadways, fences, and other anthropogenic features and structures. However, the Santa Ana River channel and undeveloped lands in the Hill and Canyon Area of the City contain habitats and features that allow for wildlife movement corridors. Future development within the City has the potential to impede the movement of wildlife through these areas. The construction of new roadways, in particular, could create new barriers to wildlife movement, as could any project implemented within relatively undeveloped areas of the Hill and Canyon Area. Projects that restrict, constrict, or otherwise affect wildlife movement through existing corridors would be considered a significant impact under CEQA.

Additionally, implementation of future projects in the City may impact breeding and/or nesting activities of native birds. Construction activities that occur during the avian nesting season, defined as February 1 through July 31 in the urbanized areas of the City and February 1 through September 30 in the Hill and Canyon Area, could disturb nesting sites for bird species protected under Fish and Game Code or the MBTA. The removal of trees and other vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other manufactured disturbances may cause nesting birds to abandon their nests. Native bird species could potentially nest in all areas of the City, including developed areas that support trees, shrubs, or other nesting platforms, including buildings or bare ground. Any project impacts to active nests of native bird species protected by the MBTA and/or Fish and Game Code would be considered significant under CEQA.

6.1.5 - Impact BIO-5: Potential to Conflict with Tree or Vegetation Protection Policies

Projects implemented in developed areas of the City have the potential to impact Landmark Trees that are protected from removal under City Municipal Code Chapter 11.12.010 and Street Trees that are protected from cutting, trimming, pruning, planting, removing, spraying, or interfering without permissions from the City under City Municipal Code Chapter 13.12.080. As well, there are specimen trees located in the SC Overlay Zone that are protected from removal or topping without permissions from the City under City Municipal Code Chapter 18.18.040. Finally, projects implemented in the Hill and Canyon Area of the City have the potential to impact oak woodlands that are protected from removal, topping, cutting, or encroaching into their root zones without implementing conservation measures under the California Oak Woodlands Conservation Act, the County Oak Resources Management Plan, and the CONCCP/HCP are present in the City. Projects implemented in the City that could remove, cut, top, prune, trim, or spray trees or impact their canopies or root zones have the potential to conflict with any of these policies, as applicable, which would be considered a significant impact under CEQA.

6.1.6 - Impact BIO-6: Potential to Conflict with Natural Community Conservation Plan or Habitat Conservation Plan

The Hill and Canyon Area of the City is within the boundaries of the CONCCP/HCP. Under this plan, USFWS and CDFW authorize incidental “take” of 44 Identified Species to the County, the City, and other signatories to the plan for projects and other actions that would occur as a result of: (1) construction activities undertaken pursuant to local government authorizations; (2) public utilities and public recreational activities undertaken pursuant to authorization of the particular public utility or public agency; and (3) ongoing maintenance of existing and future permitted facilities. Ten species are covered conditionally, and their “take” is authorized only when certain conditions are met by project proponents or Non-participating Landowners. Within the Hill and Canyon Area of the City, the Conditionally Covered Species include intermediate mariposa lily, arroyo toad, least Bell’s vireo, southwestern willow flycatcher, Riverside fairy shrimp, San Diego fairy shrimp, golden eagle, and prairie falcon. For these Conditionally Covered Species, Non-participating Landowners or other project proponents/applicants must consult with USFWS to conduct surveys, avoid/mitigate habitats, redesign projects to avoid impacts, and/or develop a mitigation plan prior to receiving authorization to “take” these species or their habitats. “Take” of these and other Identified Species and Covered Habitats, including CSS, is authorized for Non-participating Landowners that opt to participate in the CONCCP/HCP through payment of the CONCCP/HCP Mitigation Fee and implementation of construction-related minimization measures. Future projects implemented within the CONCCP/HCP area have the potential to conflict with this plan if implemented projects are not consistent with the plan, this would be considered a significant impact under CEQA.

6.2 - Mitigation Measures

6.2.1 - Impact BIO-1: Avoidance/Mitigation of Impacts to Special-status Species

For projects implemented outside of the CONCCP/HCP plan area where any special-status, non-covered species is assessed as having potential to occur, the project proponent would be required to

implement Mitigation Measure (MM) BIO-1, which is completion of a biological study to assess potential project impacts to these species, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The implementation of MM BIO-1 would allow each project proponent to identify potential impacts to special-status species outside of the CONCCP/HCP plan area that are not covered by the CONCCP/HCP and avoidance or mitigation measures that would reduce impacts to less than significant levels. If a proposed project is located in the CONCCP/HCP plan area and all special-status species with potential to occur on the proposed project site are covered by the CONCCP/HCP, the project proponent would implement MM BIO-6 (below).

Recommended Mitigation Measure

MM BIO-1 Completion of a Biological Study

Prior to the issuance of grading permits, for all future development plans within the City that could contain special-status species that are not covered by the CONCCP/HCP, or habitat conducive to hosting such species, inclusive of foraging, breeding, or dispersal habitats for wildlife, the project applicant shall employ a qualified Biologist to prepare a Biological Study to evaluate potential impacts to sensitive biological resources regulated by the United States Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), or other local, regional plans or policies that may result from the development of the specific project. The qualified Biologist shall conduct, at a minimum, a site-specific literature review, which shall consider the future development project, site location, Geographic Information System (GIS) information and known sensitive biological resources. The qualified Biologist shall, if the project site has potential support habitat for special-status species or other species protected by federal, State, or local laws or policies, conduct a site visit as part of project review. The review shall assess the site for State or federally listed plants and/or wildlife or other special-status species, aquatic resources, riparian or sensitive natural communities, wildlife movement corridors, or nurseries, or potential nesting or roosting sites, or other regulated biological resources covered by the Endangered Species Act, or California Endangered Species Act (CESA) that could be affected by the proposed project. In some cases, such as a project site that is previously completely developed and contains no potential habitat for protected species, a literature review would be sufficient for the Biologist to make a no impact and/or a less than significant impact determination for all six of the thresholds of significance for biological resources. In other cases, such as project sites that are all or partially undeveloped or contain features that could provide soil substrates for special-status plants or foraging, breeding, nesting, roosting, or dispersal habitats for special-status wildlife, a site survey may be needed to assess the biological conditions on-site. The qualified Biologist employed by each project applicant shall assess potential project impacts to non-listed, non-covered, special-status species, identify threshold of significance with a significance conclusion, and document the findings in a report. Additionally,

future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. This may include acquisition of take permits if any project proponent proposes take of federal or State-listed or candidate species. If take is proposed, the project proponent shall consult with the CDFW and/or the USFWS, as applicable, regarding an Incidental Take Permit (ITP) pursuant to Section 2081 of CESA or Sections 7 or 10 of the federal Endangered Species Act.

6.2.2 - Impact BIO-2: Avoidance/Mitigation of Impacts to Riparian or Other Sensitive Vegetation Communities

If, during implementation of MM BIO-1 or MM BIO-6, riparian habitat resources or other sensitive vegetation communities are discovered on a proposed project site, the project proponent shall implement MM BIO-2.

Recommended Mitigation Measure

MM BIO-2a Mapping of Riparian Habitat and/or Sensitive Vegetation Communities

Prior to the issuance of grading permit, for all future development plans within the City that may impact riparian habitat or natural vegetation communities that are considered sensitive by the California Department of Fish and Wildlife (CDFW), the project proponent shall employ a qualified Biologist to map and fully document the sensitive resources. Additional studies, documentation, or permitting may be required, depending on the results of the sensitive community mapping prepared for each project. During implementation of the Biological Study performed under MM BIO-2, the qualified Biologist employed by each project applicant shall assess potential project impacts to riparian habitats or sensitive vegetation communities, identify threshold of significance with a significance conclusion, and document the findings in a report that is submitted to the City and the CDFW. The results of the mapping effort may be presented in the Biological Study prepared during implementation of MM BIO-1 or MM BIO-6.

MM BIO-2b On-site and/or Off-site Mitigation

If riparian habitats or other natural vegetation communities considered sensitive by the California Department of Fish and Wildlife (CDFW) are discovered on any future implementing development or project site, and it is determined that the project will impact those resources, the project proponent shall consult with CDFW to mitigate for the loss of these resources. If the project impacts to these resources would be temporary in nature, the project proponent shall implement on-site mitigation, such as habitat restoration. If the project will result in permanent impacts to these resources, the project proponent shall purchase off-site mitigation lands or credits at a 1:1 ratio. Any credits purchased off-site shall be from mitigation banks approved by CDFW. Any lands or purchased off-site shall be protected in perpetuity under a conservation easement to protect the sensitive community from direct and indirect

negative impacts, including any future development and zone changes, restrictions on access, proposed land dedications, control of illegal dumping, water pollution, and increased human intrusion. The conservation easement shall be dedicated to a local land conservancy or other appropriate entity approved to hold and manage mitigation lands pursuant to Senate Bill (SB) 1094 (Land use: mitigation lands: nonprofit organizations).

6.2.3 - Impact BIO-3: Avoidance/Mitigation of Impacts to Protected Wetlands

If, during implementation of MM BIO-1 or MM BIO-6, potentially jurisdictional wetlands or waters of the State/US are discovered on a proposed project site, the project proponent shall implement MM BIO-3.

