Biological Technical Report

San Dimas Municipal Code Text Amendment (20-0005), City of San Dimas, Los Angeles County, California

Prepared for

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1.0 INTRODUCTION

This Biological Technical Report has been prepared to support California Environmental Quality Act (CEQA) documentation for the San Dimas Municipal Code Text Amendment (MCTA) 20-0005. The City of San Dimas is proposing MCTA 20-005 of Title 18-Zoning, Chapter 18.518: Specific Plan 11 of the San Dimas Municipal Code ("Project"), to amend grading limits within Specific Plan 11, Planning Area I ("planning area") and to make various clean-up text amendments. The proposed MCTA would also include development standards for grading, landscaping, and retaining walls. Additional text amendments include removing sections that dealt with the initial development and codifying previous policies regarding Conditional Uses within the Specific Plan. The City of San Dimas is the Lead Agency for the purposes of the CEQA. The information 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 area assessed in this report is referred to as the Biological Study Area (BSA).

Ultrasystems conducted a literature review and biological surveys of the BSA in 2022. Following the surveys, Ultrasystems (2022) prepared a Biological Resources Evaluation to support the Initial Study/Mitigated Negative Declaration (IS/MND) that was publicly circulated for the Project. The City received extensive public comments on the mitigation approach for biological resources and hired Psomas to conduct a peer review of the Biological Resources Evaluation and ultimately to prepare a mitigation approach that addressed public comments. Psomas conducted a field visit to verify the vegetation mapping and subsequently updated the findings and mitigation approach based on their professional judgement. As requested by the City, this Biological Technical Report incorporates the extensive information collected by Ultrasystems during their literature review and 2022 biological surveys to describe existing conditions, including use of figures prepared by Ultrasystems (2022). Psomas has supplemented information in this report with additional literature review and observations made during Psomas' 2023 field visit. The findings within this report are based on the professional opinion of Psomas.

1.1 PROJECT LOCATION

The BSA is located in the City of San Dimas, Los Angeles County, California. It is generally located north of Interstate 10 (I-10), west of State Route 57 (SR-57), and south and east of Walnut Creek (Figure 1). The BSA includes the neighborhoods along Calle Cristina and Paseo Lucinda and surrounding open space north to East Puente Street and south to East Covina Hills Road (Figure 2).

The BSA is located on the U.S. Geological Survey's (USGS') San Dimas 7.5-minute quadrangle and occupies Township 1 South, Range 8 West, Sections 17 and 20 (Figure 3). The BSA is located in the San Jose Hills with the San Gabriel Valley to the north and west and the Pomona Valley to the east. Elevations within the BSA range from approximately 680 to 980 feet above mean sea level (msl). Topography slopes down moderately from Calle Cristina to East Covina Hills Road. Surrounding land uses include residential development and undeveloped open space on slopes, ridgelines, and canyons between the residences.

The BSA is within the Big Dalton Wash Hydrologic Unit (HU) 180701060402 within the larger San Gabriel Watershed. The Big Dalton Wash HU drains an area of approximately 80.7 square miles (USEPA 2022a). No blueline streams or waterbodies are shown within the BSA on the USGS quadrangle (Figure 3).

The BSA is in Area I of Specific Plan 11, which is located within the southwestern portion of the City of San Dimas. The BSA comprises the western half of Area I of Specific Plan 11. The BSA

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Source: UltraSystems 2022
ESRI Basemap 2022

Regional Location

Figure 1

San Dimas MCTA

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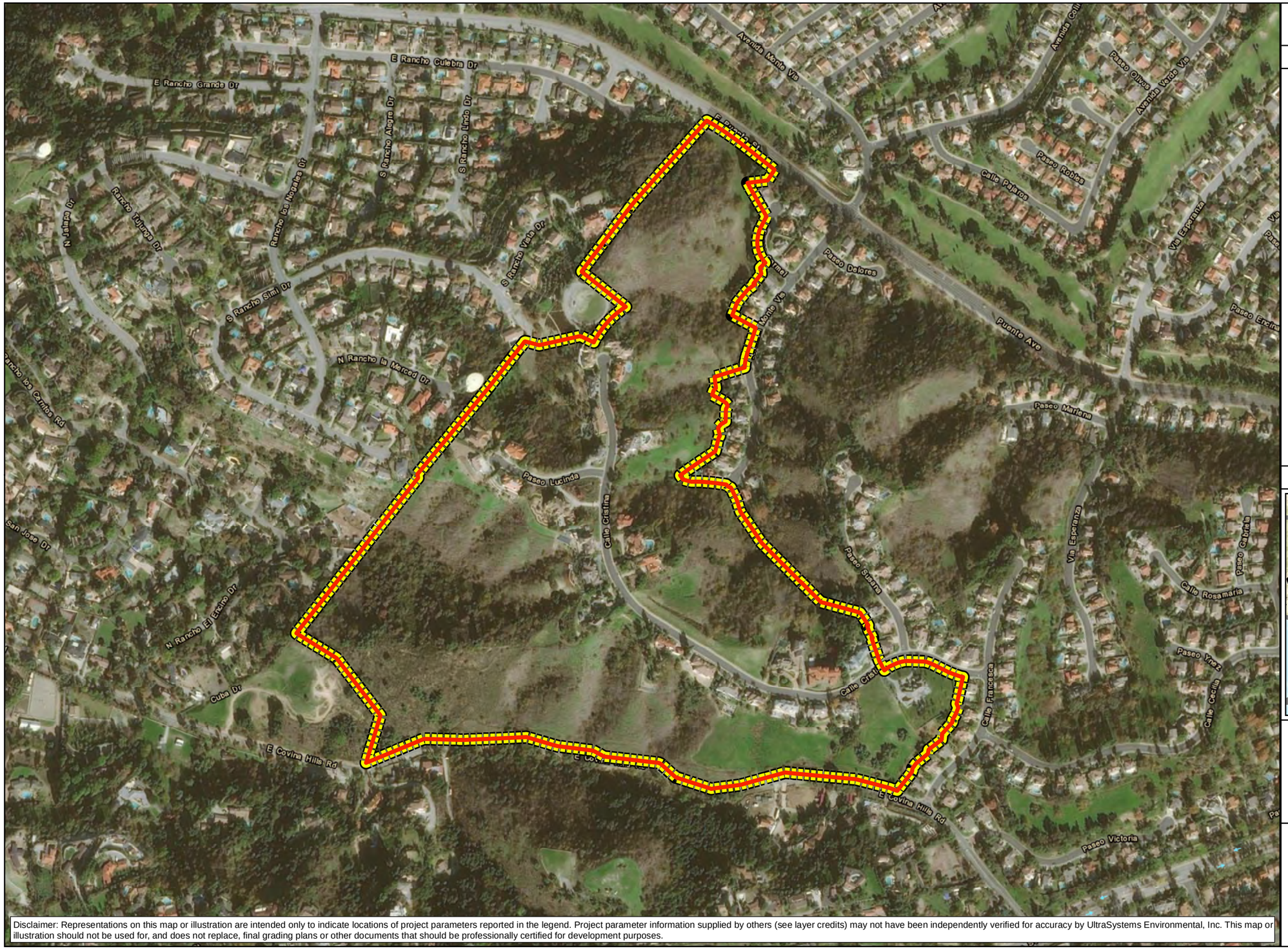

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San Dimas
MCTA 20-0005

Legend

Project Boundary

Biological Study Area (BSA)

Key Map

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Map not to scale

Source: UtlraSystems 2022

Project Boundary and Biological Study Area (BSA)

Figure 2

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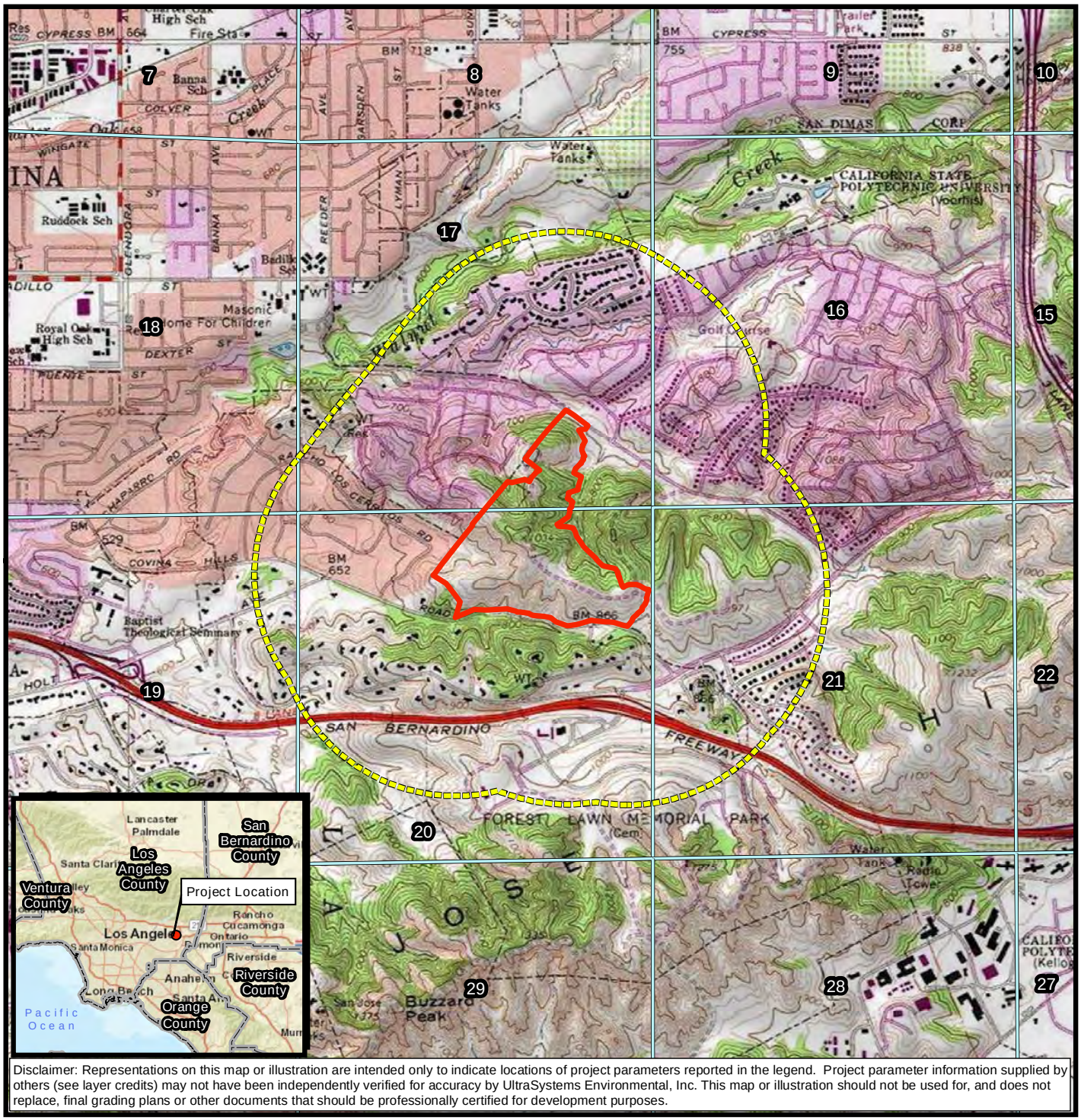

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Legend

- Project Boundary
- Half-Mile Radius
- Section Boundary

USGS Quadrangle: San Dimas
Township: 1S Range: 9W
0 1,000 2,000 Feet Sections:17,20

Source: UltraSystems 2022
ESRI Basemap 2022

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USGS Topographic Quadrangle Map

Figure 3

San Dimas MCTA

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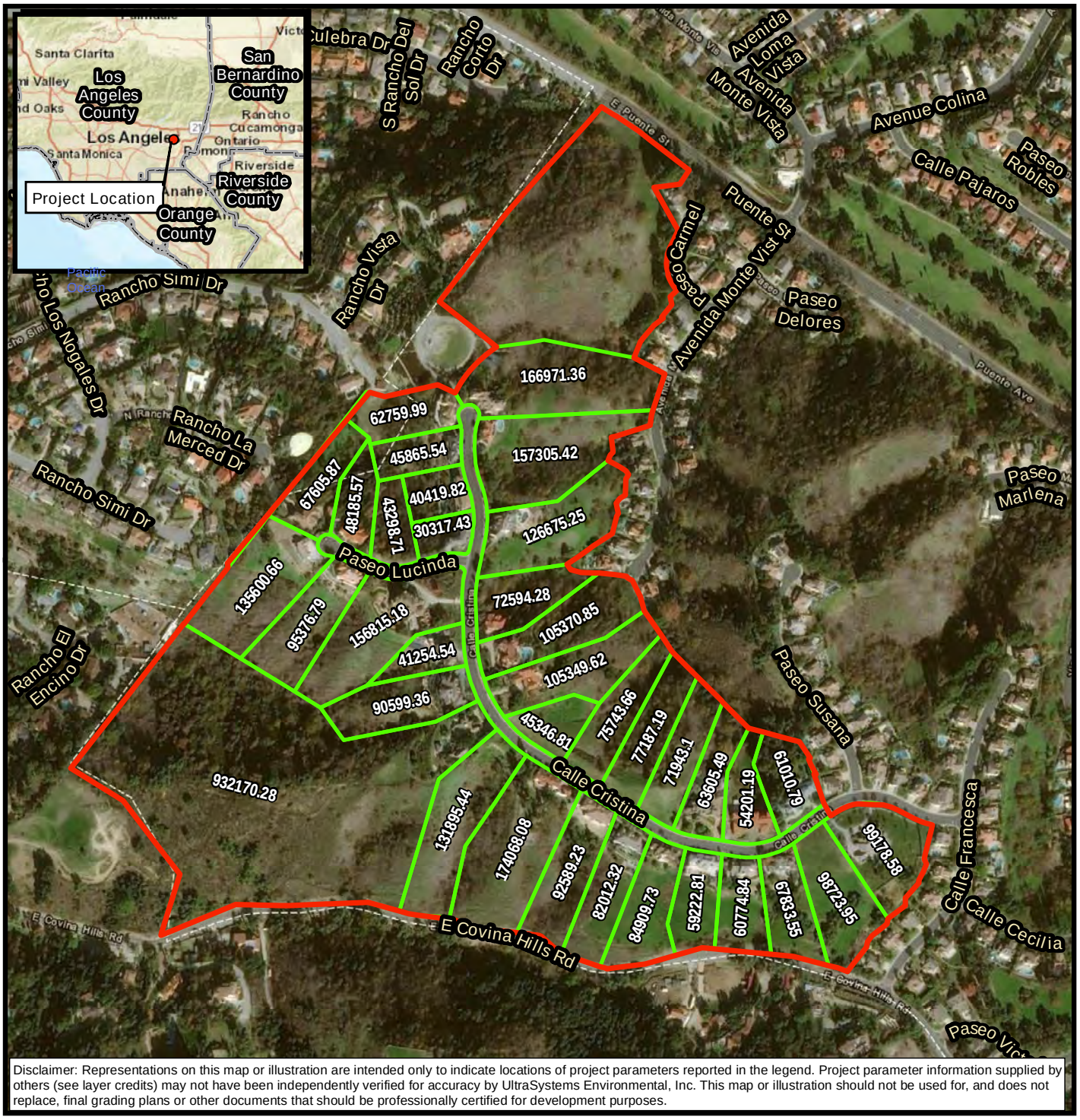
is subdivided into 36 residential lots; 29 lots are developed with single-family residences and 7 lots are vacant (Table 1; Figure 4). According to the City of San Dimas Zoning Map and General Plan, the area is zoned “single family, very low”, which is very low-density, single family detached residential and large estate developments (City of San Dimas 1991).

TABLE 1
PARCEL INFORMATION

Residential Lot Number	Assessor Parcel Number	Size of Parcel (acres)
1	844-803-8031	2.276
2	844-803-8032	2.265
3	844-803-8033	1.311
4	844-803-8034	1.122
5	844-803-8035	1.065
6	844-803-8036	1.682
7	844-803-8037	1.410
8	844-803-8038	1.923
9	844-803-8039	3.704
10	844-803-8040	3.026
11	844-800-8041	21.397
12	844-803-8041	2.080
13	844-803-8042	0.946
14	844-803-8043	3.600
15	844-803-8044	2.190
16	844-800-8042	3.112
17	844-800-8043	1.551
18	844-800-8044	1.107
19	844-803-8045	0.995
20	844-803-8046	0.697
21	844-803-8047	0.929
22	844-800-8045	1.053
23	844-800-8046	1.442
24	844-800-8047	3.832
25	844-800-8048	3.613
26	844-800-8055	2.907
27	844-803-8048	1.666
28	844-803-8049	2.420
29	844-803-8050	1.495
30	844-803-8051	0.450
31	844-803-8052	1.582
32	844-803-8053	1.627
33	844-803-8054	1.374
34	844-803-8055	1.118
35	844-806-8056	0.904
36	844-803-8057	1.179
Open Space	844-800-8050	11.613
	Total	**96.663**



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Source: UltraSystems 2022
ESRI Basemap 2022

Parcel Map

Figure 4

San Dimas MCTA

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The Project is not located within an area designated by the County of Los Angeles as a Significant Ecological Area (SEA). The East San Gabriel Valley SEA includes Walnut Creek to the north, Bonelli Regional Park/Puddingstone Reservoir to the east, and various open spaces referred to as the Walnut Islands to the south; the nearest SEA boundaries to the BSA are located approximately 0.5 mile to the north and approximately 0.5 mile to the east.

1.2 PROJECT BACKGROUND

The existing San Dimas Municipal Code Chapter 18.518: Specific Plan 11 (SP-11) allows for unlimited grading (cut and fill) for roadway access and excavation to construct building retaining foundations for the primary residence and garage. The Municipal Code also allows up to 35 percent of building lot coverage for the subject residential lots. Specifics are listed below:

- The average lot size for SP-11, Planning Area 1 is 109,021 square feet (sf) (with lots ranging between 30,371 sf and 932,170 sf).
- The average existing 1st floor lot coverage is 6.5 percent of the lot (with lots ranging between 0.81 percent and 14.69 percent of the lot).
- The average additional first floor building area for the existing homes is 34,251 sf (ranging between 7,253 sf and 318,718 sf).
- The estimated average available grading to accommodate the additional 1st floor building area is 21,500 cubic yards (cy) (ranging between 850 cy to over 200,000 cy).

1.3 PROJECT DESCRIPTION

The Project proposes to expand the allowable grading (cut and fill) on each of the 36 residential lots within the Project boundary by 1,000 cubic yards (cy) per lot, or a total of 36,000 cy over all lots. The increase in allowable grading would be to allow owners to grade a portion of their backyards. The current grading quantity permitted by SP-11 is insufficient for grading backyards; therefore, owners generally use decks in the rear portions of their lots to extend their usable space. The text amendment would allow the owners to grade for swimming pools or do other improvements to extend the usable space in their backyard, which is not currently allowed under the existing municipal code. It should be noted that the existing municipal code allows unlimited grading for the primary residence, driveway, and garage; the text amendment would not change this. Additionally, the proposed text amendment would not allow for the primary residences to be expanded to fill a larger portion of the lot.

The current municipal code allows a total grading quantity of approximately 774,000 cy (approximately 21,500 cy per lot) to establish the primary residence, driveway, and garage. The proposed text amendment would increase the amount by 36,000 cy (approximately 1,000 cy per lot); thus, the proposed increase would increase the allowable grading by about 4.7 percent (Table 2).

TABLE 2
GRADING PERMITTED UNDER EXISTING SPECIFIC PLAN AND PROPOSED AMENDMENTS

	Existing Grading Allowed Under SP-11	Proposed Additional Grading with Text Amendment
Grading Quantity	774,000 total cubic yards; average 21,500 cubic yards per lot	36,000 total cubic yards; 1,000 cubic yards per lot
Purposes	Mass grading; grading building pads for primary residences, garages, and driveways	Grading for usable backyards (currently decking is only option for backyard use). Additional grading would not be used to expand primary residences, garages, and driveways.
Source: City of San Dimas (2022).		

1.4 PROPOSED MUNICIPAL CODE TEXT AMENDMENTS

The proposed Project includes the following text amendments to San Dimas Municipal Code Chapter 18.518 Specific Plan No. 11 to preserve the original intent of the specific plan, minimize the visual impacts of potential grading and retaining walls, codify existing policies/practices, and eliminate defunct sections of the code:

- Requires that proposed grading and retaining walls follow the existing topographic contours present on the lot. The proposed grading cuts and/or retaining walls should not cut directly across contour lines.
- Limits retaining walls to a maximum exposed height of 12 feet per wall and a maximum combined exposed height of multiple retaining walls to 24 feet. This language is consistent with existing retaining wall height limit standards used in other hillside areas.
- Requires that if more than one retaining wall would be constructed directly adjacent to one another, the two walls must be separated by half the height of the taller of the two adjacent walls.
- Requires the use of gravity-type retaining walls unless on-site conditions prohibit their use.
- Requires that wall materials be either slump stone or split-face stone with a tan or earth tone color.
- Includes landscape and irrigation standards that require the planting of trees at the base of the lowest retaining wall and drought-tolerant shrubs at the base of every wall. Also requires installation of permanent irrigation to ensure that the required landscaping survives and is healthy enough to provide screening.

1.5 PROJECT OPERATION

The proposed text amendments would not change the land use designation of the existing or future residences in the planning area.

1.6 REGULATORY SETTING

Projects are required to comply with various federal, State, and local regulations designed to protect and promote environmental quality. These regulations are summarized below.

It should be noted that because the environmental document for SP-11 is being modified, the Project must be evaluated according to the current regulatory requirements, some of which have changed since the initial Specific Plan was adopted. For example, new species have been listed under the federal and State Endangered Species Acts; the potential for these species to occur and the requirements resulting from potential impacts must be evaluated by today's standards within this Biological Technical Report.

1.6.1 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) designates and protects plants and animals that are listed as "Endangered" or "Threatened." The USFWS and the National Marine Fisheries Service (NMFS) share responsibility for administration of the FESA. The USFWS is primarily responsible for terrestrial and freshwater organisms while the NMFS is primarily responsible for marine wildlife. Under Section 9 of the FESA, federally listed species are 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). Section 9 take prohibitions apply to listed wildlife and fish species, but not to plants. Endangered plants are not protected from take, although it is unlawful to remove, possess, or maliciously damage or destroy them on federal lands. Removing or damaging listed plants on State and private lands in knowing violation of State law, or in the course of violating a State criminal trespass law, is also illegal under the FESA.

Two sections of the FESA authorize incidental take. Section 7 regulates take associated with federal projects or projects that require a federal permit. It also requires federal agencies to use their authority to carry out conservation programs to benefit Endangered and Threatened species. Under Section 7, federal agencies are required to consult with the USFWS or the NMFS to ensure that any action they carry out, including those they fund or authorize (such as through a permit) would "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]). Under Section 7, consultations can be either informal or formal. An incidental take permit pursuant to Section 10(a)(1)(B) is required when non-federal, otherwise lawful activities, including lawful project development, would result in take of Threatened or Endangered wildlife. Under this provision, the USFWS and/or the NMFS may, where appropriate, authorize the taking of federally

listed wildlife or fish if such taking occurs incidentally during otherwise legal activities. Section 10(a)(2)(B) requires an application for an incidental take permit to include a Habitat Conservation Plan (HCP). The purpose of the habitat conservation planning process associated with the permit is to ensure there are adequate avoidance, minimization, and mitigation measures to address the effects of the authorized incidental take. Section 10 provides a clear regulatory mechanism to permit the incidental take of federally listed fish and wildlife species by private interests and non-federal governmental agencies.

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."

