

4.3 BIOLOGICAL RESOURCES

Information in this section is based in part on the analysis contained in the Biological Technical Report that was prepared for the Project in January 2024 (Psomas 2024c), which is provided as Appendix F.

The information and analysis set forth herein and in the Biological Technical Report has been reported in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).

The determination of impacts in this analysis is based on the Project impact boundaries overlaid with maps of biological resources in the Project Site. For ease of reference and consistent with the Biological Technical Report, this analysis refers to the Project Site, which consists of the Project Site and adjacent open spaces areas within 500 feet of the proposed impact boundaries.

As detailed more fully below, biological impacts associated with the Project were evaluated with respect to the following special status biological issues:

- Species listed under federal or State Endangered Species Acts;
- Species proposed for listing under federal or State Endangered Species Acts;
- Non-listed species that meet the criteria in the definition of “Rare” or “Endangered” in the State CEQA Guidelines (i.e., 14 California Code of Regulations, Section 15380)¹;
- Species designated as California Species of Special Concern;
- Vegetation types (synonymous with “habitat” and “community”) suitable to support a federally or State-listed Endangered or Threatened plant or wildlife species;
- Streambeds, waterbodies, wetlands, and their associated vegetation;
- Vegetation types, other than wetlands, considered sensitive natural communities by regulatory agencies (e.g., USFWS, CDFW) or resource conservation organizations;
- Other species or issues of concern to regulatory agencies or conservation organizations; and
- Central–Coastal Subregion NCCP/HCP Implementation Agreement.

¹ Section 15380 of the State CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plant with a CRPR of 1B.1 or 2) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this report, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the State CEQA Guidelines.

The actual and potential occurrence of these resources in the Project Site was correlated with the relevant significance criteria to determine whether the impacts of the Project on these resources would be considered significant, as discussed further below.

4.3.1 EXISTING CONDITIONS

Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP)

The Project Site is in the Central/Coastal Subregion of the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The purpose of this plan is to provide regional protection and recovery of multiple species and habitat while allowing compatible land use and appropriate development. The City of Anaheim is a signatory jurisdiction, which means that the City has signed the NCCP/HCP Implementation Agreement (IA) that requires the City to comply with the provisions of the NCCP/HCP and associated IA. As depicted in Exhibit 4.3-1, the Project Site is located within a NCCP Reserve “Existing Use Area”.

Critical Habitat






The United States Fish and Wildlife Service (USFWS) published a Revised Final Rule designating Critical Habitat for the coastal California gnatcatcher in 2007. This revised rule designates 197,303 acres of Critical Habitat in San Diego, Orange, Riverside, San Bernardino, Los Angeles, and Ventura Counties. As depicted in Exhibit 4.3-2, the Project Site is within designated Critical Habitat for the coastal California gnatcatcher.

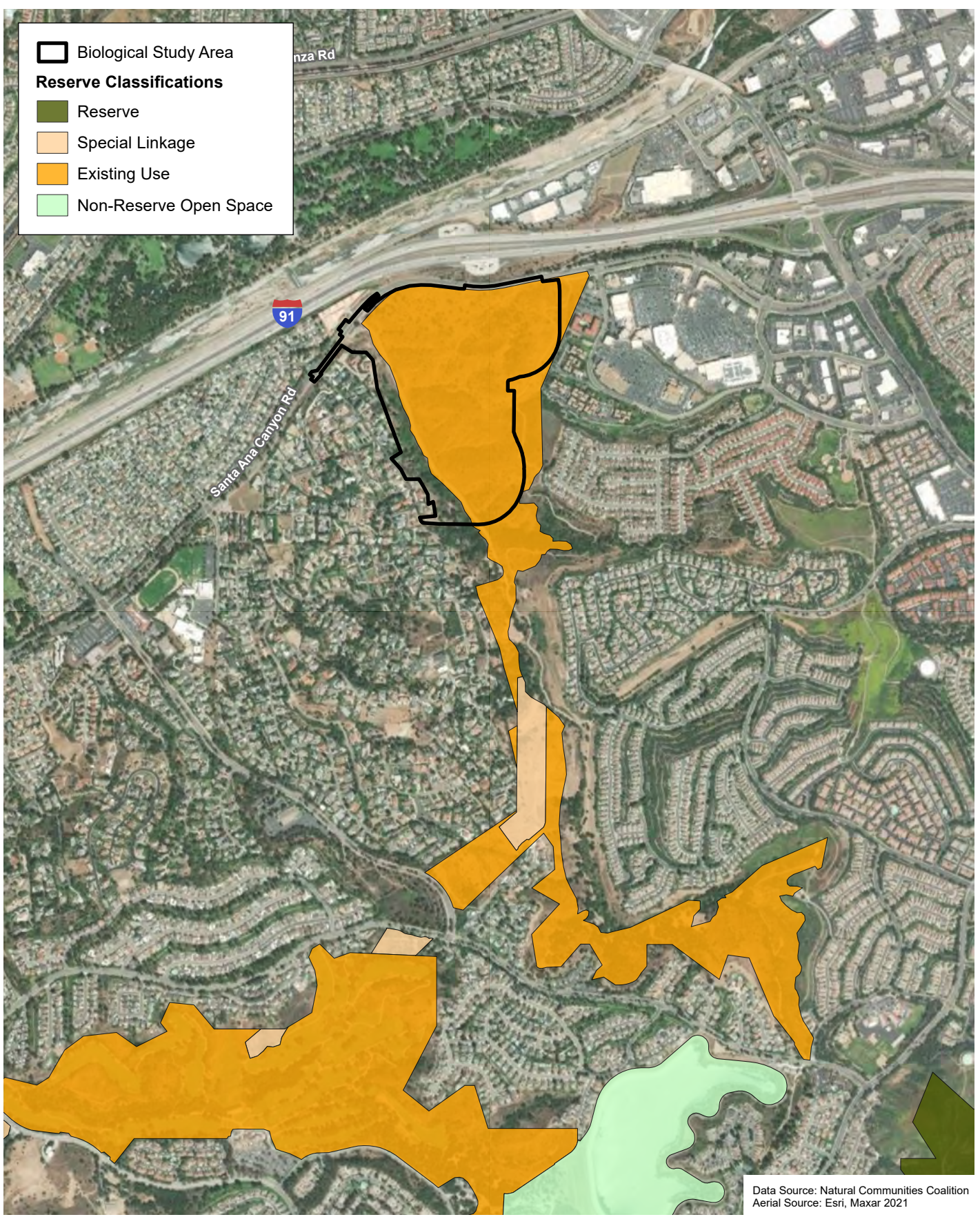
Focused Biological Surveys

As explained in more detail in the Biological Technical Report and below, focused surveys were conducted for special status plant and wildlife species with potential to occur in the Project Site. Focused surveys were conducted for special status plant species, coastal California gnatcatcher, coastal cactus wren, least Bell’s vireo, and southwestern willow flycatcher.

During the 2023 focused surveys that were conducted , two special status plant species, intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*), and Southern California black walnut (*Juglans californica*) were observed.

With respect to special status wildlife species, focused surveys were conducted for coastal California gnatcatcher, coastal cactus wren, least Bell’s vireo, and southwestern willow flycatcher. One pair of coastal California gnatcatcher was observed in the Project Site during the 2023 focused surveys. The pair successfully nested and fledged one juvenile. Four pairs of coastal California gnatcatchers were previously observed during focused surveys

 Biological Study Area
Reserve Classifications
 Reserve
 Special Linkage
 Existing Use
 Non-Reserve Open Space



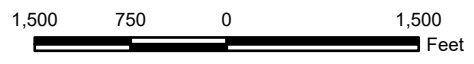
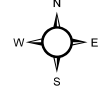
Data Source: Natural Communities Coalition
 Aerial Source: Esri, Maxar 2021

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Orange County Central-Coastal NCCP/HCP

Exhibit 4.3-1

Hills Preserve Project



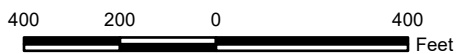
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Critical Habitat

Exhibit 4.3-2

Hills Preserve Project



conducted in 2002.² No coastal cactus wren, least Bell's vireo, or southwestern willow flycatcher were observed during the 2023 focused surveys.

Complete focused survey reports are provided as appendices to the Biological Technical Report, which is provided as Appendix F to this Draft EIR. The general locations of special status species are depicted in Exhibit 4.3-3.

Regional Environment

The Project Site is located in Santa Ana Canyon with the Santa Ana Mountains to the southeast and Chino Hills to the north. Also, the Santa Ana River is approximately 525 feet north of the Project Site. There are several designated open space areas near the Project Site including Deer Canyon Park Preserve, Yorba Regional Park, Featherly Regional Park, Chino Hills State Park, Oak Canyon Nature Center, Santiago Oaks Regional Park, Irvine Regional Park, NCCP/HCP Reserve open space including Weir Canyon, Gypsum Canyon, and Fremont Canyon, Prado Basin, and the Cleveland National Forest.

Local Environment

The Project Site consists of hillside areas with a generally north-south trending canyon along that is located along the western portion of the Project Site. USGS identifies one³ unnamed blueline stream as occurring along the western boundary of the Project Site.

Elevations within the Project Site range from approximately 600 feet above mean sea level in the southeast area of the Project Site to approximately 330 feet above mean sea level at the northwest boundary of the Project Site along Santa Ana Canyon Road.

Soils mapped in the Project Site include Anaheim loam, 30 to 50 percent slopes; Anaheim clay loam, 30 to 50 percent slopes; Balcom clay loam, 9 to 15 percent slopes; Calleguas clay loam, 50 to 75 percent slopes, eroded; Cieneba sandy loam, 30 to 75 percent slopes, eroded; Metz loamy sand; Myford sandy loam, 2 to 9 percent slopes; Soper loam, 15 to 30 percent slopes; Xeralfic arents, loamy, 2 to 9 percent slopes; Yorba gravelly sandy loam, 2 to 9 percent slopes; Yorba cobbly sandy loam, 9 to 30 percent slopes, eroded; and Yorba cobbly sandy loam, 30 to 50 percent slopes.

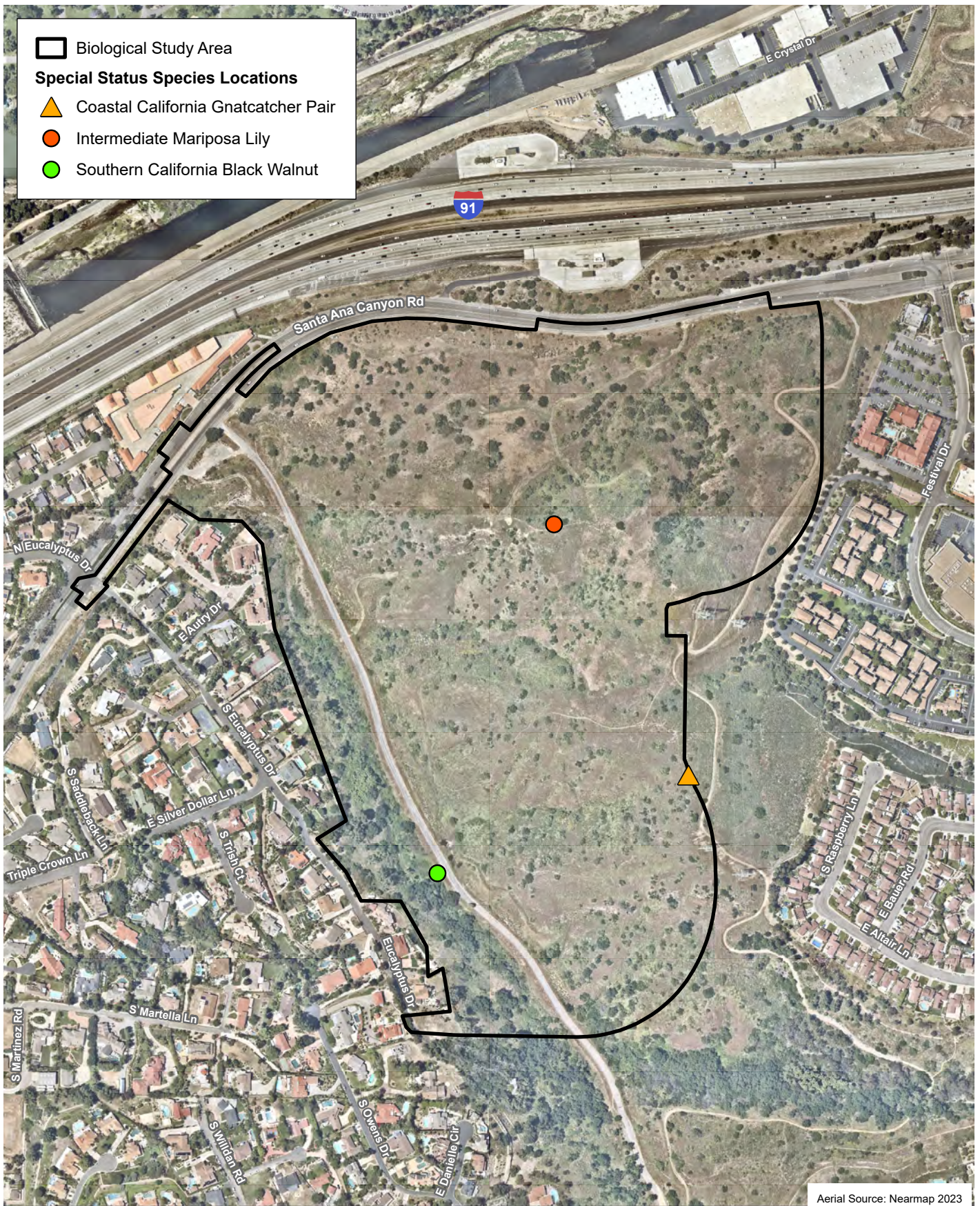
Vegetation Types and Other Areas

As fully detailed in the Biological Technical Report, a variety of vegetation types occur in the Project Site, including sagebrush – black sage scrub, sagebrush – black sage scrub/ruderal,

² A portion of the Project Site considered in the Biological Technical Report was previously proposed as a developmental project referred to as the Deer Canyon Estates Project (Tentative Tract 16440). A Biological Technical Report, Jurisdictional Delineation, and focused surveys were completed for that project (BonTerra Consulting 2005). Results of those surveys have been incorporated into the Biological Technical Report and this Section 4.3, as appropriate based on accepted industry standards and protocols.

³ A second blueline stream is shown in the northwestern corner of the Project Site on the USGS quadrangle (i.e., the Santa Ana Valley Canal), but has been developed and is now underground.

- Biological Study Area
- Special Status Species Locations**
- ▲ Coastal California Gnatcatcher Pair
- Intermediate Mariposa Lily
- Southern California Black Walnut

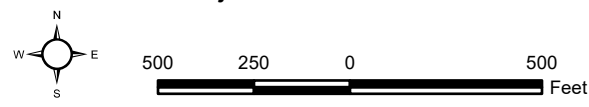


Aerial Source: Nearmap 2023

Special Status Species Locations

Exhibit 4.3-3

Hills Preserve Project



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coyote brush scrub, toyon–sumac chaparral, toyon–sumac chaparral/ruderal, ruderal, disturbed ruderal, coastal freshwater marsh, poison oak scrub, southern willow scrub, mulefat scrub, southern coast live oak riparian forest, coast live oak woodland, Mexican elderberry woodland, and non-native woodland. Other landcover that occur within the Project Site include xeric cliff face, developed, and disturbed areas. The locations of vegetation communities within the Project Site are provided in Exhibit 4.3-4.

Wildlife Populations and Movement Patterns

Vegetation in the Project Site provides habitat for many wildlife species. Common wildlife species observed or expected to occur in the Project Site are discussed below.

Fish

Most creeks and waterways in southern California are ephemeral, which means that they are typically subject to periods of high-water flow in winter and spring and little to no flow in late summer and fall. Under existing conditions, drainages in the Project Site convey water only during storm events. The drainage is isolated from other more substantial drainages in the Project vicinity, such as the Santa Ana River (which is located approximately 550 feet north of the Project Site). The drainages within the Project Site are not expected to support any fish due to their ephemeral nature.

Amphibians

Amphibian species expected to occur in the Project Site include garden slender salamander (*Batrachoseps major major*), black-bellied slender salamander (*Batrachoseps nigriventris*), western toad (*Anaxyrus boreas*), and Baja California treefrog (*Pseudacris hypochondriaca*).

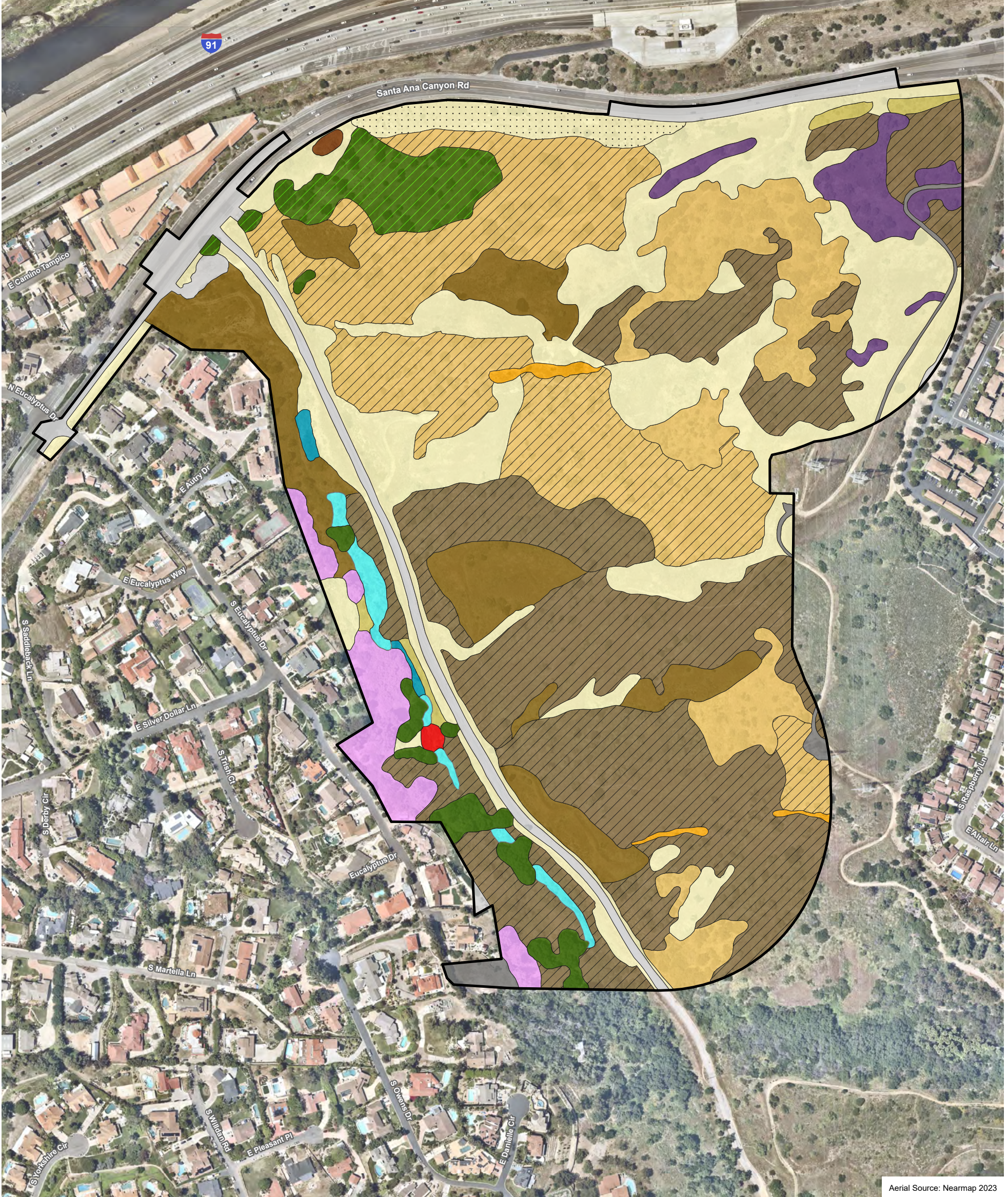
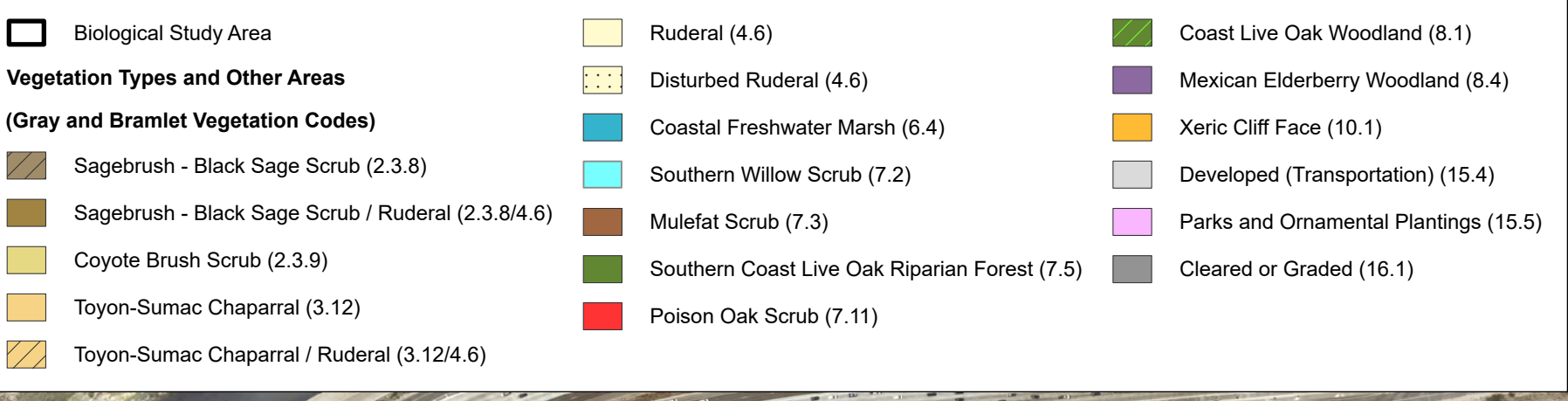
Reptiles

Common reptile species observed or expected to occur in the Project Site include common side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), western skink (*Plestiodon skiltonianus*), red racer (*Coluber flagellum piceus*), California striped racer (*Coluber lateralis lateralis*), California kingsnake (*Lampropeltis californiae*), gopher snake (*Pituophis catenifer*), and southern Pacific rattlesnake (*Crotalus oreganus helleri*).