Recommended Mitigation Measures

MM BIO-3a Determination of Project Impacts to Potentially Jurisdictional Waters and Wetlands

Prior to the issuance of grading permits, if any future developments or proposed projects are planning areas that may result in the impact to potentially jurisdictional wetlands or waters of the State/United States, the project proponent shall employ a qualified Biologist/Delineator to conduct a jurisdictional delineation which would establish the jurisdictional limits of potential wetlands or waters of the State/United States. If waters of the United States are delineated on-site, the project proponent shall prepare a jurisdictional delineation report and submit the jurisdictional delineation report to the United States Army Corps of Engineers (USACE) for verification. If the project could potentially impact wetlands or waters of the State/United States, the project proponent shall seek permissions from the resource agencies as described in MM BIO-3b.

MM BIO-3b Obtain Agency Permits for Impacts to Wetlands/Waters

If any future developments or proposed projects in the planning area are expected to impact wetlands or waters of the State/United States, the project proponent shall seek permission from the State regulatory agencies (Regional Water Quality Control Board [RWQCB] and California Department of Fish and Wildlife [CDFW]) for the proposed impacts to State waters and implement the mitigation measures as prescribed in the Clean Water Act (CWA) 401 (from RWQCB) and State of California Fish and Game Code 1602 (from CDFW) permits. If the project will impact waters of the United States, the project proponent shall seek permission from the United States Army Corp of Engineers (USACE) for the proposed impacts. The project proponent shall comply with any mitigation measures contained in the permits, such as measures pertaining to on-site habitat restoration or off-site habitat acquisition, among other measures. Copies of the regulatory permits shall be submitted to the City prior to ground disturbance within the regulated jurisdictional waters.

MM BIO-3b Apply for Permits from Regulatory Agencies

Any project proponent that proposes impacts to jurisdictional waters or wetlands within the planning area shall consult with the California Department of Fish and Wildlife (CDFW) regarding a Section 1602 Streambed Alteration Agreement Permit, the United States Army Corps of Engineers (USACE) regarding a Clean Water Act (CWA) Section 404 Permit, and the Regional Water Quality Control Board (RWQCB) regarding a CWA Section 401 Certification. The project applicant shall be required to obtain these permits as a condition of approval and prior to the issuance of any grading, construction, or building permits from the County and prior to the commencement of any grading or construction activities. The project applicant shall implement the mitigation measures as prescribed in the permits.

6.2.4 - Impact BIO-4: Avoidance/Mitigation of Impacts to Wildlife Movement Corridors or Nursery Sites

If, during implementation of MM BIO-1 or MM BIO-6, wildlife movement corridors or wildlife nursery sites (e.g., avian nesting habitat or bat maternity roost) are discovered on a proposed project site, the project proponent shall implement MM BIO-4.

Recommended Mitigation Measure**MM BIO-4a Mapping of Wildlife Movement Corridors**

If a wildlife movement corridor, such as a riparian zone or other natural feature that facilitates movements of wildlife, is discovered on any future implementing development or project site, and it is determined that the project will impact wildlife movements, the project proponent shall employ a qualified Biologist to assess potential project impacts to these resources, identification of the threshold of significance with a significance conclusion, and documentation of the findings in a report. The results of the mapping effort may be presented in the Biological Study prepared during implementation of MM BIO-1 or MM BIO-6. The project proponent shall submit the report to the City and California Department of Fish and Wildlife (CDFW). Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The project proponent shall consult with CDFW to mitigate for any loss of these resources or impediments to wildlife movements. If the impacts to wildlife movements would be temporary in nature, the project proponent shall design project elements that would avoid the resource or provide on-site mitigation to allow wildlife movements to proceed uninhibited following implementation of the project. If the project will result in permanent impacts to wildlife movements, the project proponent shall purchase off-site mitigation lands or credits at a 1:1 ratio through a CDFW-approved mitigation bank or Regional Conservation Investment Strategies Program.

MM BIO-4b Identification of Wildlife Nursery Sites

For all future development plans within the planning area that may impact wildlife nursery sites, such as active bird nests or bat maternity roosts, the project proponent shall employ a qualified Biologist to map and fully document the sensitive resources. Additional studies, documentation, or permitting may be required, depending on the results of the wildlife nursery site mapping prepared for each project. During implementation of MM BIO-4a, the qualified Biologist employed by each project applicant shall assess potential project impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA) or Fish and Game Code or bat maternity roosts, identify threshold of significance with a significance conclusion, and document the findings in a report that is submitted to the City and the California Department of Fish and Wildlife (CDFW). The results of the assessment may be presented in the Biological Study prepared during implementation of MM BIO-1 or MM BIO-6. If avian nesting habitat is determined to be on or adjacent to a future project site that may be impacted by implementation of the project, the project proponent shall implement MM BIO-4c. If potential bat maternity roosts are identified on or adjacent to a future project site that may be impacted by implementation of the project, the project proponent shall implement MM BIO-4d.

MM BIO-4c Avoidance of Nesting Avian Species

For all future development plans within the planning area that contain habitats or features that could provide nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, the following measures shall apply:

1. Removal of native vegetation shall be limited to only those necessary to construct a proposed future project as reflected in the relevant project approval documents.
2. To the extent possible, vegetation shall be removed outside of the avian nesting season, or from August 1 through January 31 (for urbanized areas of the City) or October 1 through January 31 (for the Hill and Canyon Area).
3. If a proposed future project requires vegetation to be removed during the nesting season, or between February 1 and July 31 (for urbanized areas of the City) or February 1 and September 30 (for the Hill and Canyon Area), pre-construction surveys shall be conducted 7 days prior to tree removal to determine whether or not active nests are present.
4. If an active nest is located during a pre-construction survey, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction

activities or construction foot traffic is allowed to occur within the avoidance buffer(s).

5. The qualified Biologist shall monitor the active nest during construction activities to prevent any potential impacts that may result from the construction of the proposed project until the young have fledged.

MM BIO-4c Avoidance of Bat Maternity Roosts

For all future development plans within the planning area that contain habitats or features that could provide maternal roosts for bat species, the project proponent shall employ a qualified Biologist to perform a pre-construction survey for bats within 30 days prior to removal of the potential habitat. If no bats are found present, then the trees, structures, or other potential habitat may be demolished and no further mitigation shall be required. If bats are found present, bats may be safely evicted during two seasonal periods of bat activity. For most species that occur in the planning area, bats can be evicted safely between approximately March 1 (or when evening temperatures are above 45°F (degree Fahrenheit) and rainfall less than 0.5-inch in 24 hours occurs) and April 15, prior to parturition of pups. The next acceptable period is after pups become self-sufficiently volant, generally accepted to be between September 1 through October 15 (or prior to evening temperatures dropping below 45°F and onset of rainfall greater than 0.5-inch in 24 hours). Evictions shall be implemented by a qualified Biologist accordingly:

1. There are two methods for evicting bats from occupied tree cavities or structures. The first, utilized mainly when the cavity or building is in good condition and the work is feasible, is “humane eviction,” or “bat exclusion,” which relies on the bats’ own ability to fly out of the roost. In this method, all potential, but currently unused entry points into the cavity or structure are sealed. The active entry points are fitted with one-way exits, which are left in place 7 to 10 days to allow all bats to emerge normally during nightly feeding flights. The one-way exits are then removed, and the remaining openings sealed until demolition if it will occur more than 30 days after demolition. If the interval between successful eviction and demolition will be short (less than 4 weeks), the one-way exits may often be left in place until demolition. This eviction work must be conducted by, or under direct supervision or instruction, of a qualified Biologist.
2. In some cases, the physical condition of the cavity or structure is so poor that humane eviction as described above is not feasible. If that occurs, the tree or building must be carefully and selectively dismantled in such a way that the internal environment is altered to a degree sufficient to cause bats to abandon the roost and not return. This must occur under the guidance of a qualified bat Biologist in partial dismantling of tree cavities or structures for bat eviction.

6.2.5 - Impact BIO-5: Consistency with Tree or Vegetation Protection Policies

If, during implementation of MM BIO-1 or MM BIO-6, designated Landmark Trees, Street Trees, specimen trees, or oak woodlands are discovered on a proposed project site, the project proponent shall implement MM BIO-5.

Recommended Mitigation Measures

MM BIO-5a Identification and Recording of Protected Trees

If a protected tree, such as a designated Landmark Tree, street tree, or specimen tree, or an oak woodland is discovered on any future implementing development or project site, and it is determined by the City Arborist that the project will impact these resources, the project proponent shall employ a qualified Biologist to conduct an inventory of on-site vegetation, assess potential for project impacts to the trees or oak woodlands, identify the threshold of significance with a significance conclusion, and document the findings in a report. Additionally, future implementing projects may be required to incorporate additional mitigation depending on results of such future biological studies. The additional actions shall be implemented by the project proponent, as applicable:

MM BIO-5b Permissions for Project Impacts to Landmark Trees

If any future implementing development or proposed project would remove a designated Landmark Tree, the project proponent shall seek permission from the City Council prior to its removal according to City Municipal Code Chapter 11.12.020.