Clean Water Act of 1972

Section 404

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.

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.

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 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 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 invalid under the 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 from 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.

Section 402

Pursuant to Section 402(p) of the CWA, stormwater permits are required for discharges from a municipal separate storm sewer system (MS4) serving a population of 100,000 or more. The SWRCB and RWQCBs have been authorized by the USEPA to implement and enforce the Municipal Storm Water Program (SWRCB 2023).

In the County of Los Angeles, Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075 and Los Angeles Water Board Order R4-2012-0175-A01 National Pollutant Discharge Elimination System (NPDES) Permit No. CAS004001 Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4 (MS4 Permit), is currently in effect; the City of San Dimas is a signatory to this permit, and is subject to the Waste Discharge Requirements set forth in this Order.

Section VI(D)(8) of the MS4 Permit applies exclusively to construction sites with construction activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving, and linear underground/overhead projects. The City of San Dimas, as signatory to the MS4 Permit, shall, though their erosion and sediment control ordinance and/or building permit, require the implementation of an effective combination of erosion and sediment control Best Management Practices (BMPs) to prevent erosion and sediment loss, and the discharge of construction wastes.

Section 401

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 include all species native to the United States or its territories, which are those that occur as a result of natural biological or ecological processes. The MBTA does not protect non-native species whose occurrences in the U.S. are solely the result of intentional or unintentional human-assisted introduction. The List of Migratory Birds (50 CFR 10.13) was updated by the USFWS (effective August 30, 2023) (USFWS 2023a).

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 bald eagle (*Haliaeetus leucocephalus*) and 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.

The Bald and Golden Eagle Protection Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Regulations further define "disturb" as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.6).

In addition to immediate impacts, this definition also covers effects that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

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.

Prevention and Control of Invasive Species – Executive Order 13112

Executive Order 13112 (February 3, 1999) directs all federal agencies to work cooperatively to prevent and control the introduction of invasive, non-native species in a cost-effective and environmentally sound manner to minimize their economic, ecological, and human health impacts. Executive Order 13112 established the National Invasive Species Council made up of federal agencies and departments and a supporting Invasive Species Advisory Committee

composed of State, local, and private entities. The Invasive Species Council and Advisory Committee oversees and facilitates implementation of the Executive Order, including preparation of a National Invasive Species Management Plan.

1.6.2 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 CEQA Guidelines (14 *California Code of Regulations* Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA. The CEQA Guidelines specify that a project has a significant impact to the environment if, among other things, it has the potential to "substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or an animal community; substantially reduce the number or restrict the range of an Endangered, Rare, or Threatened species. . . ." (CEQA Guidelines Section 15065[a][1]).

With regards to plants and animals, Section 15380 of the 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 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 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 Incidental Take Permit (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 (§ 5515), amphibians, and reptiles (§ 5050), birds (§ 3511), and mammals (§ 4700). Most of the species on these lists have subsequently been listed under the State and/or Federal Endangered Species Acts; however, some have not been formally listed. Fully protected species 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.

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

The Porter-Cologne Water Quality Control Act (Porter-Cologne) broadly defines "waters of the State" as any surface water or groundwater, including saline waters, within the boundaries of the State." In 2020, the Office of Administrative Law began implementing the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State. Under these new regulations, the SWRCB and its nine RWQCBs assert jurisdiction over all existing WOTUS, and all waters that would have been considered WOTUS under any historical definition.

Impacts to WOTUS are authorized by the RWQCBs through a Water Quality Certification per Section 401 of the CWA. Impacts to "waters of the State" that are not considered WOTUS would be authorized by Waste Discharge Requirements (WDRs) issued by the RWQCB, pursuant to Porter-Cologne.

Pursuant to Porter-Cologne, 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.

Porter-Cologne 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 federal WOTUS. However, SWRCB and the RWQCBs may require permits (i.e., WDRs) for the fill or alteration of the waters of the State that are outside WOTUS.

State Water Resources Control Board Resolution No. 2019-0015

The California Code of Regulations, Title 23, Section 3831(w) states that "all waters of the United States are also 'waters of the state.'" This regulation has remained in effect despite Supreme Court decisions such as *Rapanos* and *SWANCC*, which added limitations to what could be considered a WOTUS. Because the interpretation of WOTUS in place at the time § 3831(w) was adopted was broader than any post-*Rapanos* or post-*SWANCC* regulatory definitions that incorporated more limitations into the scope of federal jurisdiction, it is consistent with the Water Boards' intent to include both historic and current definitions of WOTUS into the SWRCBs wetland jurisdictional framework.

As set forth in Resolution No. 2009-0026, although the State of California has historically relied primarily on requirements in the CWA to protect wetlands, U.S. Supreme Court rulings reducing the jurisdiction of the CWA over wetland areas by limiting the definition of WOTUS necessitated the use of California's independent authorities under Porter-Cologne to protect these vital resources.

The inclusion of both current and historic definitions of WOTUS ensures some regulatory stability in an area that has otherwise been in flux. The status of a WOTUS may only be used to establish that a wetland or water qualifies as waters of the State; it cannot be used to exclude a wetland or water from qualifying as waters of the State. In other words, wetlands that are categorically excluded from qualifying as a WOTUS may nevertheless qualify as waters of the State under another jurisdictional category. Examples of waters of the State include (but are not limited to) ephemeral streams and isolated wetlands.

On April 2, 2019, the SWRCB adopted Resolution No. 2019-0015, Amendment to the Water Quality Control Plan for Ocean Waters of California and the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California to Establish a State Wetland Definition and Procedures for Discharges of Discharges of Dredged or Fill Material to Waters of the State (Procedures) for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California (SWRCB 2019).

On January 26, 2021, the Superior Court in *San Joaquin Tributaries Authority v. California State Water Resources Control Board* issued a judgment upholding the adoption of the Procedures as part of the (1) California Ocean Plan and (2) Inland Surface Waters and Enclosed Bays and Estuaries Water Quality Control Plan (ISWEBE Plan) for WOTUS as defined by the CWA.

On April 6, 2021, the SWRCB issued Resolution No. 2021-0012 confirming that the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State" (1) are in effect as state policy for water quality control for all waters of the State and (2) shall be applied via the inland surface waters and enclosed bays and estuaries plan to only waters of the United States. (SWRCB 2021).

The SWRCB and its nine RWQCBs have the authority to regulate the discharge of dredged or fill material under § 401 CWA and Porter-Cologne. Dischargers that obtain a federal permit or license that authorizes impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as § 404 CWA and § 10 of the Safe Rivers and Harbors Act, must obtain certification from the SWRCB or a RWQCB to ensure that the discharge does not violate State water quality standards or any other appropriate requirement of State law. When a discharge is proposed to waters outside of federal jurisdiction, the SWRCB and the RWQCBs regulate the discharge under Porter-Cologne through the issuance of WDRs.

Construction General Permit; Order 2009-0009-DWQ

If a project will disturb one or more acres of soil during construction, project owners are required by the SWRCB to obtain coverage under a General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009 0009 DWQ, as authorized by § 402 CWA, [NPDES permit]). The Construction General Permit requires potential dischargers of pollutants into waters of the U.S. to prepare a site-specific Stormwater Pollution Prevention Plan, which establishes enforceable limits on discharges, requires effluent monitoring, designates reporting requirements, and requires construction BMPs to reduce or eliminate point and non-point source discharges of pollutants. Additionally, BMPs must be maintained, inspected before and after each precipitation event, and repaired or replaced as necessary. The SWRCB authorizes Construction General Permits.

For projects that would disturb less than one acre of soil, applicants for grading permits pursuant to the proposed Project would be required to comply with the WDRs for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County (except those discharges originating from the City of Long Beach MS4), Order No. R4-2012-0175 as mended by State Water Board Order WQ 2015-0075 and Los Angeles Water Board Order R4-2012-0175-A01 NPDES Permit No. CAS004001 (referred to as the MS4 Permit), to which the City of San Dimas is a Permittee. The MS4 Permit applies to the discharge of pollutants from anthropogenic sources into WOTUS through stormwater and urban runoff conveyance systems, including flood control facilities (e.g., storm drains).

Section IV(D)(8)(d)(1) of the MS4 applies to construction sites of less than one acre and requires the implementation of an effective combination of erosion and sediment control BMPs to prevent erosion and sediment loss. Sections IV(D)(8)(e) and IV(D)(8)(f) of the MS4 require operators of public and private construction sites within its jurisdiction to select, install, implement, and maintain BMPs that comply with its erosion and sediment control ordinance, and state that the requirements contained in this part apply to all activities involving soil disturbance with the exception of agricultural activities. Activities covered by this permit include but are not limited to grading, vegetation clearing, soil compaction, paving, re-paving, and linear underground/overhead projects. Grading projects of less than one acre would, with compliance with the Los Angeles County MS4 Permit, minimize or avoid potential violations of water quality standards or waste discharge requirements, and would not substantially degrade surface or groundwater quality.

Applicants for grading permits pursuant to the proposed Project would be required to comply with § IV(D)(8)(d) of the MS4 Permit, which requires construction BMPs to reduce or eliminate point and non-point source discharges of pollutants, including sediment.

1.6.3 Regional

Significant Ecological Areas

The SEA Program was originally established as a part of the 1980 County General Plan, to help conserve the genetic and physical diversity within Los Angeles County by designating biological resource areas capable of sustaining themselves into the future. The General Plan 2035 (General Plan) updated the SEA boundary map, goals, and policies in 2015.

SEAs are places where the County deems it important to facilitate a balance between development and biological resource conservation. Where occurring within SEAs, development activities are carefully guided and reviewed with a key focus on site design as a means for conserving fragile resources such as streams, woodlands, and Threatened or Endangered species and their habitats.

The SEA Ordinance (Title 22 Planning and Zoning Code) implements the goals and policies of the General Plan by establishing permitting requirements, design standards, and review processes for development within SEAs. The goal of the SEA Ordinance is to guide development to the least impactful areas on a property to avoid adverse impacts to biological resources (LACRP 2019, pp. 6-7).

City of San Dimas Municipal Code – Tree Preservation

Chapter 18.162 Tree Preservation Ordinance of the San Dimas Municipal Code states the goal of preserving and protecting the mature significant trees, as well as other trees which are determined to be desirable, growing within the City. A “mature significant tree” is defined as “any tree within the city of an oak genus which measures eight inches or more in trunk diameter and/or any other species of trees which measure ten inches or more in trunk diameter and/or a multi-trunk tree(s) having a total circumference of thirty-eight inches or more; the multi-trunk tree shall include at least one trunk with a diameter of a minimum of four inches”. Exceptions are provided in § 18.162.080.

Mature significant trees may be removed from developed property with the approval of the Director of Development Services or Development Plan Review Board, subject to procedures listed in Section 18.162.040. “Developed” property refers to property that has been improved with structures, buildings, surface materials, landscaping, and similar improvements in accordance with all City ordinances.

A tree removal permit is required for undeveloped property. No issuance of any grading or building permits or commencement of work shall be allowed on undeveloped property prior to the approval of a permit. No mature significant tree which conforms to the standards and definitions of this chapter shall be removed or relocated without obtaining the written approval of the Director of Development Services. “Undeveloped” property refers to any parcel or parcels of land which does not contain physical man-made improvements, and may be improved in conformance with applicable development standards of the zoning classification where the property is located. Undeveloped property shall also refer to any parcel or parcels of land which may or may not contain improvements and on which development applications, including but not limited to, development plan review board, variance, zone change, and subdivision, have been submitted.

2.0 METHODS

This section summarizes survey methods used to conduct biological surveys for the Project. The BSA includes approximately 96 acres. Surveys did not extend beyond the BSA (Figure 2).

As discussed in the Introduction, Ultrasystems conducted biological surveys of the BSA in 2022. As part of this effort, Ultrasystems conducted a literature review, vegetation mapping, general plant and wildlife surveys, habitat assessments for special status species, and a jurisdictional assessment of potential WOTUS and waters of the State; methods for these efforts are described below. The Biological Resources Evaluation prepared by Ultrasystems (2022) was used to support the IS/MND that was publicly circulated for the Project. The City received extensive public comments on the mitigation approach for biological resources and hired Psomas to conduct a peer review of the Biological Resources Evaluation and ultimately to prepare a mitigation approach that addressed public comments. Psomas conducted a field visit to verify the vegetation mapping and habitat assessment and subsequently updated the findings and mitigation approach based on their professional judgement. As requested by the City, this Biological Technical Report incorporates the extensive information collected by Ultrasystems during their literature review and 2022 biological surveys to describe existing conditions, including use of their figures. Psomas has supplemented information with additional literature review and observations made during Psomas' 2023 field visit; methods for this field visit are described below. The findings within this report are based on the professional opinion of Psomas.

2.1 ULTRASYSTEMS SURVEYS (2022)

Prior to fieldwork, Ultrasystems (2022) conducted an extensive literature review to identify habitat, special status plant and wildlife species, potential jurisdictional areas, critical habitat, and wildlife movement corridors potentially associated with the BSA. Ultrasystems Biologists visited the BSA to conduct the following biological surveys: vegetation mapping; general plant and wildlife surveys; habitat assessment for special status species, including burrowing owl (*Athene cunicularia*)*;* wildlife corridor evaluation; and jurisdictional assessment (Ultrasystems 2022).

Field work was conducted on June 30; July 1 and 19; August 4 and 5, 2022 by Michelle Tollett, accompanied by Joyce Mak or Erik Segura. The general biological assessment covered accessible areas of the BSA, including areas that would be impacted by the Project. The fieldwork was conducted during the daytime walking slowly on foot. The burrowing owl habitat assessment covered habitat types that are considered suitable for that species. Biologists used binoculars from strategic vantage points whenever direct access was not possible due to private property, chain link fences, and locked gates; inaccessible areas were assessed using aerial photography (Ultrasystems 2022).

Vegetation was mapped in the field on an aerial photograph or delineated using a Global Positioning System (GPS) unit. Vegetation classification general follows *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) with modification to better represent existing site conditions. Each habitat type identified was cross-referenced with *Preliminary Descriptions of Terrestrial Communities of California* (Holland 1986) and CDFW's *California Natural Community List* (CDFW 2023b). Plant species were identified using *The Jepson Manual: Vascular Plants of California, second edition* (Baldwin et al. 2012). All plant species observed were recorded in field notes (Ultrasystems 2022).

Wildlife species were identified visually or audibly in the field during field surveys. Biologists recorded signs of wildlife including tracks, burrows, dens, nest sites, scat, or remains. They also surveyed areas that would potentially serve as roosting habitat or hibernacula for bat species. Biologists also searched for natural and man-made travel routes that wildlife could use to traverse

the site as well as barriers to wildlife movement. All wildlife species observed were recorded in field notes (Ultrasystems 2022).

2.2 LITERATURE REVIEW

Prior to the start of surveys, Psomas reviewed the Ultrasystems (2022) Biological Resources Evaluation for the Project and public comments submitted on the IS/MND.

Psomas then conducted an updated literature search to identify special status plants, wildlife, habitats, and potential jurisdictional water resources reported from the vicinity of the Project. The Project region is generally defined as the USGS San Dimas quadrangle and the eight surrounding quadrangles, with the understanding that the northernmost quadrangles extend to elevations well outside those found in the BSA. The following sources of information were reviewed during the literature review:

- CDFW's California Natural Diversity Database (CNDDB); USGS Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, Prado Dam, Azusa, Glendora, and Mt. Baldy 7.5-minute quadrangles (CDFW 2023a)
- The California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants; USGS Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, Prado Dam, Azusa, Glendora, and Mt. Baldy 7.5-minute quadrangles (CNPS 2023a)
- CDFW's *Natural Communities List* (CDFW 2023b), *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023c); and *Special Animals List* (CDFW 2023d)
- Jepson eFlora (Jepson Flora Project 2023)
- Web Soil Survey data provided by the USDA's Natural Resources Conservation Service (USDA NRCS 2023a)
- The National Hydric Soils List (USDA NRCS 2023b)
- The National Wetlands Inventory's Wetland Mapper (USFWS 2023b)

2.3 VEGETATION MAPPING AND GENERAL SURVEYS

Psomas Senior Biologists Allison Rudalevige and Jonathan Aguayo performed a general plant and wildlife survey and field verified vegetation mapping prepared by Ultrasystems on July 11, 2023. The map was updated, as necessary, based on current (i.e., July 11, 2023) conditions. To update the existing vegetation map, an aerial photograph at a scale of 1-inch equals 400-feet (1″=400′) was overlaid with the 2022 UltraSystems vegetation layer. These base layers were loaded onto Avenza Maps application on an Apple iPad. Vegetation that was inaccessible due to steep topography or access issues was mapped from a distance with the use of binoculars.

Nomenclature of vegetation types generally follows that of *A Manual of California Vegetation* (CNPS 2023b), which is the most current vegetation classification system used by CDFW for assessing sensitive natural communities (CDFW 2023b). Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023c) for special status species and the Jepson eFlora (Jepson Flora Project 2023) for all other taxa. Representative photographs of the BSA from Ultrasystems (2022) are included in Appendix A.

All plant and wildlife species detected during the survey were documented in field notes and are listed in Appendix B. Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing rocks and debris. Birds were identified by visual and auditory recognition. Surveys for mammals were conducted during the day and included searching for and identifying

diagnostic sign, including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Taxonomy and nomenclature for wildlife follows the *Special Animals List* (CDFW 2023c) for special status species and, for other species, Crother (2017) for amphibians and reptiles, the American Ornithological Society (AOS 2023) for birds, and the Smithsonian National Museum of Natural History (SNMNH 2011) for mammals.

2.4 JURISDICTIONAL ASSESSMENT

Jurisdictional water resources include WOTUS under the regulatory authority of the USACE; waters of the State under the regulatory authority of the RWQCB; and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation), under the regulatory authority of CDFW. A formal jurisdictional delineation was not performed. However, information from the National Wetlands Inventory Wetland Mapper was used to identify potential jurisdictional water resources in the BSA.

3.0 EXISTING BIOLOGICAL RESOURCES

3.1 PHYSICAL ENVIRONMENTAL SETTING

3.1.1 Regional Environment

The BSA is located in southeastern Los Angeles County. The BSA is located in the San Jose Hills, between the San Gabriel Mountains that are approximately four miles to the north and the Puente-Chino Hills that are approximately five miles to the south. Walnut Creek is located along the northern boundary of the San Jose Hills; it is approximately 0.5 mile north of the BSA and is vegetated with oak woodlands along the creek. Bonelli Regional Park/Puddingstone Reservoir and associated open space areas are located at the eastern end of the San Jose Hills; it is approximately 1.3 miles east of the BSA (and across SR-57). Open space hillsides, known as the Walnut Islands, are located in the southern portion of the San Jose Hills; they are approximately 0.5 mile to the southeast of the BSA (and across I-10). All of these open space areas are within the designated East San Gabriel Valley SEA. High density development and roadways surround each of these areas just outside their designated SEA boundaries.

The BSA is located in an area consisting of a mix of residential development interspersed with undeveloped canyons, ridgelines, and slopes. Higher density residential development and roadways surrounds the BSA in all directions, although there is some additional natural open space located to the south between East Covina Hills Road and I-10.

3.1.2 Climate

Southern California experiences a Mediterranean climate characterized by mild, rainy winters and hot, dry summers. The temperature is moderated by the coastal influence of the Pacific Ocean, which creates mild conditions throughout most of the year. The most distinguishing characteristic of a Mediterranean climate is its seasonal precipitation. In Southern California, precipitation is characterized by brief, intense storms between November and March. It is not unusual for the majority of the annual precipitation to fall during a few storms over a short span of time.

The California Irrigation Management System operates a station at Cal Poly Pomona (Station 78), approximately two miles southeast of the BSA. Based on data collected between January 1, 1990, and December 31, 2022, this station recorded an average maximum air temperature of 76.8 degrees Fahrenheit (°F), an average minimum air temperature of 50.5°F, and an average annual air temperature of 62.5°F (CIMIS 2023).

Rainfall patterns in the region are subject to extreme variations from year to year and longer-term wet and dry cycles. Based on data collected between January 1, 1990, and December 31, 2022, this station recorded an average annual precipitation of approximately 15.2 inches (CIMIS 2023). The minimum annual precipitation over that time period was 4.2 inches (in 2013) and the maximum was 32.5 inches (in 1993). From January 1 and August 30, 2023, the station received 36.4 inches.

Climate change refers to any significant change in climate, such as the average temperature, precipitation, or wind patterns over a period of time. Significant changes in global climate patterns have been associated with an accumulation of greenhouse gas emissions in the atmosphere. Some greenhouse gases occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities; the majority of global warming is attributed to human activities. In addition to affecting temperature and precipitation patterns, climate change is believed to be contributing to more extreme weather

events such as more frequent larger storms and extended periods of drought (USFS 2018; USEPA 2017).

In Southern California's forests, climate change effects are changing fire patterns and disease outbreaks and affecting water supplies (USFS 2018). Fires are a natural part of the landscape, but each year the fire season is coming earlier and ending later. In addition, the fires themselves are burning hotter and have become more damaging and dangerous. Similarly, insects are a natural part of forested landscapes, but now the insects are spreading more rapidly because the winter is not cold enough to reduce their populations. Also, insect-caused disease epidemics are larger and last longer, killing more trees and increasing fire risk. The warmer winters are affecting water supplies because the snowpacks are thinner and melt earlier in spring, so the water runs out from the forest earlier in summer. Extended droughts also make trees more vulnerable to both fire and insects (USFS 2018).

3.1.3 Local Environment

The BSA is located in an area consisting of a mix of residential development interspersed with natural open space. Generally, single family residences are located on the ridges of the BSA with parcels that slope down to natural open space in the canyon bottoms. Elevations within the BSA range from approximately 680 to 980 feet above msl. Topography slopes down moderately from Calle Cristina to East Covina Hills Road. There are no blueline streams in the BSA. Areas of herbaceous vegetation are periodically mowed.

3.1.4 Soils

Soils mapped in the BSA include Urban land-Biscailuz-Pico complex, 0 to 2 percent slopes; Zaca-Apollo, warm complex, 20 to 55 percent slopes; and Counterfeit-Urban land complex, 10 to 35 percent slopes, terraced (USDA NRCS 2022) (Figure 5). None of these soils are listed as hydric on the National Hydric Soils List (USDA NRCS 2023).

The Zaca-Apollo, warm complex covers most of the BSA. It has clay or clay loam horizons over bedrock. The parent material is colluvium and/or residuum weathered from sandstone and siltstone. It is well drained and primarily found on hillslopes.

The Urban land-Biscailuz-Pico complex has surface horizons of loam with sandy lower horizons. The parent material is discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock. It is found on alluvial fans and floodplains. Biscailuz is somewhat poorly drained while Pico is well drained.

The Counterfeit-Urban land complex has clay loam, clay, and sandy loam horizons. The parent material is human-transported material consisting mostly of colluvium and/or residuum weathered from sedimentary rock. It is somewhat poorly drained and found on hillslopes.

3.2 VEGETATION TYPES AND OTHER AREAS

Fourteen vegetation types and other landcovers were mapped in the BSA (Table 3, Figure 6). The text below describes the vegetation composition in the BSA; the corresponding vegetation classification as provided by *A Manual of California Vegetation* (CNPS 2023b); and whether the vegetation type would be considered a sensitive natural community (CDFW 2023b).

Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

San Dimas
MCTA

Legend

Project Boundary

500ft Biological Study Area

Soil Map Unit

1007-Urban land-Biscailuz-Pico complex, 0 to 2 percent slopes

1141-Zaca-Apollo, warm complex 20 to 55 percent slopes

1232-Counterfeit-Urban land complex, 10 to 35 percent slopes, terraced

Key Map

N

Map not to scale

Source: UtlraSystems 2022

USDA Soils

Figure 5

PSOMAS

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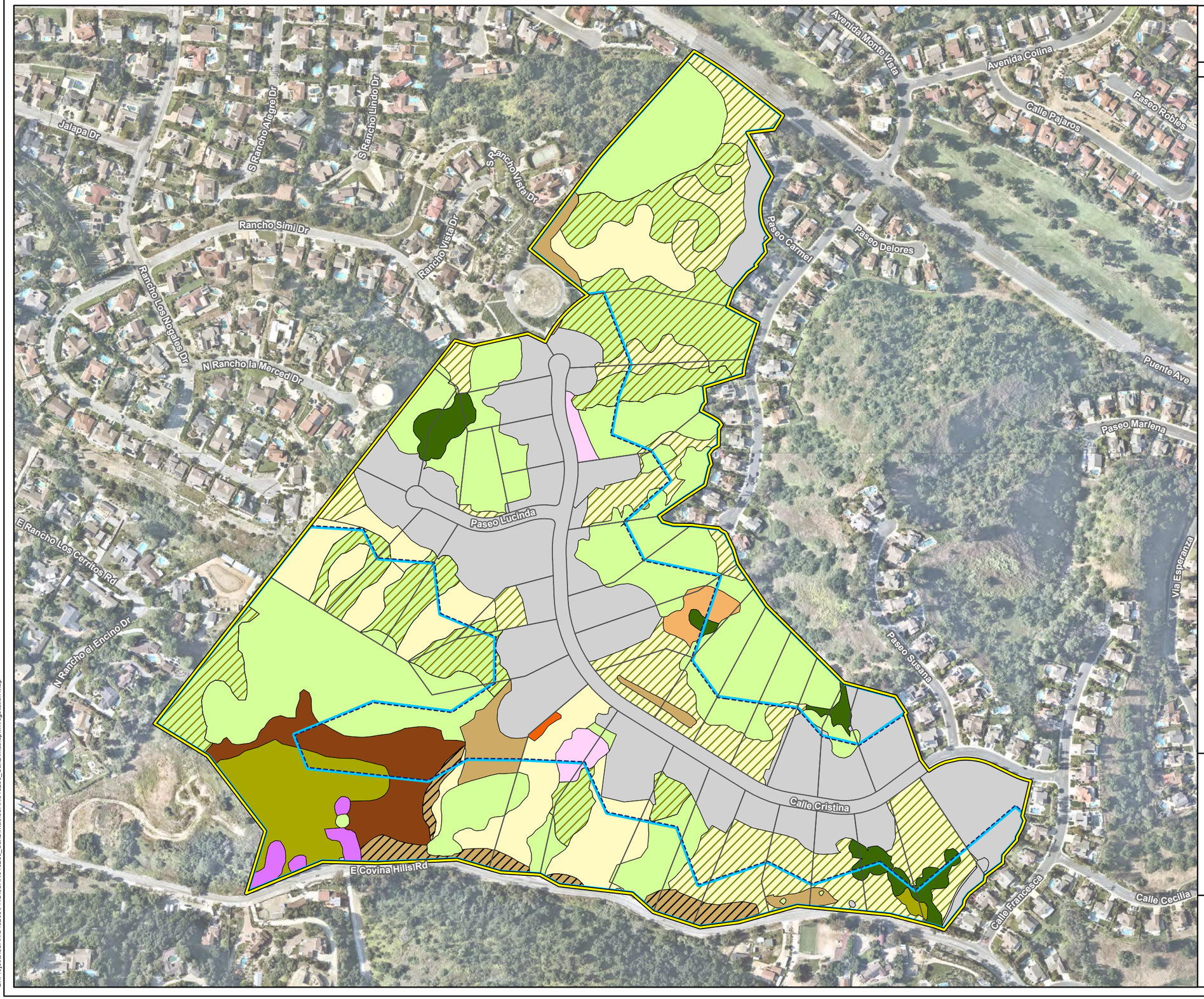

San Dimas MCTA

Legend

- Project Boundary
- Conservation Easement
- Parcel

Coastal Sage Scrub

- California Sagebrush Scrub (Disturbed)
- California Buckwheat Scrub
- California Buckwheat Scrub (Disturbed)
- California Sagebrush - California Buckwheat Scrub
- California Sagebrush - Black Sage Scrub
- Coast Prickly Pear Scrub

Native Woodland

- California Walnut Groves
- California Walnut Groves (Disturbed)
- Coast Live Oak Woodland (Disturbed)

Non-Native Woodland

- Pepper Tree Groves
- Eucalyptus Groves

Non-Native Herbaceous

- Upland Mustards or Star-thistle Fields
- Upland Mustards or Star-thistle Fields (Mowed)

Developed Areas

- Developed/Ornamental

0 175 350 Feet

0 50 100 Meters

N W E S

Scale: 1:4,200

Data Source: Vegetation map developed by UltraSystems (2022) and updated by Psomas (2023)
Aerial Source: Nearmap 2023

Vegetation Types and Other Areas
Figure 6

PSOMAS

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D:\Projects\3SAN\040200\PRO\3SAN040200_SanDimas\3SAN040200_SanDimas.aprx\Vegetation Map

TABLE 3
VEGETATION TYPES AND OTHER AREAS IN THE BSA

Vegetation Type or Other Area	*A Manual of California Vegetation* Alliance	Sensitive Vegetation Community (CDFW 2023b)	Total Vegetation in BSA (acres)
Coastal Sage Scrub			
California Sagebrush Scrub (Disturbed)	*Artemisia californica* – (*Salvia leucophylla*) Shrubland Alliance	No	0.089
California Buckwheat Scrub	*Eriogonum fasciculatum* Shrubland Alliance	No	2.000
California Buckwheat Scrub (Disturbed)	*Eriogonum fasciculatum* Shrubland Alliance	No	1.927
California Sagebrush – California Buckwheat Scrub	*Artemisia californica* – (*Salvia leucophylla*) Shrubland Alliance with *Eriogonum fasciculatum* Shrubland Alliance	No	0.251
California Sagebrush – Black Sage Scrub	*Artemisia californica* – *Salvia mellifera* Shrubland Alliance	No	3.480
Coast Prickly Pear Scrub	*Opuntia littoralis* – *Opuntia oricola* – *Cylindropuntia prolifera* Shrubland Alliance	Yes	3.848
Subtotal Coastal Sage Scrub			*11.595*
Native Woodland			
California Walnut Groves	*Juglans California* Forest & Woodland Alliance	Yes	27.057
California Walnut Groves (Disturbed)	*Juglans California* Forest & Woodland Alliance	Yes	12.529
Coast Live Oak Woodland (Disturbed)	*Quercus agrifolia* Woodland & Forest Alliance	No	1.801
Subtotal Native Woodland			*41.387*
Non-Native Woodland			
Pepper Tree Groves	*Schinus* (*molle*, *terebinthifolius*) – *Myoporum laetum* Forest & Woodland Semi-Natural Alliance	No	0.657
Eucalyptus Groves	*Eucalyptus* spp. – *Ailanthus altissima* – *Robinia pseudoacacia* Woodland Semi-Natural Alliance	No	0.797
Subtotal Non-Native Woodland			*1.454*
Non-Native Herbaceous			
Upland Mustards or Star-thistle Fields	*Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) Herbaceous Semi-Natural Alliance	No	9.179
Upland Mustards or Star-thistle Fields (mowed)	*Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) Herbaceous Semi-Natural Alliance	No	12.094
Subtotal Non-Native Herbaceous			*21.273*
Developed Areas			
Developed/Ornamental	N/A	No	20.954
Subtotal Developed Areas			*20.954*
Total			**96.663**

[a] Ranked as sensitive based on less than 10 stands sampled; may be more widespread (CDFW 2023d).
[b] This blended community would be characterized more as riparian herb than southern black willow forest; therefore, it would not be considered a sensitive community.

BSA: Biological Survey Area

3.2.1 Coastal Sage Scrub

Coastal sage scrub communities mapped in the BSA consist of California sagebrush scrub (disturbed), California buckwheat scrub, California buckwheat scrub (disturbed), California sagebrush – California buckwheat scrub, California sagebrush – black sage scrub, and coast prickly pear scrub.

California Sagebrush Scrub (Disturbed)

Approximately 0.089 acre of California sagebrush scrub (disturbed) occurs in the BSA. It is located in a small patch in the southern half of the BSA. In the BSA, this vegetation type is dominated by California sagebrush (*Artemisia californica*). Other native species observed include laurel sumac (*Malosma laurina*), phacelia (*Phacelia* sp.), and large-bracted morning-glory (*Calystegia macrostegia*). It is categorized as disturbed because it is degraded by the presence of non-native species such as black mustard (*Brassica nigra*) and tocalote (*Centaurea melitensis*).

The California sagebrush scrub (disturbed) in the BSA corresponds to the *Artemisia californica* – (*Salvia leucophylla*) Shrubland Alliance mixed with the *Brassica nigra* – *Centaurea* [*solstitialis*, *melitensis*] Herbaceous Semi-Natural Alliance (CNPS 2023b). The *Artemisia californica* – (*Artemisia californica*) Shrubland Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

California Buckwheat Scrub

Approximately 2.000 acres of California buckwheat scrub occurs in the BSA. It is located in a few small, isolated patches. This vegetation type is dominated by California buckwheat (*Eriogonum fasciculatum*). A small amount of oat (*Avena* sp.) and grayish shortpod mustard (*Hirschfeldia incana*) is also present.

The California buckwheat scrub in the BSA corresponds to the *Eriogonum fasciculatum* Shrubland Alliance (CNPS 2023b). The *Eriogonum fasciculatum* Shrubland Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

California Buckwheat Scrub (Disturbed)

Approximately 1.927 acres of California buckwheat scrub (disturbed) occurs in the BSA. It is located in patches along East Covina Hills Road. In the BSA, this vegetation type consists of an open cover of California buckwheat shrubs. These areas are characterized as disturbed because there is a low cover of California buckwheat and they are heavily degraded by the presence of non-native grasses and forbs, including grayish shortpod mustard, black mustard, ripgut grass (*Bromus diandrus*), oat, and prickly lettuce (*Lactuca serriola*). Some native species are also present, including rocky malacothrix (*Malacothrix saxatilis*), phacelia, and Wright's jimsonweed (*Datura wrightii*).

The California buckwheat scrub (disturbed) in the BSA corresponds to the *Eriogonum fasciculatum* Shrubland Alliance mixed with the *Brassica nigra* – *Centaurea* [*solstitialis*, *melitensis*] Herbaceous Semi-Natural Alliance in *A Manual of California Vegetation* (CNPS 2023b). As noted above, the *Eriogonum fasciculatum* Shrubland Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

California Sagebrush – California Buckwheat Scrub

Approximately 0.251 acre of California sagebrush – California buckwheat scrub occurs in the BSA. It is located near the northeastern edge of the BSA. In the BSA, this vegetation type is

co-dominated by California sagebrush and California buckwheat. A small amount of grayish shortpod mustard is also present.

The California sagebrush – California buckwheat scrub in the BSA corresponds most closely to the *Artemisia californica – Eriogonum fasciculatum* Association in *A Manual of California Vegetation* (CNPS 2023b). This Association is not considered a sensitive natural community by CDFW (CDFW 2023b).

California Sagebrush – Black Sage Scrub

Approximately 3.480 acres of California sagebrush – black sage scrub occurs in the BSA. It is located on a slope near the southwest corner of the BSA. In the BSA, this vegetation type is co-dominated by California sagebrush and black sage (*Salvia mellifera*). A small amount of oat and grayish shortpod mustard is also present.

The California sagebrush – black sage scrub in the BSA corresponds to the *Artemisia californica – Salvia mellifera* Shrubland Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Artemisia californica – Salvia mellifera* Shrubland Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

Coast Prickly Pear Scrub

Approximately 3.848 acres of coast prickly pear scrub occurs in the BSA. It is located in the southwest corner of the BSA. This vegetation type is characterized by the presence of scattered patches of coast prickly pear (*Opuntia littoralis*) that is greater than 30 percent relative cover and is mixed with other coastal sage scrub species. The dominant species growing between the patches of cactus include California buckwheat and California sagebrush with a small amount deerweed (*Acmispon glaber*). A member of the Boraginaceae (either dessicated [dried out] popcorn flower [*Cryptantha* sp.] or fiddleneck [*Amsinckia* sp.]) was also observed but was not identifiable due to the timing of the survey, which was well past the blooming period. A small amount of non-native vegetation is present and includes tocalote and grayish shortpod mustard.

The coast prickly pear scrub in the BSA corresponds to the *Opuntia littoralis – Opuntia oricola – Cylindropuntia prolifera* Shrubland Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Opuntia littoralis – Opuntia oricola – Cylindropuntia prolifera* Shrubland Alliance is considered a sensitive natural community by CDFW (CDFW 2023b).

3.2.2 Native Woodland

Native woodland communities mapped in the BSA consist of California walnut groves, California walnut groves (disturbed), and coast live oak woodland (disturbed).

California Walnut Groves

Approximately 27.057 acres of California walnut groves occurs in the BSA. They are located on slopes and drainage edges throughout the BSA. In the BSA, this vegetation type is dominated by southern California black walnut (*Juglans californica*) that is more than 50 percent relative cover. Some areas have a closed canopy while other areas have a canopy that is open; a few individual trees are mapped. A few scattered coast live oak (*Quercus agrifolia*) are also present. The understory contains a mix of native and non-native species. Native species include phacelia, chilicothe (*Marah macrocarpa*), and western poison oak (*Toxicodendron diversilobum*). Non-native species include tocalote, Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), grayish shortpod mustard, and oats.

The California walnut groves in the BSA correspond to the *Juglans californica* Forest & Woodland Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Juglans californica* Forest & Woodland Alliance is considered a sensitive natural community by CDFW (CDFW 2023b). Southern California black walnut is also considered a special status plant species and is discussed below in Section 3.7.

California Walnut Groves (Disturbed)

Approximately 12.529 acres of California walnut groves (disturbed) occurs in the BSA. They are located on slopes throughout the BSA. This vegetation type contains an open canopy of southern California black walnut that is more "savannah-like" than the undisturbed form of California walnut groves (described above). The understory and areas between the trees are dominated by non-native species such as grayish shortpod mustard and oat.

The California walnut groves (disturbed) in the BSA corresponds to the *Juglans californica* Forest & Woodland Alliance mixed with the *Brassica nigra* – *Centaurea* [*solstitialis*, *melitensis*] Herbaceous Semi-Natural Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Juglans californica* Forest & Woodland Alliance is considered a sensitive natural community by CDFW (CDFW 2023b).

Coast Live Oak Woodland (Disturbed)

Approximately 1.801 acres of coast live oak woodland (disturbed) occurs in the BSA. It is located on slopes throughout the BSA. This vegetation type is co-dominated by coast live oak and non-native species such as pepper (*Schinus molle*). The understory and areas between trees contain non-native species such as grayish shortpod mustard and oat. It is categorized as disturbed because coast live oak makes up less than 50 percent relative cover of the tree layer and because it is mixed with non-native trees.

The coast live oak woodland (disturbed) in the BSA corresponds to the *Quercus agrifolia* Woodland & Forest Alliance mixed with the *Schinus* (*molle*, *terebinthifolius*) – *Myoporum laetum* Forest & Woodland Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Quercus agrifolia* Woodland & Forest Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

3.2.3 Non-Native Woodland

Non-native woodland communities mapped in the BSA consist of pepper tree groves and eucalyptus groves.

Pepper Tree Groves

Per *A Manual of California Vegetation*, pepper tree groves occur in coastal canyons, washes, slopes, riparian areas, and roadsides. The tree canopy is open to continuous. Shrubs are infrequent or common while the herbaceous layer is simple to diverse. For groves of pepper trees, this vegetation type has greater than 60 or 80 percent relative cover in the tree layer.

Approximately 0.657 acre of pepper tree groves occurs in the BSA. It is located in small patches adjacent to roads, either as an extension of ornamental landscaping or on natural slopes. This vegetation type has a canopy of pepper tree (*Schinus molle*). The area adjacent to Paseo Lucinda has a turf understory while the areas adjacent to East Covina Hills Road have an understory dominated by non-native vegetation such as Italian thistle and horehound (*Marrubium vulgare*). Scattered native species, such as chilicothe and phacelia, are also present.

The pepper tree groves in the BSA correspond to the *Schinus* (*molle*, *terebinthifolius*) – *Myoporum laetum* Forest & Woodland Semi-Natural Alliance in *A Manual of California Vegetation* (CNPS 2023b). This Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

Eucalyptus Groves

Approximately 0.797 acre of Eucalyptus groves occur in the BSA. This vegetation type is located in patches along Calle Cristina. This vegetation type has a canopy of gum; scattered coast live oak and pine (*Pinus* sp.) are also present.

The Eucalyptus groves in the BSA correspond to the *Eucalyptus* spp. – *Ailanthus altissima* – *Robinia pseudoacacia* Semi-Natural Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Eucalyptus* spp. – *Ailanthus altissima* – *Robinia pseudoacacia* Semi-Natural Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

3.2.4 Non-Native Herbaceous

Non-native herbaceous communities mapped in the BSA consist of upland mustards or star-thistle fields and upland mustards or star-thistle fields (disturbed). These areas are dominated by non-herbaceous species, many of which are considered invasive.

Upland Mustards or Star-thistle Fields

Approximately 9.179 acres of upland mustards or star-thistle fields occurs in the BSA. This vegetation type occurs on slopes throughout the BSA. This vegetation type is dominated non-native grasses and forbs, primarily grayish shortpod mustard and black mustard. Tocalote and oats are also present. Some areas have scattered native species and intergrade with native vegetation types such as California walnut groves and California buckwheat scrub.

The upland mustards or star-thistle fields in the BSA correspond to the *Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) Herbaceous Semi-Natural Alliance in *A Manual of California Vegetation* (CNPS 2023b). The *Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) Herbaceous Semi-Natural Alliance is not considered a sensitive natural community by CDFW (CDFW 2023b).

Upland Mustards or Star-thistle Fields (Mowed)

Approximately 12.094 acres of upland mustards or star-thistle fields (mowed) occurs in the BSA. At the time of the 2023 surveys, mowed vegetation consisted primarily of a thatch of oats with grayish shortpod mustard. Some areas had barley (*Hordeum vulgare*), common sow thistle (*Sonchus oleraceus*), castor bean (*Ricinus communis*), Wright's jimsonweed, and climbing milkweed (*Funastrum cynanchoides* var. *hartwegii*).

The upland mustards or star-thistle fields (mowed) in the BSA correspond to a mix of *Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) and *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliances in *A Manual of California Vegetation* (CNPS 2023b). Neither the *Brassica nigra* – *Centaurea* (*solstitialis*, *melitensis*) or the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliances are considered a sensitive natural community by CDFW (CDFW 2023b).

3.2.5 Developed Areas

Developed/Ornamental

Approximately 20.954 acres of developed/ornamental areas occur in the BSA. This landcover includes residential structures, roadways, and associated landscaping throughout the BSA.

Ornamental vegetation is varied and includes trees, shrubs, herbs, and turf grass. Representative landscaping species include olive (*Olea europaea*), pine, pepper, jacaranda (*Jacaranda* sp.), bougainvillea (*Bougainvillea* sp.), night-blooming jasmine (*Cestrum nocturnum*), and cultivated roses (*Rosa* sp.).

As this landcover is developed with associated landscaping that is primarily non-native and ornamental, it does not correspond to a vegetation Alliance in *A Manual of California Vegetation* (CNPS 2023b). These areas would not be considered sensitive natural communities by CDFW (CDFW 2023b).

3.3 WILDLIFE POPULATIONS AND MOVEMENT PATTERNS

Vegetation in the BSA provide habitat for many wildlife species. Common wildlife species observed or expected to occur are discussed below.

3.3.1 Fish

Most creeks and waterways in southern California are ephemeral (subject to periods of high water flow in winter and spring and little to no flow in late summer and fall). Drainages in the BSA would be expected to convey flow due to nuisance runoff or after precipitation events. There is no aboveground connectivity to a larger downstream waterway. Therefore, fish are not expected to occur in the BSA.

3.3.2 Amphibians

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope/aspect.

Habitat for amphibians in the BSA is relatively limited due to the lack of standing or flowing water sources. No amphibians were observed during 2022 surveys conducted by Ultrasystems or the 2023 surveys conducted by Psomas (Ultrasystems 2022). Amphibian species that may occur in the BSA include western toad (*Anaxyrus boreas*), Baja California treefrog (*Pseudacris hypochondriaca*), and black-bellied salamander (*Batrachoseps nigriventris*).

3.3.3 Reptiles

Reptiles are well-adapted to life in arid habitats. They have several physiological adaptations that allow them to conserve water. Reptiles can also become dormant during weather extremes, allowing them to survive prolonged droughts and paucity of food (Ruben and Hillenius 2005). Reptilian diversity and abundance typically vary with vegetation type and character.

Common reptile species observed in the BSA during either the 2022 surveys conducted by Ultrasystems or the 2023 surveys conducted by Psomas include common side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*) (Ultrasystems 2022). Other reptile species expected to occur include 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*).

3.3.4 Birds

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

The following resident bird species were observed in the BSA during either the 2022 surveys conducted by Ultrasystems or the 2023 surveys conducted by Psomas: California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), black phoebe (*Sayornis nigricans*), California scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), oak titmouse (*Baeolophus inornatus*), Bewick's wren (*Thryomanes bewickii*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), and California towhee (*Melozone crissalis*).

Migratory species observed in the BSA that are present during the nesting season include ash-throated flycatcher (*Myiarchus cinerascens*) and phainopepla (*Phainopepla nitens*). Wintering species that may occur in the BSA include ruby-crowned kinglet (*Regulus calendula*), cedar waxwing (*Bombycilla cedrorum*), yellow-rumped warbler (*Setophaga coronata*), and white-crowned sparrow.

Raptors (birds of prey) observed in the BSA include Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), and red-shouldered hawk (*Buteo lineatus*). Other raptor species that are expected to occur include great-horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), western screech owl (*Megascops kennicottii*), and American kestrel (*Falco sparverius*). The turkey vulture (*Cathartes aura*), a scavenger, would also be expected to occur.

3.3.5 Mammals

Small mammals observed in the BSA during either the 2022 surveys conducted by Ultrasystems or the 2023 surveys conducted by Psomas include Eastern fox squirrel (*Sciurus niger*), western gray squirrel (*Sciurus griseus*), California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and desert cottontail (*Sylvilagus audubonii*). Medium to large-sized mammals, or their sign, observed include coyote (*Canis latrans*). Other species that may occur include northern raccoon (*Procyon lotor*), Virginia opossum (*Didelphia virginiana*), and striped skunk (*Mephitis mephitis*).

Bats occur throughout most of Southern California and may use any portion of the BSA as foraging habitat. Most of the bats that could potentially occur in the BSA are inactive during the winter and either hibernate or migrate, depending on the species. Bats may roost in crevices of structures or large trees in the BSA. Bat species that may occur in the BSA for foraging and/or roosting include Mexican free-tailed bat (*Tadarida brasiliensis*), canyon bat (*Parastrellus hesperus*), California myotis (*Myotis californicus*), and Yuma bat (*Myotis yumanensis*).

3.3.6 Wildlife Movement

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).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms such as “wildlife corridor,” “travel route,” “habitat linkage,” and “wildlife crossing” have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

A. ***Travel route –*** a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas; and it provides a relatively direct link between target habitat areas.

B. ***Wildlife corridor –*** a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate their movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat linkages” or “landscape linkages”) can provide both transitory and resident habitat for a variety of species.

C. ***Wildlife crossing –*** a small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor, which may impede wildlife movement and increase the risk of predation.