Birds

A variety of bird species are expected to be residents in the Project Site, using the habitats throughout the year. Other species are present in the Project Site only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur in the Project Site during the winter and migrate to the north for breeding in the spring.

Bird species were observed or expected to occur in the Project Site include mallard (*Anas platyrhynchos*), California quail (*Callipepla californica*), rock pigeon (*Columba livia*), band-tailed pigeon (*Patagioenas fasciata*), Eurasian collared-dove (*Streptopelia decaocto*),



Aerial Source: Nearmap 2023

Biological Resources

Hills Preserve Project

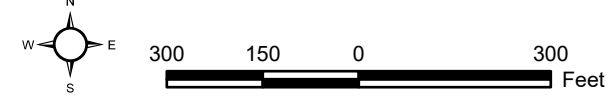


Exhibit 4.3-4



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mourning dove (*Zenaida macroura*), greater roadrunner (*Geococcyx californianus*), white-throated swift (*Aeronautes saxatalis*), Anna's hummingbird (*Calypte anna*), rufous hummingbird (*Selasphorus rufus*), Allen's hummingbird (*Selasphorus sasin*), acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (*Picoides nuttalli*), downy woodpecker (*Picoides pubescens*), red-crowned parrot (*Amazona viridigenalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), Hutton's vireo (*Vireo huttoni*), California scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), oak titmouse (*Baeolophus inornatus*), northern rough-winged swallow (*Stelgidopteryx serripennis*), bushtit (*Psaltriparus minimus*), Bewick's wren (*Thryomanes bewickii*), blue-gray gnatcatcher (*Poliophtila caerulea*), coastal California gnatcatcher, wrentit (*Chamaea fasciata*), western bluebird (*Sialia mexicana*), American robin (*Turdus migratorius*), California thrasher (*Toxostoma redivivum*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), spotted towhee (*Pipilo maculatus*), orange-crowned warbler (*Leiothlypis celata*), and common yellowthroat (*Geothlypis trichas*).

Migratory species observed or expected to occur in the Project Site that are present during the nesting season include lesser nighthawk (*Chordeiles acutipennis*), barn swallow (*Hirundo rustica*), cliff swallow (*Petrochelidon pyrrhonota*), Wilson's warbler (*Cardellina pusilla*), and black-headed grosbeak (*Pheucticus melanocephalus*). Other migratory species observed or expected to occur in the Project Site during the spring/summer include black-chinned hummingbird (*Archilochus alexandri*), Costa's hummingbird (*Calypte costae*), Pacific-slope flycatcher (*Empidonax difficilis*), ash-throated flycatcher (*Myiarchus cinerascens*), phainopepla (*Phainopepla nitens*), hooded oriole (*Icterus cucullatus*), Bullock's oriole (*Icterus bullockii*), Nashville warbler (*Leiothlypis ruficapilla*), and blue grosbeak (*Passerina caerulea*).

Wintering species observed or expected to occur in the Project Site include northern flicker (*Colaptes auratus*), ruby-crowned kinglet (*Regulus calendula*), hermit thrush (*Catharus guttatus*), cedar waxwing (*Bombycilla cedrorum*), yellow-rumped warbler (*Setophaga coronata*), Townsend's warbler (*Setophaga townsendi*), Lawrence's goldfinch (*Spinus lawrencei*), golden-crowned sparrow (*Zonotrichia atricapilla*), white-crowned sparrow, and Lincoln's sparrow (*Melospiza lincolnii*).

Raptors (birds of prey) observed or expected to occur in the Project Site include bald eagle, Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), great-horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), western screech owl (*Megascops kennicottii*), American kestrel (*Falco sparverius*), and merlin (*Falco columbarius*). The turkey vulture (*Cathartes aura*), a scavenger, was also observed.

Mammals

Small mammals observed or expected to occur in the Project Site include eastern fox squirrel (*Sciurus niger*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), mouse (*Peromyscus sp.*), and desert cottontail (*Sylvilagus audubonii*). Medium to large-sized mammals, or their sign, observed or expected to occur include bobcat

(*Lynx rufus*), coyote (*Canis latrans*), northern raccoon (*Procyon lotor*), and southern mule deer (*Odocoileus hemionus*).

Bats occur throughout most of Southern California and may use any portion of the Project Site as foraging habitat. Most of the bats that could potentially occur in the Project Site are inactive during the winter and either hibernate or migrate, depending on the species. Bats may roost in cliffs or rocky outcroppings, crevices of structures, or trees in the Project Site. Bat species that may occur in the Project Site for foraging and roosting include greater bonneted bat [western mastiff bat] (*Eumops perotis californicus*), Brazilian free-tailed bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), canyon bat (*Parastrellus hesperus*), pallid bat (*Antrozous pallidus*), California myotis (*Myotis californicus*), and Yuma bat (*Myotis yumanensis*).

Wildlife Corridors

As discussed in more detail in the Biological Technical Report, wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

The Santa Ana River is considered a regional wildlife corridor and is located approximately 550 feet north of the Project Site. However, Santa Ana Canyon Road and SR-91 provide substantial barriers to wildlife movement, although more mobile species such as birds and coyotes may be able to cross these barriers to reach the river.

The Project Site consists of open space areas vegetated primarily with native habitat area; however, the open space is generally constrained by SR-91 to the north, residential development to the west, and commercial development to the east. Deer Canyon Park Preserve is located immediately south of the Project Site and undeveloped open space with native habitats continues approximately two miles in the southerly direction (north of Canyon Rim Road) to connect with open space in Weir Canyon within the NCCP/HCP Reserve; wildlife would only need to cross two roads (The Highlands and Serrano Avenue) to reach the open space in Weir Canyon. The open space from the Project Site to Weir Canyon would be considered a wildlife linkage and provides movement opportunities for all wildlife along this corridor. The linkage is even more valuable for birds and more mobile species that

could use it to move from the NCCP/HCP Reserve in Weir Canyon to reach the Santa Ana River to the north. The entirety of the open space along this wildlife linkage has been designated by the NCCP/HCP as “Existing Use”, which indicates that jurisdictions should make their best efforts to obtain conservation easements⁴ over privately-owned lands to assure that natural vegetation along these linkages is retained.

The Project Site itself supports native habitats. Natural drainages and ridgelines create favorable travel routes for local wildlife movement. Local wildlife movement could occur across all habitat types but is expected to be concentrated in native habitat types (i.e., coastal sage scrub, chaparral, riparian, and woodland).

Jurisdictional Resources

Jurisdictional resources were evaluated within the Project Site including wetland and non-wetland WOTUS regulated by the USACE; waters of the State regulated by the RWQCB; and waters, including the bed, bank, and channel of all lakes, rivers, and/or streams (and associated wetland and riparian vegetation), regulated by CDFW. The Jurisdictional Delineation Report is included as an appendix to the Biological Technical Report.

Nine potential jurisdictional features were mapped in the Project Site: there is one⁵ unnamed blueline stream along the western edge of the Project Site (Drainage 1) and eight smaller drainages (referred to as Drainage 2, Drainage 3, et seq.).







Under the September 8, 2023, Amended 2023 Rule definition of WOTUS, only relatively permanent, standing, or continuously flowing tributaries are considered WOTUS. Because all of the waters in the Project Site are ephemeral, they would not be considered WOTUS under the Amended 2023 Rule definition of WOTUS. Therefore, there is no USACE jurisdiction in the Project Site.

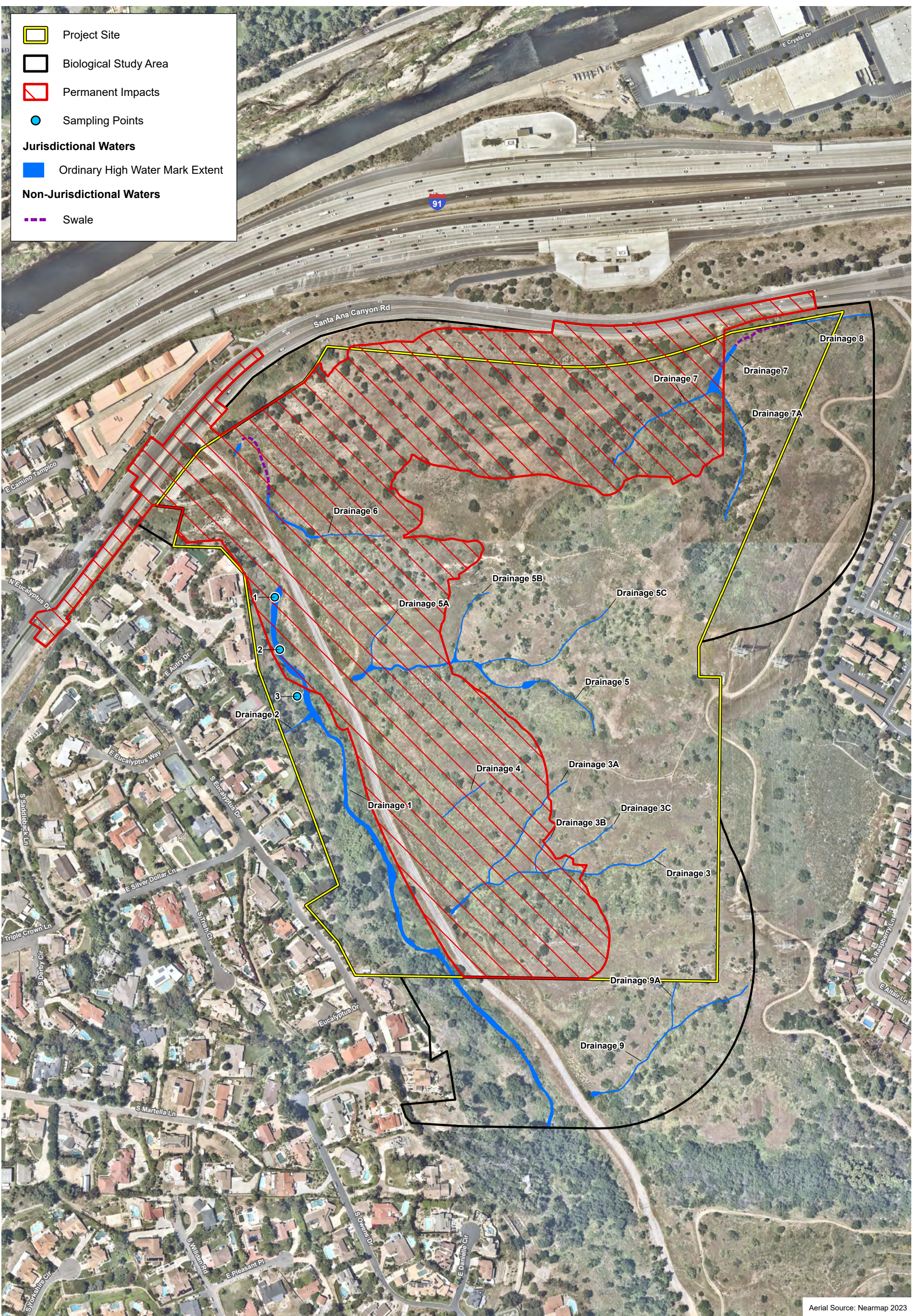
Based on an assessment of jurisdictional waters, a total of approximately 1.241 acres of waters of the State under the regulatory authority of the RWQCB occur in the Project Site.

As detailed in Table 4.3-1, a total of approximately 4.852 acres of waters under the regulatory authority of CDFW occurs in the Project Site. The locations of drainages within the Project Site are depicted in Exhibits 4.3-5 and 4.3-6.

⁴ The NCCP/HCP text specifically states that “the failure or inability to obtain a conservation easements over private lands located within Existing Use areas shall not be deemed a breach of the NCCP/HCP...”.

⁵ A second blueline stream is shown in the northwestern corner of the Project Site on the USGS quadrangle (i.e., the Santa Ana Valley Canal), but has been developed and is now underground.

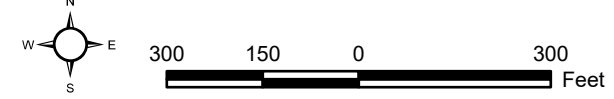
-  Project Site
-  Biological Study Area
-  Permanent Impacts
-  Sampling Points
- Jurisdictional Waters**
-  Ordinary High Water Mark Extent
- Non-Jurisdictional Waters**
-  Swale








Aerial Source: Nearmap 2023

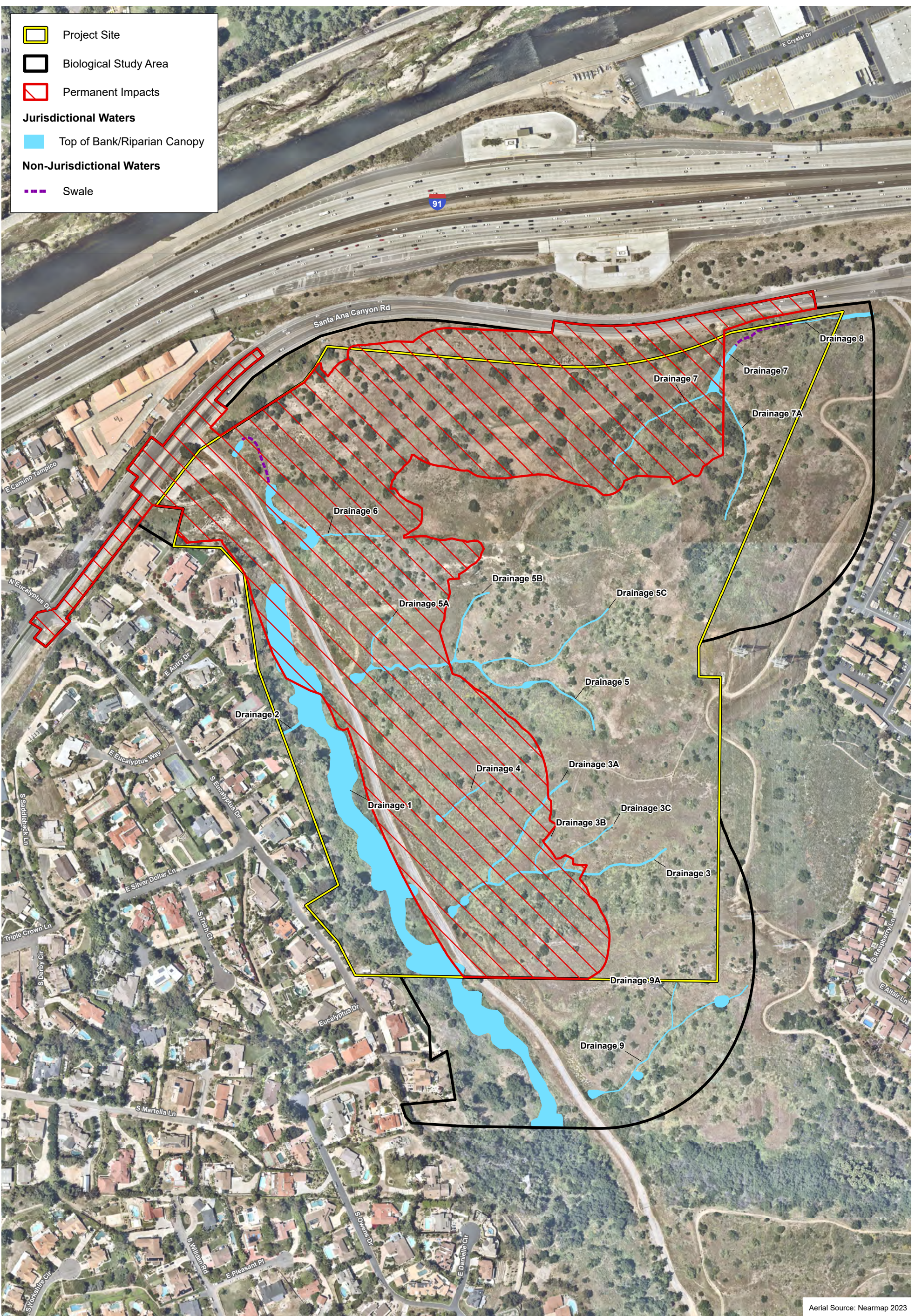
Project Impacts – RWQCB
Hills Preserve Project

Exhibit 4.3-5



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-  Project Site
-  Biological Study Area
-  Permanent Impacts
- Jurisdictional Waters**
-  Top of Bank/Riparian Canopy
- Non-Jurisdictional Waters**
-  Swale



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Project Impacts - CDFW

Hills Preserve Project

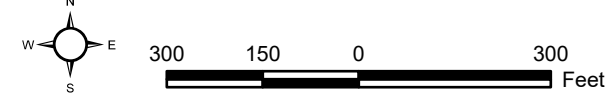


Exhibit 4.3-6



**TABLE 4.3-1
JURISDICTIONAL RESOURCES IN THE PROJECT SITE**

Feature	USACE WOTUS (approximate acres)	RWQCB Waters of the State (approximate acres)	CDFW Jurisdictional Resources (approximate acres)
Drainage 1	0.000	0.645	3.487
Drainage 2	0.000	0.015	0.017
Drainage 3	0.000	0.111	0.301
Drainage 4	0.000	0.008	0.037
Drainage 5	0.000	0.174	0.360
Drainage 6	0.000	0.057	0.238
Drainage 7	0.000	0.152	0.197
Drainage 8	0.000	0.019	0.051
Drainage 9	0.000	0.060	0.164
Total	0.000	1.241	4.852
USACE: U.S. Army Corps of Engineers; WOTUS: waters of the United States; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife.			

Special Status Biological Resources

Special status biological resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations.

Special Status Plants

As discussed in more detail in the Biological Technical Report, focused surveys were conducted in spring/summer 2023 for all special status plant species with potential to occur in the Project Site based on the presence of suitable habitat. See Table 6 of the Biological Technical Report for more information related to this. Two special status plant species, intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*), and Southern California black walnut (*Juglans californica*) were observed during the 2023 focused surveys.

Intermediate Mariposa-lily

Intermediate mariposa-lily has a CRPR of 1B.2. It is a Conditionally Covered species⁶ in the Central-Coastal NCCP/HCP (i.e., impacts to populations less than 20 individuals are fully authorized). It typically blooms between May and July. This perennial bulbiferous herb occurs on dry, rocky, open slopes in chaparral and coastal sage scrub at elevations between sea level and approximately 2,231 feet above mean sea level. It is sometimes locally common following fire. This species is known from the South Coast and northern Peninsular Ranges.

⁶ The NCCP/HCP refers to this species by its former common name – foothill mariposa lily.

Seven individual intermediate mariposa-lilies were observed in a single population in the 2023 focused survey area. The population occurs on an east – west running ridgeline in ruderal vegetation at the edge of sagebrush – black sage scrub. The species associated with the intermediate mariposa-lilies observed in the Project Site include grayish shortpod mustard (*Hirschfeldia incana*), oat, deerweed (*Acmispon glaber*), fascicled tarplant (*Deinandra fasciculata*), Lindley’s silverpuffs (*Uropappus lindleyi*), and California sagebrush.