MM BIO-5c Permissions for Project Impacts to Street Trees

If any future implementing development or proposed project would remove, top, trim, prune, plant, remove, spray, or in any other manner interfere with any street tree located on public property, the project proponent shall seek permission from the Director of Community Services before performing such actions according to City Municipal Code Chapter 13.12.080.

MM BIO-5d Permissions for Project Impacts to Specimen Trees

If any future implementing development or proposed project would remove or top a Specimen Tree such as an oak, pepper, or sycamore tree located in the Scenic Corridor (SC) Overlay Zone, the project proponent shall seek an Administrative Specimen Tree Removal Permit and Discretionary Specimen Tree Removal Permit by the City's Planning and Building Department according to City Municipal Code Chapter 18.18.040. Additionally, the project proponent shall replace the specimen tree(s) on the same parcel or in the public right-of-way in the immediate vicinity according to City Municipal Code Chapter 18.18.040 and as directed by the City.

MM BIO-5e Avoidance and Mitigation for Project Impacts to Oak Woodlands

If any future implementing development or proposed project would impact oak woodland resources, the project proponent shall implement goals of the County of Orange Oak Woodland Management Program, which seeks to preserve oak woodlands through open space acquisitions and conservation within the County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan (CONCCP/HCP) reserve area. The project proponent shall employ a qualified Biologist/Arborist to assess potential project impacts to oak woodlands, including number of trees and acreage of woodland affected. For projects located outside of the CONCCP/HCP, the project proponent shall mitigate loss of oaks and woodland community at a 1:1 ratio on County open space through the County of Orange Oak Woodland Management Program. For projects located in the CONCCP/HCP plan area, conservation would be achieved through implementing MM BIO-6, including payment of the CONCCP/HCP mitigation fee.

6.2.6 - Impact BIO-6: Consistency with the County of Orange Natural Community Conservation Plan/Habitat Conservation Plan

If a proposed project is located in the CONCCP/HCP plan area, the project proponent shall implement MM BIO-6a through MM BIO-6d, which includes compliance with all applicable CONCCP/HCP requirements pertaining to protection of sensitive biological resources and limitations of take of covered resources. Implementation of this measure would ensure that each development in the area covered by the CONCCP/HCP would have a less than significant impact.

Recommended Mitigation Measures**MM BIO-6a Conduct Biological Study/CONCCP/HCP Consistency Analysis**

For all proposed projects in the County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan (CONCCP/HCP) plan area, Non-participating Landowners or other project applicants shall employ a qualified Biologist to prepare a Biological Study to evaluate potential impacts to coastal sage scrub (CSS), Covered Habitats, and Identified and Target Species that are covered under the CONCCP/HCP that could result from project implementation. The qualified Biologist shall conduct, at a minimum, a site-specific literature review, which shall consider the future development project, site location, Geographic Information System (GIS) information and known sensitive biological resources. The qualified Biologist shall, if the project site has potential support CSS, Covered Habitats, or Identified or Target Species, conduct a site visit as part of project review. The review shall assess the site to determine whether any Conditionally Covered Species occur or could occur on-site, to determine the CONCCP/HCP Mitigation Fee required, and to recommend appropriate construction-related minimization measures, as applicable. For projects located in Special Linkages/Management Areas, the study would offer recommendations for compatible development or use that conserves habitat or functions as a linkage for Target Species. Projects proposed on lands

targeted for the reserve assembly would need to demonstrate consistency with the goals of the CONCCP/HCP. The study shall also assess whether other sensitive resources protected under CEQA but not covered under the CONCCP/HCP are present on the site and could be affected by project implementation, including but not limited to aquatic resources, riparian or sensitive natural communities, wildlife movement corridors, or nurseries, or potential nesting or roosting sites. If Conditionally Covered Species occur or could occur on-site, the project applicant shall implement MM BIO-1c. All projects implemented by Non-participating Landowners that opt to participate in the CONCCP/HCP shall implement MM BIO-1b and MM BIO-1d. If take of Conditionally Covered Species or take of non-covered, listed species, is proposed, or if the Non-Participating Landowner declines to participate in the CONCCP/HCP, the project proponent shall consult with the California Department of Fish and Wildlife (CDFW) and/or the United States Fish and Wildlife Service (USFWS), as applicable, regarding an Incidental Take Permit (ITP) pursuant to Section 2081 of the California Endangered Species Act (CESA) or Sections 7 or 10 of the federal Endangered Species Act.

MM BIO-1b Payment of CONCCP/HCP Mitigation Fee

For Non-participating Landowners that opt to participate in the County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan (CONCCP/HCP), payment of the CONCCP/HCP Mitigation Fee would be required. This payment would be made to the Nonprofit Corporation on a per-acre basis.

MM BIO-1c Avoidance and Mitigation of Conditionally Covered Species

If any project has the potential to support or contain habitat for Conditionally Covered Species, including intermediate mariposa lily, arroyo toad, least Bell's vireo, southwestern willow flycatcher, Riverside fairy shrimp, San Diego fairy shrimp, golden eagle, and prairie falcon, the project proponent shall be required to consult with United States Fish and Wildlife Service (USFWS) to determine whether surveys, habitat avoidance/mitigation, project redesign, and/or submission of a mitigation plan prior would be required in order to receive authorization to "take" these species or their habitats.

MM BIO-1d Implement CONCCP/HCP Construction-related Minimization Measures

Non-participating Landowners or other project applicant(s) shall provide the City evidence that construction-related minimization measures are implemented on their projects. These construction-related minimization measures are designed to avoid, minimize, reduce, and/or offset impacts of any activities resulting in incidental take, or habitat disturbance of Identified or Target Species, and include but are not limited to:

- To the maximum extent practicable, no grading of Covered Habitats that is occupied by special-status species shall occur during the County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan (CONCCP/HCP)-defined breeding season (February 25 through July 15). It is expressly understood that this provision and the remaining provisions of these “construction-related minimization measures” are subject to public health and safety considerations. These considerations include unexpected slope stabilization, erosion control measures and emergency facility repairs. In the event of such public health and safety circumstances, landowners or public agencies/utilities shall provide United States Fish and Wildlife Service (USFWS)/California Department of Fish and Wildlife (CDFW) with the maximum practicable notice (or such notice as is specified in the CONCCP/HCP) to allow for capture of identified Target Species that are not otherwise flushed and shall carry out the following measures only to the extent as practicable in the context of the public health and safety considerations.
- Prior to the commencement of grading operations or other activities involving significant soil disturbance, all areas of Covered Habitat to be avoided under the provisions of the CONCCP/HCP, shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations or other activities involving disturbance of Covered Habitat, a survey shall be conducted to locate identified Target Species within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.
- A monitoring Biologist, acceptable to USFWS/CDFW shall be on-site during any clearing of Covered Habitat. The landowner or relevant public agency/utility shall advise USFWS/CDFW to work with the monitoring Biologist in connection with bird flushing/capture activities. The monitoring Biologist shall flush identified Target Species (avian or other mobile Identified Species) from occupied habitat areas immediately prior to brush-clearing and earthmoving activities. If birds cannot be flushed, they shall be captured in mist nets, if feasible, and relocated to areas of the site to be protected or to the CONCCP/HCP Reserve System. It shall be the responsibility of the monitoring Biologist to assure that identified target avian species shall not be directly impacted by brush-clearing and earthmoving equipment in a manner that also allows for construction activities on a timely basis.
- Following the completion of initial grading/earth movement activities, all areas of Covered Habitat shall be avoided by construction equipment and personnel shall be marked with temporary fencing or other appropriate markers clearly visible to construction personnel. No construction access, parking or storage of equipment or materials shall be permitted within such marked areas.
- In areas bordering the CONCCP/HCP Reserve System or Special Linkage/Special Management areas containing Target Species identified in the CONCCP/HCP for protection, vehicle transportation routes between cut-and-fill locations shall be

restricted to a minimum number during construction consistent with project construction requirements. Waste, dirt, or rubble shall not be deposited on adjacent Covered Habitats identified in the CONCCP/HCP for protection. Pre-construction meetings involving the monitoring Biologist, construction supervisors and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures.

- Covered Habitats identified in the CONCCP/HCP for protection and location within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as recommended by the monitoring Biologist.