It is important to note that in a large, open space area with few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors (as defined above) may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these “local” routes while searching for food, water, shelter, and mates and will not need to cross into other large, open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles (such as roads and highways), the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they provide adequate space,

cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

In general, wildlife corridor discussions typically focus on larger, more mobile mammal species such as southern mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), and coyote. Discussing the needs of larger mammal species typically also captures the needs of mid-sized mammals such as foxes (*Vulpes* sp.), northern raccoon, striped skunk, and American badger (*Taxidea taxus*). Most mammal species have relatively large home ranges through which they move to find adequate food, water, and breeding and wintering habitat. It is assumed that corridors that serve larger, more mobile mammal species also serve as corridors for many smaller, less mobile species, such as reptiles, amphibians, and rodents. Regional movement for these species facilitates gene flow and requires at least some local “stepping stone” movement of individuals between populations.

Discussions of wildlife corridors generally focus less on bird species because they are more mobile and can fly over inhospitable habitat. Long-distance migrants are able to move great distances over unsuitable habitat; however, they must have stopover sites to rest and forage in order to continue their migration. Many resident species are habitat-specific, moving only through their preferred habitat type(s), or similar adjacent habitat; wildlife corridors would be more important for these bird species.

Ideally, an open space corridor should encompass a heterogeneous mix of vegetation types to accommodate the ecological requirements of a wide variety of resident species in any particular region. Most species typically prefer adequate vegetation cover during movement, which can serve as both a food source and as protection from weather and predators. Drainages, riparian areas, and forested canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. Landscape linkages must also provide “live-in” habitat (food and cover) to support smaller and less mobile species, such as amphibians, reptiles, and rodents, that require longer periods to traverse a corridor.

Although the BSA includes undeveloped open space mixed with residential development, it is surrounded by higher density residential development and roadways/highways in all directions, although there is some additional natural open space located to the south between East Covina Hills Road and I-10. There are significant barriers to wildlife movement surrounding the BSA, including I-10 to the south and SR-57 to east. More mobile species (e.g., birds) and species that can cross through urban areas (e.g., coyotes, raccoons) may be able to navigate through urban areas to reach larger areas of open space, such as those in the East San Gabriel Valley SEA (e.g., Walnut Creek, Bonelli Regional Park/Puddingstone Reservoir). However, because the BSA does not provide a connection between areas of open space, it would not serve as a wildlife corridor. This was confirmed by reviewing the CDFW Habitat Connectivity Viewer; the BSA is not within any area identified for wildlife movement (e.g., Essential Connectivity Areas, Natural Landscape Blocks, or Small Natural Areas) (CDFW 2023e). Natural drainages and ridgelines serve as travel routes for local wildlife movement within the BSA and the open space south of East Covina Hills Road. Local wildlife movement could occur across all habitat types but is expected to be concentrated in native habitat types with shrub and tree cover (i.e., coastal sage scrub, native woodland), and to some extent, also in the non-native woodland. Species that are less restricted in movement (e.g., birds) and/or are well-adapted to urbanized areas (e.g., northern raccoon, striped skunk, or coyote) are more likely to move between the BSA and adjacent areas. Predators (e.g., coyotes) and smaller mammals (e.g., northern raccoon and striped skunks) are known to use medium- to low-density residential neighborhoods, golf courses, and washes for hunting and foraging, using washes (natural and channelized), culverts, underpasses, and city

streets for travelling (Baker and Timm 1998; Grubbs and Krausman 2009; Ng et al. 2004). Urban areas also provide anthropogenic food sources such as discarded human food, pet food, fruit trees, and domestic animals (Larson et al. 2020).

3.4 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources that were observed, reported, or have the potential to occur in the BSA. These 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. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition to species, special status biological resources include vegetation types and habitats that are either unique; of relatively limited distribution in the region; or provide a high value for wildlife. These resources have been defined by federal, State, and local government conservation programs. Sources used to determine the special status of biological resources are listed below.

- ***Habitats –*** the CNDDB (CDFW 2023a) and the *California Natural Communities List* (CDFW 2023b).
- ***Plants –*** the CNDDB (CDFW 2023a); the Inventory of Rare and Endangered Plants (CNPS 2023a); various USFWS *Federal Register* notices regarding listing status of plant species; and the *List of Special Vascular Plants, Bryophytes, and Lichens* (CDFW 2023c).
- ***Wildlife –*** the CNDDB (CDFW 2023a); the California Wildlife Habitat Relationships Database System (CDFW 2014); various USFWS *Federal Register* notices regarding listing status of wildlife species; and the *List of Special Animals* (CDFW 2023d).

3.4.1 Definitions

A federally **Endangered** species is one facing extinction throughout all or a significant portion of its geographic range. A federally **Threatened** species is one likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally listed Threatened or Endangered species in a project impact area generally imposes constraints on development, particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. "Harm" in this sense can include any disturbance of species' habitats during any portion of its life history.

Federally **Proposed** or **Candidate** species are those officially proposed by the USFWS to be added to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed project. The presence of a Proposed or Candidate species within a project impact area may impose constraints on development if they are listed prior to issuance of project permits, particularly if a project would result in "take" of the species or its habitat.

The State of California considers an **Endangered** species to be one whose prospects of survival and reproduction are in immediate jeopardy, a **Threatened** species as one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management, and a **Rare** species as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. "Rare species" only applies only to California native plants. State-listed Threatened and Endangered species are protected against take unless an Incidental Take Permit is obtained from the resource agencies. The presence of any State-listed Threatened or Endangered species in a

project impact area generally imposes constraints on development, particularly if a project would result in "take" of the species or its habitat.

California **Species of Special Concern** is an informal designation used by CDFW for some declining wildlife species that are not State Candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as special status by CDFW. A few years ago, CDFW down-listed several species from Species of Special Concern to the **Watch List**. Although not considered special status, Watch List species are tracked by the CNDDB.

Species that are California **Fully Protected** and **Protected** include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite (*Elanus leucurus*). Fully Protected species may not be taken or possessed at any time. California Protected species include those species that may not be taken or possessed at any time except under special permit from CDFW issued pursuant to Sections 650 and 670.7 of the *California Code of Regulations,* or Section 2081 of the *California Fish and Game Code.*

Species of **Local Concern** are those that have no official status with the resource agencies but are being watched because either the region has a unique population or the species is declining in the region.

Special Animal is a general term that refers to species that the CNDDB is interested in tracking, regardless of legal or protective status. This term includes species designated as any of the above terms but also includes species that may be considered biologically rare; restricted in distribution; declining throughout their range; have a critical, vulnerable stage in their life cycle that warrants monitoring; are on the periphery of their range and are threatened with extirpation in California; are associated with special status habitats; or are considered by other State or federal agencies or private organizations to be sensitive or declining.

The **CRPR**, formerly known as CNPS List, is a ranking system by the Rare Plant Status Review group[1] and managed by the CNPS and CDFW (CNPS 2023a). A CRPR summarizes information on the distribution, rarity, and endangerment of California's vascular plants. Plants with a CRPR of **1A** are presumed extirpated from the State because they have not been seen in the wild in California for many years and they are either rare or extinct elsewhere. Plants with a CRPR of **1B** are Rare, Threatened, or Endangered throughout their range. Plants with a CRPR of **2A** are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of **2B** are considered Rare, Threatened, or Endangered in California, but are more common elsewhere. Plants with a CRPR of **3** require more information before they can be assigned to another rank or rejected; this is a "review" list. Plants with a CRPR of **4** are of limited distribution or are infrequent throughout a broader area in California; this is a "watch list". The Threat Rank is an extension that is added to the CRPR to designate the plant's endangerment level. An extension of **.1** is assigned to plants that are considered to be "seriously threatened" in California (i.e., over 80 percent of the occurrences are threatened or have a high degree and immediacy of threat). Extension **.2** indicates the plant is "fairly threatened" in California (i.e., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension **.3** is assigned to plants that are considered "not very threatened" in California (i.e., less than 20 percent of occurrences are threatened or have a low degree and immediacy of threat or no current threats are known). The absence of a threat code extension indicates that this information is lacking for the plant(s) in question.

[1] This group consists of over 300 botanical experts from the government, academia, non-governmental organizations, and the private sector.

In addition to providing an inventory of special status plant and wildlife species, CDFW also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (e.g., the CNPS) (CDFW 2023b). Special status natural communities are "of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects"; they may or may not contain special status species. Determination of the level of imperilment (i.e., exposure to injury, loss, or destruction) is based on the NatureServe Heritage Program Status Ranks that rank both species and vegetation types on a global and statewide basis according to their rarity, trend in population size or area, and recognized threats (e.g., proposed developments, habitat degradation, and non-native species invasion) (Faber-Langendoen et al. 2012).

3.5 SPECIAL STATUS VEGETATION TYPES

3.5.1 Coastal Sage Scrub

Coastal sage scrub has declined approximately 70 to 90 percent in its historic range in California (Noss and Peters 1995). It has largely been lost to land use changes in Southern California basins and foothills. Coastal sage scrub vegetation types have potential to support special status plant and wildlife species. Coastal sage scrub communities mapped in the BSA consist of California sagebrush scrub (disturbed), California buckwheat scrub, California buckwheat scrub (disturbed), California sagebrush – California buckwheat scrub, California sagebrush – black sage scrub, and coast prickly pear scrub. Of these, only coast prickly-pear scrub is considered a sensitive natural community by CDFW (CDFW 2023b). The other coastal sage scrub vegetation types may be considered of local concern.

3.5.2 Native Woodlands

California walnut forests and woodlands are found only in southern California, with a very limited distribution within that range (Quinn 1989). Walnuts can occur singly, in nearly pure stands, or in mixtures with other trees (e.g., oak woodland). Walnut stands are often within or near urban areas; continued development is further reducing the limited extent of this species. The BSA includes California walnut groves and California walnut groves (disturbed); both vegetation types are considered sensitive natural communities by CDFW (2023b).

Coast live oak woodlands are most common along the southern Coast Ranges and at low elevations in Southern California (Schoenherr 1992). Woodlands provide habitat for many vertebrate and invertebrate species, including food sources and cavities and cover for nesting or roosting. Coast live oak woodland (disturbed) occurs in the BSA and provides high-quality habitat for wildlife. The coast live oak trees in the BSA are large enough to provide cavities for shelter (e.g., roosting) and breeding (e.g., cavity-nesting) for wildlife species. Downed wood provides important cover for amphibians, reptiles, and small to medium-sized mammals; nest sites for cavity-nesting and ground-nesting birds; nutrients into the soil as they decompose; and favorable microhabitat for emerging seedlings (Tietje et al. 2005). Coast live oak woodland is not considered a sensitive natural community but is generally considered of local concern because of the habitat value that it provides.

3.6 JURISDICTIONAL RESOURCES

A formal jurisdictional delineation was not performed by UltraSystems or Psomas in the BSA. Elements of the literature review (i.e., aerial imagery, the USGS topographic quadrangle, web soil survey data [USDA NRCS 2023], National Hydric Soils List [USDA NRCS 2023], and the National Wetlands Inventory's Wetland Mapper [USFWS 2023]) were used to identify potential jurisdictional water resources.

Based on the literature review, potential jurisdictional waters occur in the BSA (Figure 7). The National Wetlands Inventory identified freshwater forested/shrub wetlands and riverine areas within the BSA. These include Palustrine forested areas with a temporarily flooded water regime (PFOA) and riverine streambeds with temporarily flooded (R4SBA) or seasonally flooded (R4SBJ) water regimes. These may or may not be present in the BSA; the mapping needs to be field verified during a formal jurisdictional delineation.

Parcels containing streambeds, channels, or converging slopes may contain jurisdictional features. Based on the field surveys, it is expected that the potential jurisdictional waters shown on Figure 7 could be considered WOTUS, waters of the State, and/or CDFW jurisdictional waters. Additionally, there may be some areas that are jurisdictional that were not mapped by the National Wetlands Inventory (NWI) (Figure 7).

The limits of non-wetland WOTUS and waters of the State are identified by the presence of an Ordinary High Water Mark. The determination of wetlands is based on the USACE's three-parameter approach in which wetlands are defined by the presence of hydrophytic vegetation, hydric soils, and wetland hydrology indicators.

It is important to note that there have been multiple changes to the definition of WOTUS in recent years resulting in substantial changes to areas under federal jurisdiction. Most recently, the USEPA amended the definition of WOTUS to conform to the recent Supreme Court decision in *Sackett v. USEPA* which took effect on September 8, 2023. The amended definition excludes all waters that are not determined to be "relatively permanent" in their flow regime (i.e., ephemeral waters).

The limits of RWQCB waters and wetlands include ephemeral and isolated waters along with all other USACE waters. The limits of CDFW jurisdictional waters are identified as either the top of bank or the outer drip line of riparian vegetation associated with the feature.

A formal delineation of the BSA has not been conducted; however, the field surveys observed that the drainages in the BSA are generally ephemeral and vegetated with facultative upland or upland vegetation. Under the current USACE definition, drainages in the BSA would likely not be considered WOTUS because they are ephemeral. However, the drainages would likely be under the jurisdiction of RWQCB and CDFW. A formal jurisdictional delineation would need to be conducted to confirm this. Additionally, given the evolving definition of WOTUS, the definition could change; therefore, a jurisdictional delineation would be needed to confirm the jurisdiction of each agency prior to disturbance of any potentially jurisdictional areas.

3.7 SPECIAL STATUS PLANTS

Table 4 provides a summary of special status plant species reported to occur in the Project region (i.e., the USGS' Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, Prado Dam, Azusa, Glendora, and Mt. Baldy 7.5-minute quadrangles). This list includes species reported by the CNDDB and the CNPS, supplemented with species from the Project Biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. The table includes information on the status, species habitat, and potential for occurrence. Note that these species are listed alphabetically according to their scientific name.

Of the 76 species reported from the Project region, one species (southern California black walnut) was incidentally observed during the general surveys and 25 species have potential or limited potential to occur in the BSA based on the presence of suitable habitat. The remaining 51 species would not be expected to occur because the BSA lacks suitable habitat or because it is outside the current known geographic or elevation range of the species. Species observed in the BSA

San Dimas MCTA

Legend

- Project Boundary
- Conservation Easement
- Parcel

Wetland Type

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Riparian Type

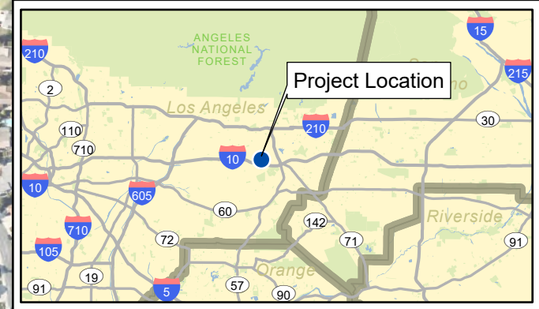
- Forested/Shrub Riparian

Infrastructure

- Culvert
- Catch Basin
- Ribbon Drain
- Open Channel
- Underground Culvert
- Gravity Underground Culvert

Note: Jurisdictional resources shown are based on remote data and may not represent actual jurisdictional resources in the Project Boundary. A jurisdictional delineation would be required to map resources under the regulatory authority of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife.

Key Map



0 175 350 Feet

0 50 100 Meters

N W E S

Scale: 1:4,200

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory (2023); UltraSystems (2022)
Aerial Source: Nearmap 2023

Potential Jurisdictional Resources

Figure 7

PSOMAS

(Rev: 09/06/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_Potential_JD_Resources.pdf

D:\Projects\3SAN040200\PRO\3SAN040200_SanDimas\3SAN040200_SanDimas.aprx\Potential Jurisdictional Resources Map

and federally or State-listed species with potential or limited potential to occur are discussed further below.

Focused surveys have not been conducted for special status plant species in the BSA.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Abronia villosa var. *aurita*	chaparral sand-verbena	—	—	1B.1	Sandy areas in chaparral, coastal scrub, and desert dunes between 245 and 5,250 feet above msl.	Not expected to occur; no suitable soils; outside current known geographic range.
Acanthoscyphus parishii var. *parishii*	Parish's oxytheca	—	—	4.2	Gravelly or sandy soils in chaparral and lower montane coniferous forest between 4,005 and 8,530 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Amaranthus watsonii	Watson's amaranth	—	—	4.3	Mojavean desert scrub and Sonoran desert scrub between 65 and 5,580 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range.
Androscce elongate ssp. acuta	California androsace	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland between 490 and 4,280 feet above msl.	May occur; suitable habitat; historically reported from Bonelli Regional Park (CCH 2023).
Aphyllon validum ssp. *validum*	Rock Creek broomrape	—	—	1B.2	Granitic soil in chaparral and pinyon and juniper woodland between 3,380 and 6,560 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Arctostaphylos glandulosa ssp. *gabrielensis*	San Gabriel manzanita	—	—	1B.2	Rocky soil in chaparral between 1,950 and 4,920 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Asplenium vespertinum	western spleenwort	—	—	4.2	Rocky soil in chaparral, cismontane woodland, and coastal scrub between 590 and 3,280 feet above msl.	May occur; suitable habitat; historically reported from Bonelli Regional Park (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Astragalus bicristatus	crested milk-vetch	—	—	4.3	Carbonate (usually), rocky, or sandy soils in lower montane coniferous forest and upper montane coniferous forest between 5,580 and 9,005 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Astragalus brauntonii	Braunton's milk-vetch	FE	—	1B.1	Recent burns or disturbed areas, usually on sandstone with carbonate layers in chaparral, coastal scrub, valley and foothill grassland between 15 and 2,100 feet above msl.	Not expected to occur; no suitable soils.
Atriplex coulteri	Coulter's saltbush	—	—	1B.2	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland between 10 and 1,510 feet above msl.	Limited potential to occur; suitable habitat; at edge of current known geographic range.
Atriplex parishii	Parish's brittlescale	—	—	1B.1	Alkaline or clay soils in chenopod scrub, playas, and vernal pools between 80 and 6,235 feet above msl.	Not expected to occur; no suitable habitat.
Berberis nevinii	Nevin's barberry	FE	SE	1B.1	Gravelly or sandy soil in chaparral, cismontane woodland, coastal scrub, and riparian scrub between 230 and 2,705 feet above msl. Perennial, evergreen species observable year-round.	Limited potential to occur; suitable habitat; reported approximately eight miles to the east (CCH 2023).
Brodiaea filifolia	thread-leaved brodiaea	FT	SE	1B.1	Often clay soils in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools between 80 and 3,675 feet above msl.	May occur; suitable habitat; reported approximately five miles to the north (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Calochortus catalinae	Catalina mariposa lily	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 50 and 2,295 feet above msl.	May occur; suitable habitat; historically reported approximately two miles to the north (CCH 2023).
Calochortus clavatus var. *clavatus*	club-haired mariposa lily	—	—	4.3	Clay, rocky, or serpentinite soil in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 100 and 4,265 feet above msl.	Not expected to occur; outside current known geographic range.
Calochortus clavatus var. *gracilis*	slender mariposa lily	—	—	1B.2	Chaparral, coastal scrub, and valley and foothill grassland between 1,050 and 3,280 feet above msl.	Not expected to occur; outside current known geographic and elevation range.
Calochortus plummerae	Plummer's mariposa-lily	—	—	4.2	Rocky and sandy sites, usually of granitic or alluvial material, in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest between 330 and 5,580 feet above msl.	May occur; suitable habitat; reported approximately one mile to the southeast (CDFW 2023a).
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	—	—	1B.2	Dry, rocky calcareous slopes and rock outcrops in coastal scrub, chaparral, valley and foothill grassland between 345 and 2,805 feet above msl.	May occur; suitable habitat; reported approximately one mile to the southeast (CCH 2023).
Calystegia felix	lucky morning-glory	—	—	1B.1	Alkaline or loamy soils in meadows and seeps and alluvial riparian scrub between 100 and 705 feet above msl.	Not expected to occur; no suitable habitat.
Calystegia sepium ssp. *binghamiae*	Santa Barbara morning-glory	—	—	1A	Coastal marshes and swamps at 15 feet above msl.	Not expected to occur; considered extirpated, no suitable habitat; outside current known geographic and elevation range.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Camissoniopsis lewisii	Lewis' evening-primrose	—	—	3	Sand or clay soil in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland between sea level and 985 feet above msl.	May occur; suitable habitat; reported approximately 14 miles to the west (CCH 2023).
Castilleja gleasoni	Mt. Gleason paintbrush	—	SR	1B.2	Granitic soil in chaparral, lower montane coniferous forest, and pinyon and juniper woodland between 3,805 and 7,120 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Centromadia parryi ssp. *australis*	southern tarplant	—	—	1B.1	Disturbed sites and alkaline soils in marshes and swamp margins, vernally mesic valley and foothill grassland, and vernal pools between sea level and 1,575 feet above msl.	Not expected to occur; no suitable habitat.
Centromadia pungens ssp. *laevis*	smooth tarplant	—	—	1B.1	Alkaline (generally) soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland between sea level and 1,200 feet above msl.	Limited potential to occur; suitable habitat; at edge of current known geographic range.
Chorizanthe leptotheca	Peninsular spineflower	—	—	4.2	Granitic soil in chaparral, coastal scrub, and lower montane coniferous forest between 985 and 6,235 feet above msl.	Not expected to occur; outside current known geographic range.
Chorizanthe parryi var. *parryi*	Parry's spineflower	—	—	1B.1	Sometimes rocky or sandy soils in openings of chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 900 and 4,005 feet above msl.	May occur; suitable habitat; historically reported approximately four miles to the north (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Cladium californicum	California saw-grass	—	—	2B.2	Alkaline freshwater marshes and swamps and meadows and seeps between 195 and 5,250 feet above msl.	Not expected to occur; no suitable habitat.
Convolvulus simulans	small-flowered morning-glory	—	—	4.2	Clay, seeps, occasionally serpentine soils in chaparral openings, coastal scrub, valley and foothill grasslands between 100 and 2,430 feet above msl.	May occur; suitable habitat; historically reported approximately seven miles to the east (CCH 2023).
Deinandra paniculata	paniculate tarplant	—	—	4.2	Usually vernally mesic, sometimes sandy substrate in coastal scrub, valley and foothill grassland, and vernal pools between 80 and 3,085 feet above msl.	May occur; suitable habitat; reported approximately seven miles to the east (CCH 2023).
Dodecahema leptoceras	slender-horned spineflower	FE	SE	1B.1	Sandy soil in chaparral, cismontane woodland, and alluvial fan coastal scrub between 655 and 2,495 feet above msl.	Not expected to occur; no suitable soils.
Dudleya 38cymosa ssp. *crebrifolia*	San Gabriel River dudleya	—	—	1B.2	Granitic soil in chaparral between 900 and 1,500 feet above msl.	Not expected to occur; no suitable habitat.
Dudleya densiflora	San Gabriel Mountains dudleya	—	—	1B.1	Granitic soil in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland between 800 and 2,000 feet above msl.	Not expected to occur; outside current known geographic range.
Dudleya multicaulis	many-stemmed dudleya	—	—	1B.2	Heavy, often clayey soils or grassy slopes in chaparral, coastal scrub, valley and foothill grassland between 50 and 2,590 feet above msl.	May occur; suitable habitat; reported from Bonelli Regional Park (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	FE	SE	1B.1	Sandy or gravelly soils on river floodplains or terraced fluvial deposits in coastal scrub and chaparral between 300 and 2,000 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range (i.e., the Santa Ana River watershed).
Fimbristylis thermalis	hot springs fimbristylis	—	—	2B.2	Alkaline soils near hot springs, meadows, and seeps between 360 and 4,395 feet above msl.	Not expected to occur; no suitable habitat.
Galium angustifolium ssp. *gabrielense*	San Antonio Canyon bedstraw	—	—	4.3	Granitic, rocky, or sandy soil in chaparral and lower montane coniferous forest between 3,935 and 8,695 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Galium grande	San Gabriel bedstraw	—	—	1B.2	Broad-leafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest between 1,395 and 4,920 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Galium jepsonii	Jepson's bedstraw	—	—	4.3	Granitic, gravelly, or rocky soil in lower montane coniferous forest and upper montane coniferous forest between 5,055 and 8,205 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Heuchera caespitosa	urn-flowered alumroot	—	—	4.3	Rocky soil in cismontane woodland, lower montane coniferous forest, montane riparian forest, and upper montane coniferous forest between 3,790 and 8,695 feet above msl.	Not expected to occur; outside current known geographic and elevation range.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Horkelia cuneata var. *puberula*	mesa horkelia	—	—	1B.1	Sandy or gravelly soils in maritime chaparral, cismontane woodland, and coastal scrub between 230 and 2,660 feet above msl.	May occur; suitable habitat; historically reported approximately four miles to the east (CCH 2023).
Imperata brevifolia	California satintail	—	—	2B.1	Mesic areas of chaparral, coastal scrub, often alkali meadows and seeps, Mojavean desert scrub, and riparian scrub between sea level and 3,985 feet above msl.	Not expected to occur; no suitable habitat.
Juglans californica	Southern California black walnut	—	—	4.2	Chaparral, cismontane woodland, coastal scrub, and riparian woodland between 165 and 2,955 feet above msl. Perennial species observable year-round.	**Observed during general surveys.**
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	—	—	4.2	Moist, saline places including coastal dunes, coastal scrub, coastal salt marshes and swamps, and alkaline meadows and seeps between 10 and 2,955 feet above msl. Perennial species observable year-round.	Not expected to occur; perennial species not observed during general surveys; no suitable habitat.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	—	—	1B.1	Usually on alkaline soils in coastal salt marsh, playas, and vernal pools between 5 and 4,005 feet above msl.	Not expected to occur; no suitable habitat.
Lathyrus splendens	pride-of-California	—	—	4.3	Chaparral between 655 and 5,005 feet above msl.	Not expected to occur; no suitable habitat.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Lepechinia fragrans	fragrant pitcher sage	—	—	4.2	Chaparral between 65 and 4,300 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	—	—	4.3	Dry soils in chaparral and coastal scrub between 5 and 2,905 feet above msl.	May occur; suitable habitat; historically reported approximately five miles to the east (CCH 2023).
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	—	—	4.2	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland between 100 and 5,905 feet above msl.	Not expected to occur; outside current known range.
Lilium parryi	lemon lily	—	—	1B.2	Mesic areas in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forests between 4,005 and 9,005 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Linanthus concinnus	San Gabriel linanthus	—	—	1B.2	Rocky openings in chaparral, lower montane coniferous forest, and upper montane coniferous forest between 4,985 and 9,185 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Microseris douglasii ssp. *platycarpha*	small-flowered microseris	—	—	4.2	Clay soil in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools between 50 and 3,510 feet above msl.	May occur; suitable habitat; reported approximately three miles to the southeast (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Monardella australis ssp. *jokerstii*	Jokerst's monardella	—	—	1B.1	Alluvial terraces, scree, slopes, talus, and washes in chaparral and lower montane coniferous forest between 4,430 and 5,740 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Monardella breweri ssp. *glandulifera*	Brown's Flat monardella	—	—	1B.2	Dry openings in chaparral and lower montane coniferous forest between 4,265 and 4,920 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Monardella macrantha ssp. *hallii*	Hall's monardella	—	—	1B.3	Broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland between 2,395 and 7,200 feet above msl.	Not expected to occur; outside current known geographic and elevation range.
Monardella saxicola	rock monardella	—	—	4.2	Rocky, usually serpentinite soil in chaparral, closed-cone coniferous forest, and lower montane coniferous forest between 1,640 and 5,905 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Monardella viridis	green monardella	—	—	4.3	Broad-leafed upland forest, chaparral, and cismontane woodland between 330 and 3,315 feet above msl.	Not expected to occur; outside current known geographic range.
Muhlenbergia californica	California muhly	—	—	4.3	Mesic seeps and streambanks in chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps between 330 and 6,560 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Muhlenbergia utilis	aparejo grass	—	—	2B.2	Alkaline or serpentinite soils in chaparral, cismontane woodland, coastal scrub, marshes and swamps, and meadows and seeps between 80 and 7,630 feet above msl.	Not expected to occur; no suitable soils.
Navarretia prostrata	prostrate vernal pool navarretia	—	—	1B.2	Mesic areas of coastal scrub, meadows and seeps, alkaline valley and foothill grassland, and vernal pools between 10 and 3,970 feet above msl.	Not expected to occur; no suitable habitat.
Oreonana vestita	woolly mountain-parsley	—	—	1B.3	Gravelly or talus substrate in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest between 5,300 and 11,485 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Pelazoneuron puberulum var. *sonorense*	Sonoran maiden fern	—	—	2B.2	Meadows and seeps between 165 and 2,000 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range.
Phacelia hubbyi	Hubby's phacelia	—	—	4.2	Open gravelly, talus, or rocky slopes of chaparral, coastal scrub, and valley and foothill grassland between sea level and 3,280 feet above msl.	May occur; suitable habitat; historically reported less than one half mile to the southeast (CCH 2023)
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	—	—	3.2	Rocky or sandy soil in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps between 15 and 985 feet above msl.	May occur; suitable habitat; reported approximately eight miles to the northeast (CCH 2023).
Phacelia stellaris	Brand's star phacelia	—	—	1B.1	Coastal dunes and coastal scrub between 5 and 1,310 feet above msl.	May occur; suitable habitat; historically reported approximately nine miles to the west (CCH 2023).