Southern California Black Walnut

Southern California black walnut has a CRPR of 4.2. It is not a Covered species in the Central Coastal NCCP/HCP. It is a tree that is observable year-round. This species is the dominant species in walnut woodlands, which are naturally limited in distribution. It can also occur in chaparral, cismontane woodland, coastal scrub, and riparian woodland from 165 to 2,955 feet above mean sea level. Walnut woodlands are threatened by urbanization, grazing, non-native plants, and possibly by lack of natural reproduction. Southern California black walnut is also threatened by hybridization with horticultural varieties of walnut. One individual tree was observed in the 2023 focused survey area. The tree occurs in the drainage on the western edge of the Project Site.

Special Status Wildlife

As shown in Table 4.3-2, 41 wildlife species have potential to occur in the Project Site based on the presence of suitable habitat and the results of focused surveys. See Section 3.4.5 of the Biological Technical Report for more information related to this topic.

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**TABLE 4.3-2
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT VICINITY**

Species	Common Name	Federal Status	State Status	NCCP/HCP Covered Species	Habitat*	Potential to Occur
Invertebrates						
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	—	Conditionally Covered	Inhabits vernal pools and ephemeral depressions.	Not expected to occur; no suitable habitat.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	—	Conditionally Covered	Inhabits vernal pools and ephemeral depressions.	Not expected to occur; no suitable habitat.
<i>Danaus plexippus</i>	monarch butterfly	Candidate (overwintering)	—	No	Overwintering sites consist of forested areas that provide protection from the elements and moderate temperatures, as well as nectar and clean water sources located nearby. Overwintering sites are within 1.5 miles of the Pacific Ocean at elevations of 200–300 feet above msl. Reproduction is dependent on the presence of milkweed (<i>Asclepias</i> sp.).	Not expected for overwintering because the Project Site is too far inland and is outside the known elevational range for overwintering.
<i>Euphydryas editha quino</i>	quino checkerspot butterfly	FE	—	Conditionally Covered	Inhabits openings in chaparral and sage scrub and grasslands; erect plantain is one of the specific host plants where females lay eggs.	Not expected to occur; outside of known range for this species.
<i>Bombus crotchii</i>	Crotch's bumble bee	—	CE	No	Inhabits areas with appropriate food sources (e.g., <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> [CDFW 2023a]).	May occur; suitable habitat.
Fish						
<i>Oncorhynchus mykiss irideus</i> pop. 10	steelhead – southern California Distinct Population Segment (DPS)	FE	SE	No	Inhabits streams; can tolerate warmer water and more variable conditions.	Not expected to occur; no suitable habitat.
<i>Rhinichthys osculus</i> ssp. 8	Santa Ana speckled dace	—	SSC	No	Inhabits permanently flowing streams, usually in shallow cobble and gravel riffles.	Not expected to occur; no suitable habitat.
<i>Catostomus santaanae</i>	Santa Ana sucker	FT	—	No	Inhabits coastal streams; prefer sand-rubble-boulder bottoms; cool, clear water; and algae.	Not expected to occur; no suitable habitat.
Amphibians						
<i>Taricha torosa</i>	Coast Range newt	—	SSC	No	Breeds in ponds, reservoirs, and slow-moving streams and lives in terrestrial habitats.	May occur for foraging; suitable terrestrial habitat but no suitable breeding habitat.
<i>Spea hammondi</i>	western spadefoot	—	SSC	Covered	Breeds in vernal pools in grassland habitats, but also hardwood woodlands.	May occur for foraging; suitable terrestrial habitat but no suitable breeding habitat.
<i>Anaxyrus californicus</i>	arroyo toad	FE	SSC	Conditionally Covered	Inhabits rivers with sandy banks, washes, and intermittent streams.	Not expected to occur; no suitable habitat
Reptiles						
<i>Emys marmorata</i>	western pond turtle	FPT	SSC	No	Inhabits marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation and basking sites and suitable upland habitat.	Not expected to occur; no suitable habitat.
<i>Phrynosoma blainvillii</i>	coast horned lizard	—	SSC	Covered	Inhabits a wide variety of habitats with open areas for sunning, bushes for cover, and patches of loose soil for burial.	May occur; suitable habitat.
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	—	WL	Covered	Inhabits coastal scrub, chaparral, and hardwood woodlands; prefers washes and other sandy areas with patches of brush and rocks.	Expected to occur; observed during previous surveys (BonTerra Consulting 2005); suitable habitat.

**TABLE 4.3-2
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT VICINITY**

Species	Common Name	Federal Status	State Status	NCCP/HCP Covered Species	Habitat*	Potential to Occur
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	—	SSC	Covered	Inhabits deserts and semi-arid areas with sparse vegetation and open areas, woodland, and riparian areas.	Expected to occur; suitable habitat.
<i>Anniella stebbinsi</i>	southern California legless lizard	—	SSC	No	Inhabits a variety of habitats, generally in moist, loose soil.	May occur; suitable habitat.
<i>Arizona elegans occidentalis</i>	California glossy snake	—	SSC	No	Inhabits a range of scrub and grassland habitats, often with loose or sandy soils.	May occur; suitable habitat.
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	—	SSC	No	Inhabits brushy or shrubby vegetation with small mammal burrows for refuge and overwintering sites.	May occur; suitable habitat.
<i>Thamnophis hammondi</i>	two-striped gartersnake	—	SSC	No	Found in or near permanent fresh water, often along streams with rocky beds and riparian growth.	Not expected to occur; no suitable habitat.
<i>Crotalus ruber</i>	red-diamond rattlesnake	—	SSC	Covered	Inhabits rocky areas with dense vegetation in chaparral, woodland, grassland, and deserts.	May occur; suitable habitat.
Birds						
<i>Accipiter cooperii</i>	Cooper's hawk	—	WL (nesting)	No	Forages in woodland. Nests in riparian growths of deciduous trees, such as canyon bottoms on river floodplains and in live oaks (<i>Quercus</i> spp.).	Observed during 2023 surveys; observed during previous surveys (BonTerra Consulting 2005); suitable foraging and nesting habitat.
<i>Accipiter striatus</i>	sharp-shinned hawk	—	WL (nesting)	Covered	Winters in woodlands, forests, forest edges, and suburban areas. Breeds in dense forests with closed canopy cover; does not breed in southern California.	May occur for foraging in winter; not expected to occur for nesting; observed during previous surveys (BonTerra Consulting 2005); suitable foraging habitat; nests outside the Project region.
<i>Aquila chrysaetos</i>	golden eagle	—	WL, FP & (nesting & wintering)	Conditionally Covered	Inhabits a variety of open habitats (e.g., desert, grassland, shrubland, chaparral, forests); avoids developed areas; nests on cliffs and steep escarpments.	May occur for foraging; not expected to occur for nesting; suitable foraging habitat; no suitable nesting habitat.
<i>Buteo regalis</i>	ferruginous hawk	—	WL (wintering)	No	Inhabits open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper woodland; nests on cliffs, rocky outcrops, and tree groves	Limited potential to occur for foraging in winter; marginally suitable foraging habitat (winter); does not nest in the Project region.
<i>Circus hudsonius</i>	northern harrier	—	SSC (nesting)	Covered	Wetlands and grasslands with low, thick vegetation. Nests in freshwater and brackish marshes, meadows, tundra, prairies, and marshlands. Winters in grasslands, pasturelands, croplands, estuaries, floodplains, and marshes,	May occur for foraging; not expected to occur for nesting; observed during previous surveys (BonTerra Consulting 2005); suitable foraging habitat; limited marginally suitable nesting habitat.
<i>Elanus leucurus</i>	white-tailed kite	—	FP (nesting)	No	Inhabits open grasslands, meadows, or marshes close to isolated, dense-topped trees for nesting and perching.	May occur; observed during previous surveys (BonTerra Consulting 2005); suitable foraging and nesting habitat.
<i>Haliaeetus leucocephalus</i>	bald eagle	Delisted	SE, FP (nesting & wintering)	No	Nests in large, old-growth trees with open branches near water. Forages along ocean shore, lake margins, and rivers.	May occur as a flyover; limited potential to occur for foraging; not expected to occur for nesting; marginal suitable foraging habitat; no suitable nesting habitat.
<i>Falco columbarius</i>	merlin	—	WL (wintering)	No	Open and semi-open areas such as grasslands, open forests, and coastal areas. Nests in conifers or deciduous trees in semi-open areas. Does not nest in southern California.	May occur for foraging in winter; not expected to occur for nesting; observed during previous surveys (BonTerra Consulting 2005); suitable foraging habitat; nests outside the Project region.

**TABLE 4.3-2
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT VICINITY**

Species	Common Name	Federal Status	State Status	NCCP/HCP Covered Species	Habitat*	Potential to Occur
<i>Falco mexicanus</i>	prairie falcon	—	WL (nesting)	Conditionally Covered	Variety of open habitats (desert, grassland, shrubland, agriculture, streams) especially near bluffs and cliffs that are used for nesting.	May occur; limited potential to occur for nesting; suitable foraging habitat; limited suitable nesting habitat.
<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Delisted, FP (nesting)	Covered	Nests in a scrape, depression, or ledge in an open site on cliffs, banks, dunes, and mounds near wetlands, lakes, rivers, or other water.	Limited potential to occur for foraging and nesting; marginal suitable foraging and nesting habitat.
<i>Coturnicops noveboracensis</i>	yellow rail	—	SSC	No	Inhabits freshwater marshlands.	Not expected to occur; no suitable habitat.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	—	ST, FP	No	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays.	Not expected to occur; no suitable habitat.
<i>Sternula antillarum browni</i>	California least tern	FE (nesting colony)	SE, FP (nesting colony)	No	Colonial breeder on bare or sparsely vegetated, flat substrates such as sand beaches, alkali flats, landfills, or paved areas along the coast.	Not expected to occur; no suitable habitat.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT (nesting)	SE (nesting)	No	Nests in extensive riparian forests along broad, lower flood-bottoms of larger river systems with willows (<i>Salix</i> spp.), often mixed with cottonwoods (<i>Populus</i> spp.), with understory of blackberry (<i>Rubus</i> sp.), nettles (<i>Urtica</i> sp.), or wild grape.	Not expected to occur; no suitable habitat.
<i>Asio otus</i>	long-eared owl	—	SSC (nesting)	No	Inhabits riparian bottomlands with tall willows and cottonwoods, also belts of live oak along stream courses.	Limited potential to occur for foraging and nesting; marginal suitable foraging and nesting habitat.
<i>Athene cunicularia</i>	burrowing owl	—	SSC (burrow sites)	No	Inhabits open, dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation; uses California ground squirrel burrows and similar openings for breeding.	Limited potential to occur; marginally suitable foraging and nesting habitat.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE (nesting)	SE (nesting)	Conditionally Covered	Inhabits riparian habitat along rivers, stream, and other wetlands with dense growths of willows, mule fat, etc., often with a scattered overstory of cottonwood.	Not expected to occur; not observed during 2023 focused surveys; not observed during previous focused surveys (BonTerra Consulting 2005); limited amount of suitable habitat.
<i>Lanius ludovicianus</i>	loggerhead shrike	—	SSC	No	Inhabits grasslands and other dry, open habitats.	May occur; suitable habitat.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE (nesting)	SE (nesting)	Conditionally Covered	Inhabits riparian forest, riparian scrub, and riparian woodland, usually nesting in willows, mule fat, or mesquite.	Not expected to occur; not observed during 2023 focused surveys; not observed during previous focused surveys (BonTerra Consulting 2005); limited amount of suitable habitat.
<i>Eremophila alpestris actia</i>	California horned lark	—	WL	No	Inhabits short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow agricultural fields, and alkali flats.	Limited potential to occur; marginally suitable habitat.
<i>Campylorhynchus sandiegensis</i> <i>brunneicapillus</i>	coastal cactus wren	—	SSC	Covered	Inhabits coastal sage scrub with tall prickly-pear cactus for nesting and roosting.	Not expected to occur; not observed during 2023 focused surveys; incidentally observed during previous surveys (BonTerra Consulting 2005); limited marginally suitable habitat.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	SSC	Covered	Inhabits coastal sage scrub in arid washes, on mesas, and slopes.	Observed during 2023 focused surveys; observed during previous surveys (BonTerra Consulting 2005); suitable habitat.

**TABLE 4.3-2
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT VICINITY**

Species	Common Name	Federal Status	State Status	NCCP/HCP Covered Species	Habitat*	Potential to Occur
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	—	WL	Covered	Inhabits coastal sage scrub and sparse mixed chaparral, frequently on relative steep, rocky hillsides with grass and forb patches.	May occur; observed during previous surveys (BonTerra Consulting 2005); suitable habitat.
<i>Ammodramus savannarum</i>	grasshopper sparrow	—	SSC (nesting)	No	Inhabits dense grasslands on rolling hills, lowland plains, and valleys and on hillsides on lower mountain slopes.	Limited potential to occur; marginally suitable habitat.
<i>Artemisiospiza belli belli</i>	Bell's sparrow	—	WL	No	Sage scrub, chaparral (open cover), and other open scrubby habitats; also occurs in desert scrub.	May occur; potentially suitable habitat.
<i>Icteria virens</i>	yellow-breasted chat	—	SSC (nesting)	No	Inhabits riparian thickets of willow and other brushy tangles near watercourses; nests in low, dense riparian vegetation consisting of willows, blackberry, and wild grape.	May occur; suitable habitat.
<i>Agelaius tricolor</i>	tricolored blackbird	—	ST, SSC (nesting colony)	No	Inhabits freshwater marsh, swamps, and wetlands with open water and protected nesting substrate.	Not expected to occur; no suitable habitat.
<i>Setophaga petechia</i>	yellow warbler	—	SSC (nesting)	No	Inhabits riparian forest, riparian scrub, and riparian woodland, foraging and nesting in willow shrubs and thickets, cottonwoods, sycamores (<i>Platanus</i> sp.), ash (<i>Fraxinus</i> sp.), and alders (<i>Alnus</i> sp.).	May occur; observed during previous surveys (BonTerra Consulting); suitable habitat.
Mammals						
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	—	SSC	No	Inhabits riparian scrub, pinyon and juniper woodland, and Sonoran thorn woodland; forages on night-blooming succulents; roosts in caves and in and around buildings.	Not expected to occur for foraging or roosting; no suitable foraging or roosting habitat; outside of current known range.
<i>Antrozous pallidus</i>	pallid bat	—	SSC	No	Inhabits deserts, grasslands, shrublands, woodlands, and forest, most commonly in open, dry habitats with rocky areas for roosting.	May occur for foraging and roosting; suitable foraging and roosting habitat.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	—	SSC	No	Variety of habitats throughout the State except alpine and subalpine; mesic sites; forages along habitat edges; roosts in mines, caves, and buildings.	May occur for foraging; not expected to occur for roosting; suitable foraging habitat; no suitable roosting habitat.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	—	SSC	No	Inhabits pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Roosts in crevices of cliffs and rocky outcroppings.	May occur for foraging; limited potential to occur for roosting; suitable foraging habitat; limited amount of suitable roosting habitat.
<i>Nyctinomops macrotis</i>	big free-tailed bat	—	SSC	No	Rugged and rocky terrain; roosts in buildings, caves, rock crevices in cliffs, and rocky outcroppings.	May occur for foraging; limited potential to occur for roosting; suitable foraging habitat; limited marginally suitable roosting habitat.
<i>Lasiurus frantzii</i>	western red bat	—	SSC	No	Riparian habitat near water. Roosts exclusively in trees, particularly sycamore, cottonwood, ash, and elderberry (<i>Sambucus</i> sp.).	May occur for foraging and roosting; suitable foraging and roosting habitat.
<i>Lasiurus xanthinus</i>	western yellow bat	—	SSC	No	Inhabits valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	May occur for foraging and roosting; suitable foraging and roosting habitat.

**TABLE 4.3-2
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT VICINITY**

Species	Common Name	Federal Status	State Status	NCCP/HCP Covered Species	Habitat*	Potential to Occur
<i>Eumops perotis californicus</i>	western mastiff bat	—	SSC	No	Inhabits many open, semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	May occur for foraging and roosting; suitable foraging and roosting habitat.
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	—	SSC	No	Inhabits coastal scrub, chaparral, grasslands, and sagebrush, usually in association with rocks or coarse gravel.	May occur; suitable habitat.
<i>Neotoma bryanti [lepida] intermedia</i>	Bryant's [San Diego desert] woodrat	—	SSC	Covered	Inhabits coastal scrub with moderate to dense canopies, rock outcrops, rocky cliffs, and slopes.	May occur; suitable habitat.
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	—	SSC	No	Inhabits desert areas, especially scrub habitats with friable soils for digging with low to moderate shrub cover.	Not expected to occur; no recent records in Orange County.
<i>Taxidea taxus</i>	American badger	—	SSC	No	Dry, open stages of shrub, forest, and herbaceous habitats with friable soils.	May occur; suitable habitat.
<i>Puma concolor</i>	mountain lion-Southern California/Central Coast Evolutionary Significant Unit (ESU)	—	CE	No	Inhabits various habitats within foothill and mountain areas typically where deer can be found.	May occur; suitable habitat.

NCCP/HCP: Natural Community Conservation Plan/Habitat Conservation Plan; msl: mean sea level

LEGEND:

Federal (USFWS)		State (CDFW)	
FE	Endangered	SE	Endangered
FT	Threatened	ST	Threatened
FPT	Proposed Threatened	FP	Fully Protected
		CE	Candidate Endangered
		SSC	Species of Special Concern
		WL	Watch List

* Sources include CDFW 2023a.

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4.3.2 REGULATORY SETTING

Federal

National Environmental Policy Act

The National Environmental Policy Act (NEPA) establishes a broad national framework for protecting the environment. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment (42 United States Code [USC] 4321–4347). NEPA established the U.S. Environmental Protection Agency (USEPA) with the following roles and functions: (1) to establish and enforce environmental protection standards consistent with national environmental goals; (2) to conduct research on the adverse effects of pollution and on methods and equipment for controlling it; the gathering of information on pollution; and the use of this information in strengthening environmental protection programs and recommending policy changes; (3) to assist, through grants, technical assistance, and other means, in arresting pollution of the environment; and (4) to assist the Council on Environmental Quality in developing and recommending to the President new policies for the protection of the environment.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that the USFWS has listed as “Endangered” or “Threatened.” A federally listed species is protected from unauthorized “take,” which is defined in the FESA as acts to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 USC Sections 1532[19] and 1538[a]). In this definition, “harm” includes “any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife” (50 Code of Federal Regulations [CFR], Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and “which may require special management considerations or protection” (16 USC 1538[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires consultation with the USFWS and the fish and wildlife agencies of States where the “waters of any stream or other body of water are proposed or authorized, permitted, or licensed to be impounded, diverted or otherwise controlled or modified” by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of “preventing loss of and damage to wildlife resources.”

Sections 404 and 401 of the Clean Water Act of 1972

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into waters of the United States (WOTUS), including wetlands. The U.S. Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the 404 permit program and for making jurisdictional determinations. This permitting authority applies to all WOTUS where the material has the effect of (1) replacing any portion of WOTUS with dry land or (2) changing the bottom elevation of any portion of WOTUS. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in WOTUS. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development. Authorizations are conducted through the issuance of Nationwide (or General) Permits, through Individual (or Standard) Permits, or through Letters of Permission. Wetlands and other waters that do not meet the definition of WOTUS are not covered by the CWA; however, they are regulated by the State of California through the Porter-Cologne Water Quality Control Act and State Water Resources Control Board (SWRCB) Resolution No. 2019-0015 for California (SWRCB 2019).

The definition of WOTUS has been the subject of shifting regulations. Past federal revisions to regulations addressing the extent of USACE jurisdiction and the definition of WOTUS have been issued by the Obama Administration in 2015 and the Trump Administration in 2020. On January 18, 2023, the United States Environmental Protection Agency (USEPA) published a final Water Rule in the Federal Register that went into effect on March 20, 2023 (“the 2023 Rule”) (USACE and USEPA 2023a).

The definition of WOTUS changed again in response to the United States Supreme Court decision in the case of *Sackett v. USEPA*. On September 8, 2023, the USEPA and the USACE amended the Code of Federal Regulations to conform the definition of WOTUS to the Supreme Court decision (USACE and USEPA 2023b). This conforming rule amends the provisions of the agencies’ definition of WOTUS that were held invalid under the United States Supreme Court’s interpretation of the CWA under *Sackett*. Based on these changes, tributaries must have at least relatively permanent flow to be considered WOTUS under the federal definition. This would exclude ephemeral drainages from being WOTUS. This represents a substantial change to areas under federal jurisdiction in the arid west. This report provides interpretations of WOTUS under the Amended 2023 Rule.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established federal or State water quality standards. The SWRCB, in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), is responsible for administering the Section 401 water quality certification program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The SWRCB's and RWQCB's jurisdiction also extend to all "waters of the State" when no WOTUS are present, including wetlands and non-wetland waters of the State (isolated and non-isolated). The USEPA is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who has been delegated the responsibility of administering the water quality certification (Section 401) program.