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SECTION 7: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this Biological Resources Assessment and acknowledge that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: December 11, 2024 Signed:



Michael W. Tuma, PhD, Principal Biologist
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**Appendix A:
Special-status Species Tables**

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Table 1: Special-status Plant Species Potentially Occurring within the Project Site

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
Gymnosperms						
<i>Hesperocyparis forbesii</i> Tecate cypress	CONCCP/ HCP	CONCCP/ HCP	1B.1	Perennial, evergreen tree found in clay and gabbroic (sometimes) soils in closed-cone coniferous forest and chaparral communities. Elevation: 80–1,500 m	High: The Hill and Canyon Area of the City contains suitable habitat and this species is known to occur there. There are five recent and one historical records in the 12-Quad search area encompassing the City, including one recent record (2010) within city limits.	Yes
<i>Hesperocyparis goveniana</i> Gowen cypress	FT	—	1B.2	Perennial, evergreen tree found in closed-cone coniferous forest and chaparral communities. Elevation: 30–300 m	None: The City is out of the known range of this species.	No
Dicots						
<i>Abronia maritima</i> red sand-verbena	—	—	4.2	Perennial herb found in coastal dunes. Elevation: 0–100 m Bloom period: February–November	None: The City of outside of the known range of the species and does not contain suitable habitat(s) that would support its occurrence.	No
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	—	—	1B.1	Annual herb found in sandy soils in chaparral, coastal scrub, and desert dune communities. Elevation: 75–1,600 m Bloom period: March–September	Moderate: The Hill and Canyon Area of the City contains suitable habitat that could support occurrence of this species. There are one recent and five historical records in the 12-Quad search area encompassing the City, including four historical records within city limits.	Yes
<i>Aphanisma blitoides</i> aphanisma	—	—	1B.2	Annual herb found in gravelly (sometimes) and sandy (sometimes) soils in coastal bluff scrub, coastal dunes, and coastal scrub. Elevation: 1–305 m Bloom period: February–June	Low: The Hill and Canyon Area of the City contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are two historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Arenaria paludicola</i> marsh sandwort	FE	SE	1B.1	Perennial, stoloniferous herb found in marshes and swamps (freshwater or brackish). Elevation: 3–170 m Bloom period: May–August	None: The City does not contain suitable habitat(s) that would support occurrence of this species.	No
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE	—	1B.1	Perennial herb found in carbonate and sandstone soils in chaparral, coastal scrub, and valley and foothill grassland communities. Typically found in burned areas and sometimes in disturbed areas. Elevation: 4–640 m Bloom period: January–August	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are seven recent records in the 12-Quad search area encompassing the City, including three recent (2019, 2020, 2020) records within city limits.	Yes
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	—	—	1B.1	Annual herb found in alkaline soils and lake margins in meadows and seeps and playas. Elevation: 60–850 m Bloom period: May–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City, which is within city limits. This species is believed to be locally extirpated.	No
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> Ventura Marsh milk-vetch	FE	CE	1B.1	Perennial herb found in coastal dunes, coastal scrub, and marshes and swamps (edges, coastal salt, brackish). Elevation: 1–35 m Bloom period: August–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City. This species is possibly locally extirpated.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Atriplex coulteri</i> Coulter's saltbush	—	—	1B.2	Perennial herb found in alkaline or clay soils (sometimes) in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 3–460 m Bloom period: March–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is outside of the known range of the species and there are no records within city limits. There are three historical records in the 12-Quad search area encompassing the City.	No
<i>Atriplex pacifica</i> south coast saltscale	—	—	1B.2	Annual herb found in coastal bluff scrub, coastal dunes, coastal scrub, and playas. Elevation: 0–140 m Bloom period: March–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Atriplex parishii</i> Parish's brittlescale	—	—	1B.1	Annual herb found in alkaline soils in chenopod scrub, playas, and vernal pools. Elevation: 25–1900 m Bloom period: June–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	—	—	1B.2	Annual herb found in alkaline soils in coastal bluff scrub and coastal scrub. Elevation: 10–200 m Bloom period: April–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are four historical records in the 12-Quad search area encompassing the City.	No
<i>Baccharis malibuensis</i> Malibu baccharis	—	—	1B.1	Perennial, deciduous shrub found in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Elevation: 150–305 m Bloom period: August	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is outside of the known range of the species. There are three recent records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Calandrinia breweri</i> Brewer's calandrinia	—	—	4.2	Annual herb found in burned (sometimes) or disturbed (sometimes) areas in loam (sometimes) or sandy (sometimes) soils in chaparral and coastal scrub communities. Elevation: 10–1,220 m Bloom period: March–June	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Calystegia felix</i> lucky morning-glory	—	—	1B.1	Annual herb found in alkaline (sometimes) and loam (sometimes) soils in meadows and seeps and riparian scrub communities. Elevation: 30–215 m Bloom period: March–September	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is outside of the known range of the species and there are no records within city limits. There are six recent and two historical records in the 12-Quad search area encompassing the City.	No
<i>Calystegia sepium</i> ssp. <i>binghamiae</i> Santa Barbara morning-glory	—	—	1A	Perennial, rhizomatous herb found in coastal marshes and swamps. Elevation: 5 m Bloom period: August	None: The City does not contain suitable habitat(s) that would support occurrence of this species.	No
<i>Camissoniopsis lewisii</i> Lewis' evening-primrose	—	—	3	Annual herb found in clay and sandy soils (sometimes) in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 0–300 m Bloom period: March–May	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Centromadia parryi</i> ssp. <i>australis</i> southern tarplant	—	—	1B.1	Annual herb found in marshes and swamps (margins), valley and foothill grassland (vernally mesic), and vernal pools. Elevation: 0–480 m Bloom period: May–November	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no records within city limits. There are eighteen recent and nineteen historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Centromadia pungens</i> <i>ssp. laevis</i> smooth tarplant	—	—	1B.1	Annual herb found in alkali meadow and alkali scrub communities and disturbed places in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland communities. Elevation: 0–640 m Bloom period: April–September	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Cercocarpus minutiflorus</i> small-flowered mountain mahogany	CONCCP/ HCP	CONCCP/ HCP	CBR	Shrub found in chaparral. Elevation: 0–1,400 m Bloom period: March–May	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species.	No
<i>Chloropyron maritimum</i> salt marsh bird’s-beak	FE	SE	1B.2	Annual, hemiparasitic herb found in coastal dunes, marsh and swamp, salt marsh, and wetlands communities. Elevation: 0–30 m Bloom period: May–October	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no records within city limits. There are one recent and three historical records in the 12-Quad search area encompassing the City.	No
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	—	CE	1B.1	Annual herb found in sandy soils in coastal scrub and valley and foothill grassland communities. Elevation: 150–1,220 m Bloom period: April–July	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no records within city limits. There is one historical record in the 12-Quad search area encompassing the City. This species may be locally extirpated.	No
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spineflower	—	—	1B.2	Annual herb that occurs in valley and foothill grassland, coastal scrub, chaparral, meadows and seeps, and vernal pool communities. Elevation: 30–1,530 m Bloom period: April–July	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City, which is within city limits.	Yes