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Pseudognaphalium leucocephalum	white rabbit-tobacco	—	—	2B.2	Sandy or gravelly areas of riparian woodland, cismontane woodland, coastal scrub, and chaparral between sea level and 6,890 feet above msl.	May occur; suitable habitat; historically reported approximately six miles to the northeast (CCH 2023).
Quercus durata var. *gabrielensis*	San Gabriel oak	—	—	4.2	Chaparral and cismontane woodland between 1,475 and 3,280 feet above msl. Perennial species observable year-round.	Not expected to occur; no suitable habitat; outside current known elevation range.
Quercus engelmannii	Engelmann oak	—	—	4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland between 165 and 4,265 feet above msl. Perennial species observable year-round.	Limited potential to occur; suitable habitat; nearest recent record is from Bonelli Regional Park to the east (CCH 2023)..
Romneya coulteri	Coulter's matilija poppy	—	—	4.2	Chaparral and coastal scrub, often in burns, between 65 and 3,935 feet above msl. Perennial species observable year-round.	Limited potential to occur; suitable habitat; nearest recent record is approximately 7.5 miles northeast in Ontario (CCH 2023).
Sagittaria sanfordii	Sanford's arrowhead	—	—	1B.2	Shallow freshwater marshes and swamps between sea level and 2,135 feet above msl.	Not expected to occur; no suitable habitat.
Senecio aphanactis	chaparral ragwort	—	—	2B.2	Drying alkaline flats of chaparral, cismontane woodland, coastal scrub between 50 and 2,625 feet above msl.	Not expected to occur; no suitable soils.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Senecio astephanus	San Gabriel ragwort	—	—	4.3	Rocky slopes in chaparral and coastal bluff scrub between 1,310 and 4,920 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Sidalcea neomexicana	salt spring checkerbloom	—	—	2B.2	Alkali springs and marshes in playas, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub between 50 and 5,020 feet above msl.	Not expected to occur; no suitable habitat.
Sidotheca caryophylloides	chickweed oxytheca	—	—	4.3	Sandy soils in lower montane coniferous forest between 3,655 and 8,530 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.
Symphyotrichum defoliatum	San Bernardino aster	—	—	1B.2	Disturbed areas, vernally mesic grassland, or near ditches, streams, and springs in meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland between 5 and 6,695 feet above msl.	May occur; suitable habitat; reported approximately 4.5 miles to the east (CCH 2023).
Symphyotrichum greatae	Greata's aster	—	—	1B.3	Mesic areas of broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland between 985 and 6,595 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic range.

TABLE 4
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	CRPR	Habitat*	Potential to Occur
Thysanocarpus rigidus	rigid fringepod	—	—	1B.2	Dry, rocky slopes of pinyon and juniper woodland between 1,970 and 7,220 feet above msl.	Not expected to occur; no suitable habitat; outside current known geographic and elevation range.

CRPR: California Rare Plant Rank; msl: mean sea level.

LEGEND:

Federal (USFWS)		**State (CDFW)**	
FE	Endangered	SE	Endangered
FT	Threatened	SR	Rare

CRPR

1A	Plants presumed extirpated in California and either rare or extinct elsewhere
1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2B	Plants Rare, Threatened, or Endangered in California but more common elsewhere
3	Plants about which we need more information – A Review List
4	Plants of limited distribution – A Watch List

CRPR Threat Code Extensions

None	Plants lacking any threat information
.1	Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2	Fairly threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)
.3	Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

Species that were observed on site are shown in **boldface type.**

* Sources include CDFW 2023a, CNPS 2023a, and Jepson Flora Project 2023.

3.7.1 Thread-leaved Brodiaea

Thread-leaved brodiaea (*Brodiaea filifolia*) is a federally Threatened species, a State Endangered species, and a CRPR 1B.1 species. It typically blooms between March and June (CNPS 2023a). This perennial bulbiferous herb often occurs in clay soil in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools between 80 and 3,675 feet above msl (CNPS 2023a). This species is known from the south coast (Los Angeles and San Diego Counties), the San Bernardino mountains, and the western Peninsular Ranges (Orange, Riverside, and San Diego Counties) (Jepson Flora Project 2023). It is threatened by residential development, agriculture, foot traffic, grazing, illegal dumping, non-native plants, and vehicles (CNPS 2023). This species has been reported approximately five miles to the north (CCH 2023).

The general surveys were not timed to identify thread-leaved brodiaea in the BSA. The 2023 surveys were performed in July (after mowing was performed) and the earliest 2022 survey was performed on June 30, 2022, which is at the end of the blooming period. Focused surveys would be needed to determine the presence or absence of this species in the BSA. Thread-leaved brodiaea has potential to occur in coastal sage scrub and limited potential to occur in non-native herbaceous vegetation in the BSA.

3.7.2 Nevin's Barberry

Nevin's barberry (*Berberis nevinii*) is a federally and State Endangered species and a CRPR 1B.1 species. It is a perennial shrub that is observable year-round. This species occurs in gravelly or sandy soils in chaparral, coastal sage scrub, cismontane woodland, and riparian woodland from 230 to 2,705 feet above msl (CNPS 2023a). This species is known from Los Angeles, Riverside, San Bernardino, and San Diego Counties. It is threatened by alteration of fire regimes, development, and road maintenance (CNPS 2023a). This species has been reported approximately eight miles to the east (CCH 2023).

While this species would have been observable during the general surveys, much of the general surveys were conducted from overlooks; surveys did not visually cover 100 percent of the BSA. Focused surveys would be needed to determine the presence or absence of this species in the BSA. Nevin's barberry has potential to occur in coastal sage scrub, chaparral and native woodlands and has a limited potential to occur in non-native woodlands in the BSA.

3.7.3 Southern California Black Walnut

Southern California black walnut is a CRPR 1B.1 species. It is a perennial tree that is observable year-round. It typically blooms between March and August (CNPS 2023a). This species occurs on hillsides and in canyons, chaparral, cismontane woodland, coastal scrub, and riparian woodland between 165 and 2,955 feet above msl (Jepson Flora Project 2023; CNPS 2023a). This species is known from the outer South Coast Ranges, the South Coast, the western Transverse Ranges, the San Gabriel Mountains, the Peninsular Ranges, and the San Jacinto Mountains (Jepson Flora Project 2023). Walnut forests are a fragmented, rare, and declining vegetation community threatened by urbanization, grazing, non-native plants, possibly by lack of natural reproduction and hybridization with horticultural varieties of walnut (CNPS 2023a).

Southern California black walnut trees were observed throughout the BSA. They are primarily located in areas mapped as California walnut groves and California walnut groves (disturbed) (Figure 6). A formal tree survey to inventory individual trees was not performed.

3.7.4 Protected Trees

Multiple trees within the BSA would meet the definition of a "mature significant tree" pursuant to the City of San Dimas Municipal Code (Chapter 18.162 – Tree Preservation). This would include coast live oak, southern California black walnut, and any other tree meeting the trunk diameter requirement (including non-native species). A mature significant tree is defined as any tree within the oak genus which measures 8 inches or more in trunk diameter and/or any other species of trees which measure 10 inches or more in trunk diameter and/or a multi-trunk tree(s) having a total circumference of 38 inches or more; the multi-trunk tree shall include at least one trunk with a diameter of a minimum of 4 inches.

The following trees are excluded:

- trees planted, grown, and/or held for sale by licensed nurseries and/or tree farms or the removal or transplanting of such trees pursuant to the operation of licensed nursery and/or tree farm;
- trees within existing or proposed public right-of-way where their removal or relocation is necessary to obtain adequate line-of-sight distances as required by the City Engineer;
- trees which, in the opinion of the City Engineer, will cause damage to existing public improvements;
- trees which require maintenance or removal action for the protection of existing electrical power or communication lines or other property of a public utility;
- trees damaged by thunderstorms, windstorms, flood, earthquakes, fire, widespread organic disease or insect infestation, or other natural disasters and determined to be dangerous by a police officer, fireman, civil defense official, or code enforcement officer in their official capacity;
- minor trimming and/or pruning of trees on developed property within the scope of typical and reasonable tree maintenance;
- trees declared to be dead, diseased or dying, subject to the requirements of Section 18.162.090;
- fruit trees, including citrus, plum, nectarine, cherry, apricot, peach, pear, pomegranate, persimmon, loquat, fig, avocado, and other species determined similar by the director of development services.

3.8 SPECIAL STATUS WILDLIFE

Table 5 provides a summary of special status wildlife species reported to occur in the Project region (i.e., the USGS' Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, Prado Dam, Azusa, Glendora, and Mt. Baldy 7.5-minute quadrangles). This list includes species reported by the CNDDB, supplemented with species from the Project Biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. The table includes information on the status, species habitat, and potential for occurrence. Note that these species are listed taxonomically.

Of the 54 species reported from the Project region, two species (monarch butterfly [*Danaus plexippus*] and Cooper's hawk [*Accipiter cooperii*]) were incidentally observed during the summer 2022 general surveys and 23 species have potential or limited potential to occur in the BSA based on the presence of suitable habitat. The remaining species would not be expected to occur because the BSA lacks suitable habitat or because it is outside the current known geographic range of the species. Species observed in the BSA and federally or State-listed species,

Candidate species, or Fully Protected species with potential or limited potential to occur are discussed further below.

Focused surveys have not been conducted for special status wildlife species in the BSA.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Invertebrates					
Danaus plexippus	monarch butterfly	Candidate (overwintering)	—	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 (*Asclepias* sp.). Primarily occurs in coastal, lowland, and foothill areas with milkweed, though also in deserts and mountains.	**Observed (foraging)** (Ultrasystems 2022)**.** Not expected for overwintering because BSA is too far inland and is outside the known elevational range for overwintering.
Bombus crotchii	Crotch bumble bee	—	CE	Inhabits areas with appropriate food sources (e.g., *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum [CDFW 2023a]*).	May occur; suitable habitat.
Fish					
Oncorhynchus mykiss irideus pop. 10	steelhead – southern California DPS	FE	CE	Inhabits streams; can tolerate warmer water and more variable conditions.	Not expected to occur; no suitable habitat.
Gila orcuttii	arroyo chub	—	SSC	Inhabits warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams; substrates of sand or mud.	Not expected to occur; no suitable habitat.
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	—	SSC	Inhabits permanent streams with cool, flowing, rocky-bottomed washes, shallow cobble, and gravel riffles.	Not expected to occur; no suitable habitat.
Catostomus santaanae	Santa Ana sucker	FT	—	Inhabits coastal streams; prefer sand-rubble-boulder bottoms; cool, clear water; and algae.	Not expected to occur; no suitable habitat.
Amphibians					
Taricha torosa	Coast Range newt	—	SSC	Breeds in ponds, reservoirs, and slow-moving streams and lives in terrestrial habitats.	Not expected to occur; no suitable habitat.
Ensatina eschscholtzii klauberi	large-blotched ensatina	—	WL	Inhabits moist and shaded evergreen and deciduous woodlands.	Not expected to occur; no suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur	
Spea hammondii	western spadefoot	—	SSC	Breeds in vernal pools in grassland habitats, but also hardwood woodlands.	Limited potential to occur for foraging; marginally suitable terrestrial habitat; no suitable breeding habitat.	
Anaxyrus californicus	arroyo toad	FE	SSC	Inhabits semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically 3rd order); adjacent stream terraces and uplands for foraging and wintering.	Not expected to occur; no suitable habitat.	
Rana boylii	foothill yellow-legged frog – south coast DPS	FE	SE	Inhabits partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying.	Not expected to occur; no suitable habitat.	
Rana muscosa	southern mountain yellow-legged frog	FE	SE, WL	Inhabits lakes, ponds, meadow streams, isolated pools and open riverbanks; rocky canyons in narrow canyons and in chaparral.	Not expected to occur; no suitable habitat.	
Reptiles						
Emys marmorata	western pond turtle	FPT	SSC	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.	
Phrynosoma blainvillii	coast horned lizard	—	SSC	Inhabits a wide variety of habitats with open areas for sunning, bushes for cover, and patches of loose soil for burrowing.	May occur; suitable habitat.	
Aspidoscelis hyperythra	orange-throated whiptail	—	WL	Inhabits coastal scrub, chaparral, and hardwood woodlands; prefers washes and other sandy areas with patches of brush and rocks.	May occur; suitable habitat.	
Aspidoscelis tigris stejnegeri	coastal whiptail	—	SSC	Inhabits deserts and semi-arid areas with sparse vegetation and open areas, woodland, and riparian areas.	May occur; suitable habitat.	

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Anniella stebbinsi	southern California legless lizard	—	SSC	Inhabits sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Sometimes found in suburban gardens in Southern California. Spends most of its life beneath the soil, under rocks, boards, driftwood, logs, debris, or in leaf litter. Prefers areas with loose, sandy soil, moisture, warmth, and plant cover.	May occur; suitable habitat.
Arizona elegans occidentalis	California glossy snake	—	SSC	Inhabits a range of scrub and grassland habitats, often with loose or sandy soils.	May occur; suitable habitat.
Salvadora hexalepis virgultea	coast patch-nosed snake	—	SSC	Inhabits brushy or shrubby vegetation with small mammal burrows for refuge and overwintering sites.	May occur; suitable habitat.
Thamnophis hammondii	two-striped garter snake	—	SSC	Found in or near permanent fresh water, often along streams with rocky beds and riparian growth.	Not expected to occur; no suitable habitat.
Crotalus ruber	red-diamond rattlesnake	—	SSC	Inhabits rocky areas with dense vegetation in chaparral, woodland, grassland, and deserts.	May occur; suitable habitat.
Birds					
Accipiter cooperii	Cooper's hawk	—	WL (nesting)	Forages in woodland. Nests in riparian growths of deciduous trees, such as canyon bottoms on river floodplains and/or in live oaks.	**Observed (foraging)** (Ultrasystems 2022); expected to occur for nesting; suitable foraging and nesting habitat.
Aquila chrysaetos	golden eagle	—	WL, FP (nesting & wintering)	Found in a variety of open habitats (desert, grassland, shrubland, agriculture, streams) especially near mountains, hills, and cliffs.	Limited potential to occur for foraging; not expected to occur for nesting; suitable foraging habitat; no suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Buteo swainsoni	Swainson's hawk	—	ST (nesting)	Breeds over grassland-dominated habitats in North America.	Limited potential to occur for foraging; not expected to occur for nesting; marginally suitable foraging habitat; BSA is outside the current known geographic range for nesting.
Elanus leucurus	white-tailed kite	—	FP (nesting)	Inhabits open grasslands, meadows, or marshes close to isolated, dense-topped trees for nesting and perching.	Limited potential to occur for foraging and nesting; marginally suitable foraging and nesting habitat.
Coturnicops noveboracensis	merlin	—	WL (wintering)	Prefers vast open space areas such as estuaries, grasslands, and deserts. Nests in conifers or deciduous trees in semi open areas. Does not nest in southern California.	Limited potential to occur for foraging; not expected to occur for nesting; marginally suitable foraging habitat; BSA is outside the current known geographic range for nesting.
Coturnicops noveboracensis	yellow rail	—	SSC	Inhabits freshwater marshlands.	Not expected to occur; no suitable habitat.
Laterallus jamaicensis coturniculus	California black rail	—	ST, FP	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays.	Not expected to occur; no suitable habitat.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT (nesting)	SE (nesting)	Nests in riparian forests along broad, lower flood-bottoms of larger river systems with willows (*Salix* spp.), often mixed with cottonwoods (*Populus* sp.), with understory of blackberry (*Rubus* sp.), nettles (*Urtica* sp.), or wild grape (*Vitis californica*).	Not expected to occur; no suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Asio otus	long-eared owl	—	SSC (nesting)	Inhabits riparian bottomlands with tall willows and cottonwoods, also belts of live oak along stream courses.	Limited potential to occur for foraging and nesting; marginally suitable foraging and nesting habitat.
Athene cunicularia	burrowing owl	—	SSC (burrow sites)	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.
Cypseloides niger	black swift	—	SSC (nesting)	Nests in dark inaccessible sites with unobstructed flight paths on ledges or shallow caves in steep rock faces and canyons, usually behind or next to waterfalls.	Not expected to occur; no suitable habitat.
Empidonax traillii extimus	southwestern willow flycatcher	FE (nesting)	SE (nesting)	Inhabits riparian habitat along rivers, stream, and other wetlands with dense growths of willows, mule fat (*Baccharis salicifolia* ssp. *salicifolia*), etc., often with a scattered overstory of cottonwood.	Not expected to occur; no suitable habitat.
Vireo bellii pusillus	least Bell's vireo	FE (nesting)	SE (nesting)	Inhabits riparian forest, riparian scrub, and riparian woodland, usually nesting in willows, mule fat, or mesquite (*Prosopis* sp.).	Not expected to occur; no suitable habitat.
Eremophila alpestris actia	California horned lark	—	WL	Inhabits short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow agricultural fields, and alkali flats.	Not expected to occur; no suitable habitat.
Riparia riparia	bank swallow	—	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, or ocean to dig nesting hole.	Not expected to occur; no suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	—	SSC	Inhabits coastal sage scrub with tall prickly-pear cactus for nesting and roosting. Coastal subspecies (i.e., *sandiegensis*) occurs in San Diego and Orange Counties.	Not expected to occur; outside of current known range. Cactus wren of a different subspecies may occur; suitable habitat.
Polioptila californica californica	coastal California gnatcatcher	FT	SSC	Inhabits coastal sage scrub in arid washes, on mesas, and slopes.	May occur; suitable habitat.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	—	WL	Inhabits coastal sage scrub and sparse mixed chaparral, frequently on relative steep, rocky hillsides with grass and forb patches.	May occur; suitable habitat.
Ammodramus savannarum	grasshopper sparrow	—	SSC (nesting)	Inhabits dense grasslands on rolling hills, lowland plains, and valleys and on hillsides on lower mountain slopes.	Not expected to occur; no suitable habitat.
Icteria virens	yellow-breasted chat	—	SSC (nesting)	Inhabits riparian thickets of willow and other brushy tangles near watercourses; nests in low, dense riparian vegetation consisting of willows, blackberry, and wild grape.	Not expected to occur; no suitable habitat.
Agelaius tricolor	tricolored blackbird	—	ST, SSC (nesting colony)	Inhabits freshwater marsh, swamps, and wetlands with open water and protected nesting substrate.	Not expected to occur; no suitable habitat.
Setophaga petechia	yellow warbler	—	SSC (nesting)	Inhabits riparian forest, riparian scrub, and riparian woodland, foraging and nesting in willow shrubs and thickets, cottonwoods, sycamores (*Platanus* sp.), ash (*Fraxinus* sp.), and alders (*Alnus* sp.).	Not expected to occur; no suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Mammals					
Antrozous pallidus	pallid bat	—	SSC	Inhabits deserts, grasslands, shrublands, woodlands, and forest, most commonly in open, dry habitats with rocky areas for roosting.	Limited potential to occur for foraging; not expected to occur for roosting; suitable foraging habitat; no suitable roosting habitat.
Lasiurus frantzii	western red bat	—	SSC	Riparian habitat near water. Roosts exclusively in trees, particularly sycamore, cottonwood, ash, and elderberry (*Sambucus* sp.).	May occur for foraging and roosting; suitable foraging and roosting habitat.
Lasiurus xanthinus	western yellow bat	—	SSC	Inhabits valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Not expected to occur for foraging or roosting; no suitable foraging or roosting habitat.
Eumops perotis californicus	western mastiff bat	—	SSC	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.
Nyctinomops femorosaccus	pocketed free-tailed bat	—	SSC	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.	Not expected to occur; no suitable habitat.
Nyctinomops macrotis	big free-tailed bat	—	SSC	Rugged and rocky terrain; roosts in buildings, caves, rock crevices of cliffs, and rocky outcroppings.	Not expected to occur; no suitable habitat.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	—	SSC	Inhabits coastal scrub, chaparral, grasslands, and sagebrush, usually in association with rocks or coarse gravel.	May occur; suitable habitat.