Migratory Bird Treaty Act of 1918

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner, unless permitted by regulations, to "pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . ." (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. This regulation seeks to protect migratory birds and active nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements by the USFWS.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: *Accipitridae* (kites, hawks, and eagles); *Cathartidae* (New World vultures); *Falconidae* (falcons and caracaras); *Pandionidae* (ospreys); *Strigidae* (typical owls); and *Tytonidae* (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce

of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorized the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments established the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

State

California Environmental Quality Act

CEQA (13 Public Resources Code Sections 21000 et seq.) is a statute that requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The State CEQA Guidelines (14 California Code of Regulations [CCR] Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA.

With regards to plants and animals, Section 15380 of the State CEQA Guidelines independently defines “Endangered” and “Rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, Endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while Rare species are defined as those that (1) have such low numbers that they could become Endangered if their environment worsens or (2) are likely to become endangered within the foreseeable future (i.e., “threatened” as used in the FESA). In addition, a Lead Agency can consider a non-listed species (e.g., species with a California Rare Plant Rank [CRPR], California Species of Special Concern, or species of Local Concern) to be treated as if it were Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “Rare” or “Endangered” in the Project region.

The State CEQA Guidelines designate certain “trustee agencies” that have jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. CDFW is the trustee agency responsible for conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project. CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California (California Fish and Game Code §1802).

California Endangered Species Act

The State of California implements the CESA, which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the California Code of Regulations.

State-listed Threatened and Endangered species are protected under provisions of CESA. Activities that may result in take of individuals (defined in CESA as acts to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. While habitat degradation or modification is not included in the definition of “take” under CESA, the CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If it is determined that the “take” would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the California Code of Regulations. If a State-listed species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW’s requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the California Fish and Game Code.

California Fish and Game Code

CDFW administers the California Fish and Game Code. Particular sections of the Code are applicable to natural resource management.

Native Plant Protection

Sections 1900–1913 of the California Fish and Game Code were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

Unlawful Take or Destruction of Nests or Eggs

These sections duplicate federal protection under the MBTA. Section 3503 of the California Fish and Game Code makes it unlawful to take, possess, or destroy any bird’s nest or any bird’s eggs. Further, any birds in the orders Falconiformes or Strigiformes (i.e., birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

California Fully Protected Species

The State of California created the “Fully Protected” classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA; however, some have not been formally listed.

Various sections of the California Fish and Game Code provide lists of Fully Protected reptile and amphibian (§ 5050), bird (§ 3511), and mammal (§ 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835. CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research.

Natural Communities Conservation Planning Act

The Natural Community Conservation Planning Act, codified in Sections 2800–2835 of the California Fish and Game Code and signed into law in October 1991, authorizes the preparation of Natural Community Conservation Plans (NCCPs). The Act is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The purpose of an NCCP is to sustain and restore those species and their habitat identified by CDFW that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. The NCCP process provides an alternative to protecting species on a “single species basis” as in the federal and State environmentally sensitive areas (ESAs). Under the Act, CDFW is responsible for creating process planning and conservation guidelines for NCCP programs. Local governments and landowners may then prepare the NCCPs so that they comply with the CESA.

California Fish and Game Code (Sections 1600 through 1616)

California Fish and Game Code Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

California Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify CDFW before beginning any activity that will do one or more of the following:

- substantially obstruct or divert the natural flow of a river, stream, or lake;
- substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Section 1602 of the California Fish and Game Code applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Lake or Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

California Porter-Cologne Water Quality Control Act

Pursuant to the California Porter-Cologne Water Quality Control Act, the SWRCB and the nine RWQCBs may require permits (known as "Waste Discharge Requirements" or WDRs) for the fill or alteration of the waters of the State. The term "waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050[e]). The SWRCB and RWQCB have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a "report of waste discharge" under Section 13260, which is treated as an application for WDRs.

The Porter-Cologne Water Quality Control Act charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (i.e., WDRs) for the fill or alteration of the waters of the State.

Local

City of Anaheim General Plan – Green Element

The City of Anaheim General Plan's Green Element comprehensively addresses topics concerning conservation of vital natural resources such as plant and animal species and areas of significant habitat. Applicable goals and policies from the Green Element that are related to biological resources and applicable to the Project are provided in Table 4.10-1 in Section 4.10, Land Use and Planning, with a Project consistency analysis.

Anaheim Municipal Code

The entire Project Site is within the City's Scenic Corridor Overlay Zone. The purpose of the Scenic Corridor Overlay Zone is to provide for and promote orderly growth in certain areas of the City designated as being of distinctive, scenic importance, while implementing

local governmental agency actions for the protection, preservation, and enhancement of the unique and natural scenic assets of these areas as a valuable resource to the community. The City's Scenic Corridor Overlay Zone has been designated as an area of distinctive natural and rural beauty, characterized and exemplified by the interrelationship between such primary natural features as the rolling terrain, winding river, Specimen Trees, and the profusion of natural vegetation. Chapter 18.18 of the AMC provides regulations for parcels that are located within the City's Scenic Corridor Overlay Zone.

Tree preservation procedures for the City's Scenic Corridor Overlay Zone are provided in AMC Section 18.18.040 with the purpose of preserving the natural beauty of the Santa Ana Canyon environment, to increase the visual identity and quality of the area, and to protect the remaining natural amenities from premature removal or destruction. Also, Section 18.18.040 of the AMC includes provisions for issuance of tree removal permits and replacement tree planting.

The AMC defines specimen trees as "any tree of the *Quercus* varieties (Oak) with a trunk measuring twenty-five (25) inches or greater in circumference; or any tree of the *Schinus* varieties (Pepper) and *Platanus* varieties (Sycamore), with trunks measuring fifty (50) inches or greater in circumference; measurements of circumference shall be taken at a point four (4) feet above ground level."

As required by AMC Section 18.18.040, impacted specimen trees would require the issuance of a Specimen Tree Removal Permit by the City. As part of the permit process, the City requires that replacement trees be planted on the same parcel or in the public right-of-way located in the immediate vicinity, as directed by the City. Any replacement trees in the public right-of-way must be approved by the Department of Public Works. The replacement trees shall comply with the following provisions:

- The replacement trees shall be a minimum thirty-six (36) inch box size at time of planting, or larger if appropriate to the tree unless the City Arborist approves a twenty-four (24) inch box size based on feasibility and site characteristics.
- The number of replacement trees shall be as identified in Table 18-A of AMC Section 18.18.040. For impacted specimen trees that are under 38" in circumference⁷, one replacement tree is required per impacted specimen tree. For impacted specimen trees that are 38"-64" in circumference, two replacement trees are required per impacted specimen tree. For impact specimen trees that are over 64", three replacement trees are required per impacted specimen tree.
- Any replacement trees that are planted within the Project Site, which are subsequently removed, damaged, diseased and/or dies, shall be replaced in a timely manner in accordance with the provisions of the AMC.

⁷ The circumference of trees is measured at four feet above ground level.

Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan

On August 30, 1991, the State Fish and Game Commission considered a petition in support of listing the coastal California gnatcatcher (*Polioptila californica californica*). The Commission decided not to list the coastal California gnatcatcher as an Endangered species in favor of pursuing preparation of a NCCP program as proposed by Assembly Bill (AB) 2172 (AB 2172/Natural Community Conservation Planning Act). AB 2172 authorized CDFW⁸ to enter into agreements with any person for the purpose of preparing and implementing NCCPs and to prepare guidelines for development and implementation of NCCPs. AB 2172 also permits NCCPs to be prepared by local, State, or federal agencies independently or in cooperation with other persons and requires CDFW to be compensated for costs incurred in preparing and implementing NCCPs.

The purpose of the NCCP program is to provide regional or area wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth. AB 2172 was designed in recognition of the fact that individual species protection under the CESA and the FESA is costly and historically ineffective as a mechanism for protection or prevention of extinction of plant and wildlife species, and that a habitat-based, multispecies or ecosystem-driven preservation approach has greater potential for long-term success. The focus of the NCCP program represents a dramatic shift from “individual species” to “habitat”.

On March 25, 1993, the U.S. Department of the Interior listed the coastal California gnatcatcher as a “Threatened” species and adopted a special rule in accordance with Section 4(d) of the FESA that authorized landowners and local jurisdictions to voluntarily participate in the State of California NCCP Act of 1992.

The County of Orange, in conjunction with the State and federal resource agencies, local jurisdictions (including the City of Anaheim), utility companies, the Transportation Corridor Agencies, and major private landowners, prepared the NCCP/HCP for the Central-Coastal NCCP Subregion (NCCP/HCP approved on April 16, 1996, and Implementation Agreement executed on July 17, 1996). The plan is intended to ensure the long-term survival of the coastal California gnatcatcher and other special status coastal sage scrub-dependent plant and wildlife species while allowing for reasonable economic growth in accordance with State-sanctioned NCCP program guidelines. The Site Project occurs within the NCCP Central-Coastal Subregion.

The habitat Reserve includes core coastal sage scrub (CSS) habitat along the frontal slopes of the Lomas de Santiago and provides high densities of NCCP target species (i.e., CSS Species), including coastal California gnatcatcher, coastal cactus wren (*Campylorhynchus brunneicapillus couesi*), and orange-throated whiptail (*Aspidoscelis hyperythra*). In addition, the Habitat Reserve provides linkages with other core habitat areas via a long strip of natural habitat between Portola Parkway and the Foothill Transportation Corridor, and other large

⁸ The California Department of Fish and Wildlife (CDFW) was formerly known as the California Department of Fish and Game (CDFG).

blocks of core habitat in the open space near Irvine Regional Park and the foothills of Santiago Canyon. The Habitat Reserve supports the largest subpopulation of coastal California gnatcatchers in the Central Subarea of the NCCP Central/Coastal Subregion Reserve System Design for Orange County (County of Orange 1996a).

The County of Orange has been issued a 10(a) permit as part of the approval of the NCCP/HCP which authorizes the “take” of coastal sage scrub and other specified habitats (e.g., oak woodland, cliff and rock, Tecate cypress) and provides regulatory coverage for a number of “Covered Species”. Potential direct and indirect impacts are fully mitigated for participating landowners through their participation and contribution in the NCCP/HCP Mitigation Program. Their participation not only provides mitigation for coastal sage scrub and the coastal California gnatcatcher, but also other special status species designated as Identified Species (including both fully Covered Species and Conditionally Covered Species) by the NCCP/HCP. Mitigation measures outlined in the NCCP/HCP Mitigation Program are summarized below:

1. Creation of a Habitat Reserve System that will include coastal sage scrub and representative habitat of virtually all of the major habitat types currently existing within the Central–Coastal Subregion;
2. Creation and funding of an NCCP Non-Profit Corporation to coordinate management of the Reserve System;
3. Designation of Special Linkage Areas and Existing Use Areas to enhance biological connectivity within the Reserve System and Central–Coastal Subregion;
4. Implementation of the Adaptive Management Program, including specific management plans, defined by the NCCP/HCP, within the Reserve System, including provisions for restoration and enhancement funded both by Participating Landowners and Non-Participating Landowners as provided herein.

The Central-Coastal NCCP/HCP also includes 13 cities that will be affected by the NCCP/HCP; each City that signed the Implementation Agreement is responsible for conducting some of the following actions, depending on which portions of their jurisdiction are included within the Reserve System, or take of Identified Species will occur within their jurisdiction, or both. Signatory Cities are expected to address the following responsibilities with regard to actions of the Signatory Cities and landowners subject to the jurisdiction of those cities:

1. Consideration of amendments to the general plan, zoning, or other implementing ordinances to comply with state planning and zoning requirements;
2. Adopting fuel modification ordinances/standards consistent with the NCCP/HCP fuel modification policies that will be applicable to areas bordering the Reserve System, and within Special Linkage and Existing Use areas;
3. In cooperation with the individual Reserve owner/manager, reviewing project proposals within the Reserve system on lands managed by the particular Local Government to assure consistency with the NCCP/HCP;

4. Assuring that non-participating landowners provide evidence of payment of the mitigation fee to the NCCP Non-Profit Corporation where the landowner elects to use the mitigation fee option for the take of listed CSS species⁹;
5. Recording/compiling Identified Species, CSS, and Covered Habitat impacts within its jurisdiction annually and reporting losses/mitigation to the County Environmental Management Agency (EMA) to enable the County, as the Lead Agency, to compile subregional data for transmittal to the CDFW and USFWS;
6. Ensuring the NCCP/HCP construction-related minimization measures set forth in the NCCP/HCP Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) are enforced;
7. Making best efforts to acquire conservation easements over privately owned Existing Use areas owned by non-participating landowners;
8. For those local governments owning land within the Reserve System, formally committing such lands to the Reserve System and managing such lands in accordance with the NCCP/HCP and its Implementation Agreement;
9. Accepting and using the NCCP/HCP EIR/EIS as the CEQA Program EIR, defining the mitigation program and covering all take allowed for CSS, Identified Species, and Covered Habitat impacts of Planned Activities;
10. Recognizing the mitigating values of preservation of non-CSS resources in the Reserve System in acting on specific Planned Activities; and
11. Committing to the CSS, Identified Species, and Covered Habitat mitigation assurances.

The City of Anaheim is a Signatory City to the NCCP/HCP Implementation Agreement. As such, the City will not approve activities resulting in a take other than as authorized pursuant to the NCCP/HCP Implementation Agreement unless otherwise authorized by the USFWS and CDFW.

4.3.3 THRESHOLDS OF SIGNIFICANCE

In accordance with the City of Anaheim's Environmental Checklist, the Project would result in significant impacts related to biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

⁹ coastal California gnatcatcher

- c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) 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.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

For a more detailed description of the methodologies used to conduct this analysis, see Section 2 of the Biological Technical Report, which summarizes survey methods used to conduct a literature review; to perform general biological surveys; and to assess the potential for the Project Site to support special status species. As noted above and therein, the Project Site discussed in this analysis consists of the approximately 76.01-acre Project Site (i.e., property owned by the Property Owner/Developer of the proposed Project) and adjacent open space areas within 500 feet of the proposed impact boundaries, which is collectively referred to in the Biological Technical Report as the Biological Survey Area (BSA). The Project's BSA also allows for an assessment of indirect impacts of construction activities on surrounding habitat.

See also Section 4.2 of the Biological Technical Report, which further delineates the application of the above-referenced thresholds in this analysis.

4.3.4 IMPACT ANALYSIS

- a) *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant With Mitigation Incorporated. Implementation of the Project would result in direct and indirect impacts to special status plant and wildlife species that occur within or adjacent to the Project Site. The Project's impacts to special status species were evaluated in detail within the Project's Biological Technical Report and are described here in summary.

Project Impact Footprint

The Project's direct impacts were determined based on the outermost Project construction activity in relationship to biological resources that occur within the Project Site. All the Project's direct impacts are considered permanent impacts. Construction access and staging for the Project would occur entirely within the permanent impact boundary shown or within

existing roadways such as Santa Ana Canyon Road. Fuel modification areas have been included in the permanent impact footprint for the Project.

Both direct and indirect impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of habitats due to grading, construction, and construction-related activities. Indirect impacts are those that would occur in adjacent areas related to temporary disturbance from construction activities (e.g., noise, dust) and the long-term operation of the Project.

Impacts to Vegetation Communities

The Project’s permanent direct impacts to vegetation communities are identified in Table 4.3-3 and are depicted in Exhibit 4.3-4.

**TABLE 4.3-3
PROJECT IMPACTS TO VEGETATION COMMUNITIES**

Vegetation Types and Other Areas	Gray and Bramlet Vegetation Code	Existing in the Biological Survey Area^a (approximate acres)	Permanent Impact (approximate acres)		CDFW Sensitive Natural Community
Coastal Sage Scrub (2.0)					
Sagebrush – Black Sage Scrub	2.3.8	28.87	8.91		No ^b
Sagebrush – Black Sage Scrub/Ruderal	2.3.8/4.6	8.76	5.23		No ^b
Coyote Bush Scrub	2.3.9	0.59	0.00		No ^b
<i>Subtotal Coastal Sage Scrub</i>		<i>38.22</i>	<i>14.14</i>		
Chaparral (3.0)					
Toyon – Sumac Chaparral	3.12	7.91	2.17		Yes
Toyon – Sumac Chaparral/Ruderal	3.12/4.6	17.19	10.31		Yes (degraded)
<i>Subtotal Chaparral</i>		<i>25.10</i>	<i>12.48</i>		
Grassland (4.0)					
Ruderal	4.6	21.25	8.96		No
Disturbed Ruderal	4.6	1.88	1.22		No
<i>Subtotal Grassland</i>		<i>23.13</i>	<i>10.18</i>		
Marsh (6.0)					
Coastal Freshwater Marsh	6.4	0.22	0.14		Yes
<i>Subtotal Marsh</i>		<i>0.22</i>	<i>0.14</i>		
Riparian (7.0)					
Southern Willow Scrub	7.2	0.87	0.05		Yes
Mulefat Scrub	7.3	0.10	0.00		No

**TABLE 4.3-3
PROJECT IMPACTS TO VEGETATION COMMUNITIES**

Vegetation Types and Other Areas	Gray and Bramlet Vegetation Code	Existing in the Biological Survey Area ^a (approximate acres)	Permanent Impact (approximate acres)		CDFW Sensitive Natural Community
Southern Coast Live Oak Riparian Forest	7.5	1.63	0.10		No
Poison Oak Scrub	7.11	0.11	0.00		No
<i>Subtotal Riparian</i>		<i>2.71</i>	<i>0.15</i>		
Woodland (8.0)					
Coast Live Oak Woodland	8.1	3.09	2.78		
Mexican Elderberry Woodland	8.4	2.20	0.35		No
<i>Subtotal Woodland</i>		<i>5.29</i>	<i>3.13</i>		
Cliff					
Xeric Cliff Face	10.1	0.40	0.06		No
<i>Subtotal Cliff and Rock</i>		<i>0.40</i>	<i>0.06</i>		
Developed Areas (15.0)					
Developed (Transportation)	15.4	4.33	3.81		No
Parks and Ornamental Plantings	15.5	2.51	0.00		No
<i>Subtotal Developed Areas</i>		<i>6.84</i>	<i>3.81</i>		
Disturbed Areas					
Cleared or Graded	16.1	0.79	0.00		No
<i>Subtotal Disturbed Areas</i>		<i>0.79</i>	<i>0.00</i>		
Total		102.70	44.09		
^a The Biological Survey Area includes the Project Site plus adjacent open space within 500 feet of the Project impact boundary; the limits of the Biological Survey Area go outside the limits of the Project Site. ^b CDFW does not consider these communities special status throughout the state; however, these vegetation types are considered of local concern because of their status in the NCCP/HCP area (i.e., potential to support NCCP/HCP Covered Species). Source: Psomas 2024c.					

Coastal Sage Scrub

A total of approximately 14.14 acres of coastal sage scrub vegetation (approximately 8.91 acres of sagebrush–black sage scrub and approximately 5.23 acres of sagebrush–black sage scrub/ruderal) would be permanently impacted to construct the Project. While sagebrush scrub–black sage scrub is not considered a sensitive natural community by CDFW, coastal sage scrub is considered a special status vegetation type in the Central–Coastal Subregion of the NCCP/HCP because it provides habitat for Covered Species such as the coastal California gnatcatcher.

Most of the Project Site has been designated as “Existing Use” by the Central–Coastal NCCP/HCP. Existing Use areas are not considered part of the NCCP/HCP Reserve; however, the designation indicates that local jurisdictions (i.e., the City of Anaheim) should make their best efforts to obtain conservation easements¹⁰ over privately-owned lands to assure that natural vegetation along these linkages is retained. For development resulting in take of listed species (including their habitat, i.e., coastal sage scrub), non-participating landowners must provide acceptable mitigation through separate permits under FESA and/or CESA. The NCCP/HCP mitigation fee option for non-participating landowners is not available for take in Existing Use areas unless: (1) the Project is located within a signatory Local Government jurisdiction¹¹; and (2) it is specifically authorized by the USFWS and CDFW. Nothing in the Implementation Agreement prohibits non-participating landowners from independently pursuing take authorization under FESA and CESA.

The loss of approximately 14.14 acres of coastal sage scrub vegetation that is occupied by the coastal California gnatcatcher would be considered a significant impact. Additionally, the Project is within an Existing Use area; any impact on coastal sage scrub within this area requires approval from the USFWS and CDFW. Implementation of **MM BIO-1** would ensure that appropriate authorization is obtained from the resource agencies, compensatory mitigation is provided, and that the standard NCCP/HCP avoidance and minimization measures would be implemented.