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Cistanthe maritima</i> seaside cistanthe	—	—	4.2	Annual herb found in sandy soils in coastal bluff scrub, coastal scrub, and valley and foothill grassland. Elevation: 5–300 m Bloom period: March–June	None: The City of outside of the known range of the species and does not contain suitable habitat(s) that would support its occurrence.	No
<i>Convolvulus simulans</i> small-flowered morning-glory	—	—	4.2	Annual herb found in clay soils, seeps, and serpentine soils in openings in chaparral, coastal scrub, and valley and foothill grassland communities. Elevation: 30–740 m Bloom period: March–July	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Deinandra paniculata</i> paniculate tarplant	—	—	4.2	Annual herb found in sandy soils (sometimes) and in vernal mesic soils (usually) in coastal scrub, valley and foothill grassland, vernal pool communities. Elevation: 25–940 m Bloom period: April–November	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Dichondra occidentalis</i> western dichondra	CONCCP/ HCP	CONCCP/ HCP	4.2	Perennial rhizomatous herb found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. Elevation: 50–500 m Bloom period: March–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species, and there is a recent herbarium record (from 2019) in the city limits.	Yes
<i>Diplacus clevelandii</i> Cleveland's bush monkeyflower	—	—	4.2	Perennial rhizomatous herb found in disturbed areas (often), openings, and gabbroic and rocky soils in chaparral, cismontane woodland, and lower montane coniferous forest. Elevation: 450–2000 m Bloom period: April–July	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	CONCCP/ HCP	CONCCP/ HCP	1B.1	Perennial herb found in clay (often), rocky, and serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. Elevation: 5–450 m Bloom period: April–June	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species.	No
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica Mountains dudleyea	FT CONCCP/ HCP	CONCCP/ HCP	1B.1	Perennial herb found in rocky and volcanic (sometimes) soils in chaparral and coastal scrub. Elevation: 150–1675 m Bloom period: March–June	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Dudleya multicaulis</i> many-stemmed dudleya	—	—	1B.2	Perennial herb found in clay soils (usually) in chaparral, coastal scrub, and valley and foothill grassland communities. Elevation: 15–790 m Bloom period: April–July	High: The Hill and Canyon Area contains suitable habitat, and this species is known to occur there. There are fifteen recent and 30 historical records in the 12-Quad search area encompassing the City, including one recent (2013) and six historical records within city limits.	Yes
<i>Dudleya stolonifera</i> Laguna Beach dudleya	FT CONCCP/ HCP	CT CONCCP/ HCP	1B.1	Perennial stoloniferous herb found in rocky soils in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. Elevation: 10–260 m Bloom period: May–July	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species.	No
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woolstar	FE	SE	1B.1	Perennial herb found in sandy soils on river floodplains or terraced fluvial deposits in chaparral and coastal scrub communities. Elevation: 180–700 m Bloom period: May–September	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City, which is within city limits. This species may be locally extirpated.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	FE	CE	1B.1	Annual/perennial herb found in mesic soils in coastal scrub, valley and foothill grassland, and vernal pools. Elevation: 20–620 m Bloom period: April–June	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	Yes
<i>Euphorbia misera</i> Cliff spurge	CONCCP/ HCP	CONCCP/ HCP	2B.2	Perennial shrub found in rocky soils in coastal bluff scrub, coastal scrub, and Mojavean desert scrub. Elevation: 10–500 m Bloom period: December–August	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits.	No
<i>Harpagonella palmeri</i> Palmer’s grapplinghook	CONCCP/ HCP	CONCCP/ HCP	4.2	Annual herb found in clay soils and openings in chaparral, coastal scrub, and valley and foothill grassland communities. Elevation: 20–955 m	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	—	—	1A	Perennial rhizomatous herb found in marshes and swamps (freshwater, coastal salt). Elevation: 10–1525 m Bloom period: August–October	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	—	—	1B.1	Perennial herb found in chaparral, coastal scrub, and cismontane woodland communities. Bloom period: February–July Elevation: 70–810 m Bloom period: March–May	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There is one recent (2008) record in the 12-Quad search area encompassing the City, which is within city limits.	Yes
<i>Isocoma menziesii</i> var. <i>decumbens</i> decumbent goldenbush	—	—	1B.2	Perennial shrub found in chaparral and coastal scrub (often disturbed areas, sandy). Elevation: 10–250 m Bloom period: April–November	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species. There is one historical record in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Juglans californica</i> southern California black walnut	—	—	4.2	Perennial, deciduous tree found in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Elevation: 50–900 m Bloom period: March–August	High: The Hill and Canyon Area contains suitable habitat, and this species is known to occur there.	Yes
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter’s goldfields	—	—	1B.1	Annual herb found in marshes and swamps, playas, and vernal pools. Elevation: 1–1,220 m Bloom period: February–June	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and ten historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes
<i>Lepechinia cardiophylla</i> heart-leaved pitcher sage	CONCCP/ HCP	CONCCP/ HCP	1B.2	Perennial shrub found in closed-cone coniferous forest, chaparral, and cismontane woodland communities. Elevation: 520–1,370 m Bloom period: April–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are seven recent and three historical records in the 12-Quad search area encompassing the City, including one recent (2003) record within city limits.	Yes
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson’s pepper-grass	—	—	4.3	Annual herb found in dry soils in chaparral and coastal scrub communities. Elevation: 1–855 m Bloom period: January–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are five recent and one historical records in the 12-Quad search area encompassing the City, including one recent (2008) record within city limits.	Yes
<i>Lycium californicum</i> California box-thorn	—	—	4.2	Perennial shrub found in coastal bluff scrub and coastal scrub. Elevation: 5–150 m Bloom period: March–August	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no records in city limits.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Microseris douglasii</i> ssp. <i>platycarpa</i> small-flowered microseris	—	—	4.2	Annual herb found in clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pool communities. Elevation: 15–1,070 m Bloom period: March–May	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Monardella australis</i> ssp. <i>jokerstii</i> Jokerst’s monardella	—	—	1B.1	Perennial herb found in alluvial terraces, drainages, scree, slopes, talus, and washes in chaparral and lower montane coniferous forest communities. Elevation: 1,350–1,750 m Bloom period: July–September	None: The City is outside the known elevation range of this species. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i> intermediate monardella	—	—	1B.3	Perennial rhizomatous herb that occurs in chaparral, cismontane woodland, and lower montane coniferous forest communities. Elevation: 400–1,250 m Bloom period: April–September	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are four recent and five historical records in the 12-Quad search area encompassing the City, including one recent (2008) record within city limits.	Yes
<i>Nama stenocarpa</i> mud nama	—	—	2B.2	Annual/perennial herb found in marshes and swamps. Elevation: 5–500 m Bloom period: January–July	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are four historical records in the 12-Quad search area encompassing the City.	No
<i>Nasturtium gambelii</i> Gambel’s water cress	FE	CT	1B.1	Perennial rhizomatous herb found in marshes and swamps (brackish, freshwater). Elevation: 5–330 m Bloom period: April–October	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City. This species is believed to be locally extirpated.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	—	—	1B.2	Annual herb found in mesic, alkaline soils in coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pool communities. Elevation: 3–1,210 m Bloom period: April–July	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no records in city limits. There are one recent and one historical records in the 12-Quad search area encompassing the City.	No
<i>Nemacaulis denudata</i> var. <i>denudata</i> coast woolly-heads	—	—	1B.2	Annual herb found in coastal dunes. Elevation: 0–100 m Bloom period: April–September	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are four recent and three historical records in the 12-Quad search area encompassing the City.	No
<i>Penstemon californicus</i> California beardtongue	—	—	1B.2	Perennial herb found in sandy soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland communities. Elevation: 1,170–2,300 m Bloom period: May–June	None: The City is outside the known elevation range of this species. There is one historical record in the 12-Quad search area encompassing the City, which is within city limits, but non-specific in location.	No
<i>Pentachaeta aurea</i> ssp. <i>allenii</i> Allen’s pentachaeta	—	—	1B.1	Annual herb found in openings in coastal scrub and valley and foothill grassland communities. Elevation: 75–520 m Bloom period: March–June	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is outside of the known range of the species. There are one recent and four historical records in the 12-Quad search area encompassing the City.	No
<i>Phacelia hubbyi</i> Hubby’s phacelia	—	—	4.2	Annual herb found in gravelly, rocky, and talus soils in chaparral, coastal scrub, and valley and foothill grassland. Elevation: 0–1000 m Bloom period: April–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i> south coast branching phacelia	—	—	3.2	Perennial herb found in rocky (sometimes) and sandy soils in chaparral, coastal dunes, coastal scrub, and marshes and swamps (coastal salt). Elevation: 5–300 m Bloom period: March–August	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Phacelia stellaris</i> Brand’s star phacelia	—	—	1B.1	Annual herb found in coastal dunes and coastal scrub communities. Elevation: 1–400 m Bloom period: March–June	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no records in city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Polygala cornuta</i> var. <i>fishiae</i> Fish’s milkwort	—	—	4.3	Perennial deciduous shrub found in chaparral, cismontane woodland, and riparian woodland communities. Elevation: 100–1,000 m Bloom period: May–August	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	—	—	2B.2	Perennial herb found in gravelly and sandy soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Elevation: 0–2,100 m Bloom period: August–November	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes
<i>Quercus berberidifolia</i> inland scrub oak	CONCCP/ HCP	CONCCP/ HCP	—	Small evergreen or semi-evergreen shrubby oak found in chaparral and coastal scrub. Elevation: 100–1,800 m Bloom period: February–April	High: The Hill and Canyon Area contains suitable habitat, and this species is known to occur there.	Yes