TABLE 5
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Species	Common Name	Federal Status	State Status	Habitat[a]	Potential to Occur
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE	CE, SSC	Inhabits sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces.	Not expected to occur; outside current known geographic range.
Neotoma bryanti [*lepida*] *intermedia*	Bryant's [San Diego desert] woodrat	—	SSC	Inhabits coastal scrub with moderate to dense canopies, rock outcrops, rocky cliffs, and slopes.	May occur; suitable habitat.
Taxidea taxus	American badger	—	SSC	Inhabits dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	May occur; suitable habitat.
Puma concolor	mountain lion–Southern California/Central Coast Evolutionary Significant Unit (ESU)	—	CE	Inhabits various habitats within foothill and mountain areas typically where deer can be found.	Limited potential to occur for foraging; not expected to deb (breed) in the BSA; potentially suitable habitat but fragmented from larger areas of open space; no suitable breeding habitat.
Ovis canadensis nelsoni	desert bighorn sheep	—	FP	Occur between from 3,000 to 10,000 feet above msl and graze and browse in areas of low growing vegetation close to steep terrain. Occur in steep slopes and cliffs, rough and rocky topography, sparse vegetation, canyons, washes, and alluvial fans. Water is a critical factor in the distribution of this sheep.	Not expected to occur; no suitable habitat.

msl: mean sea level; BSA: Biological Study Area; USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife.

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

[a] Sources include CDFW 2023a
[b] Protected by *California Fish and Game Code* §§ 4800-4810

3.8.1 Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is a federal Candidate[2] species that is not yet listed or proposed for listing. While the USFWS determined that listing the species as Threatened is warranted, it is precluded by higher priority actions. Monarch butterflies lay their eggs on the obligate milkweed (*Asclepias* sp.). Multiple generations of monarchs are produced through the breeding season, with most adult butterflies living two to five weeks. Overwintering adults enter reproductive diapause and live for six to nine months (USFWS 2023c). Each spring, monarchs leave overwintering sites and disperse across California and eventually migrate to all western states, searching for milkweed plants on which to lay their eggs. Several generations are produced throughout the spring, summer, and fall, with each generation spreading further across the landscape. The last generation then migrates all the way back to the overwintering grounds on the Pacific coast in the fall. Monarchs return to the same groves of trees each year (Xerces Society 2023). In the western U.S., monarchs overwinter at groves of trees along the Pacific Coast with a large concentration overwintering in California. Currently, the most common overwintering groves consist of non-native blue gum (*Eucalyptus* sp.), but they also use native Monterey pine (*Pinus radiata*), Monterey cypress (*Hesperocyparis macrocarpa*), western sycamore, and redwood (*Sequoia sempervirens*). The majority of overwintering sites are found within 1.5 miles of the Pacific Ocean, which moderates temperatures, at lower elevations (i.e., 200 to 300 feet above msl) and situated on slopes oriented to the south, southwest, or west that provide the most solar radiation (Xeres Society 2016). An overwintering site was reported in Schabarum Regional Park in Rowland Heights, approximately 7.5 miles southwest of the BSA; 60 individuals were observed in 1998, 2 in 1999, 7 in 2002, 6 in 2007, 25 in 2008, and 0 were observed in 2022 (Xeres Society 2023).

Monarch butterfly was recorded as an incidental observation during the 2022 general surveys and its hostplant, milkweed, was noted during botanical surveys. The BSA is over 50 miles from the Pacific Ocean and the elevation of the BSA is higher than typical overwintering sites (i.e., 680 to 980 feet above msl). Additionally, there are no known overwintering sites mapped in the BSA (Xeres Society 2023). Therefore, Monarch butterfly is not expected to overwinter in the BSA.

3.8.2 Crotch Bumblebee

Crotch bumble bee is a Candidate to be State listed as Endangered. The Crotch bumble bee was proposed as a Candidate to be State listed as Endangered in June 2019. The status of the Crotch bumble bee has changed multiple times based on court rulings between June 2019 and September 2022. Based on the most recent ruling by the California Supreme Court, the proposed Candidate status was reinstated.

This species is a near endemic species in California. It occurs throughout most of southwestern California including the Mediterranean region, along the Pacific coast, western deserts, Great Valley and adjacent foothills (Williams 2014; Zungri 2005). The Crotch bumble bee is a ground nester and often makes its nest in abandoned mammal burrows and can be found in most native habitat types, although it prefers grassland and scrub habitats. Crotch bumble bee is a short-tongued species and prefers food plants from the following families: *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* (Williams 2014). The CNDDB lists favored foodplants from the following genera: *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum* (CDFW 2023a). Grassland and scrub habitat, as well as several plant species from these families are present; therefore, suitable habitat is present for this species. This species has been historically and recently observed at multiple locations in the Project region. The most recent

[2] The USFWS does not treat Candidate species as if they are listed until they are formally proposed for listing.

nearby observations of this species were in Claremont, Glendora, San Gabriel Canyon, and Chino Hills State Park in 2019 and 2020 (CDFW 2023a). Therefore, this species may occur.

3.8.3 Swainson's Hawk

Swainson's hawk is a State-listed Threatened species; its nesting locations are protected. It forages over grassland and ruderal vegetation types during migration to and from South America, primarily feeding on small rodents, reptiles, and some insects within these habitats. This species formerly bred along the coast in southern California, but breeding is now mostly limited to the Sacramento and San Joaquin valleys, the extreme northeast part of California, as well as Mono and Inyo counties (England et al. 1997). This species is threatened by loss of habitat, habitat deterioration on the South American wintering grounds, human disturbance at nest sites, shooting, and possibly pesticides (Remsen 1978). There are two historic records from Chino (1920) and Prado Basin (1916), but no recent records of this species in the Project region (CDFW 2023a). Marginally suitable foraging habitat for this species is present throughout the BSA; therefore, it may forage over the BSA during migration. However, it is not expected to nest in the BSA because it does not nest in the Project region.

3.8.4 Golden Eagle

Golden eagle is a California Species of Special Concern and a California Fully Protected species; it is also protected by the federal Bald Eagle Act. Habitat for this species generally consists of grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. Broad expanses of open country are required for foraging, while nesting is primarily restricted to rugged mountainous areas with large trees or on cliffs (Johnsgard 2001). The golden eagle is an uncommon resident throughout Southern California except in the Colorado Desert and Colorado River where it is a casual winter visitor (Garrett and Dunn 1981). This species is threatened by habitat destruction, shooting, and human disturbance at nest sites (Remsen 1978). This species has been reported from Chino Hills (CDFW 2023a). Suitable foraging habitat is present for this species throughout the BSA; however, no suitable nesting habitat is present. Therefore, the golden eagle has a limited potential to occur for foraging but is not expected to occur for nesting in the BSA.

3.8.5 White-tailed Kite

White-tailed kite is a California Fully Protected species; its nesting locations are protected. This species nests in oak and sycamore woodlands, mature willows with adjacent grasslands, agricultural fields, and other open areas. Kites prey on voles (*Microtus* sp.) and other small, diurnal mammals, occasionally on birds, insects, reptiles, and amphibians. Kites forage in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. They soar, glide, and hover (i.e., "kite") less than 100 feet above the ground in search of prey. This species has been reported from Prado Basin and also Chino Hills (CDFW 2023a). Marginally suitable foraging and nesting habitat for this species is present throughout the BSA; therefore, it has a limited potential to occur for foraging and nesting.

3.8.6 Burrowing Owl

Burrowing owl is a California Species of Special Concern; its breeding and wintering burrows are protected. The western burrowing owl is a grassland specialist distributed throughout western North America, where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments, with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Haug et al. 1993; Dechant et al. 2003). Burrowing owls in Florida excavate their own burrows, but western burrowing owls depend upon the presence of burrowing mammals

whose burrows are used for roosting and nesting (Haug et al. 1993). The presence or absence of colonial mammal burrows (e.g., California ground squirrels) is often a major factor that limits the presence or absence of burrowing owls. In Southern California, burrowing owls breed and forage in grasslands and prefer flat to low rolling hills in treeless terrain. They are small owls that nest in burrows, typically in open habitats most often along banks and roadsides. The burrowing owl has declined in many other areas due to habitat modification, poisoning of its prey items, shooting, and human disturbance (Remsen 1978). This species has been reported from Chino Creek, Prado Basin, Chino Airport, and Ontario (CDFW 2023a). The upland mustards or star thistle field and upland mustard or star thistle fields (mowed) may have vegetation that is too dense to support this species; even after mowing, there is a thick layer of thatch that is not favored by the species that prefers low density vegetation. Therefore, burrowing owl has a limited potential to occur for breeding or wintering.

3.8.7 Coastal California Gnatcatcher

Coastal California gnatcatcher is a federally listed Threatened species and a California Species of Special Concern. This species occurs in most of Baja California, Mexico's arid regions, but this subspecies is extremely localized in the United States, where it predominantly occurs in coastal regions of highly urbanized Los Angeles, Orange, Riverside, and San Diego Counties (Atwood 1992). In California, this subspecies is a resident of coastal sage scrub vegetation types. The breeding season for the coastal California gnatcatcher ranges from late February to August. Nests are generally placed in a shrub about three feet above ground. Loss of habitat to urban development and brood parasitism[3] by brown-headed cowbirds (*Molothrus ater*) have been cited as causes of coastal California gnatcatcher population decline (Unitt 1984; Atwood 1990). This species has been reported from many locations in the Project region; the nearest locations to the BSA are Bonelli Regional Park, Walnut Creek, San Jose Hills, Schabarum Park, Chino Hills, Puente Hills (CDFW 2023a). Suitable habitat for coastal California gnatcatcher occurs in coastal sage scrub vegetation types in the BSA. Therefore, this species may occur.

USFWS published a Revised Final Rule designating Critical Habitat for the coastal California gnatcatcher in 2007 (USFWS 2007). This Revised Critical Habitat designates 197,303 acres in San Diego, Orange, Riverside, San Bernardino, Los Angeles, and Ventura Counties. The BSA is not located within the designated Revised Critical Habitat for the coastal California gnatcatcher.

3.8.8 Mountain Lion

The mountain lion is currently a Candidate to be State listed as Threatened as an Evolutionary Significant Unit comprised of the following subpopulations: (1) Santa Ana Mountains; (2) Eastern Peninsular Ranges; (3) San Gabriel/San Bernardino Mountains; (4) Central Coast South (Santa Monica Mountains); (5) Central Coast North (Santa Cruz Mountains); and (6) Central Coast Central. CDFW is in the process of reviewing the petition for listing and evaluating available information. CDFW status review report was expected in November 2021; as of October 2023, its status has not been updated (CDFW 2023f). The mountain lion occurs throughout most of California except for the Mojave and Colorado Deserts and the croplands of the Central Valley. Mountain lions occur in a variety of habitats, especially brushy habitats and riparian areas with interspersed irregular terrain, rocky outcrops, and tree/brush edges. Mountain lions use caves, natural cavities, and thickets for cover. Mountain lions use habitat connections for movement among fragmented core habitat (Zeiner et al. 1988–1990). A major threat to this species is fragmentation of habitat by spread of human developments and associated roads. Estimates of effective population size highlight genetic isolation and raise significant concerns for viability in Southern California and the Central Coast (Center for Biological Diversity 2019). As described

[3] Brood parasitism is when one species lays its eggs in another species' nest and the young are raised by the host bird, often to the detriment of their biological young.

above under wildlife movement, the BSA is surrounded by higher density residential development, located approximately 0.5 mile from larger areas of open space in the East San Gabriel Valley SEA (i.e., Walnut Creek, Bonelli Park). Additionally, there are significant barriers to movement separating the BSA from these areas of open space, including SR-57 and I-10. While potentially suitable habitat is present in the BSA, because the BSA is in a fragment of open space, mountain lions have limited potential to occur. They would not be expected to den (breed) in the BSA.

4.0 PROJECT IMPACTS

The Project involves a municipal code text amendment, which would allow for grading, cut, and fill, beyond the grading that is necessary for the primary residence, driveway, and garage for properties located within the proposed MCTA planning area. At this time, no specific construction activities are currently proposed. Because the future home-owner projects are unknown, the maximum potential impact area is analyzed.

Each parcel is divided up into different categories of varying size (Figure 8). The pink areas in Figure 8 represent 35 percent of the existing lot (by area) including existing structures, landscaping, and currently undeveloped areas. The blue areas in Figure 8 represent a conceptual grading extent that extends 20 feet beyond the 35 percent lot coverage area and is the area anticipated to be the most typical area of impact for future home-owner projects to create more usable space in their backyards. However, the text amendment would allow home-owners to grade their yard in any configuration within the 1,000 cy limit; therefore, a worst-case scenario is analyzed. The purple areas in Figure 8 represent the remainder of the lot. These total of these three areas represent the maximum potential impact area for each lot. The green areas in Figure 8 represent the existing conservation easement; these areas would not change following the text amendment, they would remain as open space and could not be impacted by future home-owner projects. The determination of impacts in this analysis is based on a comparison of maps depicting maximum potential impact area and maps of biological resources in the BSA.

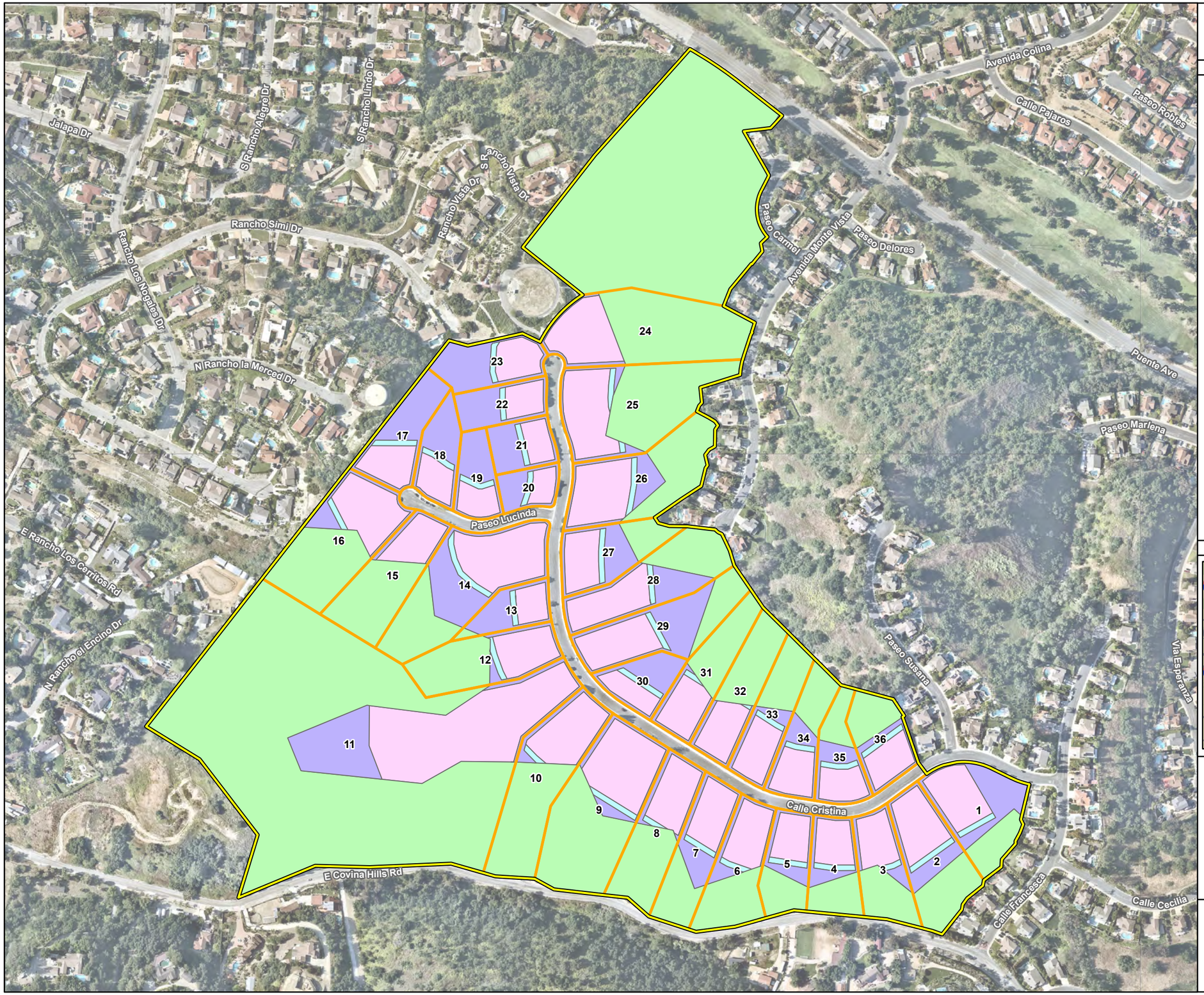
All future permanent structural impacts are assumed to be contained within the maximum potential impact area (i.e., the pink, blue, and purple areas identified on Figure 8). All construction activities, including equipment staging areas, and remedial grading are also assumed to be contained within these areas.

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 be related to temporary disturbance from construction activities (e.g., noise, dust) and the long-term use of a project.

Biological impacts associated with future projects are 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 CEQA Guidelines (i.e., 14 California Code of Regulations, Section 15380)[4];
- Species designated as California Species of Special Concern, Fully Protected, or Watch List species;
- 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;

[4] Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plant with a CRPR of 1B.1) 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 discussion, 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 CEQA Guidelines.

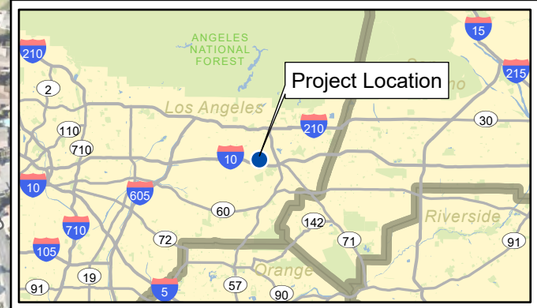


San Dimas MCTA

Legend

- Project Boundary
- Project Parcels
- 35% Lot Coverage
- Conservation Easement
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Key Map



0 175 350 Feet

0 50 100 Meters

N W E S

Scale: 1:4,200

Data Source: UltraSystems (2022)
Aerial Source: Nearmap 2023

Project Impacts
Figure 8

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- Vegetation types, other than wetlands, considered special status by regulatory agencies (e.g., USFWS, CDFW) or resource conservation organizations; and
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources in the BSA was correlated with the following significance criteria to determine whether the impacts of the Project on these resources would be considered significant.

4.1 SIGNIFICANCE CRITERIA

The environmental impacts relative to biological resources are assessed using impact significance criteria that mirror the policy contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the state to:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities…"*

Determining whether a project may have a significant effect, or impact plays a critical role in the CEQA process. According to CEQA, Section 15064.7, Thresholds of Significance, each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A significant threshold is quantitative, qualitative, or performance level of a particular environmental effect, that would normally be determined to be significant by the agency if the threshold is exceeded.

In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

> *"The Project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species…"*

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including: candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and, adopted HCPs. These factors are considered through the checklist of questions answered during the IS process that is used to determine appropriate environmental documentation for a project (i.e., Negative Declaration, MND, or Environmental Impact Report). Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds for an environmental document. For each of the thresholds identified below, the section of CEQA upon which the threshold was derived has been provided. For the purpose of this analysis, impacts to biological resources are considered significant (before

considering offsetting mitigation measures) if one or more of the follow conditions would result from implementation of the Project:

1. *If the Project has the potential to substantially degrade the quality of the environment (15065[a]).*
2. *If the Project has the potential to substantially reduce the habitat of a fish or wildlife species (15065[a]).*
3. *If the Project will cause a fish or wildlife populations to drop below self-sustaining levels (15065[a]).*
4. *If the Project will threaten to eliminate a plant or animal community (15065[a]).*
5. *If the Project will reduce the number or restrict the range of an endangered, rare, or threatened species[5] (15065[a]).*
6. *If the Project has 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 Game and Wildlife Service (CEQA Guidelines, Appendix G, IV. [a]).*
7. *If the Project has 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 (CEQA Guidelines, Appendix G, IV. [b]).*
8. *If the Project has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (CEQA Guidelines, Appendix G, IV. [c]).*
9. *If the Project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impedes the use of native wildlife nursery sites (CEQA Guidelines, Appendix G, IV. [d]).*
10. *If the Project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (CEQA Guidelines, Appendix G, IV. [e]).*
11. *If the Project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CEQA Guidelines, Appendix G, IV. [f]).*

An evaluation of whether an impact on biological resources would result in a "substantial adverse effect" must consider both the resource itself and how that resource fits into a regional context. For the Project, the regional setting of the Project generally includes the San Jose Hills, including lands identified within the East San Gabriel Valley SEA (i.e., Walnut Creek, Bonelli Regional Park/Puddingstone Reservoir, and the San Jose Hills/Walnut Islands), San Gabriel Mountains, and Chino-Puente Hills.

[5] Endangered and threatened species as used in this threshold are those listed by the USFWS and/or CDFW as Threatened or Endangered. Section 15380 of CEQA indicates that a lead agency can consider a non-listed species (e.g., CRPR 1B plants) to be 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. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species met the definitions for rare and endangered according to Section 15380 of CEQA.

For the purposes of the impact analysis, "substantial adverse effect" is defined as the loss or harm of a magnitude which, based on current scientific data and knowledge, would 1) substantially diminish population numbers of a species or distribution of a habitat type within the region, or 2) eliminate the functions and values of a biological resource in the region.