Chaparral

A total of approximately 12.48 acres of chaparral vegetation (approximately 2.17 acres toyon–sumac chaparral and approximately 10.31 acres toyon–sumac chaparral/ruderal) would be permanently impacted to construct the Project. Toyon–sumac chaparral in the Project Site is consistent with the *Rhus integrifolia* Association, which is considered a sensitive natural community by CDFW. The loss of toyon–sumac chaparral and toyon–sumac chaparral/ruderal would be considered potentially significant because of its special status. Implementation of **MM BIO-2** would ensure that compensatory mitigation is provided.

Grassland

A total of approximately 10.18 acres of ruderal vegetation (approximately 8.96 acres ruderal and approximately 1.22 acres disturbed ruderal) would be permanently impacted to construct the Project. These vegetation types are considered of low biological value because they are comprised of weedy non-native species. Impacts on ruderal vegetation would be considered less than significant; therefore, no mitigation would be required.

Marsh/Riparian

A total of approximately 0.14 acre of coastal freshwater marsh and approximately 0.15 acre of riparian vegetation types (approximately 0.05-acre southern willow scrub and

¹⁰ The NCCP/HCP text specifically states that “the failure or inability to obtain a conservation easements over private lands located within Existing Use areas shall not be deemed a breach of the NCCP/HCP...”.

¹¹ The City of Anaheim is a signatory Local Government jurisdiction.

approximately 0.10-acre southern coast live oak riparian forest) would be permanently impacted to construct the Project. Of these, coastal freshwater marsh and southern willow scrub are both considered sensitive natural communities by CDFW. Additionally, these areas are under the jurisdiction of CDFW and RWQCB. Impacts on riparian vegetation types are considered significant due to their high biological value. Implementation of **MM BIO-3** would ensure that applicable jurisdictional permits are obtained, and that compensatory mitigation is provided.

Woodland

A total of approximately 3.13 acres of woodland (approximately 2.78 acres of coast live oak woodland and approximately 0.35 acre of Mexican elderberry woodland) vegetation would be permanently impacted to construct the Project. Coast live oak woodland and Mexican elderberry woodland are not considered sensitive natural communities by CDFW. The loss of coast live oak and Mexican elderberry woodland would be considered adverse; however, the loss would be limited in relation to the total amount of coast live oak woodland and Mexican elderberry woodland available in the Project region. Impacts on woodland would be considered less than significant; therefore, no mitigation would be required.

Cliff

A total of approximately 0.06 acre of xeric cliff face would be permanently impacted to construct the Project. The loss of xeric cliff face relative to the availability of this mapping unit in the Project region would be limited in relation to the total amount of cliff available in the Project region. Impacts on xeric cliff face would be considered less than significant; therefore, no mitigation would be required.

Developed/Disturbed Areas

A total of approximately 3.81 acres of developed areas would be permanently impacted to construct the Project. Developed areas are considered of low biological value. Impacts on developed areas would be considered less than significant; therefore, no mitigation would be required.

The Project would not impact parks and ornamental plantings or cleared or graded areas.

Special Status Plant Species

Focused plant surveys were conducted in spring/summer 2023. Two special status plant species were observed: intermediate mariposa-lily and southern California black walnut (Psomas 2024c).

Seven individual intermediate mariposa-lilies (CRPR 1B.2) were observed in the Project Site in a single population. The location is outside of the Project's impact area; therefore, there would be no direct impact on this species, and no mitigation would be required.

One southern California black walnut (CRPR 4.2) was observed on the Project Site. This individual is located outside of the Project's impact area; therefore, there would be no impact, and no mitigation would be required.

Special Status Wildlife Species

Invertebrates

The Crotch's bumble bee has potential to occur in the Project Site. A total of approximately 40.34 acres of suitable foraging and nesting habitat (i.e., all vegetation types except developed) for this species would be permanently impacted to construct the Project. This species is a Candidate for State listing; therefore, if present in the impact area, any impact on this species would be significant. Therefore, the Project would implement **MM BIO-4**, which requires that pre-construction focused surveys for Crotch's bumble bee be conducted and that avoidance of active nest burrows occur during construction, as well as consultation with CDFW. Therefore, with implementation of **MM BIO-4**, the Project would have a less than significant impact related to Crotch's bumble bee.

Amphibians

Coast Range newt and western spadefoot have potential to occur in the Project Site. The Project would not impact breeding habitat for these species (i.e., stream habitat with sufficient water and vernal pools, respectively); however, the Project would impact upland habitats that could be used for foraging and aestivation. A total of approximately 40.28 acres of suitable upland habitat for these species (i.e., coastal sage scrub, chaparral, ruderal, marsh, riparian, and woodland) would be permanently impacted to construct the Project. The western spadefoot is a Covered Species under the NCCP/HCP; upland habitats have been conserved in the Reserve System. Although not formally covered, Coast Range newt also benefits from habitats conserved in the Reserve System. Due to the limited amount of habitat loss relative to the availability of habitat for Coast Range newt and western spadefoot in the region, impacts on these species would be considered less than significant and no mitigation would be required.

Reptiles

Orange-throated whiptail was previously observed in the Project Site and is expected to occur. Additionally, coast horned lizard, coastal whiptail, southern California legless lizard, California glossy snake, coast patch-nosed snake, and red diamond rattlesnake have potential to occur in habitats throughout the Project Site. A total of approximately 40.34 acres of suitable habitat for these species (i.e., coastal sage scrub, chaparral, ruderal, marsh, riparian, woodland, and cliff) would be permanently impacted to construct the Project. Of these species, coast horned lizard, orange-throated whiptail, coastal whiptail, and red diamond rattlesnake are Covered Species in the NCCP/HCP; upland habitats have been conserved in the Reserve System. Although not formally covered, southern California legless lizard, California glossy snake, and coast patch-nosed snake also benefit from habitats conserved in the Reserve System. Due to the limited amount of habitat loss relative to the

availability of habitat for these species in the region, impacts on these species would be considered less than significant and no mitigation would be required.

Birds

The Project Site contains federally-designated critical habitat for the federally Threatened coastal California gnatcatcher, which has been previously observed in coastal sage scrub habitats within the Project Site. One pair of gnatcatchers was observed during the most recent focused surveys. A total of approximately 14.14 acres of suitable habitat for this species (i.e., coastal sage scrub) would be permanently impacted by the Project. Also, a total of approximately 44.09 acres of Critical Habitat for coastal California gnatcatcher would be permanently impacted by the Project. Any impact on this species would be considered significant prior to the implementation of mitigation. This species is a Covered Species under the NCCP/HCP; however, take of coastal California gnatcatcher is not covered in Existing Use areas. Implementation of **MM BIO-1** would ensure that appropriate authorization is obtained from the resource agencies and that the standard NCCP/HCP avoidance and minimization measures would be implemented to minimize Project impacts related to coastal California gnatcatcher to a less than significant level.

Focused surveys were conducted in the riparian habitats of the Project Site for least Bell's vireo and southwestern willow flycatcher in 2002, 2003, and 2023. No least Bell's vireo or southwestern willow flycatcher were observed in the Project Site during any of these surveys. Similarly, no coastal cactus wrens were observed during the most recent focused surveys in 2023. Therefore, these species are not expected to occur. There would be no impact on these species, and no mitigation would be required.

Loggerhead shrike, southern California rufous-crowned sparrow, and Bell's sparrow have potential to occur in the upland habitats of Project Site. A total of approximately 26.62 acres of suitable upland shrub habitat for these species (i.e., coastal sage scrub and chaparral) would be permanently impacted to construct the Project. Of these species, the Southern California rufous-crowned sparrow is Covered Species in the NCCP/HCP; upland shrub habitats have been conserved in the Reserve System. Due to the limited amount of habitat loss relative to the availability of habitat for these species in the region, impacts on these species would be considered less than significant and no mitigation would be required.

California horned lark and grasshopper sparrow have a limited potential to occur in the Project Site. A total of approximately 10.18 acres of ruderal habitat that could be used by these species would be permanently impacted to construct the Project. Due to the limited amount of habitat loss relative to the availability of habitat for these species in the region, impacts on these species would be less than significant and no mitigation would be required.

Burrowing owl has a limited potential to occur in the Project Site. A total of approximately 10.18 acres of ruderal habitat that could be used by this species would be permanently impacted to construct the Project. Due to the limited amount of habitat loss relative to the availability of habitat for this species in the region, the loss of habitat would be considered less than significant. However, active burrow sites of this species are protected at all times

of the year and direct impacts to an active burrow would be considered a significant impact. Therefore, the Project would be required to implement **MM BIO-5**, which requires that pre-construction burrow surveys be conducted and that avoidance and minimization measures be implemented if burrowing owl are encountered.

Yellow-breasted chat and yellow warbler have potential to occur in the riparian habitats of Project Site. A total of approximately 0.15 acre of riparian vegetation types (0.05-acre southern willow scrub and 0.10 acre southern coast live oak riparian forest) would be permanently impacted to construct the Project. Due to the limited amount of habitat loss relative to the availability of habitat for these species in the region, impacts on these species would be less than significant and no mitigation would be required.

Several special status raptor species were observed or have potential to forage in the Project Site: Cooper's hawk, sharp-shinned hawk, golden eagle, ferruginous hawk, northern harrier, white-tailed kite, bald eagle, merlin, prairie falcon, American peregrine falcon, and long-eared owl. A total of approximately 40.34 acres of suitable foraging habitat for these species would be permanently impacted to construct the Project. The loss of foraging habitat for these raptors would cumulatively contribute to the ongoing regional loss of foraging habitat for these species. Of these species, sharp-shinned hawk, northern harrier, and American peregrine falcon are Covered Species, while golden eagle and prairie falcon are Conditionally Covered, by the NCCP/HCP; upland habitats have been conserved in the Reserve System. Due to the limited amount of habitat loss relative to the availability of foraging habitat for these species in the region, impacts on raptor foraging habitat would be less than significant and no mitigation would be required.

The Cooper's hawk, white-tailed kite, prairie falcon, American peregrine falcon, and long-eared owl also have potential or limited potential to nest within or adjacent to the Project Site. Impacts on any active raptor nest (common or special status species) would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Additionally, these species could be disturbed by noise adjacent to construction areas. Impacts on the nest of special status raptor species would be considered significant. Implementation of **MM BIO-6** requires pre-construction surveys to ensure that construction would not violate the provisions of the MBTA or California Fish and Game Code.

Mammals

Mountain lions are known to occur throughout the vicinity of the Project Site. Mountain lions could move through and utilize the Project Site. A total of approximately 40.34 acres of suitable habitat for this species (i.e., coastal sage scrub, chaparral, ruderal, marsh, riparian, woodland, and cliff) would be permanently impacted to construct the Project. The mountain lion is proposed for State listing due to fragmentation of habitat that isolates populations. The Project would not substantially disrupt movement along an existing wildlife corridor. However, the Project would reduce the amount of open space habitat available for use in the northernmost portion of an existing wildlife corridor.

There are no wildlife crossings suitable for mountain lions within or near the Project Site. The nearest crossing to allow mountain lions to reach the Santa Ana River and/or other open

spaces to the north, such as Chino Hills State Park, is 3.93 miles to the east of the Project Site at SR-91 and Gypsum Canyon. Therefore, the Project would not be expected to substantially interfere with movement of mountain lions, although the Project would incrementally reduce the amount of habitat for mountain lion by approximately 40.34 acres. As such, impacts on mountain lion would be less than significant and no mitigation would be required.

Five special status bat species have potential to forage in the Project Site: Mexican long-tongued bat, pallid bat, Townsend's big-eared bat, big free-tailed bat, and western mastiff bat. A total of approximately 40.34 acres of suitable foraging habitat for these species would be permanently impacted to construct the Project. The loss of foraging habitat for these bats would cumulatively contribute to the ongoing regional loss of foraging habitat for these species. Due to the limited amount of habitat loss relative to the availability of foraging habitat for these species in the region, impacts on bat foraging habitat would be considered less than significant and no mitigation would be required.

Pallid bat, big free-tailed bat, and western mastiff bat also have potential to roost in the Project Site. Bats may roost in large oak, non-native trees, or in crevices in the xeric cliff face in the Project Site. A total of approximately 2.94 acres of potential roosting habitat (0.10-acre southern coast live oak riparian forest, approximately 2.78 acres coast live oak woodland, and 0.06 acre of xeric cliff face) would be permanently impacted to construct the Project. Construction activities could directly impact roosting individuals which would present a significant impact. Therefore, to minimize impacts to roosting bats, the Project would implement **MM BIO-7**, which requires that a pre-construction survey for bats be conducted and that bat exclusion be implemented if needed.

Indirect Impacts

Noise/Human Activity

Project noise impacts are discussed in detail in Section 4.11 of this Draft EIR. Noise and human activity levels in areas adjacent to the Project impact area would increase substantially over present levels during construction of the Project. During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species. Construction activities would occur during the day; thus, construction noise would not affect nocturnal species (i.e., those active at night) or wildlife movement that occurs at night. Diurnal species (i.e., species active during the day) would be deterred from the area by construction activities. It should be noted that there is currently ambient noise due to the existing adjacent development uses, such as traffic along Santa Ana Canyon and SR-91, residential noise to the west, commercial noise to the east, and recreational use¹² through the Project Site (e.g., walking, hiking, bike riding); therefore, wildlife species in the Project Site and vicinity are expected to be somewhat urban-tolerant. The additional impact of construction noise on most wildlife species occupying

¹² There are currently no formal trails through the Project Site; people generally walk, hike, and ride bikes along the main road through the Project Site from Santa Ana Canyon Road to Deer Canyon Park Preserve.

areas adjacent to the Project would be considered less than significant for most wildlife species.

However, noise from construction activities may cause birds adjacent to the work area to abandon their territory or may discourage individuals from selecting habitat adjacent to the work area due to construction noise and human activity. Construction activities could interfere with communication between a pair that could affect their nest success. Noise impacts would be considered significant for the coastal California gnatcatcher and nesting birds/raptors. With the implementation of NCCP/HCP avoidance and minimization measures included in **MM BIO-1**, indirect noise impacts on the coastal California gnatcatcher would be considered less than significant. **MM BIO-4** would be implemented by the Project, which requires that pre-construction focused surveys for Crotch's bumble bee be conducted and that avoidance of active nest burrows occur during construction, as well as consultation with CDFW. Implementation of **MM BIO-6** requires pre-construction surveys to ensure that construction would not violate the provisions of the MBTA or California Fish and Game Code. With implementation of **MM BIO-4** and **MM BIO-6**, indirect impacts on nesting birds and raptors (including burrowing owl) would be reduced to less than significant.

Noise and human activity would also increase during operation of the Project. This would increase the ambient noise in the immediate vicinity and would incrementally increase disturbance of habitat remaining undeveloped adjacent to the Project. If undeterred, residents may encroach into these undeveloped areas adjacent to the development, increasing disturbance by creating additional hiking, biking, and horse trails and bringing unleashed dogs into the habitat. Human disturbance could disrupt the normal foraging and breeding behavior of wildlife that would be avoided adjacent to the Project's buildings and other development, which would diminish the value of these avoided habitat areas. Wildlife stressed by noise and human activity from the development and additional encroachment may be extirpated from the undeveloped areas adjacent to the development, which would leave only wildlife that are tolerant of human activity. This impact would be potentially significant because it would contribute to an additional incremental loss of habitat. Therefore, the Project would be required to implement **MM BIO-8**, which requires the development and implementation of a fencing plan to deter public access in unauthorized areas. With implementation of **MM BIO-8**, the Project would have a less than significant impact related to the biological effects of the Project's operational noise levels.

Increased Dust and Urban Pollutants

Grading activities would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. The respiratory function of the plants in the area would be impaired if the dust accumulation were to be excessive. The Project would be required to implement a Storm Water Pollution Prevention Plan (SWPPP) and construction would be required to comply with fugitive dust regulations promulgated by the South Coast Air Quality Management District (SCAQMD). This indirect effect of construction of the Project on the native vegetation in the immediate vicinity of the Project Site is considered less than significant because it would not substantially reduce plant populations in the region.

During construction, there is potential that excess silt, petroleum, and/or chemicals on the soil surface within the Project Site could be washed into drainages during storms and may affect areas downstream of the Project, such as the Santa Ana River. Adverse effects on water quality could indirectly impact species that use riparian areas within the watershed by affecting the food web interactions (e.g., abundance of insects or other prey) or through biomagnification (i.e., the buildup of pesticides to toxic levels in higher trophic levels). These impacts would be reduced to less than significant with the implementation of **MM BIO-3**, which requires the Project to obtain a water quality certification from the RWQCB. Furthermore, the Project would be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) during construction, which would minimize the amount of dust and other pollutants that could leave the Project Site in storm water and/or as fugitive dust.

Polluted storm water could runoff of the Project Site that could impair water quality downstream of the Project during operation. Chemicals, fertilizers, and pesticides used in landscaping may runoff into downstream waters and could adversely affect water quality, habitat, plant and/or wildlife species (including insects). Adverse effects on water quality could impact populations of wildlife species that use riparian areas by affecting the food web interactions affecting their prey (e.g., insects), or through biomagnification (i.e., the buildup of pesticides to toxic levels in higher trophic levels). As noted above, these impacts would be reduced to less than significant with the implementation of **MM BIO-3**, which requires the Project to obtain a water quality certification from the RWQCB. Furthermore, the Project would be required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) during construction, which would minimize the amount of dust and other pollutants that could leave the Project Site in storm water and/or as fugitive dust.

During operation, the Project's residents may use rodenticides to control pest species in outdoor areas of the Project Site. The anticoagulant effects of rodenticides have been found to affect non-target species (i.e., predators of rodents), such as raptors, coyotes, bobcats, and mountain lions. This effect could be substantial because the Project is adjacent to undeveloped areas with habitat. Therefore, the Project would implement **MM BIO-9**, which requires that use of anticoagulant rodenticides be prohibited from being used throughout the Project's exteriors and landscaping. With implementation of **MM BIO-9**, the Project's effects to wildlife related to rodenticide would be reduced to a less than significant level. More information on the topics of hydrology and water quality is provided in Section 4.9 of this Draft EIR.

Invasive Exotic Plant Species

Project construction activities create disturbance, which in turn provides a place for non-native weedy species to spread. Additionally, construction equipment can introduce non-native weed seeds to the area if equipment is not properly cleaned. Weeds from the construction may then spread to habitat in adjacent undeveloped areas (including adjacent Reserve areas), which would degrade habitat quality for native species. In addition to the negative effects on habitat quality, non-native weeds can also increase the potential for large fires to spread. This impact would be considered potentially significant.

The Project would include landscaping throughout the developed portions of the Project Site. The landscaping could include planting of ornamental species that are known to be particularly invasive (e.g., Japanese honeysuckle [*Lonicera japonica*], fan palm [*Washingtonia* spp.], etc.). Seeds from invasive species may escape to natural areas and degrade the native vegetation in undeveloped areas, particularly along downstream riparian areas. Since the Project is adjacent to undeveloped areas, this impact is considered potentially significant.

Therefore, the Project would implement **MM BIO-10**, which includes best practices to avoid the introduction of weed seeds during grading. **MM BIO-10** also includes requirements that the Project's landscaping not include any invasive, exotic plant species. With implementation of **MM BIO-10**, the Project would have a less than significant impact related to the introduction and spread of invasive exotic plant species.

Night Lighting

The Project's proposed night lighting could result in an indirect impact on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to the lighted areas. Of greatest concern is the effect on small, ground-dwelling animals that use the darkness to hide from predators, and on owls, which are specialized night foragers. Because the Project is directly adjacent to undeveloped areas, indirect impacts due to night lighting are of particular concern. This increased lighting would be considered significant because it would contribute to an additional incremental loss of habitat for wildlife using areas adjacent to the Project Site. Therefore, the Project would implement **MM BIO-11**, which requires that a lighting plan be developed showing the type and location of all exterior lighting. The lighting plan will include photometric analyses to ensure that lighting level increases would be minimal when compared to the pre-Project conditions. With implementation of **MM BIO-11**, the Project would have a less than significant impact related to the proposed night light's effects on wildlife.

Bird Strikes

A potential long-term operational impact associated with the Project pertains to bird strike mortality and injury. Ornithologists estimate that collisions with clear and reflective sheet glass and plastic cause up to a billion bird fatalities or injuries annually. Birds often cannot differentiate between the glass' reflective surface and the natural landscape, leading to these incidents. The presence of multistory buildings with multiple windows situated adjacent to habitat in undeveloped areas increases the likelihood of bird mortality, affecting both common and special status species. Also, the Project would include perimeter fencing with transparent materials that could also present a bird strike hazard. The potential loss of federally or State-listed species due to bird strikes could be significant. Therefore, the Project would implement **MM BIO-12**, which requires that building glass be designed to minimize bird strikes to the extent feasible. With implementation of **MM BIO-12**, the Project's would have a less than significant impact related to bird strikes.