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Quercus dumosa</i> Nuttall's scrub oak	CONCCP/ HCP	CONCCP/ HCP	1B.1	Perennial evergreen shrub found in clay, loam, and sandy soils in closed-cone coniferous forest, chaparral, and coastal scrub. Elevation: 15–400 m Bloom period: February–April	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Quercus engelmannii</i> Engelmann oak	—	—	4.2	Perennial, deciduous tree found in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland communities. Elevation: 50–1,300 m Bloom period: March–June	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Romneya coulteri</i> Coulter's matilija poppy	CONCCP/ HCP	CONCCP/ HCP	4.2	Perennial, rhizomatous herb found in chaparral and coastal scrub, often in burned areas. Elevation: 20–1,200 m Bloom period: March–July	High: The Hill and Canyon Area contains suitable habitat, and this species is known to occur there.	Yes
<i>Senecio aphanactis</i> chaparral ragwort	—	—	2B.2	Annual herb found in drying alkaline flats (usually) in chaparral, cismontane woodland, and coastal scrub communities. Elevation: 15–800 m Bloom period: January–April	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no records in city limits. There are two historical records in the 12-Quad search area encompassing the City.	No
<i>Sidalcea neomexicana</i> salt spring checkerbloom	—	—	2B.2	Perennial herb found in playas and in alkaline, mesic soils in chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub communities. Elevation: 15–1,500 m Bloom period: March–June	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no recent or specific records in city limits. There are four historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Suaeda esteroa</i> estuary seablite	—	—	1B.2	Perennial herb found in marshes and swamps (coastal salt). Elevation: 0–5 m Bloom period: July–October	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are eight recent and six historical records in the 12-Quad search area encompassing the City.	No
<i>Suaeda taxifolia</i> woolly seablite	—	—	4.2	Perennial evergreen shrub found in coastal bluff scrub, coastal dunes, and marshes and swamps (coastal margins). Elevation: 0–50 m Bloom period: January–December	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but it may be outside of the known range of the species.	No
<i>Symphyotrichum defoliatum</i> San Bernardino aster	—	—	1B.2	Perennial, rhizomatous herb found in banks of ditches, streams, and springs in cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernal mesic valley and foothill grassland communities. Elevation: 2–2,040 m Bloom period: July–November	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no recent or specific records in city limits. There are nine historical records in the 12-Quad search area encompassing the City.	No
<i>Viguiera laciniata</i> San Diego County viguiera	—	—	4.3	Perennial shrub found in chaparral and coastal scrub. Elevation: 60–750 m Bloom period: February–June	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
Monocots						
<i>Allium marvinii</i> Yucaipa onion	—	—	1B.2	Perennial, bulbiferous herb found in clay soils and openings in chaparral community. Elevation: 760–1,065 m Bloom period: April–May	None: The City is outside the known elevation range of this species. There is one historical record in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Brodiaea filifolia</i> Thread-leaved brodiaea	FT	SE	1B.1	Perennial, bulbiferous herb found in clay soils in openings in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pool communities. Elevation: 25–1,120 m Bloom period: March–June	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is outside of the known range of the species. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Calochortus catalinae</i> Catalina mariposa lily	CONCCP/ HCP	CONCCP/ HCP	4.2	Perennial, bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities. Elevation: 15–700 m Bloom period: March–June	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Calochortus plummerae</i> Plummer’s mariposa-lily	—	—	4.2	Perennial, bulbiferous herb found in granitic and rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland communities. Elevation: 100–1,700 m Bloom period: May–July	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are six recent and four historical records in the 12-Quad search area encompassing the City.	Yes
<i>Calochortus weedii</i> var. <i>intermedius</i> intermediate mariposa- lily	CONCCP/ HCP	CONCCP/ HCP	1B.2	Perennial, bulbiferous herb that occurs in calcareous soils on rocky sites in coastal scrub, chaparral, and valley and foothill grassland communities. Elevation: 105–855 m Bloom period: May–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are 66 recent and eleven historical records in the 12-Quad search area encompassing the City, including nine recent and two historical records within city limits.	Yes
<i>Eleocharis parvula</i> small spikerush	—	—	4.3	Perennial herb found in marshes and swamps. Elevation: 1–3020 m Bloom period: June–August	None: The City does not contain suitable habitat(s) that would support occurrence of this species.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Hordeum intercedens</i> vernal barley	—	—	3.2	Annual herb found in vernal pools and depressions and saline flats in coastal dunes, coastal scrub, and valley and foothill grassland communities. Elevation: 5–1,000 m Bloom period: March–June	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it may be outside of the known range of the species.	No
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	—	—	4.2	Perennial, rhizomatous herb found in mesic soils in coastal dunes, meadows and alkaline seeps and coastal salt marshes and swamps. Elevation: 3–900 m Bloom period: May–June	None: The project area does not contain suitable habitat(s) that would support occurrence of this species.	No
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> ocellated Humboldt lily	—	—	4.2	Perennial, bulbiferous herb found in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland communities. Elevation: 30–1,800 m Bloom period: March–July	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Nolina cismontana</i> chaparral nolina	—	—	1B.2	Perennial, evergreen shrub occurring in gabbroic soils and sandstone (sometimes) in chaparral and coastal scrub communities. Elevation: 140–1,275 m Bloom period: May–July	High: The Hill and Canyon Area of the City contains suitable habitat and this species is known to occur there. There are 28 recent and four historical records in the 12-Quad search area encompassing the City, including six recent records within city limits.	Yes
<i>Orcuttia californica</i> California Orcutt grass	FE	CE	1B.1	Annual herb found in vernal pools. Elevation: 15–660 m Bloom period: April–August	Low: The Hill and Canyon Area contains potentially suitable habitat for this species, but there are no recent or specific records in city limits. There are one recent and two other records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status			Habitat Description ⁴	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS ¹	CDFW ²	CNPS ³			
<i>Sagittaria sanfordii</i> Sanford’s arrowhead	—	—	1B.2	Perennial rhizomatous herb (emergent) found in marshes and swamps (shallow freshwater). Elevation: 0–650 m Bloom period: May–October	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	No
Code Designations						
¹ Federal Status: 2020 USFWS Listing			² State Status: 2020 CDFW Listing		³ CNPS: 2020 CNPS Listing	
FE = Listed as endangered under the Federal Endangered Species Act FT = Listed as threatened under the Endangered Species Act FC = Candidate for listing (threatened or endangered) under the Endangered Species Act FD = Delisted in accordance with the Endangered Species Act FPD = Federally Proposed to be Delisted — = Not federally listed			SE = Listed as endangered under California Endangered Species Act (CESA) ST = Listed as threatened under CESA SC = Candidate for listing (threatened or endangered) under CESA CR = Rare in California — = Not State listed		Rank 1A = Plants presumed extirpated in California and either rare or extinct elsewhere Rank 1B = Plants rare, threatened, or endangered in California and elsewhere Rank 2 = Plants rare, threatened, or endangered in California but more common elsewhere Rank 3 = Plants about which more information is needed Rank 4 = Watch List: Plants of limited distribution CBR = Considered But Rejected Blooming period: Months in parentheses are uncommon.	
³ Habitat description: Habitat description adapted from CNDDB (CDFW 2023) and CNPS online inventory (CNPS 2023).						

Table 2: Special-status Wildlife Species Potentially Occurring within the Project