4.2 DIRECT IMPACTS

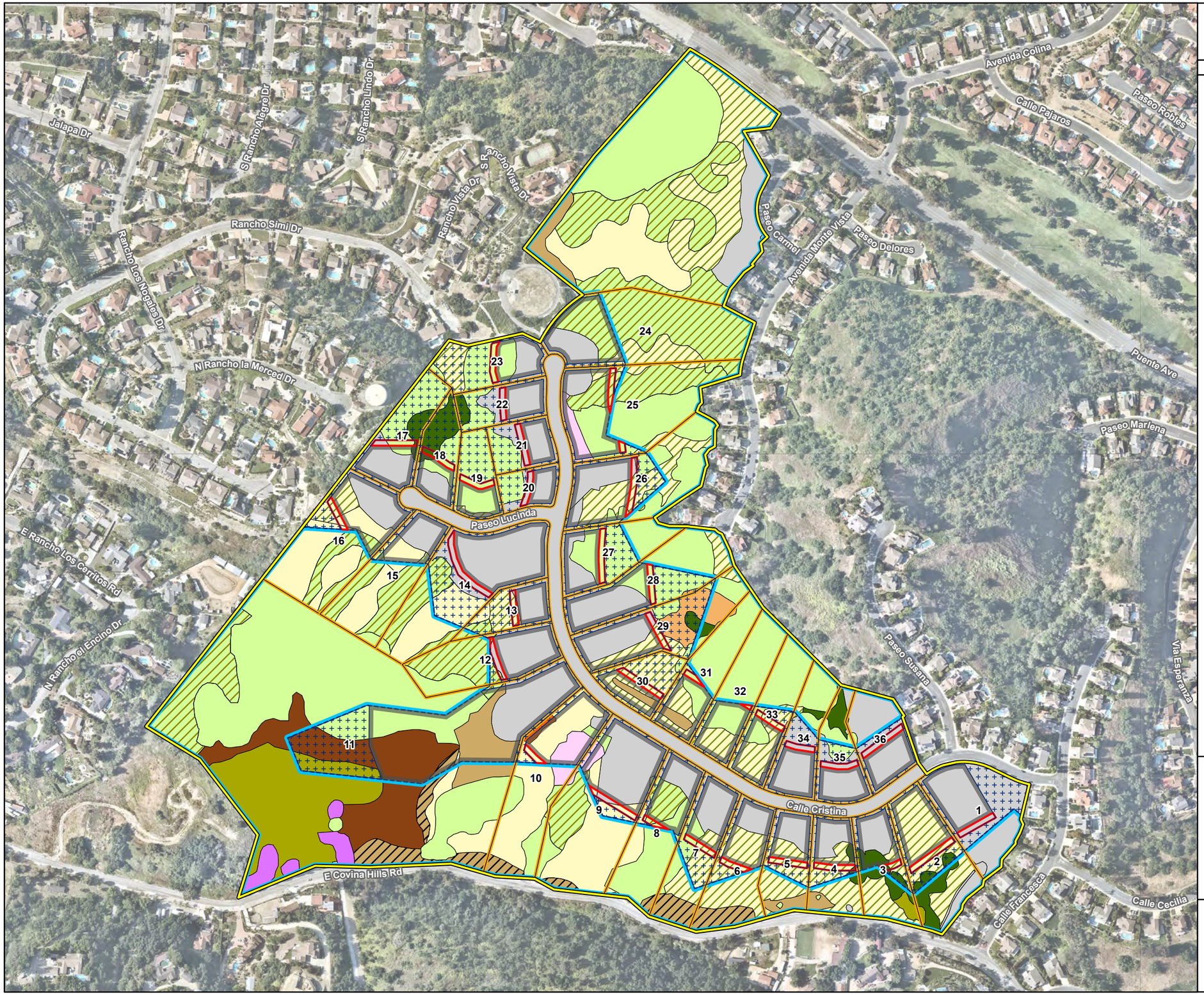
The actual and potential occurrence of biological resources in the BSA vicinity was correlated with the significance criteria described above to determine whether the maximum potential impact on these resources would be significant. Potential direct impacts are described below.

4.2.1 Vegetation Types and Other Areas

The maximum potential direct impact on vegetation types and other areas are shown in Table 6 and Figures 9A–9D. A detailed breakdown of impacts by lot is provided in Appendix C. The vegetation types that may be impacted are discussed below.

TABLE 6
VEGETATION TYPES AND OTHER AREAS
IN THE BSA

Vegetation Type or Other Area	Total Vegetation in BSA (acres)	Maximum Potential Impact Area (acres)	Total in the Conservation Easement (acres)
Coastal Sage Scrub			
California Sagebrush Scrub (Disturbed)	0.089	0.089	0.000
California Buckwheat Scrub	2.000	0.960	1.040
California Buckwheat Scrub (Disturbed)	1.927	0.074	1.853
California Sagebrush – California Buckwheat Scrub	0.251	0.022	0.229
California Sagebrush – Black Sage Scrub	3.480	1.590	1.890
Coast Prickly Pear Scrub	3.848	0.329	3.519
Subtotal Coastal Sage Scrub	*11.595*	*3.064*	*8.531*
Native Woodland			
California Walnut Groves	27.057	7.850	19.207
California Walnut Groves (Disturbed)	12.529	1.920	10.609
Coast Live Oak Woodland (Disturbed)	1.801	0.982	0.819
Subtotal Native Woodland	*41.387*	*10.752*	*30.635*
Non-Native Woodland			
Pepper Tree Groves	0.657	0.000	0.657
Eucalyptus Groves	0.797	0.652	0.145
Subtotal Non-Native Woodland	*1.454*	*0.652*	*0.802*
Non-Native Herbaceous			
Upland Mustards or Star-thistle Fields	9.179	2.048	7.131
Upland Mustards or Star-thistle Fields (mowed)	12.094	6.011	6.083
Subtotal Non-Native Herbaceous	*21.273*	*8.059*	*13.214*
Developed Areas			
Developed/Ornamental	20.954	18.428	2.526
Subtotal Developed Areas	*20.954*	*18.428*	*2.526*
Total	**96.663**	**40.955**	**55.708**



San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Coastal Sage Scrub

- California Sagebrush Scrub (Disturbed)
- California Buckwheat Scrub
- California Buckwheat Scrub (Disturbed)
- California Sagebrush - California Buckwheat Scrub
- California Sagebrush - Black Sage Scrub
- Coast Prickly Pear Scrub

Native Woodland

- California Walnut Groves
- California Walnut Groves (Disturbed)
- Coast Live Oak Woodland (Disturbed)

Non-Native Woodland

- Pepper Tree Groves
- Eucalyptus Groves

Non-Native Herbaceous

- Upland Mustards or Star-thistle Fields
- Upland Mustards or Star-thistle Fields (Mowed)

Developed Areas

- Developed/Ornamental

0 175 350 Feet

0 50 100 Meters

N W E S

Scale: 1:4,200

Data Source: Vegetation map developed by UltraSystems (2022) and updated by Psomas (2023)
Aerial Source: Nearmap 2023

Project Impacts – Vegetation Types and Other Areas

Figure 9A

PSOMAS

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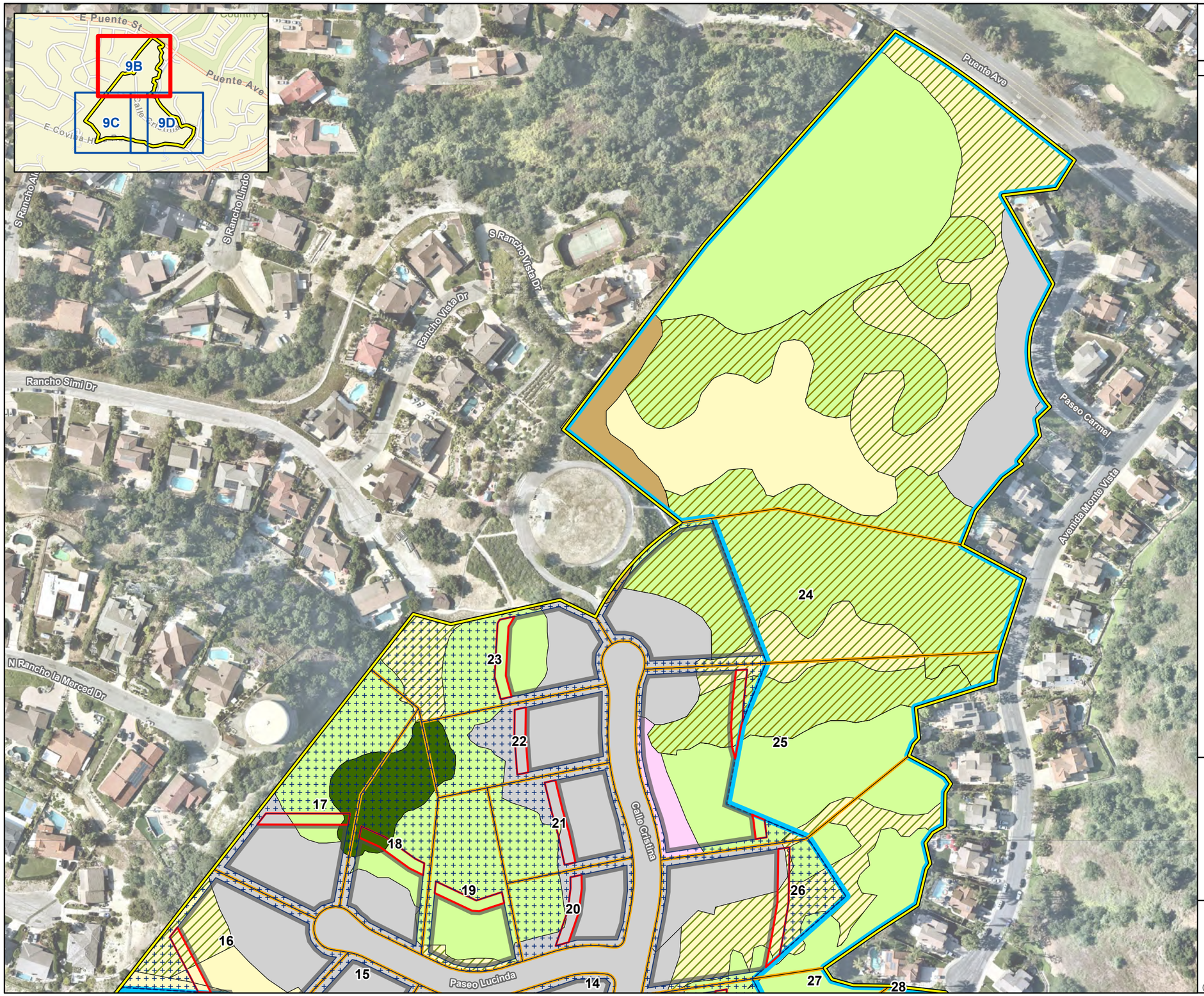


San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Coastal Sage Scrub

- California Sagebrush Scrub (Disturbed)
- California Buckwheat Scrub
- California Buckwheat Scrub (Disturbed)
- California Sagebrush - California Buckwheat Scrub
- California Sagebrush - Black Sage Scrub
- Coast Prickly Pear Scrub

Native Woodland

- California Walnut Groves
- California Walnut Groves (Disturbed)
- Coast Live Oak Woodland (Disturbed)

Non-Native Woodland

- Pepper Tree Groves
- Eucalyptus Groves

Non-Native Herbaceous

- Upland Mustards or Star-thistle Fields
- Upland Mustards or Star-thistle Fields (Mowed)

Developed Areas

- Developed/Ornamental

0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: Vegetation map developed by UltraSystems (2022) and updated by Psomas (2023)
Aerial Source: Nearmap 2023

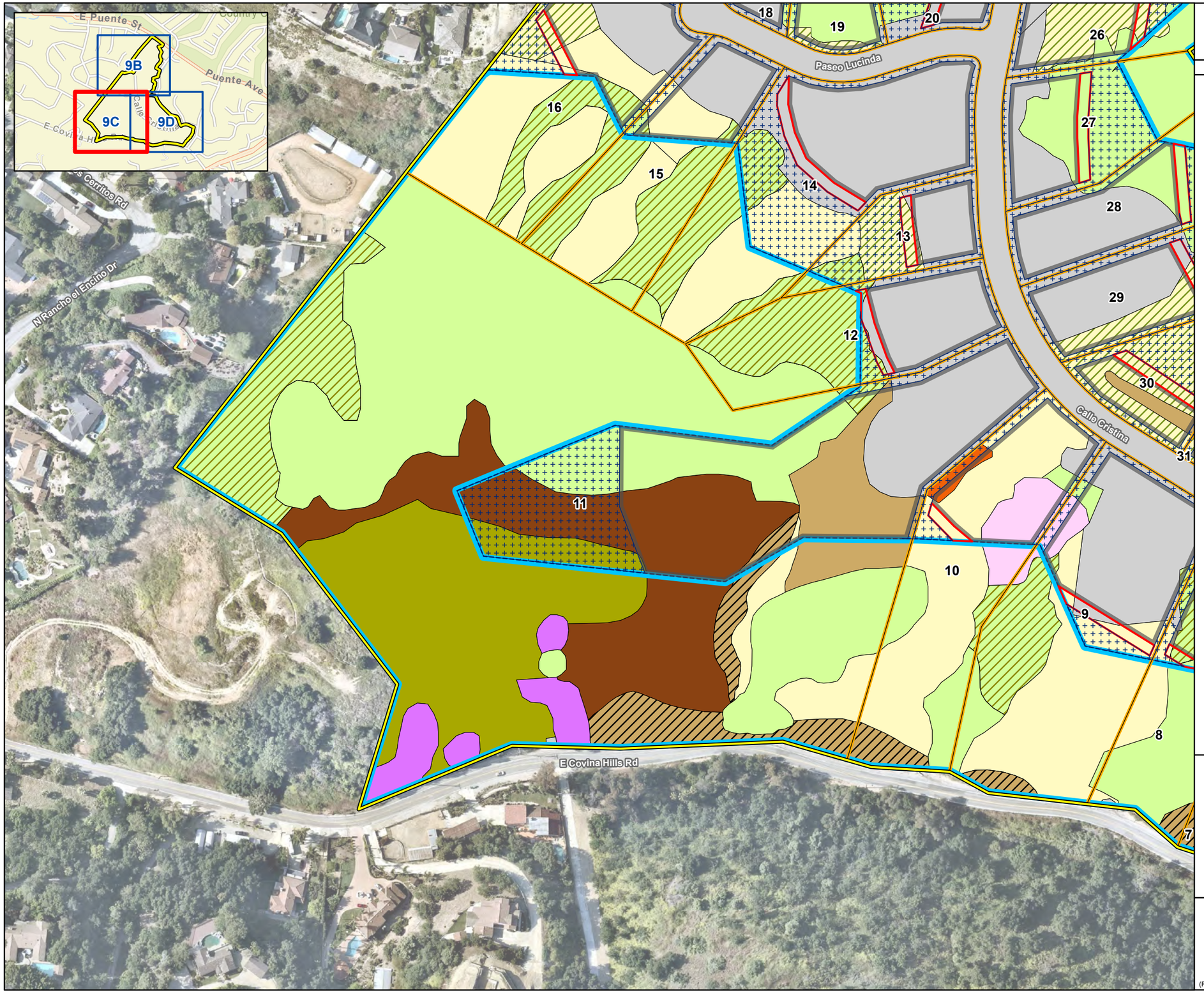
Project Impacts – Vegetation Types and Other Areas

Figure 9B

PSOMAS

(Rev: 10/09/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_ProjectImpacts_VegTypes_B-D.pdf

D:\Projects\3SAN\040200\PRO\3SAN040200_SanDimas\3SAN040200_SanDimas.aprx\Project Impacts – Vegetation Types and Other



San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Coastal Sage Scrub

- California Sagebrush Scrub (Disturbed)
- California Buckwheat Scrub
- California Buckwheat Scrub (Disturbed)
- California Sagebrush - California Buckwheat Scrub
- California Sagebrush - Black Sage Scrub
- Coast Prickly Pear Scrub

Native Woodland

- California Walnut Groves
- California Walnut Groves (Disturbed)
- Coast Live Oak Woodland (Disturbed)

Non-Native Woodland

- Pepper Tree Groves
- Eucalyptus Groves

Non-Native Herbaceous

- Upland Mustards or Star-thistle Fields
- Upland Mustards or Star-thistle Fields (Mowed)

Developed Areas

- Developed/Ornamental

0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: Vegetation map developed by UltraSystems (2022) and updated by Psomas (2023)
Aerial Source: Nearmap 2023

Project Impacts – Vegetation Types and Other Areas

Figure 9C

PSOMAS

(Rev: 10/09/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_ProjectImpacts_VegTypes_B-D.pdf

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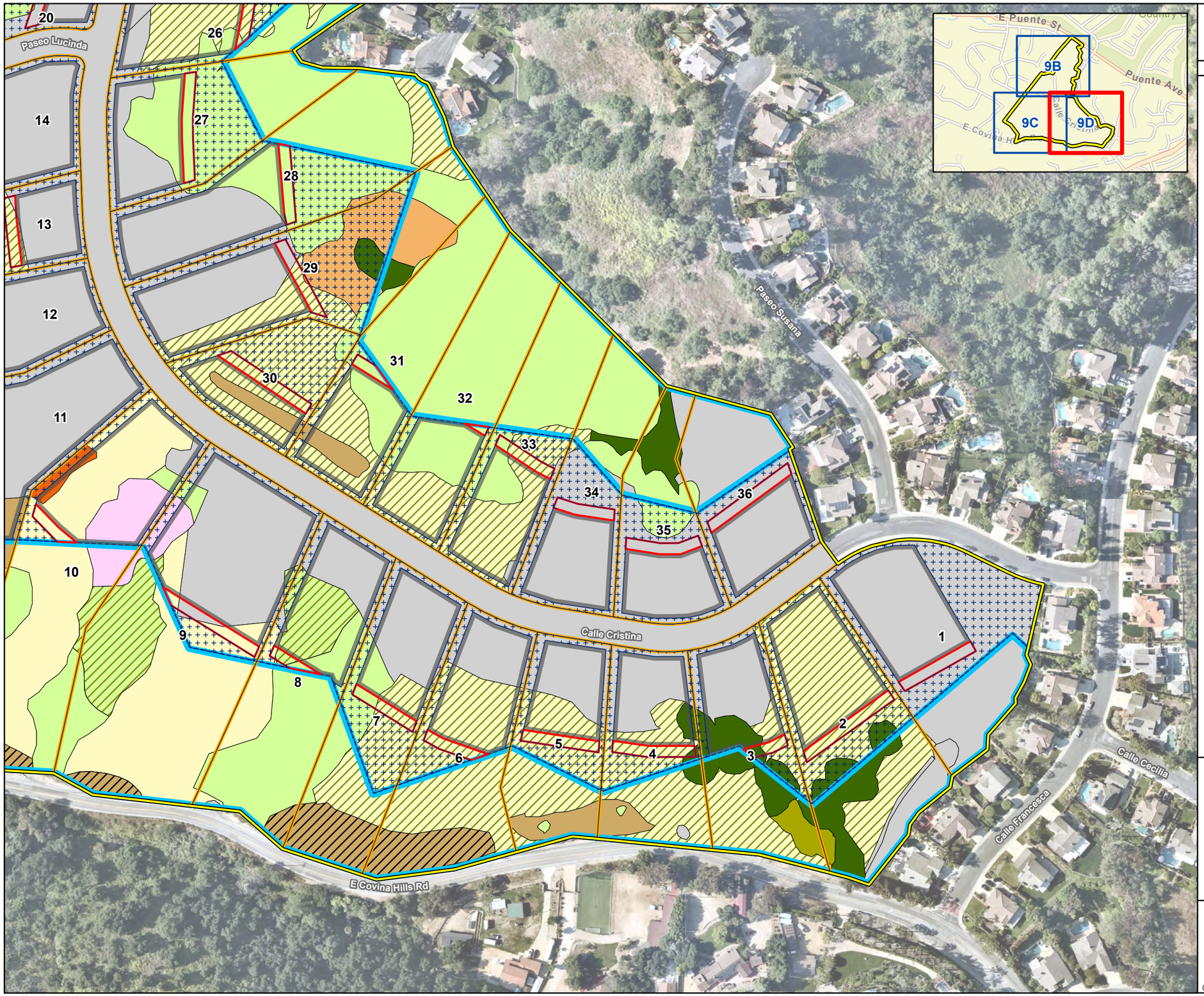

San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Coastal Sage Scrub

- California Sagebrush Scrub (Disturbed)
- California Buckwheat Scrub
- California Buckwheat Scrub (Disturbed)
- California Sagebrush - California Buckwheat Scrub
- California Sagebrush - Black Sage Scrub
- Coast Prickly Pear Scrub

Native Woodland

- California Walnut Groves
- California Walnut Groves (Disturbed)
- Coast Live Oak Woodland (Disturbed)

Non-Native Woodland

- Pepper Tree Groves
- Eucalyptus Groves

Non-Native Herbaceous

- Upland Mustards or Star-thistle Fields
- Upland Mustards or Star-thistle Fields (Mowed)

Developed Areas

- Developed/Ornamental

0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: Vegetation map developed by UltraSystems (2022) and updated by Psomas (2023)
Aerial Source: Nearmap 2023

Project Impacts – Vegetation Types and Other Areas

Figure 9D

PSOMAS

(Rev: 10/09/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_ProjectImpacts_VegTypes_B-D.pdf

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Coastal Sage Scrub

A total of 3.064 acres of coastal sage scrub vegetation occurs in the maximum potential impact area. Coastal sage scrub vegetation types that may be impacted include California sagebrush scrub (disturbed), California buckwheat scrub, California buckwheat scrub (disturbed), California sagebrush – California buckwheat scrub, California sagebrush – black sage scrub, and coast prickly pear scrub. Coast prickly pear scrub is considered a sensitive natural community by CDFW. The remaining coastal sage scrub has declined in the region and may be considered locally sensitive, especially if they are occupied by the federally Threatened coastal California gnatcatcher.

A total 0.329 acre of coast prickly pear scrub is located within the maximum potential impact area, entirely located in Lot 11. A total of 3.519 acre of coast prickly pear scrub would remain in the conservation easement areas. Cactus scrub is the primary habitat for cactus wren. In San Diego and Orange County, the subspecies of cactus wren (i.e., coastal cactus wren) is a California Species of Special Concern; however, Los Angeles County's cactus wrens are of the inland subspecies that is not special status. This vegetation type provides high quality habitat for native species. Therefore, avoidance of this vegetation type is recommended. However, if the maximum potential impact area was impacted, resulting in the loss of 0.329 acre, that would represent a loss of 9 percent of this vegetation type in the BSA while 91 percent of this vegetation type would be preserved in the conservation area. The potential loss of 0.329 acre of coast prickly pear scrub would be considered adverse, but less than significant when considering the amount of this vegetation type in the Project region. MM 1 is recommended to avoid and minimize impacts on this vegetation type to the extent possible.

The following lots have coastal sage scrub vegetation present within the maximum potential impact area: Lots 10, 11, 23, 24, 28, 29, 30, and 31. A total of 2.735 acres of coastal sage scrub (excluding coast prickly pear scrub) is located within the maximum potential impact area; 2.395 acres are located in Lot 11. Coastal sage scrub (excluding coast prickly pear scrub) remaining in the conservation easement would be 5.012 acres. Coastal sage scrub vegetation types (excluding coast prickly pear) are not considered sensitive natural communities; therefore, the loss of up to 2.735 acres of coastal sage scrub would be considered adverse, but less than significant when considering the amount of this vegetation type in the Project region. Therefore, no mitigation would be required for the loss of coastal sage scrub as a vegetation type. However, coastal sage scrub vegetation types (including coast prickly pear scrub) could be occupied by coastal California gnatcatcher (discussed below); mitigation would be required for the loss of occupied habitat. MM 1 is recommended to avoid and minimize impacts on coastal sage scrub vegetation types to the extent possible.