Increased Wildfire Risk

Fires are a natural part of the landscape in California; however, with the changing weather patterns brought by climate change, during many years the fire season is coming earlier and ending later than in the past. In the last five years (October 2019 - October 2023), there have been approximately 6,884 wildfires that have burned approximately 1,570,571 acres in California. Drought or extended periods of low rainfall can dry out fuel, increasing its risk of burning. Periods of high rainfall decrease fire risk because there is more moisture in the vegetation; however, years of high rainfall increase the fuel load with growth of vegetation and weeds. In the Project region, Santa Ana wind conditions also increase the risk of fire with dry, gusty winds. According to the National Park Service, approximately 85 percent of wildfires are caused by humans. Human-caused wildfires are due to campfires left unattended, the burning of debris, equipment use and malfunctions, negligently discarded cigarettes, and intentional acts of arson. The location of the Project is an important factor in understanding the extent of wildfire risk and how much potential for damage there is if a fire starts. Risk is higher when there are hot temperatures, low humidity, and high winds (i.e., “red flag warning” weather conditions). Risk is also higher near dry, ignitable vegetation (e.g., coastal sage scrub, chaparral, grassland, and ruderal), and hills or mountainous topography. The Project would increase residents and visitors within the Project Site, which will continue to be adjacent to undeveloped areas containing a mix of native and non-native vegetation that may burn if exposed to an ignition source. However, the Project Site and its surroundings are already subject to human-sparked wildfire risk given the existence of residential and commercial development to the east and west of the Project Site, and due to the presence of Santa Ana Canyon Road and SR-91 to the north. Furthermore, as described in the project description in Section 3.0 as well as the wildfire discussion in Section 4.18 of this Draft EIR, the Project would minimize wildfire impacts by:

- Removing existing flammable vegetation within the Project Site this is near existing residential and commercial uses.
- Implementing a Fire Master Plan.
- Improving access for Anaheim Fire and Rescue to the Project Site through the provision of new driveways and fire lanes to access the Project Site.
- Providing water and fire hydrants to the Project Site. There are no fire hydrants within the Project Site in existing conditions; and
- Maintaining fuel modification zones around the proposed structures.

With implementation of these provisions, the Project would result in a less than significant impact related to impacts on biological resources that could result from a wildfire ignited within the Project Site during operation of the Project.

During Project construction, construction equipment or personal vehicles have potential to accidentally ignite vegetation, starting a wildfire. Additionally, construction personnel may dispose of cigarettes inappropriately on the construction site and could ignite dry vegetation. If not contained quickly, the fire could spread through adjacent habitat areas resulting in

damage to the NCCP/HCP Existing Use area. The loss of habitat may affect listed species (e.g., coastal California gnatcatcher) and could be substantial; therefore, this impact would be considered potentially significant. Therefore, the Project would implement **MM BIO-13**, which requires that a qualified Biologist conduct a Worker Environmental Awareness Program (WEAP) training for construction staff. The WEAP training will include specific guidance on methods to avoid the ignition of wildfires. Furthermore, **MM BIO-13** includes provisions for biological monitoring during vegetation removal, which would further minimize potential wildfire ignition and its effects on plants and wildlife given that the qualified Biologist that is monitoring construction activities would have the ability to halt or divert work, as needed, to minimize biological impacts.

Conclusion

In conclusion, with implementation of **MM BIO-1** through **MM BIO-13**, the Project would have a less than significant impact related to candidate, sensitive, and special status plant and wildlife species.

b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. The Project Site contains the following vegetation communities that are considered sensitive natural communities by CDFW: toyon – sumac chaparral, toyon – sumac chaparral/ruderal, southern willow scrub, and coastal freshwater marsh.

Additionally, although not considered sensitive communities State-wide, coastal sage scrub is considered special status in the Project region because of its potential to support NCCP/HCP Covered Species, including the coastal California gnatcatcher. Coastal sage scrub vegetation in the Project Site includes sagebrush – black sage scrub, sagebrush – black sage scrub/ruderal, and coyote brush scrub.

Riparian vegetation types are also often considered special status because they are under the regulatory authority of the resource agencies (i.e., USACE, CDFW, and/or RWQCB); jurisdictional resources are discussed in the next section. Riparian vegetation types in the Project Site include coastal freshwater marsh, southern willow scrub, mulefat scrub, and southern coast live oak riparian forest. As mentioned above, southern willow scrub, and coastal freshwater marsh are considered sensitive natural communities by CDFW.

The Project's direct impacts to vegetation communities, including sensitive natural communities, are described above in Table 4.3-3.

MM BIO-1 requires that the Property Owner/Developer mitigate for impacts to coastal sage scrub and coastal California gnatcatcher through one or a combination of options as approved by the USFWS and CDFW.

The Project would implement **MM BIO-2** to mitigate for direct impacts to vegetation communities that are considered sensitive natural communities by CDFW, including: toyon – sumac chaparral and toyon – sumac chaparral/ruderal. **MM BIO-2** requires that the Property Owner/Developer mitigate for impacts to chaparral vegetation (i.e., toyon-sumac chaparral and toyon-sumac chaparral/ruderal) through one or a combination of options, as approved by the City of Anaheim.

To minimize effects related to sensitive riparian vegetation communities, including southern willow scrub and coastal freshwater marsh, **MM BIO-3** would be implemented by the Project, which requires that applicable regulatory permits are obtained and that compensatory mitigation for impacts to riparian vegetation communities is provided.

With implementation of **MM BIO-1, MM BIO-2 and MM BIO-3**, the Project would have a less than significant impact related to sensitive natural communities.

c) Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant With Mitigation Incorporated. A jurisdictional delineation was conducted during the preparation of the Project's Biological Technical Report. The purpose of the jurisdictional delineation was to identify drainage features within the Project Site that require permitting pursuant to state and federal regulations. As described in Table 4.3-4, the Project would have permanent impacts to approximately 0.458 acres of Regional Water Quality Control Board Waters of the State and approximately 1.391 acres of California Department of Fish and Wildlife jurisdictional resources. No Waters of the United States (WOTUS) under the jurisdiction of the United States Army Corps of Engineers are present in the Project Site. The locations of impacted drainages within the Project Site are depicted in Exhibits 4.3-5 and 4.3-6.

**TABLE 4.3-4
PROJECT DRAINAGE IMPACTS**

Feature	RWQCB Waters of the State (approximate acres)	CDFW Jurisdictional Resources (approximate acres)
Drainage 1	0.154	0.672
Drainage 2	—	—
Drainage 3	0.075	0.204
Drainage 4	0.008	0.037
Drainage 5	0.071	0.127
Drainage 6	0.057	0.238
Drainage 7	0.093	0.113
Drainage 8	—	—
Drainage 9	—	—
Total	0.458	1.391
RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; WOTUS: waters of the United States.		
^a Under revisions to the 2023 Rule, no WOTUS are present in the Project Site and, therefore, there would be no Project impacts.		

Implementation of **MM BIO-3** would ensure that applicable jurisdictional permits are obtained to impact jurisdictional waters, and that compensatory mitigation for impacts to jurisdictional waters would be provided in coordination with CDFW and RWQCB. With implementation of **MM BIO-3**, the Project would have a less than significant impact related to this threshold.

d) Would the Project 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?

Less Than Significant With Mitigation Incorporated. The Santa Ana River is a regional wildlife corridor and is located approximately 525 feet north of the Project Site. However, Santa Ana Canyon Road and SR-91 provide substantial existing barriers to wildlife movement between the Project Site and the Santa Ana River to the north. Therefore, only the more mobile species such as birds and coyotes are able cross these barriers in existing conditions.

There is residential development to the west of the Project Site and commercial development to the east that constrains wildlife movement in these directions.

The Project Site is primarily undeveloped, and it contains a mix of vegetation communities that wildlife could use for movement and/or to live in.

The primary area where wildlife movement could occur is from the Project Site through undeveloped areas to the south of the Project Site. There are three undeveloped parcels immediately south of the Project Site between the Project Site and Deer Canyon Park Preserve. Deer Canyon Park Preserve is located approximately 825 feet south of the Project Site. Deer Canyon Park Preserve extends approximately 1.54 miles in the southerly direction to where it ends north of Canyon Rim Road. By crossing two roads, The Highlands and Serrano Avenue, wildlife could move from the Project Site south through undeveloped areas and Deer Canyon Park Preserve, and ultimately to existing open space areas in Weir Canyon and beyond. Given this connectivity, the undeveloped areas in the Project Site and to the south towards Weir Canyon would be considered a wildlife linkage. This linkage has greatest value for birds, coyotes, and other more mobile species that could use it to move from Weir Canyon to reach the Santa Ana River to the north.

Also, the Project Site, parcels to the south, as well as Deer Canyon Park Preserve are designated by the NCCP/HCP as “Existing Use”, which indicates that jurisdictions should make their best efforts to obtain conservation easements¹³ over privately-owned lands to assure that natural vegetation along these linkages is retained.

The Project would result in permanent impacts to approximately 40.34 acres of native and non-native habitats on the Project Site, which would be graded, landscaped, and used for residential and commercial uses. This would result in an overall reduction in the acreage of habitat available for wildlife species. The Project would also result in a reduction in the acreage of areas available for wildlife species to move through, although as mentioned above Santa Ana Canyon Road and SR-91 act as substantial barriers north of the Project Site for all but birds, coyotes, and other more mobile wildlife species.

Several common bird species have the potential to nest in the vegetation and/or on the ground in the Project Site. Therefore, the Project’s removal of vegetation and ground-disturbance during construction would have the potential to impact nesting birds if it were to occur during the avian nesting season. The loss of an active migratory bird nest, including nests of common species, would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of California Fish and Game Code. The MBTA and California Fish and Game Code prohibit the taking of migratory birds, nests, and eggs. The potential loss of an active nest would be considered significant. Implementation of **MM BIO-6** would require pre-construction surveys to ensure that construction would not violate the provisions of the MBTA or California Fish and Game Code.

With implementation of **MM BIO-6**, the Project would result in a less than significant impact related to this threshold.

¹³ The NCCP/HCP text specifically states that “the failure or inability to obtain a conservation easements over private lands located within Existing Use areas shall not be deemed a breach of the NCCP/HCP...”.

e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The entire Project Site is within the City's Scenic Corridor Overlay Zone. The purpose of the Scenic Corridor Overlay Zone is to provide for and promote orderly growth in certain areas of the City designated as being of distinctive, scenic importance, while implementing local governmental agency actions for the protection, preservation, and enhancement of the unique and natural scenic assets of these areas as a valuable resource to the community. The City's Scenic Corridor Overlay Zone has been designated as an area of distinctive natural and rural beauty, characterized and exemplified by the interrelationship between such primary natural features as the rolling terrain, winding river, specimen trees, and the profusion of natural vegetation. Chapter 18.18 of the AMC provides regulations for parcels that are located within the City's Scenic Corridor Overlay Zone.

Tree preservation procedures for the City's Scenic Corridor Overlay Zone are provided in AMC Section 18.18.040 with the purpose of preserving the natural beauty of the Santa Ana Canyon environment, to increase the visual identity and quality of the area, and to protect the remaining natural amenities from premature removal or destruction. Also, Section 18.18.040 of the AMC includes provisions for issuance of tree removal permits and replacement tree planting.

The AMC defines specimen trees as "any tree of the *Quercus* varieties (Oak) with a trunk measuring twenty-five (25) inches or greater in circumference; or any tree of the *Schinus* varieties (Pepper) and *Platanus* varieties (Sycamore), with trunks measuring fifty (50) inches or greater in circumference; measurements of circumference shall be taken at a point four (4) feet above ground level."

The Project would require the removal of approximately 73 specimen trees pursuant to the AMC, consisting entirely of coast live oak (*Quercus agrifolia*). The Project would also remove approximately 0.05 acre of area containing a dense patch of approximately 20 Goodding's black willow (*Salix gooddingii*) saplings, which are not specimen trees pursuant to the AMC. The Project would require issuance of a Specimen Tree Removal Permit by the City, which would require replacement tree planting at a minimum ratio of 1:1, with larger trees requiring 2:1 or 3:1 replacement ratios for impacted trees as shown in Table 4.1-2 in the Aesthetics section of this Draft EIR. Overall, the Project would result in the planting of a minimum of 175 replacement trees that would minimize impacts related to the proposed tree removals on biological resources

Any replacement trees that are planted within the Project Site, which are subsequently removed, damaged, diseased and/or dies, shall be replaced in a timely manner in accordance with the provisions of the AMC.

Through compliance with the AMC, which requires the issuance of a Specimen Tree Removal Permit and replacement tree plantings, the Project would have a less than significant impact related to this threshold and no mitigation is required.

f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less Than Significant With Mitigation Incorporated. The Project's consistency with primary aspects of the NCCP/HCP are provided below.

Consistency With Non-Reserve Open Space Policies: The Project Site is located in a NCCP/HCP Existing Use area as defined by the NCCP/HCP Implementation Agreement. Existing Use areas are not considered part of the NCCP/HCP Reserve; however, the designation indicates that local jurisdictions such as the City of Anaheim should make their best efforts to obtain conservation easements¹⁴ over privately-owned lands to assure that natural vegetation along these linkages is retained.

For development in an Existing Use area resulting in take of listed species, non-participating landowners must provide acceptable mitigation through separate permits under FESA and/or CESA. The NCCP/HCP mitigation fee option for non-participating landowners is not available for take in Existing Use areas unless: (1) the Project is located within a signatory Local Government jurisdiction¹⁵; and (2) it is specifically authorized by the USFWS and CDFW. Nothing in the Implementation Agreement prohibits non-participating landowners from independently pursuing take authorization under FESA and CESA (County of Orange 1996b).

The Project would permanently impact approximately 14.14 acres of coastal sage scrub vegetation that is occupied by the coastal California gnatcatcher. Any impact on coastal sage scrub within this area requires approval from the USFWS and CDFW.

With implementation of **MM BIO-1**, which requires that appropriate authorization is obtained from the resource agencies and that the standard NCCP/HCP avoidance and minimization measures be implemented, the Project would comply with this aspect of the NCCP/HCP.

4.3.5 CUMULATIVE IMPACTS

Projects considered in the cumulative impact analysis consist of eight projects within the City of Anaheim. These cumulative projects include new industrial, commercial, and residential land uses on a mix of previously developed and undeveloped project sites. These cumulative projects are described in more detail in Table 4-1, which is provided in Section 4.0. The cumulative projects listed in Table 4-1 would generally not result in substantial impacts related to biological resources. Of the eight cumulative projects, three are discussed in more detail below in this Section 4.3.5 due to their proximity to open space areas with potential biological resources.

¹⁴ The NCCP/HCP text specifically states that "the failure or inability to obtain a conservation easements over private lands located within Existing Use areas shall not be deemed a breach of the NCCP/HCP..."

¹⁵ The City of Anaheim is a signatory Local Government jurisdiction.

Cumulative impacts are related to site-specific impacts to biological resources and thus would be mitigated, as necessary, on a project-by-project basis. For example, as noted below, each cumulative project would be required to complete a site-specific, biological technical report and incorporate all recommendations set forth therein and otherwise ensure compliance with all applicable laws and regulations governing biological resources. Given the site-specific nature of these issues, combined with a comprehensive regulatory framework with which each cumulative development would be required to comply, this would ensure there would be a less than significant cumulative impact given the site-specific nature of these issues. As with the Project, all of the other cumulative projects would be required to obtain regulatory permits if they propose work within drainages that are subject to the regulatory approval of CDFW and RWQCB. Similarly, all cumulative projects that result in removal of vegetation would be required to comply with the provisions of the MBTA and other regulations, which would minimize potential impacts from these projects on migratory birds. Also, any cumulative projects that are located along the City of Anaheim's scenic corridor and that would impact specimen trees would be required to comply with provisions in the AMC for tree replacement.

A proposed cemetery would be located on a site that has been previously used for sand and gravel extraction; therefore, much of the native habitat within the proposed cemetery site has already been cleared. However, there is potential that the cemetery site could contain native plants, special status species, and sensitive natural communities. Approval of the proposed cemetery would be required to comply with CEQA, which would ensure that any biological resource impacts of the cemetery project are evaluated and mitigated if needed. Also, there may be drainages within the cemetery site that may require regulatory permits from CDFW and RWQCB if they were to be impacted. Similar to the Project, the cemetery project would be required to obtain regulatory permits and compensate for impacts to jurisdictional drainages in coordination with CDFW and RWQCB. The cemetery project has potential to encroach on wildlife movement from undeveloped and open space areas to the south of that site, such as Weir Canyon, Blind Canyon, and Fremont Canyon north to the Santa Ana River. These potential impacts would be evaluated as part of the CEQA process for that project and wildlife movement impacts would be mitigated, if required.

The Project would provide improved access and infrastructure to three parcels that are located south of the Project Site, which are between the Project Site and Deer Canyon Park Preserve. Therefore, the Project would make it less challenging to develop these parcels which in turn would increase the likelihood of these parcels ultimately being developed. These parcels are covered by zoning and land use designations that allow for residential development. If these parcels were to be developed with residential development, it is likely that any such project or projects within these parcels would have similar biological resource impacts as the Project given the similarity and proximity of these parcels to the Project Site. Potential biological resource impacts of any future development of the three parcels south of the Project Site would be evaluated as part of the CEQA process for any such project and any related biological resource impacts would be mitigated.

As noted above, the Project as well as a cemetery and the future development of three parcels immediately south of the Project Site are the primary actions in the Project Site vicinity that

have the potential to impact biological resources. All three projects would be required to fully mitigate their impacts pursuant to the CEQA process as well as the regulatory processes discussed above in this section.

With respect to the Project, it would not make a cumulatively considerable contribution to the already less than significant cumulative impacts related to biological resources. Similar to the other cumulative developments, pursuant to a comprehensive technical evaluation of the Project Site and vicinity, the Project would be required to implement numerous mitigation measures as well as comply with any and all permitting requirements to the extent applicable under a robust regulatory framework, and otherwise ensure compliance with all applicable laws and regulations governing biological resources.

Therefore, cumulative impacts of the Project related to biological resources would be less than significant.

4.3.6 MITIGATION PROGRAM

MM BIO-1: The Property Owner/Developer shall mitigate for impacts to coastal sage scrub and coastal California gnatcatcher prior to the issuance of a grading permit through one or a combination of the following options, as elected by the Project Owner/Developer and approved by the USFWS and CDFW: (1) payment of the NCCP/HCP mitigation fee (only if allowed by the USFWS and CDFW because the Project is within an Existing Use area); (2) long-term preservation of existing coastal sage scrub habitat occupied by coastal California gnatcatchers at an on-site or off-site location; and/or (3) restoration of coastal sage scrub habitat at an on-site or off-site location. Coastal sage scrub shall be replaced at a minimum 1:1 ratio, or as otherwise determined by the USFWS and CDFW.

Prior to the issuance of a grading permit, the Property Owner/Developer shall obtain a Biological Opinion from the USFWS describing the mitigation requirements. If the mitigation fee option is allowed, the Property Owner/Developer shall pay the mitigation fee (calculated based on the above-referenced ratio) to the NCCP Non-profit Corporation for the replacement of impacted coastal sage scrub resources prior to the issuance of a grading permit. If the preservation option is selected, a Long Term Protection and Management Plan (LTPMP) shall be prepared by a qualified Restoration Ecologist and shall be reviewed and approved by the USFWS and CDFW prior to the issuance of a grading permit. If the option of restoration of coastal sage scrub habitat is selected, a Habitat Mitigation and Monitoring Program (HMMP) shall be prepared by a qualified Restoration Ecologist and reviewed and approved by the USFWS and CDFW prior to the issuance of a grading permit. If either options #2 or #3 are selected, the Property Owner/Developer shall be responsible for implementing either the LTPMP and/or HMMP and ensuring that the mitigation program achieves the approved performance criteria. If either options #2 or #3 are selected, the Property Owner/Developer

shall implement the LTPMP or HMMP per its specified requirements, materials, methods, and performance criteria.