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Insects					
<i>Bombus crotchii</i> Crotch bumble bee	—	SC	Occurs in grassland and scrubland habitats. Nests in abandoned rodent burrows.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are seven recent and six historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes
<i>Cicindela hirticollis grandid</i> sandy beach tiger beetle	—	—	Occurs in coastal dunes adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City. This species is believed to be locally extirpated.	No
<i>Cicindela latesignata</i> western beach tiger beetle	—	—	Occurs in mudflats and beaches of coastal estuaries from San Diego County to Los Angeles County. Typically inhabit wet or dry sandy beaches and mud, sand, or salt flats.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are one recent and six historical records in the 12-Quad search area encompassing the City.	No
<i>Cicindela senilis frosti</i> senile tiger beetle	—	—	Occurs along marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore. Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City. This species is believed to be locally extirpated.	No
<i>Coelus globosus</i> globose dune beetle	—	—	Occurs in coastal sand dune habitat. Inhabits foredunes and sand hummocks; burrows beneath the sand surface and is most common beneath dune vegetation.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City.	No
<i>Danaus plexippus</i> monarch butterfly	FC	—	Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily <i>Asclepias</i> spp.)	Moderate: The City contains potentially suitable habitat that could support occurrence of this species. There are seven recent records in the 12-Quad search area encompassing the City.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE CONCCP/ HCP	CONCCP/ HCP	Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub habitats. Larval host plants are native species of plantain.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City, including one historical record within city limits. This species is believed to be locally extirpated.	No
<i>Habroscelimorpha gabpii</i> western tidal-flat tiger beetle	—	—	Occurs in estuaries and mudflats along the coast of Southern California. Generally found on dark-colored mud in the lower zone; occasionally found on dry saline flats of estuaries.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are five historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	No
<i>Panoquina errans</i> wandering (=saltmarsh) skipper	—	—	Occurs in coastal salt marshes. Requires moist saltgrass for larval development.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two recent and three historical records in the 12-Quad search area encompassing the City.	No
<i>Trigonoscuta dorothea dorothea</i> Dorothy's El Segundo Dune weevil	—	—	Occurs in coastal sand dunes in Los Angeles County.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No
Mollusks					
<i>Glyptostoma gabrielense</i> San Gabriel chestnut	—	—	Occurs in humid spots in semiarid areas in rocky hills and mountains at relatively low elevations. Range restricted to the San Gabriel Mountains and foothills near Los Angeles.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no records in the city limits. There are three historical records in the 12-Quad search area encompassing the City.	No
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	—	—	Occurs in coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County. Found only in permanently submerged areas in a variety of sediment types; able to withstand a wide range of salinities.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Crustaceans					
<i>Branchinecta sandiegonensis</i> San Diego fairy shrimp	FE CONCCP/ HCP	CONCCP/ HCP	Small, shallow (5-30 cm deep) vernal pools with cool water (10-20°C), moderate alkalinity and conductivity, and less than 1 m deep.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, including soils known to support vernal pools. There are three recent records in the 12-Quad search area encompassing the City.	Yes
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE CONCCP/ HCP	CONCCP/ HCP	Vernal pools on the Santa Rosa Plateau on Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, including soils known to support vernal pools. There are two recent and one historical records in the 12-Quad search area encompassing the City.	Yes
Fish					
<i>Catostomus santaanae</i> Santa Ana sucker	FT	—	Occurs in south coastal streams in the Los Angeles basin. Prefers sand-rubble-boulder bottoms, cool, clear water, and algae.	Low: The Santa Ana River contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are six historical records in the 12-Quad search area encompassing the City, including five historical records within city limits.	No
<i>Oncorhynchus mykiss irideus</i> pop. 10 Steelhead-southern California DPS	FE	SC	Occurs in Pacific coast streams, including the Santa Ana River.	Low: The Santa Ana River contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are two historical records in the 12-Quad search area encompassing the City, including one historical record within city limits. This species may be locally extirpated.	No
<i>Rhinichthys osculus</i> ssp. 8 Santa Ana speckled dace	—	SSC	Occurs in small springs, streams, large rivers, and deep lakes, including headwaters of the Santa Ana and San Gabriel Rivers.	Low: The Santa Ana River contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Amphibians					
<i>Anaxyrus californicus</i> arroyo toad	FE CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, cottonwoods. Requires exposed sandy streambanks with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Aneides lugubris</i> arboreal salamander	CONCCP/ HCP	CONCCP/ HCP	Occurs in moist places in leaf litter where it can hide during the day and forage food at night., including in oak woodlands.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Batrachoseps nigriventris</i> blackbelly slender salamander	CONCCP/ HCP	CONCCP/ HCP	Occurs in chaparral and oak and sycamore woodlands.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Spea hammondi</i> western spadefoot	CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in open areas with sandy or gravelly soils in mixed woodlands, grasslands, coastal sage and Riversidean alluvial fan sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in ephemeral rain pools that do not contain bullfrogs, fish, or crayfish.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are 23 recent and fifteen historical records in the 12-Quad search area encompassing the City, including two recent (2010, 2010) and one historical records within city limits.	Yes
<i>Taricha torosa</i> Coast Range newt	—	SSC	Occurs in terrestrial habitats and breeds in ponds. Individuals will migrate over 1 km to breed in ponds, reservoirs and slow moving streams. Occurs in coastal drainages from Mendocino County to San Diego County.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are two historical records in the 12-Quad search area encompassing the City, which are both within city limits.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
Reptiles					
<i>Anniella stebbinsi</i> southern California legless lizard	—	SSC	Occurs in moist, loose soil in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Tolerant of disturbances.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are three recent and seven historical records in the 12-Quad search area encompassing the City, including two historical records within city limits.	Yes
<i>Arizona elegans occidentalis</i> California glossy snake	—	SSC	Occurs in areas of rocky washes and loose, sandy soils and for burrowing in desert scrub grassland, coastal sage and Riversidean alluvial fan sage scrub, and chaparral habitats. Prefer open sandy areas with scattered brush, but also found in rocky areas.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one historical record in the 12-Quad search area surrounding the project area.	No
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	CONCCP/ HCP	WL CONCCP/ HCP	Occurs primarily on coarse soils in open coastal sage and Riversidean alluvial fan sage scrub habitat.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are five recent and sixteen historical records in the 12-Quad search area encompassing the City, including four historical records within city limits.	Yes
<i>Aspidoscelis tigris stejnegeri</i> San Diegan tiger whiptail	CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in dry, open areas with sparse foliage in coastal sage and Riversidean alluvial fan sage scrub, chaparral, woodland, and riparian habitats.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are four recent and five historical records in the 12-Quad search area surrounding the project area, including one historical record within city limits.	Yes
<i>Charina trivirgata</i> rosy boa	CONCCP/ HCP	CONCCP/ HCP	Occur in dry shrublands, chaparral, desert, and near-desert areas. They are found among scattered rocks and boulders or on talus slopes. Preferred habitat is often on south-facing hillsides at elevations from sea level to over 2,000 meters.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Chelonia mydas</i> green turtle	FT	—	Occurs in shallow tropical and subtropical waters as well as coastline beaches. Forage in coastal areas with adequate supply of algae and sea grass.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Crotalus ruber</i> red-diamond rattlesnake	CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in arid, rocky areas in creosote scrub, coastal sage and Riversidean alluvial fan sage scrub, chaparral, oak and pine woodlands, grasslands, on cultivated areas.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are one recent and eight historical records in the 12-Quad search area encompassing the City.	Yes
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	CONCCP/ HCP	CONCCP/ HCP	Occurs in open, relatively rocky areas in chaparral, grasslands, and riparian woodlands. Often in somewhat moist microhabitats near intermittent streams.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Emys marmorata</i> western pond turtle	—	SSC	Occurs in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are five recent and eighteen historical records in the 12-Quad search area encompassing the City.	Yes
<i>Phrynosoma blainvillii</i> coast horned lizard	CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in open areas with sandy soil and low vegetation in grasslands, coniferous forests, woodlands, and chaparral.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are three recent and nineteen historical records in the 12-Quad search area encompassing the City, including seven historical records within city limits.	Yes
<i>Plestiodon skiltonianus interparietalis</i> Coronado Island skink	CONCCP/ HCP	WL CONCCP/ HCP	Occurs in grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak and pine forests. Found in rocky areas close to streams and on dry hillsides.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	—	SSC	Occurs in brushy or shrubby vegetation. Dependent on small mammal burrows.	High: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are four historical records in the 12-Quad search area encompassing the City.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Thamnophis hammondi</i> two-striped gartersnake	—	SSC	Occurs in or near permanent fresh water in marshes and swamps, riparian scrub, riparian woodlands, and wetlands.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City.	Yes
Birds					
<i>Accipiter cooperii</i> Cooper's hawk	MBTA	WL FGC	Occurs and nests in deciduous and mixed forests and open woodland habitats. Year-round resident in southern California, and tolerant of urban areas with an abundance of trees.	High: The City contains suitable nesting and foraging habitats that would support occurrence of this species in the Hill and Canyon Area and urban forests throughout the City. There are three recent and two historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes
<i>Accipiter striatus</i> Sharp-shinned hawk	MBTA CONCCP/ HCP	WL CONCCP/ HCP	Occurs and nests in deciduous and mixed forests and open woodland habitats. Year-round resident in southern California, and tolerant of urban areas with an abundance of trees.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
<i>Agelaius tricolor</i> tricolored blackbird	MBTA	FT SSC FGC	Occurs and nests in large freshwater marshes with dense stands of hydrophytic vegetation (cattails, bulrushes, etc.). Short-distance migrant.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are three recent and nine historical records in the 12-Quad search area encompassing the City.	Yes
<i>Aimophila ruficeps</i> <i>canescens</i> southern California rufous-crowned sparrow	MBTA CONCCP/ HCP	WL FGC CONCCP/ HCP	Occurs and nests on steep, often rocky hillsides with grass and forb patches in coastal sage and Riversidean alluvial fan sage scrub and sparse mixed chaparral habitats. Year-round resident in southern California.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are four recent and seven historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Ammodramus savannarum</i> grasshopper sparrow	MBTA	SSC	Occurs and nests in dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are three recent and one historical records in the 12-Quad search area surrounding the project area.	Yes
<i>Aquila chrysaetos</i> golden eagle	MBTA BGEPA CONCCP/ HCP	FP FGC CONCCP/ HCP	Occurs in a variety of open, terrestrial habitats. Nests on cliff faces in desert montane areas in California.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and two historical records in the 12-Quad search area encompassing the City, including one recent record within city limits.	Yes
<i>Ardea herodias</i> great blue heron	MBTA	—	Occurs and nests in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one recent (2004) record in the 12-Quad search area encompassing the City, which is within city limits.	Yes
<i>Asio otus</i> long-eared owl	MBTA	FP FGC	Occurs and nests in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City.	Yes
<i>Athene cunicularia</i> burrowing owl	MBTA	SSC FGC	Occurs and nests in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. Short-distance migrant.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are fifteen recent and eight historical records in the 12-Quad search area encompassing the City.	Yes
<i>Buteo lagopus</i> rough-legged hawk	MBTA CONCCP/ HCP	CONCCP/ HCP	Occurs in open country and agricultural lands and in grasslands, shrublands, and forests. Their nests are usually located in trees or on a rocky cliff in which they can overlook a field to catch prey.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Buteo lineatus</i> red-shouldered hawk	MBTA CONCCP/ HCP	CONCCP/ HCP	Occurs in deciduous or mixed deciduous-conifer forests and swamps. Prefer to have dead trees nearby, where they can perch.	High: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, and the species may also occur in urban forests.	Yes
<i>Buteo regalis</i> ferruginous hawk	MBTA	WL	Grassland and arid shrublands with an abundance of prey species, such as pocket gophers, black-tailed jackrabbits, and desert cottontails. Will winter near cultivated fields that have an abundance of pocket gophers.	Moderate: The Hill and Canyon Area contains potentially suitable foraging habitat that could support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City.	Yes
<i>Buteo swainsoni</i> Swainson's hawk	MBTA	FT FGC	Occurs and nests in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Long-distance migrant.	Low: The project area contains potentially suitable habitat that would support occurrence of this species, but this species rarely nests in southern California. There are one recent and two historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	Yes
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	MBTA CONCCP/ HCP	SSC FGC CONCCP/ HCP	Occurs and nests in coastal sage scrub. Requires tall opuntia cactus or <i>Yucca</i> trees for nesting and roosting.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are seven recent and 25 historical records in the 12-Quad search area encompassing the City, including three historical records within city limits.	Yes
<i>Charadrius nivosus nivosus</i> western snowy plover	FT MBTA	SSC	Occurs in sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are three recent and five historical records in the 12-Quad search area encompassing the City.	No
<i>Circus cyaneus</i> northern harrier	MBTA CONCCP/ HCP	CONCCP/ HCP	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT MBTA	SE FGC	Occurs and nests in riparian forest along the broad lower flood-bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape. Long-distance migrant.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There are six historical records in the 12-Quad search area encompassing the City, including one historical record within city limits. This species may be locally extirpated.	No
<i>Coturnicops noveboracensis</i> yellow rail	MBTA	SSC FGC	Occurs in shallow marshes and wet meadows. In winter, this species inhabits drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No
<i>Elanus leucurus</i> white-tailed kite	MBTA	FP FGC	Occurs and nests in grasslands and open coastal scrub in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous, open stages of most habitats mostly in cismontane California. Year-round resident in southern California.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are 22 recent records in the 12-Quad search area encompassing the City, including three recent records within city limits.	Yes
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE MBTA CONCCP/ HCP	SE FGC CONCCP/ HCP	Occurs and nests in dense riparian woodlands. Long-distance migrant.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City.	Yes
<i>Eremophila alpestris actia</i> California horned lark	MBTA	WL FGC	Occurs and nests in open areas with sparse vegetation. Year-round resident in southern California.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are five recent and one historical records in the 12-Quad search area encompassing the City.	Yes
<i>Falco mexicanus</i> Prairie falcon	MBTA CONCCP/ HCP	WL CONCCP/ HCP	Occurs in perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub. Typically nests in a scrape on a sheltered ledge of a cliff overlooking a large, open area. Resident to short-distance migrant.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Falco peregrinus anatum</i> American peregrine falcon	FD MBTA CONCCP/ HCP	SD FP CONCCP/ HCP	Occurs near bodies of water, including wetlands, lakes, and rivers, in open areas with cliffs, ledges, and canyons nearby for cover and nesting. They will also nest on banks, dunes, and mounds. Their nests are a scrape on a depression or ledge on an open site. They will nest on human-made structures, and occasionally uses tree or snag cavities or old nests of other raptors.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one recent (2015) record in the 12-Quad search area encompassing the City, which is within city limits.	Yes
<i>Haliaeetus leucocephalus</i> bald eagle	FD BGEPA MBTA	SE FP FGC	Occurs near ocean shores, lake margins, and rivers for both nesting and wintering. Most nests are within 1 mile of water.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	No
<i>Icteria virens</i> yellow-breasted chat	MBTA	SSC FGC	Occurs and nests in riparian thickets of willow and other bushy tangles near watercourses. Long-distance migrant.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are eight recent and four historical records in the 12-Quad search area encompassing the City.	Yes
<i>Laterallus jamaicensis coturniculus</i> California black rail	MBTA	ST FP FGC	Occurs and nests in freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City, including one historical record within city limits.	No
<i>Pandion haliaetus</i> osprey	MBTA	WL	Occurs in ocean shore, bays, freshwater lakes, and larger streams.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	No
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	MBTA	SE	Occurs in coastal wetlands and marshes.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are five recent and four historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Poliioptila californica californica</i> coastal California gnatcatcher	FT MBTA CONCCP/ HCP	SSC FGC CONCCP/ HCP	Occurs and nests in arid washes, on mesas, and slopes in coastal sage scrub below 2,500 ft. Year-round resident in California.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are 174 recent and 45 historical records in the 12-Quad search area encompassing the City, including nineteen recent and eleven historical records within city limits.	Yes
<i>Rallus obsoletus levipes</i> light-footed Ridgway's rail	FE MBTA	SE FP	Occurs in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed (required for nesting or escape cover) are the dominant vegetation.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are five recent records in the 12-Quad search area encompassing the City.	No
<i>Riparia riparia</i> bank swallow	MBTA	ST	Nests in riparian scrub and riparian woodland. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are three historical records in the 12-Quad search area encompassing the City.	Yes
<i>Rynchops niger</i> black skimmer	MBTA	SSC	Occurs and nests on gravel bars, low islets, and sandy beaches, in unvegetated sites.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Setophaga petechia</i> yellow warbler	MBTA	SSC FGC	Occurs and nests in willow shrubs and thickets, cottonwoods, sycamores, ash, and alders, predominantly in riparian habitats. Long-distance migrant.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are nine recent records in the 12-Quad search area encompassing the City.	Yes
<i>Sternula antillarum browni</i> California least tern	FE MBTA	SE FP	Occurs and nests on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	Moderate: The City contains marginally suitable habitat that could support occurrence of this species. There are six recent and seven historical records in the 12-Quad search area encompassing the City, including two recent (2016, 2018) records within city limits.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Strix occidentalis occidentalis</i> California spotted owl	MBTA	SSC	Occurs in mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but it is likely outside of the elevation range of the species.	No
<i>Vireo bellii pusillus</i> least Bell's vireo	FE MBTA CONCCP/ HCP	SE CONCCP/ HCP	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms. Long-distance migrant.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There are 50 recent and five historical records in the 12-Quad search area encompassing the City, including one recent (2017) record within city limits.	Yes
Mammals					
<i>Antrozous pallidus pallidus</i> pallid bat	—	SSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Canis latrans</i> Coyote	CONCCP/ HCP	CONCCP/ HCP	Occurs in a wide range of habitats including forests, grasslands, deserts, and swamps. Tolerant of human activities and can also occur in suburban, agricultural, and urban settings.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species, and the species could forage in margins of the City and move along the Santa Ana River corridor. Due to its tolerance of human disturbance, this species has potential to occur throughout the entire City.	Yes
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	—	SSC	Occurs in sandy, herbaceous areas, usually in association with rocks or coarse gravel, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, and grasslands.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	Yes
<i>Choeronycteris mexicana</i> Mexican long-tongued bat	—	SSC	Occurs in pinon and juniper woodlands, riparian scrub, and Sonoran thorn woodland. Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area surrounding the project area.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Eumops perotis californicus</i> western mastiff bat	—	SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Moderate: The project area contains potentially suitable habitat that could support occurrence of this species. There are eleven historical records in the 12-Quad search area encompassing the City, including two historical records within city limits.	No
<i>Lasionycteris noctivagans</i> silver-haired bat	—	—	Occurs in coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valley foothill and montane riparian habitats. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	Low: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Lasiurus cinereus</i> hoary bat	—	—	Occurs in woodlands and forests with medium to large-size trees and dense foliage. Roosts in dense foliage of medium to large trees.	Low: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Lasiurus xanthinus</i> western yellow bat	—	SSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in skirts of dead fronds in both native and non-native palm trees.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City.	Yes
<i>Microtus californicus stephensi</i> south coast marsh vole	—	SSC	Occurs in tidal marshes in Los Angeles, Orange and southern Ventura counties.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No
<i>Myotis yumanensis</i> Yuma myotis	—	—	Occurs in open forests and woodlands with sources of water over which to feed. Maternity colonies in caves, mines, buildings or crevices.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City, which is within city limits.	Yes