If option #3 is selected, the HMMP shall include the following items:

- **Responsibilities and Qualifications.** The responsibilities and qualifications of the Property Owner/Developer, ecological specialists, and restoration (landscape) contracting personnel who shall implement the plan shall be specified. At a minimum, the HMMP shall specify that the ecological specialists and contractors have performed successful installation and long-term monitoring and maintenance of Southern California native habitat mitigation/restoration programs. A successful program shall be defined as one that has been signed off on by the resource agencies.
- **Performance Criteria.** Mitigation performance criteria to be specified in the HMMP shall conform to the resource agency permit conditions. The HMMP shall state that the use of the mitigation site(s) by special status wildlife species (e.g., coastal California gnatcatcher), though not a requirement for site success, would be regarded by the resource agencies as a significant factor in considering eligibility for program sign-off.
- **Site Selection.** The mitigation site(s) shall be determined in coordination with the Property Owner/Developer and the resource agencies. To maximize the value of the habitat provided, the site(s) shall be contiguous to other permanently preserved parcels. The soils and other physical characteristics of the potential mitigation site(s) shall be analyzed to ensure that proper conditions exist for the establishment of coastal sage scrub habitat.
- **Seed Materials Procurement.** At least one year prior to mitigation implementation, the Property Owner/Developer or its consultants/contractors shall initiate collection of the native seed materials specified in the HMMP. All seed mixes shall be of local origin (i.e., collected within 20 miles, and within the same watershed, as the selected restoration/enhancement site), to ensure genetic integrity. No seed materials of unknown or non-local geographic origin shall be used. Seed collection shall be prioritized per habitat area, in the following order: (a) Project impact areas (highest priority); (b) other on-site habitat areas; and (c) off-site habitat areas (lowest priority), assuming availability of seed species in multiple locations.
- **Wildlife Surveys and Protection.** The HMMP shall specify any wildlife surveys (i.e., nesting bird surveys, focused/protocol surveys for special status species [e.g., coastal California gnatcatcher]) and biological monitoring that are required to avoid significant adverse impacts to wildlife species during the performance of mitigation site preparation,

installation, or maintenance tasks. The HMMP shall also describe potential restrictions on these tasks due to special status wildlife conditions on the mitigation site(s) (e.g., suspension of these tasks during the nesting bird season).

- **Site Preparation and Plant Materials Installation.** Mitigation site preparation shall include all of the following: (a) protection of existing native species and habitats (including compliance with applicable seasonal restrictions, if any); (b) installation of protective fencing and/or signage (as needed); (c) initial trash and weed removal (outside the nesting bird season) and methods; (d) soil treatments, as needed (i.e., imprinting, de-compacting); (e) installation of erosion-control measures (i.e., fully natural/bio-degradable [not “photo-degradable” plastic mesh] fiber roll); (f) application of salvaged native plant materials (i.e., coarse woody debris), as available and supervised by a biological monitor; (g) temporary irrigation installation; (h) a minimum one-year preliminary weed abatement program (prior to the installation of native plant and seed materials)—including specification of approved herbicides; (i) planting of container plant and cutting species; and (j) seed mix application.
- **Schedule.** An implementation schedule shall be developed that includes planting and seeding to occur in the fall and winter (i.e., between November 1 and January 31) and the frequency of long-term maintenance and monitoring activities (including the dates of annual quantitative surveys, as described below) for five years or until the mitigation program achieves the approved performance criteria and has been released from maintenance requirements by the resource agencies.
- **Maintenance Program.** The Maintenance Program shall include (a) protection of existing native species and habitats (including compliance with applicable seasonal restrictions, if any); (b) maintenance of protective fencing and/or signage; (c) trash and weed removal—including specification of approved herbicides; (d) maintenance of erosion-control measures; (e) inspection/repairs of irrigation components; (f) replacement of dead container plant and cuttings (as needed); (g) application of remedial seed mixes (as needed); (h) herbivory control; and (i) removal of all non-vegetative materials (i.e., fencing, signage, irrigation components) upon Project completion. The mitigation site(s) shall be maintained for a period of five years to ensure successful coastal sage scrub habitat establishment within the restored/enhanced sites; however, the Property Owner/Developer may request to be released from maintenance requirements by the resource agencies prior to five years if the mitigation program has achieved all performance criteria.

- **Monitoring Program.** The Monitoring Program shall include (a) qualitative monitoring (i.e., general habitat conditions, photo-documentation from established photo stations); (b) quantitative monitoring; (c) annual monitoring reports, which shall be submitted to the Property Owner/Developer and the resource agencies for five years following implementation of site preparation and plant materials installation activities; and (d) wildlife surveys and monitoring as described above. The annual monitoring reports shall include a detailed discussion of mitigation site performance (e.g., measured vegetation coverage and diversity) and compliance with required performance criteria, a discussion of wildlife species' use of the restored and/or enhanced habitat area(s), and a list of proposed remedial measures to address noncompliance (if any) with any performance criteria. The site(s) shall be monitored for five years following completion of site preparation and plant materials installation activities or until the Property Owner/Developer has been released from maintenance requirements by the resource agencies.
- **Long-term preservation.** Long-term preservation of the mitigation site(s) shall be outlined in the HMMP to ensure that the mitigation site(s) are not impacted by future development.

The NCCP/HCP requires the following construction-related measures by implemented during construction:

- To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers shall occur during the breeding season (i.e., February 15 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, the Property Owner/Developer shall provide USFWS/CDFW with the maximum practicable notice (or such notice as is specified in the NCCP/HCP) to allow for capture of gnatcatchers, cactus wrens, and any other coastal sage scrub Covered 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 coastal sage scrub habitat to be avoided under the provisions of the NCCP/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 coastal

sage scrub, a survey shall be conducted to locate gnatcatchers and cactus wrens 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 onsite during any clearing of coastal sage scrub. The Property Owner/Developer shall advise USFWS/CDFW at least 7 calendar days prior to the clearing of any habitat occupied by Covered Species to allow USFWS/CDFW to work with the monitoring biologist in connection with bird flushing capture activities. The monitoring biologist shall flush Covered Species (avian or other mobile Covered Species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities. If birds cannot be flushed, they shall be captured in mist nets, if feasible, and relocated to areas of the site(s) to be protected or to the NCCP/HCP Reserve System. It shall be the responsibility of the monitoring biologist to assure that Covered Bird Species shall not be directly impacted by brush-clearing and earth-moving 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 coastal sage scrub habitat to 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 shall be permitted within such marked areas.
- In areas bordering the NCCP Reserve System containing significant coastal sage scrub identified in the NCCP/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 coastal sage scrub identified in the NCCP/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.
- Coastal sage scrub identified in the NCCP/HCP for protection and located 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.

MM BIO-2: The Property Owner/Developer shall mitigate for impacts to chaparral vegetation (i.e., toyon-sumac chaparral and toyon-sumac chaparral/ruderal) prior to issuance of a grading permit through one or a combination of the following options, as elected by the Project Owner/Developer and as approved

by the City of Anaheim: (1) payment of the adopted applicable in-lieu mitigation fee to an approved mitigation bank; (2) long-term preservation of existing chaparral habitat at an on-site or off-site location; and/or (3) restoration of chaparral habitat at an on-site or off-site location. Toyon-sumac chaparral shall be replaced at a minimum 1:1 ratio and toyon-sumac chaparral/ruderal shall be replaced at a minimum 0.5:1 ratio. The option selected by the Project Owner/Developer shall be approved by the City of Anaheim prior to issuance of a grading permit.

If the in-lieu mitigation fee option is selected, the Property Owner/Developer shall pay the mitigation fee (calculated based on the above-referenced ratio) to the mitigation bank for the replacement of impacted chaparral resources prior to the issuance of a grading permit. If the preservation option is selected, a LTPMP shall be prepared by a qualified Restoration Ecologist for review and approval by the City of Anaheim prior to issuance of a grading permit. If appropriate, the LTPMP may be combined with the coastal sage scrub LTPMP (described under **MM BIO-1**). If the option of restoration of chaparral habitat is selected, a HMMP shall be prepared by a qualified Restoration Ecologist for review and approval by the City of Anaheim prior to the issuance of a grading permit. If appropriate, the HMMP may be combined with the coastal sage scrub HMMP (described under **MM BIO-1**). If either options #2 or #3 are selected, the Property Owner/Developer shall be responsible for implementing either the LTPMP or HMMP and ensuring that the mitigation program achieves the approved performance criteria. The Property Owner/Developer shall implement the LTPMP or HMMP per its specified requirements, materials, methods, and performance criteria.

If selected, the HMMP shall include the following items:

- **Responsibilities and Qualifications.** The responsibilities and qualifications of the Property Owner/Developer, ecological specialists, and restoration (landscape) contracting personnel who shall implement the plan shall be specified. At a minimum, the HMMP shall specify that the ecological specialists and contractors have performed successful installation and long-term monitoring and maintenance of Southern California native habitat mitigation/restoration programs. A successful program shall be defined as one that has been signed off on by the City of Anaheim.
- **Performance Criteria.** Mitigation performance criteria to be specified in the HMMP shall conform to the mitigation requirements. The HMMP shall state that the use of the mitigation site(s) by special status wildlife species, though not a requirement for site success, would be regarded by the City of Anaheim as a significant factor in considering eligibility for program sign-off.

- **Site Selection.** The mitigation site(s) shall be determined in coordination with the Property Owner/Developer and the City. To maximize the value of the habitat provided, the site(s) shall be contiguous to other permanently preserved parcels. The soils and other physical characteristics of the potential mitigation site(s) shall be analyzed to ensure that proper conditions exist for the establishment of chaparral habitat.
- **Seed Materials Procurement.** At least one year prior to mitigation implementation, the Property Owner/Developer or its consultants/contractors shall initiate collection of the native seed materials specified in the HMMP. All seed mixes shall be of local origin (i.e., collected within 20 miles, and within the same watershed, as the selected restoration/enhancement site), to ensure genetic integrity. No seed materials of unknown or non-local geographic origin shall be used. Seed collection shall be prioritized per habitat area, in the following order: (a) Project impact areas (highest priority); (b) other on-site habitat areas; and (c) off-site habitat areas (lowest priority), assuming availability of seed species in multiple locations.
- **Wildlife Surveys and Protection.** The HMMP shall specify any wildlife surveys (i.e., nesting bird surveys, focused/protocol surveys for special status species) and biological monitoring that are required to avoid significant adverse impacts to wildlife species during the performance of mitigation site preparation, installation, or maintenance tasks. The HMMP shall also describe potential restrictions on these tasks due to special status wildlife conditions on the mitigation site(s) (e.g., suspension of these tasks during the nesting bird season).
- **Site Preparation and Plant Materials Installation.** Mitigation site preparation shall include all of the following: (a) protection of existing native species and habitats (including compliance with applicable seasonal restrictions, if any); (b) installation of protective fencing and/or signage (as needed); (c) initial trash and weed removal (outside the nesting bird season) and methods; (d) soil treatments, as needed (i.e., imprinting, de-compacting); (e) installation of erosion-control measures (i.e., fully natural/bio-degradable [not “photo-degradable” plastic mesh] fiber roll); (f) application of salvaged native plant materials (i.e., coarse woody debris), as available and supervised by a biological monitor; (g) temporary irrigation installation; (h) a minimum one-year preliminary weed abatement program (prior to the installation of native plant and seed materials)—including specification of approved herbicides; (i) planting of container plant and cutting species; and (j) seed mix application.
- **Schedule.** An implementation schedule shall be developed that includes planting and seeding to occur in the fall and winter (i.e., between November 1 and January 31) and the frequency of long-term

maintenance and monitoring activities (including the dates of annual quantitative surveys, as described below) for five years or until the mitigation program achieves the approved performance criteria and has been released from maintenance requirements by the resource agencies.

- **Maintenance Program.** The Maintenance Program shall include (a) protection of existing native species and habitats (including compliance with seasonal restrictions, if any); (b) maintenance of protective fencing and/or signage; (c) trash and weed removal—including specification of approved herbicides; (d) maintenance of erosion-control measures; (e) inspection/repairs of irrigation components; (f) replacement of dead container plant and cuttings (as needed); (g) application of remedial seed mixes (as needed); (h) herbivory control; and (i) removal of all non-vegetative materials (i.e., fencing, signage, irrigation components) following implementation of site preparation and plant materials installation activities. The mitigation site(s) shall be maintained for a period of five years to ensure successful coastal sage scrub habitat establishment within the restored/enhanced site(s); however, the Property Owner/Developer may request to be released from maintenance requirements by the resource agencies prior to five years if the mitigation program has achieved all performance criteria.
- **Monitoring Program.** The Monitoring Program shall include (a) qualitative monitoring (i.e., general habitat conditions, photo-documentation from established photo stations); (b) quantitative monitoring; (c) annual monitoring reports, which shall be submitted to the Property Owner/Developer and the resource agencies for five years following implementation of site preparation and plant materials installation activities; and (d) wildlife surveys and monitoring as described above. The annual monitoring reports shall include a detailed discussion of mitigation site performance (e.g., measured vegetation coverage and diversity) and compliance with required performance criteria, a discussion of wildlife species' use of the restored and/or enhanced habitat area(s), and a list of proposed remedial measures to address noncompliance (if any) with any performance criteria. The site(s) shall be monitored for five years following completion of site preparation and plant materials installation activities or until the Property Owner/Developer has been released from maintenance requirements by the resource agencies.
- **Long-term preservation.** Long-term preservation of the mitigation site(s) shall be outlined in the HMMP to ensure that the mitigation site(s) are not impacted by future development.

MM BIO-3: Prior to initiation of relevant Project construction activities, the Property Owner/Developer shall obtain all necessary permits that are required under

applicable laws and regulations for impacts to CDFW and RWQCB jurisdictional areas. Potential mitigation options shall include one or both of the following, as approved by CDFW and RWQCB: (1) payment of an in-lieu mitigation fee to an approved mitigation bank; (2) long-term preservation of existing riparian habitat at an on-site or off-site location; or (3) restoration of riparian habitat at an on-site or off-site location. Riparian habitat/jurisdictional areas shall be replaced at a minimum 1:1 ratio, or as otherwise determined by the resource agencies.

If the in-lieu mitigation fee option is selected by the Property Owner/Developer, the Property Owner/Developer shall pay the applicable mitigation fee (calculated based on the above-referenced ratio) to the mitigation bank for the replacement of impacted riparian resources prior to the initiation of the relevant Project construction activities. If the preservation option is selected, a LTPMP shall be prepared by a qualified Restoration Ecologist for review and approval by the CDFW and RWQCB; if appropriate, the LTPMP may be combined with the coastal sage scrub LTPMP (described under MM BIO-1). If restoration of riparian habitat is selected, a HMMP shall be prepared by a qualified Restoration Ecologist for review and approval by the CDFW and RWQCB; if appropriate, the HMMP may be combined with the coastal sage scrub HMMP (described under MM BIO-1). If options #2 or 3 are selected, the Property Owner/Developer shall be responsible for implementing either the LTPMP or HMMP and ensuring that the mitigation program achieves the approved performance criteria. If options #2 or 3 are selected, the Property Owner/Developer shall implement the LTPMP or HMMP per its specified requirements, materials, methods, and performance criteria.

The HMMP shall include the following items:

- **Responsibilities and Qualifications.** The responsibilities and qualifications of the Property Owner/Developer, ecological specialists, and restoration (landscape) contracting personnel who shall implement the plan shall be specified. At a minimum, the HMMP shall specify that the ecological specialists and contractors have performed successful installation and long-term monitoring and maintenance of Southern California native habitat mitigation/restoration programs, implemented under USACE, CDFW, and RWQCB permit conditions. A successful program shall be defined as one that has been signed off on by the resource agencies.
- **Performance Criteria.** Mitigation performance criteria to be specified in the HMMP shall conform to the resource agency permit conditions. The HMMP shall state that the use of the mitigation site(s) by special status wildlife species (e.g., least Bell's vireo), though not a requirement for site success, would be regarded by the resource agencies as a significant factor in considering eligibility for program sign-off.

- **Site Selection.** The mitigation site(s) shall be determined in coordination with the Property Owner/Developer and the resource agencies. To maximize the value of the habitat provided, the site(s) shall be contiguous to other permanently preserved parcels. The soils, hydrology/hydraulics, and other physical characteristics of the potential mitigation site(s) shall be analyzed to ensure that proper conditions exist for the establishment of riparian habitat.
- **Seed Materials Procurement.** At least one year prior to mitigation implementation, the Property Owner/Developer or its consultants/contractors shall initiate collection of the native seed materials specified in the HMMP. All seed mixes shall be of local origin; i.e., collected within 20 miles, and within the same watershed, as the selected restoration/enhancement site(s), to ensure genetic integrity. No seed materials of unknown or non-local geographic origin shall be used. Seed collection shall be prioritized per habitat area, in the following order: (a) project impact areas (highest priority); (b) other on-site habitat areas; and (c) off-site habitat areas (lowest priority), assuming availability of seed species in multiple locations.
- **Wildlife Surveys and Protection.** The HMMP shall specify any wildlife surveys (i.e., nesting bird surveys, focused/protocol surveys for special status species [e.g., least Bell's vireo]) and biological monitoring that are required to avoid significant adverse impacts to wildlife species during the performance of mitigation site preparation, installation, or maintenance tasks. The HMMP shall also describe potential restrictions on these tasks due to special status wildlife conditions on the mitigation site(s) (e.g., suspension of these tasks during the nesting bird season, as defined in project permits).
- **Site Preparation and Plant Materials Installation.** Mitigation site preparation shall include all of the following: (a) protection of existing native species and habitats (including compliance with applicable seasonal restrictions, if any); (b) installation of protective fencing and/or signage (as needed); (c) initial trash and weed removal (outside the nesting bird season) and methods; (d) soil treatments, as needed (i.e., imprinting, de-compacting); (e) installation of erosion-control measures (i.e., fully natural/bio-degradable [not "photo-degradable" plastic mesh] fiber roll); (f) application of salvaged native plant materials (i.e., coarse woody debris), as available and supervised by a biological monitor; (g) temporary irrigation installation; (h) a minimum one-year preliminary weed abatement program (prior to the installation of native plant and seed materials)—including specification of approved herbicides; (i) planting of container plant and cutting species; and (j) seed mix application.
- **Schedule.** An implementation schedule shall be developed that includes planting and seeding to occur in the fall and winter (i.e.,

between November 1 and January 31) and the frequency of long-term maintenance and monitoring activities (including the dates of annual quantitative surveys, as described below) for five years or until the mitigation program achieves the approved performance criteria and has been released from maintenance requirements by the resource agencies.

- **Maintenance Program.** The Maintenance Program shall include (a) protection of existing native species and habitats (including compliance with applicable seasonal restrictions, if any); (b) maintenance of protective fencing and/or signage; (c) trash and weed removal—including specification of approved herbicides; (d) maintenance of erosion-control measures; (e) inspection/repairs of irrigation components; (f) replacement of dead container plant and cuttings (as needed); (g) application of remedial seed mixes (as needed); (h) herbivory control; and (i) removal of all non-vegetative materials (i.e., fencing, signage, irrigation components) following implementation of site preparation and plant materials installation activities. The mitigation site(s) shall be maintained for a period of five years to ensure successful riparian habitat establishment within the restored/enhanced sites; however, the Property Owner/Developer may request to be released from maintenance requirements by the resource agencies prior to five years if the mitigation program has achieved all performance criteria.
- **Monitoring Program.** The Monitoring Program shall include (a) qualitative monitoring (i.e., general habitat conditions, photo-documentation from established photo stations); (b) quantitative monitoring; (c) annual monitoring reports, which shall be submitted to the Property Owner/Developer and the resource agencies for five years following implementation of site preparation and plant materials installation activities; and (d) wildlife surveys and monitoring as described above. The annual monitoring reports shall include a detailed discussion of mitigation site performance (e.g., measured vegetation coverage and diversity) and compliance with required performance criteria, a discussion of wildlife species' use of the restored and/or enhanced habitat area(s), and a list of proposed remedial measures to address noncompliance with any performance criteria. The site(s) shall be monitored for five years or until the Property Owner/Developer has been released from maintenance requirements by the resource agencies.
- **Long-term preservation.** Long-term preservation of the mitigation site(s) shall be outlined in the HMMP to ensure that the mitigation sites are not impacted by future development.

MM BIO-4: If CDFW determines that listing of the Crotch's bumble bee is not warranted prior to or during implementation of the Project's construction, this measure shall not be required and no further mitigation shall be necessary.

Until CDFW makes a determination, or if CDFW determines that listing of the Crotch's bumble bee is warranted, the following measure shall be required.

Prior to issuance of a grading permit, the Property Owner/Developer shall retain a qualified Biologist to conduct pre-construction focused surveys for Crotch's bumble bee within 500 feet of the relevant Project construction work area. The survey(s) shall be performed during the appropriate window for this species (i.e., March to July). Three visual surveys shall be conducted by a qualified Biologist. Surveys shall be conducted at least two hours after sunrise and three hours before sunset during suitable weather conditions. Sunny days with temperatures greater than 60 degrees Fahrenheit and wind speeds less than 8 mph are optimal, but partially cloudy days or overcast conditions are permissible if a person's shadow is visible. Surveys shall not be conducted during wet, foggy, or rainy conditions. Meandering transects shall be walked slowly within the Project focused survey area to obtain a 100% survey cover. Transect spacing shall depend on the habitat. The Biologist shall search for Crotch's bumble bee activity and the presence of ground nests. Cavities such as mammal burrows shall be inspected with binoculars for evidence of bumble bee use. If multiple exiting/entering bumble bees are observed at a cavity, further observation shall occur until nesting is confirmed (e.g., multiple individuals entering the cavity).