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in rock outcrops, rocky cliffs, and slopes in coastal sage and Riversidean alluvial fan sage scrub with moderate to dense canopies.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City.	Yes
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	—	SSC	Occurs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. Roosts in caves, crevices, mines, tunnels, and man-made structures.	Low: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Nyctinomops macrotis</i> big free-tailed bat	—	SSC	Occurs in rocky habitats in arid landscapes and has been found in a variety of plant associations, including desert shrub, woodlands, and evergreen forests. Roosts by day in crevices on cliff faces. These bats forage mostly for large moths, but may eat other insects as well.	Low: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species, but there are no recent records within city limits. There is one historical record in the 12-Quad search area encompassing the City.	No
<i>Onychomys torridus ramona</i> southern grasshopper mouse	—	SSC	Occurs in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There is one recent record in the 12-Quad search area encompassing the City.	No
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse	FE CONCCP/ HCP	SSC CONCCP/ HCP	Occurs in coastal strand, coastal dunes, and coastal sage scrub growing on marine terraces. Prefers soils of fine alluvial sands near the ocean.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There is one historical record in the 12-Quad search area encompassing the City. This species is believed to be locally extirpated.	No
<i>Sorex ornatus salicornicus</i> southern California saltmarsh shrew	—	SSC	Occurs in coastal marshes in Los Angeles, Orange and Ventura counties. Requires dense vegetation and woody debris for cover.	None: The City does not contain suitable habitat(s) that would support occurrence of this species. There are two historical records in the 12-Quad search area encompassing the City.	No

Scientific Name Common Name	Status		Habitat Description ³	Potential to Occur and Rationale ⁴	Included in Impact Analysis
	USFWS ¹	CDFW ²			
<i>Taxidea taxus</i> American badger	—	SSC	Occurs in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	Moderate: The Hill and Canyon Area contains potentially suitable habitat that could support occurrence of this species. There are one recent and one historical records in the 12-Quad search area encompassing the City.	Yes
<i>Urocyon cinereoargenteus</i> gray fox	CONCCP/ HCP	CONCCP/ HCP	Occurs in deciduous forests interspersed with brushy, woodland areas. Proximity to water is a key feature of preferred habitat.	High: The Hill and Canyon Area contains suitable habitat that could support occurrence of this species.	Yes
Code Designations					
¹ Federal Status: 2020 USFWS Listing			² State Status: 2020 CDFW Listing		
ESU = Evolutionary Significant Unit is a distinctive population FE = Listed as endangered under the Endangered Species Act FT = Listed as threatened under the Endangered Species Act FC = Candidate for listing (threatened or endangered) under the Endangered Species Act FD = Delisted in accordance with the Endangered Species Act FPD = Federally Proposed to be Delisted MBTA = protected by the Migratory Bird Treaty Act — = Not federally listed			SE = Listed as endangered under the California Endangered Species Act (CESA) ST = Listed as threatened under CESA SC = Candidate for listing (threatened or endangered) under CESA SSC = Species of Special Concern as identified by the CDFW FP = Listed as fully protected under the Fish and Game Code FGC = protected by Fish and Game Code Section 3503.5 — = Not state listed		
Notes: ³ Habitat Description: Habitat description adapted from CNDDDB or other specified source ⁴ Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 6 or other specified source. Sources: California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/ . Accessed May 4, 2023. California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx . Accessed May 4, 2023. United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation. Website: https://ecos.fws.gov/ipac/ . Accessed May 4, 2023.					

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