If no Crotch's bumble bee are observed, no further action shall be required within the year that the focused surveys is conducted, and no further mitigation shall be necessary. Because Crotch's bumble bee moves ground nests annually, the pre-construction focused surveys shall be repeated if construction does not begin before the spring (i.e., March 1) following the previous focused survey(s).

If Crotch bumble bee is present as determined by the focused survey(s), the Property Owner/Developer shall notify the City immediately and then shall consult with CDFW to determine if a permit (2081 or 2080.1) will be needed under applicable laws and regulations. If a permit is required under applicable laws and regulations, then the Property Owner/Developer shall obtain said permit prior to initiation of construction activities within 100 feet of the nest site. If no permit is needed, the Property Owner/Developer shall provide documentation to the City in the form of an email or memorandum from CDFW stating that no permit would be needed. If a ground nest is observed, it shall be protected in place until it is no longer active as determined by the qualified Biologist. An initial protective buffer of at least 100 feet shall be established around the active ground nest until CDFW can be consulted. A qualified Biologist shall determine the protective buffer distance needed depending on

the location with respect to construction activities and the type of construction activities occurring and CDFW shall approve any protective buffer that is proposed that is under 100 feet.

A Letter Report shall be prepared to document the results of the pre-construction surveys and shall be provided to the City and CDFW within 30 days of completion of the survey(s).

MM BIO-5: Per the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), the Property Owner/Developer shall retain a qualified Biologist to conduct a pre-construction survey for the burrowing owl no less than 14 days prior to any ground disturbance by the Project's construction activities and no greater than 30 days prior to ground disturbance in each Project work area. The pre-construction survey(s) for each work area shall include the area of proposed disturbance plus a 500-foot buffer (if access is available). If the pre-construction survey does not result in observing an active burrow, then no further mitigation is required.

If an active burrow is observed outside the breeding season (i.e., September 1 to January 31) and it cannot feasibly be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in applicable CDFW guidelines. One-way doors shall be used to exclude owls from the burrows; doors shall be left in place for at least 48 hours. Once the burrow is determined to be unoccupied by the qualified Biologist, the burrow shall be closed by the qualified Biologist who shall excavate the burrow using hand tools. Once the foregoing occurs, then no further mitigation is required.

If an active burrow is observed outside the breeding season (i.e., September 1 to January 31) and it can be feasibly avoided, the Biologist shall determine an appropriate protective buffer for the burrow based on applicable CDFW guidelines. The buffer shall range from 160 feet to 1,640 feet depending on the level of impact and the time of year (Table 10). The designated buffer shall be clearly marked in the field and shall be mapped as an Environmentally Sensitive Area (ESA) on construction plans. The WEAP training shall include information on the protective buffer. The Property Owner/Developer or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.

If an active burrow is observed during the breeding season (February 1 to August 31), the active burrow shall be protected until nesting activity has ended (i.e., all young have fledged from the burrow). The Biologist shall determine the appropriate protective buffer for the burrow based on applicable CDFW guidelines. The buffer shall range from 656 to 1,640 feet depending on the level of impact and the time of year (Table 5). The designated buffer shall be clearly marked in the field and shall be mapped as an ESA on construction plans. The Worker Environmental Awareness Program (WEAP)

training shall include information on the protective buffer. The Property Owner/Developer or its designee shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows. Construction shall be allowed to proceed when the qualified Biologist has determined that all fledglings have left the nest.

**TABLE 4.3-5
BURROWING OWL PROTECTIVE BUFFER SIZES**

Time of Year	Level of Disturbance		
	Low	Medium	High
April 1 to August 15	656 feet (200 meters)	1,640 feet (500 meters)	1,640 feet (500 meters)
August 16 to October 15	656 feet (200 meters)	656 feet (200 meters)	1,640 feet (500 meters)
October 16 to March 31	164 feet (50 meters)	328 feet (100 meters)	1,640 feet (500 meters)
These buffers will be utilized unless a reduced buffer is authorized by CDFW.			

Upon completion of the pre-construction burrowing owl survey(s), a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey(s) within two weeks of completion of the survey effort. If an active burrow is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any additional correspondence with the CDFW.

If time lapses of greater than 30 days occur during grading in a particular portion of the work area, an additional survey shall be conducted by a qualified Biologist within 24 hours prior to vegetation clearing and/or ground disturbance in that area. If any new burrowing owl burrows are observed, the conditions above shall be applied.

MM BIO-6: To the extent feasible, vegetation clearing shall be conducted during the non-breeding season (i.e., September 16 to January 31) to minimize direct impacts on nesting birds. If vegetation clearing would be initiated during the breeding season for nesting birds/raptors (i.e., February 1–September 15), the construction activity shall be conducted in compliance with the applicable conditions set forth in the Migratory Bird Treaty Act.

If vegetation clearing would be conducted during the breeding season (i.e., February 1–September 15), a pre-construction survey shall be conducted by a qualified Biologist (one with experience conducting nesting bird surveys) for nesting birds and/or raptors within three days prior to clearing of any vegetation or any work near existing structures. The nesting bird survey area shall include a buffer of 100 feet around the work area for nesting birds and a buffer of 500 feet around the work area for nesting raptors. If the Biologist

does not find any active nests within or immediately adjacent to the impact area, the vegetation clearing/construction work shall be allowed to proceed and no further mitigation shall be required.

If the Biologist finds an active nest within or immediately adjacent to the construction area and determines that the nest may be impacted or breeding activities substantially disrupted, the Biologist shall delineate an appropriate buffer zone (at a minimum of 25 feet) around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by a qualified Biologist: (1) clearing limits shall be established within a protective buffer around any occupied nest (the protective buffer shall be 25–100 feet for nesting birds; 300–500 feet for special status bird species or nesting raptors), and (2) access and surveying shall be restricted within the established protective buffer of any occupied nest. Encroachment into the protective buffer around a known nest shall only be allowed if the Biologist determines that the proposed activity would not disturb the nest occupants. Protective buffers may be reduced if noise reduction measures (e.g., temporary noise barriers, sound blankets) are implemented to ensure that the raptor nest is not indirectly affected by construction noise, as determined by the qualified Biologist. Construction shall be allowed to proceed when the qualified Biologist has determined that fledglings have left the nest, or the nest has failed.

MM BIO-7: A pre-construction roosting bat survey (including both day and evening efforts) shall be conducted by a qualified Biologist within two weeks prior to the initiation of construction within a specific work area to ensure that no active day-roosts would be significantly impacted. The day survey shall involve inspecting trees and xeric cliff faces within the relevant Project work area for sign of bat roosting. The evening survey shall involve monitoring each potential roost site for evening emergence, conducting exit counts, and acoustic monitoring (from a half an hour before sunset to at least one hour after sunset) near potential roosts. If active bat day-roosts occur within the relevant Project work area, bat exclusion devices shall be installed under the supervision of a qualified Biologist prior to the start of construction within the relevant Project work area.

If active bat day-roosts occur within xeric cliff faces, exclusionary measures, such as barriers with one-way doors or permanent exclusion (e.g., caulking or wire mesh), shall be installed under the supervision of a qualified Biologist.

If active bat day-roosts occur within xeric cliff faces, exclusionary measures, such as barriers with one-way doors or permanent exclusion (e.g., caulking or wire mesh), shall be installed under the supervision of a qualified Biologist.

If active bat day-roosts occur within trees proposed for removal, then the Property Owner/Developer shall elect to either (i) conduct the relevant tree removal between September and November (to avoid the bat maternity and the bat hibernation season), or (ii) proceed with the tree removal without any timing constraints but under the supervision of a qualified Biologist and utilizing phased tree trimming. Phased tree trimming consists of cutting off branches one day, and cutting down the stem(s) of a tree no sooner than 24 hours later. If avoidance of bat hibernation and bat maternity season is not feasible or if the Property Owner/Developer otherwise elects to proceed pursuant to option #2 above, then exclusionary measures, such as netting or phased tree trimming, shall be implemented after the evening roost emergence under the supervision of a qualified Biologist. Once bats have been excluded from the trees to be removed, then tree removal can proceed.

MM BIO-8: To limit the amount of human disturbance in habitat areas of the Project Site that would not be developed (i.e., undisturbed areas to the west, south, and east of the Project footprint) during the Project's operation, the Property Owner/Developer shall prepare a fencing plan for review and approval by the City of Anaheim prior to issuance of a grading permit. The Project's permanent fencing shall be designed to deter the Project's residents (including their pets, horses, bicycles, and vehicles) from entering undeveloped portions of the Project Site, except along established roads and/or trails. The fencing plan shall specify the use of split-rail fencing to direct residents to keep out of sensitive habitat in undeveloped areas of the Project Site and shall include interpretive signage displaying the natural resources in the area (e.g., coastal California gnatcatcher, riparian areas, oak woodlands). Fencing shall be installed in accordance with the fencing plan prior to the issuance of an occupancy permit. Fencing shall be maintained in perpetuity by the Property Owner/Developer.

Also, dogs shall be required to be kept on leash at all times while outdoors on the Project Site. The Property Owner/Developer shall post and maintain signage along the perimeter of the Project Site, between the Project's grading footprint and the undeveloped areas of the Project Site, stating that dogs are required to be leashed at all times when outdoors within the Project Site.

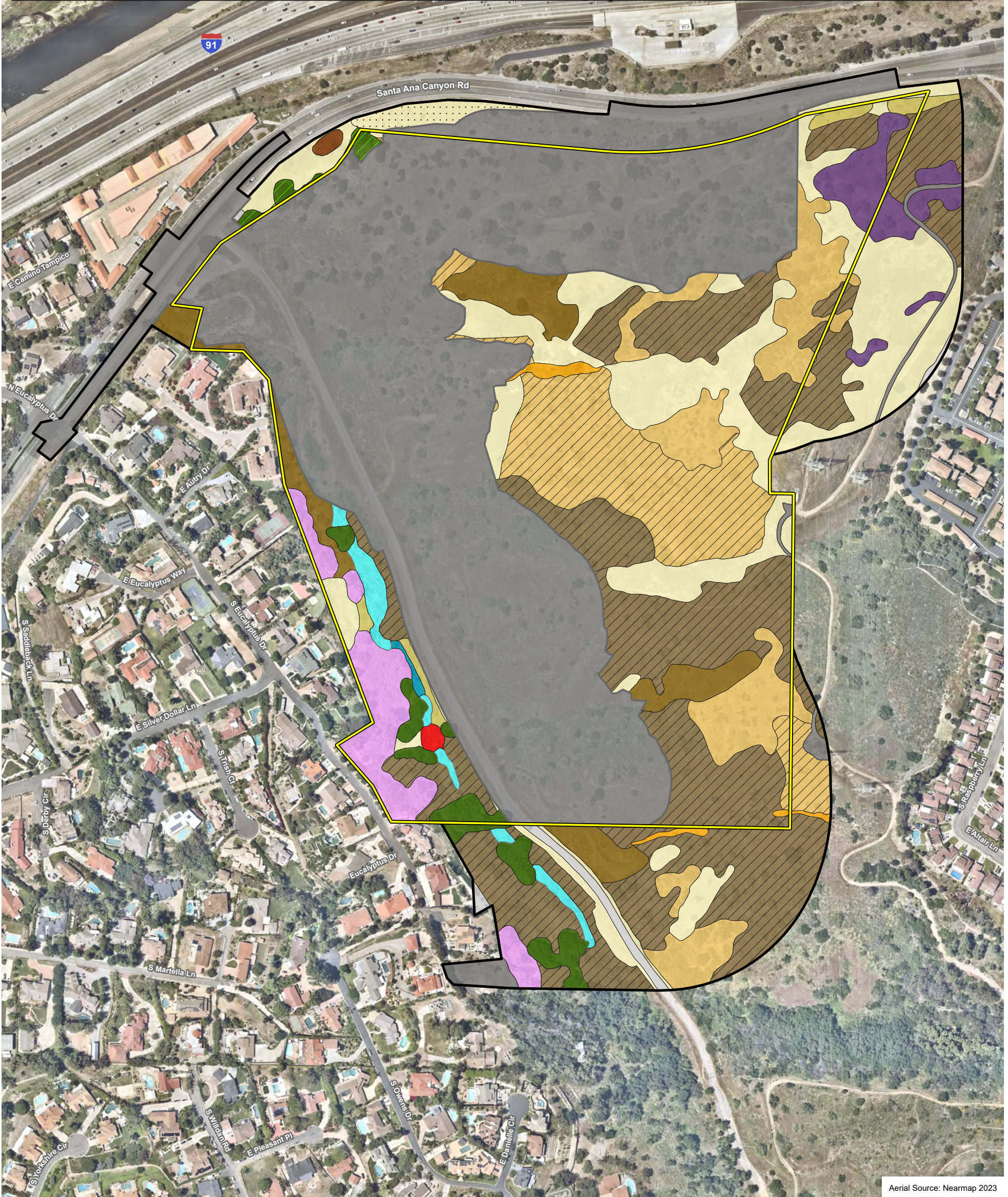
MM BIO-9: During operation of the Project, anticoagulant rodenticides shall not be used anywhere within the Project Site. Specifications related to landscaping and maintenance of the Project's commercial and multiple-family exterior areas and landscaping shall prohibit the use of anticoagulant rodenticides (e.g., difenacoum, brodifacoum, bromadiolone difethialone, warfarin, chlorophaninone, and diphacinone).

Prior to final building and zoning inspections, the Project Owner/Developer shall provide CC&Rs, reciprocal easements, or a similar document recorded on the property to the City for approval. To ensure ongoing compliance, the

Community Codes and Regulations (CC&Rs) reciprocal easements, or a similar document recorded on the property for the single-family residential, commercial, and multiple-family residential uses shall prohibit the use of rodenticides in exterior and landscaping areas. Modifications to the CC&Rs shall also require City approval.

MM BIO-10: To avoid and minimize the introduction and spread of invasive exotic plant species, the following measures shall be implemented.

- **Minimize Introduction of Weed Seeds:** Prior to issuance of a grading permit, the Property Owner/Develop shall demonstrate that Construction Plans include the following notes related to the introduction of weed seeds: (1) Construction vehicles (e.g., excavators, backhoes, dump trucks) shall be washed prior to delivery to the construction site to prevent weed seeds from entering the construction area in mud on the tires or undercarriage. (2) Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting the construction site on vehicles. (3) Wattles used for erosion control shall be biodegradable and certified as weed-free. These procedures shall be implemented throughout construction.
- **Minimize Introduction of Invasives in Landscaping:** Prior to issuance of a building permit, the Property Owner/Developer shall submit the Landscaping Plans to the City of Anaheim for review and approval prior to issuance of a building permit. The City of Anaheim will review the landscaping plans along with a qualified Biologist under contract to the City. The City's Biologist shall make suggestions for suitable substitutes if needed.
 - The review shall ensure that no invasive, exotic plant species are used in proposed landscaping and that suitable substitutes are proposed (i.e., those listed on the California Invasive Plant Council's Invasive Plant Inventory with a Risk Rating of "High" [Cal-IPC 2023]).
 - To the extent practicable, the Project's Landscaping Plans shall include transition zones in areas of the development that are adjacent to undeveloped areas (see Exhibit 4.3-7). The landscaping within these transition zone shall be designed to buffer adjacent natural habitats from human activity using native plantings (e.g., lemonade berry, western sycamore, coast live oak, etc.). Landscaping shall use plants native to the area from the Recommended Acceptable Fire Resistive Plant Species (Anaheim Fire & Rescue 2018).
- **C. Ongoing Compliance With Landscaping:** Prior to final building and zoning inspections, the Project Owner/Developer shall provide CC&Rs,



Aerial Source: Nearmap 2023

Undeveloped Areas

Hills Preserve Project

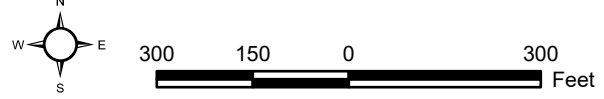


Exhibit 4.3-7



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reciprocal easements, or a similar document recorded on the property to the City for approval. To ensure ongoing compliance, the CC&Rs, reciprocal easements, or a similar document recorded on the property for commercial, multiple-family, and residential lots shall prohibit the use of highly invasive species (i.e., those listed on the California Invasive Plant Council's Invasive Plant Inventory with a Risk Rating of "High" [Cal-IPC 2023]). Modifications to the CC&Rs shall also require City approval.

MM BIO-11: The Property Owner/Developer shall submit lighting plan for the Project to the City of Anaheim for review and approval prior to issuance of a grading permit. The lighting plan shall provide the type and location of all proposed exterior lighting. All exterior lighting within the proposed development (i.e., exterior building lights, ground level landscaping lights, and lighting on the rooftop deck) and roadways (i.e., streetlights) shall be directed away from undeveloped portions of the Project Site (i.e., undeveloped areas to the west, south, and east of the Project footprint, see Exhibit 4.3-7). Specifically, exterior lighting that is installed along the western, southern, and eastern edges of the Project development shall be down-cast, diffused, shielded, low intensity, and located so that direct rays are confined to the permanently impacted portions of the Project Site. The lighting plan shall demonstrate that lighting levels will not increase lighting levels more than 0.5-foot-candle over ambient conditions at the Project's edge (i.e., where the buildings, roadways, landscaping, and lighting structures end) adjacent to undeveloped areas to the west, south, and east of the Project.

Prior to final building and zoning inspections, the Project Owner/Developer shall provide CC&Rs, reciprocal easements, or a similar document recorded on the property to the City for approval. To ensure ongoing compliance, this exterior lighting requirement shall be included as a mandatory requirement for future owners and occupants in the CC&Rs, reciprocal easements, or a similar document recorded on the property, for commercial, multiple-family, and single-family residential lots. Modifications to the CC&Rs shall also require City approval.

MM BIO-12: Prior to issuance of a building permit, the Property Owner/Developer shall submit the Project's plans for to the City of Anaheim for review and approval that demonstrates that window/glass designs for the multiple-family residential building, commercial buildings, perimeter fencing, and exterior landscaping minimizes bird strikes. This may include minimization measures such as the use of bird-safe glass or through placement or the angling of windows/glass downward so that the windows reflect the ground instead of the surrounding habitat or sky. The American Bird Conservancy has established the "2 X 4 Rule", which describes the distance between elements making up a pattern applied to windows for the purpose of preventing bird strikes. To be effective, the pattern must uniformly cover the entire window

and consist of elements of any shape (e.g., lines, dots, other geometric figures) separated by no more than 2 inches if oriented in horizontal rows, or 4 inches if oriented in vertical columns (i.e., the 2 X 4 Rule). These patterns reduce bird-window collisions when applied to the outer surface of reflective panes. Greater spacing between pattern elements increases the risk of a strike and casualties. Bird-safe glass may include a uniformly dense dot, striped, or grid pattern created as ceramic frit on the external surface of the window or a uniformly dense dot, striped, or grid patterns of clear UV-reflecting and UV-absorbing film applied to the exterior of windows. It should be noted that single decals (e.g., falcon silhouettes or large eye patterns) are ineffective and shall not be used unless the entire glass surface is uniformly covered with the objects or patterns (Klem 1990).

MM BIO-13 A Worker Environmental Awareness Program Training and biological monitoring will be implemented during the Project's construction as detailed below.

- **Biological Monitoring:** Prior to issuance of a grading permit, the Property Owner/Developer shall hire a qualified Biologist or Biologists to oversee implementation of the mitigation program and regulatory permit conditions during construction. The qualified Biologist(s) shall be approved by the City, CDFW, and USFWS. Prior to the initiation of construction, a qualified Biologist shall ensure that the Project limits are clearly staked. A qualified Biologist shall be present during all vegetation clearing activities. A qualified Biologist shall ensure that construction and personal vehicles will be parked in designated areas and that smoking shall be limited to designated areas with appropriate containers for disposal of cigarette butts.
- **B. Worker Environmental Awareness Program (WEAP) Training:** Prior to the issuance of a grading permit, and for each subsequent phase of construction, a qualified Biologist shall provide a Worker Environmental Awareness Program (WEAP) training for construction personnel to review the mitigation measures and permit requirements applicable to construction. The training shall cover: Threatened, Endangered, and other special status species that occur immediately adjacent to the construction area; the Project's location within a NCCP/HCP Existing Use area; consequences for violating the federal/State Endangered Species Acts and the Migratory Bird Treaty Act; risk of igniting fires adjacent to wildlands; leaving wildlife unharmed; applicable mitigation measures and permit conditions; and contact information for the Designated Biologist and the City of Anaheim. At the completion of each training, the Designated Biologist shall have trained personnel sign the WEAP Log to document that they have been trained and understand the mitigation measures and permit conditions. The WEAP training shall be repeated, as-needed, for new

construction personnel; all construction staff members shall be trained within one week of beginning work on the Project.

4.3.7 SIGNIFICANCE AFTER MITIGATION

With implementation of mitigation measures **MM BIO-1** through **MM BIO-13**, potentially significant impacts related to biological resources would be reduced to less than significant.

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