Native Woodland/Protected Trees

A maximum of 10.752 acres of native woodland vegetation (7.850 acres California walnut groves, 1.920 acres California walnut groves (disturbed), and 0.982 acre coast live oak woodland) are located in the maximum potential impact area. Native woodland remaining in the conservation easement would be 30.635 acres (19,207 acres California walnut groves, 10.609 acres California walnut groves (disturbed), and 0.819 acre coast live oak woodland). California walnut groves and California walnut groves (disturbed) are considered sensitive natural communities by CDFW. Oak woodlands are not considered sensitive natural communities but may be considered locally sensitive because of their high habitat and aesthetic value. The following lots have California walnut groves and/or California walnut groves (disturbed) within the maximum potential impact area: Lots 7–28, 31–33. The following lots have coast live oak woodland within the maximum potential impact area: Lots 2, 3, 4, 17, 18, 22, and 29. Impacts of California walnut groves and/or California walnut groves (disturbed) would be considered potentially significant. Impacts on coast live oak woodland would be considered adverse, but less than significant when considering the

amount of this vegetation type in the Project region. MMs 1 and 2 would be required to avoid and minimize impacts on California walnut groves and California walnut groves (disturbed) and would be recommended to avoid and minimize impacts on coast live oak woodland to the extent possible.

Native woodlands in the BSA contain Southern California black walnut and coast live oak trees that would meet the definition of a mature tree under the City of San Dimas municipal code, and would therefore be subject to provisions of the municipal code. If mature trees would be removed from a parcel, the homeowner would be required to comply with conditions of Section 18.162.040 (Review Required – Developed Property) of the municipal code. Implementation of MM 2 would ensure compliance with municipal code. MM 2 would be required to mitigate for the loss of native trees meeting the City's definition of mature significant trees. This mitigation would provide compensatory mitigation for the loss of native woodlands.

Non-Native Woodland/Protected Trees

A maximum of 0.652 acre of non-native woodland vegetation (i.e., eucalyptus groves) are located within the maximum potential impact area; pepper tree groves would not be impacted. A total of 0.802 acre of non-native woodland (0.657 acre pepper tree groves and 0.145 acre eucalyptus groves) would remain in the conservation easement. Eucalyptus groves are not considered a sensitive natural community by CDFW. These areas generally have low biological value because they are comprised of non-native species. These areas generally provide limited habitat value for native plant and wildlife species, although they may be used by nesting birds and raptors (discussed below). Impacts on eucalyptus groves would be considered less than significant, and no mitigation would be required.

Non-native woodlands in the BSA contain gum trees (i.e., Eucalyptus) and other non-native trees that meet the definition of a mature tree under the City of San Dimas municipal code, and would therefore be subject to provisions of the municipal code. If mature significant trees would be removed from a parcel, the homeowner would be required to comply with conditions of Section 18.162.040 (Review Required – Developed Property) of the municipal code. Implementation of MM 2 would ensure compliance with municipal code.

Non-Native Herbaceous

A maximum of 8.059 acres of non-native herbaceous vegetation could be impacted in the maximum potential impact area. Non-native herbaceous vegetation types that may be impacted include upland mustards or star-thistle fields and upland mustards or star-thistle fields (mowed). These areas have low biological value because they are vegetated predominantly with non-native species. These areas provide limited habitat for native plant and wildlife species, although they may occasionally be used by native species. Therefore, impacts on these areas would be considered less than significant, and no mitigation would be required.

Developed Areas

A maximum of 18.428 acres of developed/ornamental areas could be impacted within the BSA. Developed/ornamental areas are considered of low biological value because they are unvegetated or vegetated predominantly with non-native landscaping, although they may occasionally be used by native species. Therefore, impacts on these areas would be considered less than significant, and no mitigation would be required.

4.2.2 Jurisdictional Resources

Neither UltraSystems nor Psomas performed a jurisdictional delineation on the BSA. However, potential jurisdictional water resources (i.e., WOTUS under the regulatory authority of the USACE, waters of the State under the regulatory authority of the RWQCB, and/or streambeds under the regulatory authority of the CDFW) may be present in the BSA.

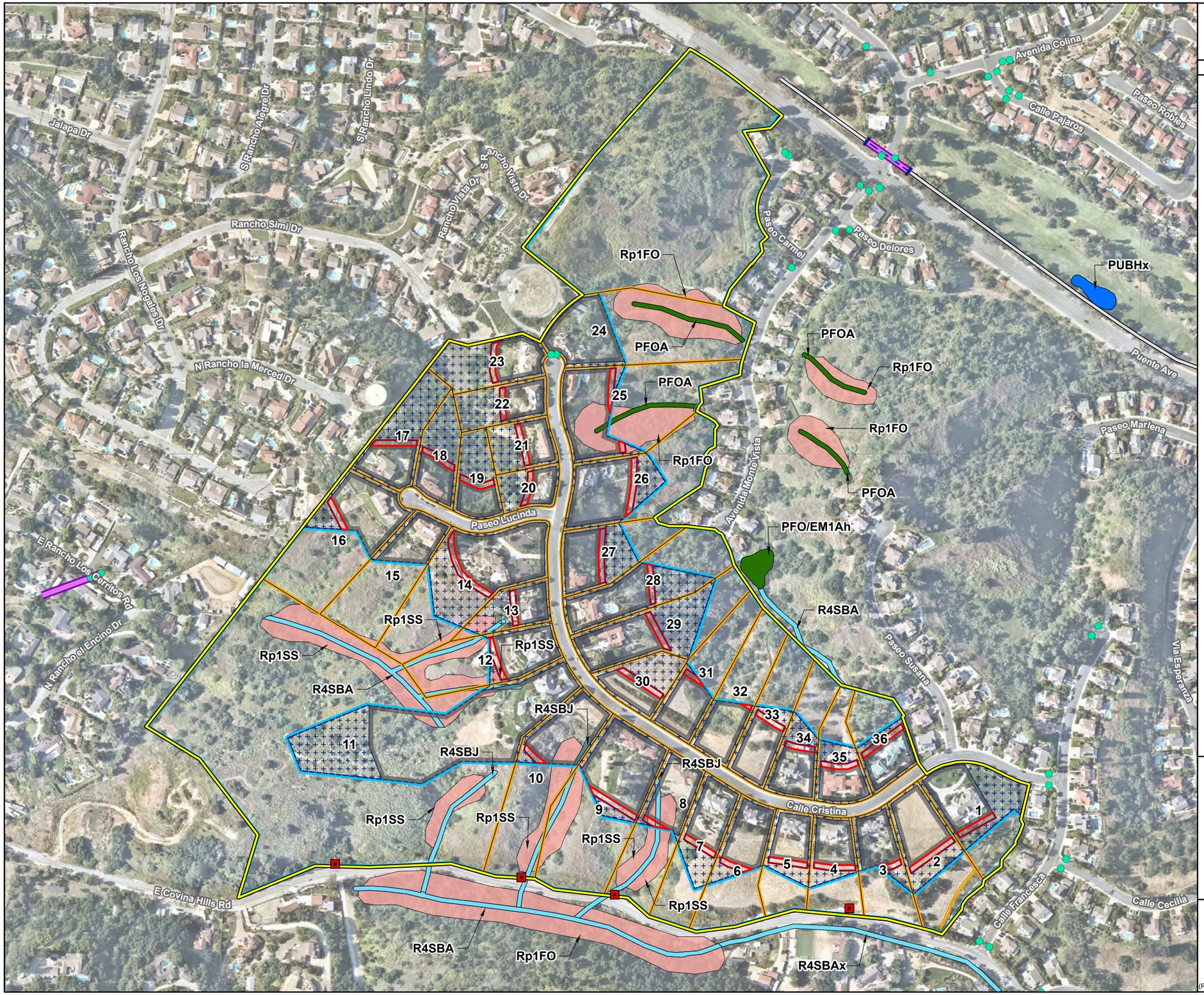
Parcels containing streambeds, channels, converging slopes, or depressional areas may have areas that would be considered potentially jurisdictional and should be assessed further if future home-owner projects would affect them (Figure 10A–10D). Parcels containing resources mapped by the NWI outside the conservation easement include Parcels 8, 9, 10, 11, 12, 13, 14, and 25; however, it should be noted that additional parcels may also contain jurisdictional resources. In order to determine if jurisdictional resources are present in a particular parcel, a jurisdictional delineation would be necessary. If jurisdictional waters are present and would be impacted by a future project, then permits, certifications, and/or agreements from the USACE, the RWQCB, and/or the CDFW would be required. Implementation of MMs 1 and 3 would ensure that jurisdictional resources are identified, and applicable jurisdictional permits are obtained.

4.2.3 Wildlife

Native and non-native vegetation provide valuable nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. A total of 13.816 acres of native vegetation types (including 3.064 acres coastal sage scrub and 10.752 acres native woodland) occur within the maximum potential impact area. Additionally, a total of 14.016 acres of non-native vegetation (including 0.652 acre of non-native woodland and 8.059 acres of non-native herbaceous vegetation) occur within areas that may be impacted in the future. Removing or altering habitats would likely result in the loss of small mammals, reptiles, amphibians, and other slow-moving wildlife that live in a project's direct impact area. More mobile wildlife species that are now using these areas would be forced to move into adjacent areas of open space, which would increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. The loss of wildlife habitat relative to the availability of habitat in the Project region would be considered adverse; however, the loss would be limited in relation to the total amount of wildlife habitat available in the Project region. Therefore, it would not be expected to reduce populations of common wildlife species below self-sustaining levels in the Project region. Therefore, this impact would be considered adverse but less than significant, and no mitigation would be required.

Several common bird species have the potential to nest in the vegetation, on the ground, or in structures throughout the BSA. Common raptor species also have potential to nest in large trees in the BSA. The loss of an active migratory bird or raptor nest, including nests of common or special status 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. This is applicable to all parcels in the BSA.

Implementation of MM 4 would ensure compliance with the provisions of the MBTA and *California Fish and Game Code*. This would be required for any parcel with impacts requiring permit approval (e.g., a grading permit from the City of San Dimas).



San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Wetland Type

- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Riparian Type

- Forested/Shrub Riparian

Infrastructure

- Culvert
- Catch Basin
- Ribbon Drain
- Open Channel
- Underground Culvert
- Gravity Underground Culvert

Note: Jurisdictional resources shown are based on remote data and may not represent actual jurisdictional resources in the Project Boundary. A jurisdictional delineation would be required to map resources under the regulatory authority of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife.

0 175 350 Feet

0 50 100 Meters

N W E S

Scale: 1:4,200

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory (2023); UltraSystems (2022)
Aerial Source: Nearmap 2023

Project Impacts – Potential Jurisdictional Resources

Figure 10A

PSOMAS

(Rev: 09/06/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_Potential_JDResources_Impacts.pdf

D:\Projects\3SAN\040200\PRO\3SAN040200_SanDimas\3SAN040200_SanDimas.aprx\Potential Jurisdictional Resources Impact Map 1

San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Wetland Type

- Freshwater Forested/Shrub Wetland

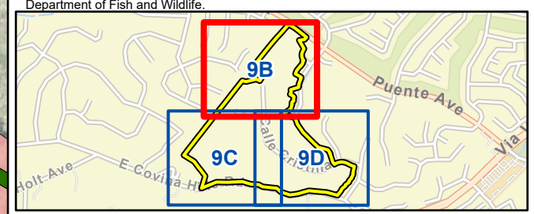
Riparian Type

- Forested/Shrub Riparian

Infrastructure

- Culvert
- Catch Basin
- Ribbon Drain
- Open Channel
- Underground Culvert
- Gravity Underground Culvert

Note: Jurisdictional resources shown are based on remote data and may not represent actual jurisdictional resources in the Project Boundary. A jurisdictional delineation would be required to map resources under the regulatory authority of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife.



0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory (2023); UltraSystems (2022)
Aerial Source: Nearmap 2023

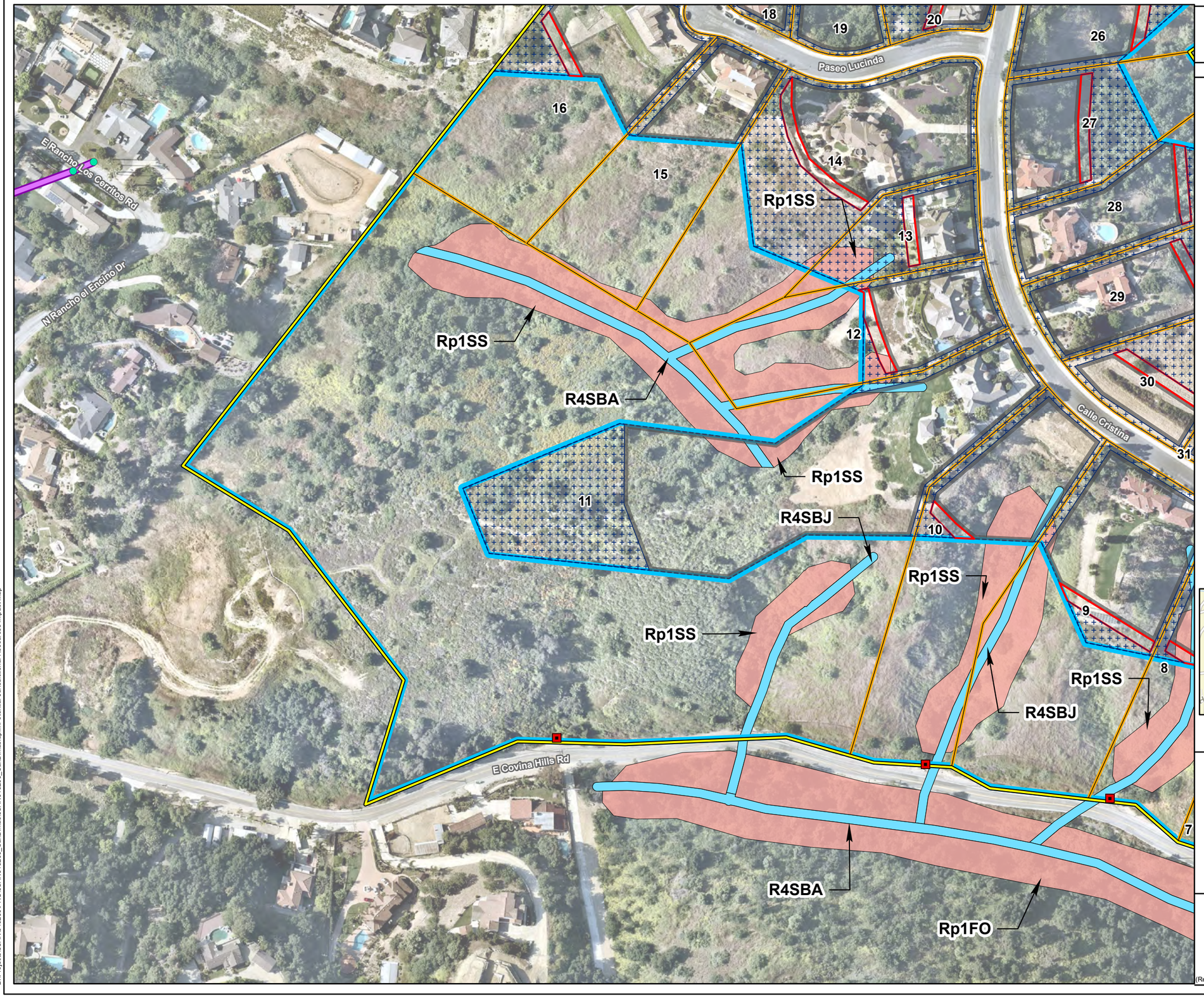
Project Impacts – Potential Jurisdictional Resources

Figure 10B

PSOMAS

(Rev: 09/06/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_Potential_JDResources_Impacts.pdf

D:\Projects\3SAN\040200\PRO\3SAN040200_SanDimas\3SAN040200_SanDimas.aprx\Potential Jurisdictional Resources Impact Map



San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Wetland Type

- Riverine

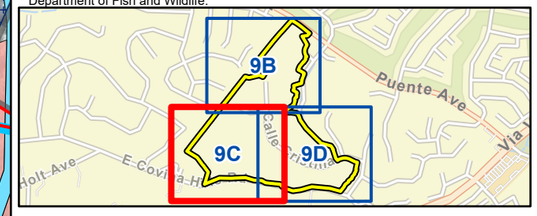
Riparian Type

- Forested/Shrub Riparian

Infrastructure

- Culvert
- Catch Basin
- Ribbon Drain
- Open Channel
- Underground Culvert
- Gravity Underground Culvert

Note: Jurisdictional resources shown are based on remote data and may not represent actual jurisdictional resources in the Project Boundary. A jurisdictional delineation would be required to map resources under the regulatory authority of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife.



0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory (2023); UltraSystems (2022)
Aerial Source: Nearmap 2023

Project Impacts – Potential Jurisdictional Resources

Figure 10C

PSOMAS

(Rev: 09/06/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_Potential_JDResources_Impacts.pdf

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San Dimas MCTA

Legend

- Project Boundary
- Parcel
- Conservation Easement
- 35% Lot Coverage
- Grading Area – 20 feet beyond 35% Impact Area Limit
- Remainder of Parcel

Wetland Type

- Freshwater Forested/Shrub Wetland
- Riverine

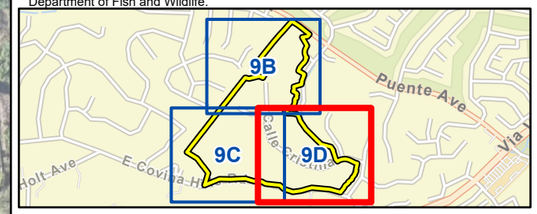
Riparian Type

- Forested/Shrub Riparian

Infrastructure

- Culvert
- Catch Basin
- Ribbon Drain
- Open Channel
- Underground Culvert
- Gravity Underground Culvert

Note: Jurisdictional resources shown are based on remote data and may not represent actual jurisdictional resources in the Project Boundary. A jurisdictional delineation would be required to map resources under the regulatory authority of the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and/or the California Department of Fish and Wildlife.



0 87.5 175 Feet

0 25 50 Meters

N W E S

Scale: 1:2,100

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory (2023); UltraSystems (2022)
Aerial Source: Nearmap 2023

Project Impacts – Potential Jurisdictional Resources

Figure 10D

PSOMAS

(Rev: 09/06/2023 JMC) R:\Projects\SAN04\3SAN040200\Graphics\Bio\ex_Potential_JDResources_Impacts.pdf

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4.2.4 Wildlife Movement

As discussed in Section 3.3.6, the BSA is surrounded by residential development and roadways and there are significant barriers to wildlife movement (SR-57 and I-10) between the BSA and larger areas of open space. Given the regional context of the BSA, development within the maximum potential impact area is not expected to impact regional wildlife movement.

Wildlife are expected to use the undeveloped ridgelines, drainages, and slopes for local travel routes throughout the BSA. Following the text amendment, some portion of each lot may be impacted depending on home-owner projects; however, the conservation easement on each parcel would remain available for wildlife movement. Project impacts on local wildlife movement would be considered adverse but less than significant; no mitigation would be required.

4.2.5 Special Status Biological Resource Impacts

Special Status Plant Species

Of the 76 species reported from the Project region, one species (southern California black walnut) was incidentally observed during the general surveys and 25 species have potential or limited potential to occur in the BSA based on the presence of suitable habitat. The remaining 51 species would not be expected to occur because the BSA lacks suitable habitat or because it is outside the current known geographic or elevation range of the species (Table 4).

Two listed species and 9 other species with a CRPR of 1 or 2 have potential or limited potential to occur in the BSA based on the presence of suitable habitat. These species are: Nevin's barberry, thread-leaved brodiaea, Coulter's saltbush, intermediate mariposa-lily, smooth tarplant, Parry's spineflower, many-stemmed dudleya, mesa horkelia, Brand's star phacelia, white rabbit-tobacco, and San Bernardino aster. Because these species are considered threatened or endangered in the Project region, impacts on these species would be considered potentially significant depending on the size of the impacted population relative to the total known from the region and the average population size in the region. A focused plant survey would be needed to determine the presence or absence of these species in the BSA and whether there are any substantial populations. Implementation of MMs 1 and 5 would reduce potential impacts on special status plant species to less than significant. This would be required for any parcel containing areas of native and/or non-native vegetation (i.e., Parcels 1–33) because some special status plant species may occur in disturbed or ruderal areas. This MM would not be required for Parcels 34–36 because these parcels consist entirely of developed/ornamental areas.

Fourteen special status plants that have potential or limited potential to occur have a CRPR of 3 or 4. These species are: California androsace, western spleenwort, Catalina mariposa-lily, Plummer's mariposa-lily, Lewis's evening-primrose, small-flowered morning-glory, paniculate tarplant, Southern California black walnut, Robinson's pepper-grass, small-flowered microseris, Hubby's phacelia, south coast branching phacelia, Engelmann oak, and Coulter's matilija poppy. Impacts on species with a CRPR of 3 or 4 are not typically considered significant because they are on a "review" or "watch" list, respectively, and not considered Rare, Threatened, or Endangered in California or throughout their range. The loss of up to 22.527 acres of potential habitat (i.e., all undeveloped areas within the maximum total impact area) would not be expected to substantially diminish population numbers of these species in the region. A total of 53.182 acre of undeveloped areas would remain in the conservation easement areas. Therefore, impacts on these species would be considered adverse but less than significant, and no mitigation would be required.

Special Status Wildlife Species

Invertebrates

Of the two special status invertebrates reported from the Project region, Crotch bumble bee has potential to occur. While monarch butterfly was observed during the summer 2022 surveys, this species is not expected to overwinter in the BSA because there are no known roosts and the area is not typical of most overwintering locations. Therefore, there would be no impact on overwintering individuals, and no mitigation would be required.

Crotch bumble has potential to occur in the BSA. Suitable habitat for this species is present throughout the BSA, including both native and non-native vegetation types. Focused surveys would be required to determine the presence or absence of this species in the BSA. A total of 22.527 acres of potential habitat (i.e., all undeveloped areas within the maximum total impact area) for the Crotch bumble bee could potentially be impacted. This species is a Candidate for State listing; therefore, if present, impacts on a ground nest of this species would be considered potentially significant. Implementation of MM 6 would reduce potential impacts to less than significant.

Fish

The drainages in the BSA are ephemeral; no fish are expected to occur in the BSA. Therefore, there would be no impact on special status fish species, and no mitigation would be required.

Amphibians

Of the six special status amphibian species reported from the Project region, five of them would not be expected to occur due to lack of suitable habitat (i.e., hydrology, stream type); the drainages in the BSA are ephemeral and do not have enough water to support these species. Therefore, there would be no impact on these species, and no mitigation would be required.

Western spadefoot (*Spea hammondii*) has limited potential to occur in the BSA. Marginally suitable terrestrial habitat occurs that may be used for foraging; however, there are no suitable breeding pools in the BSA. A total of 22.527 acres of marginally suitable foraging habitat (i.e., all undeveloped areas within the maximum total impact area) could potentially be impacted. A total of 53.182 acres of undeveloped areas would remain in the BSA within the conservation easement areas. Due to the limited amount of terrestrial habitat loss relative to the availability of terrestrial habitat for western spadefoot in the Project region, potential impacts would not be expected to reduce the regional population of the species to below self-sustaining levels. Therefore, impacts on this species would be considered adverse, but less than significant, and no mitigation would be required.

Reptiles

Of the nine special status reptile species reported from the Project region, two species (i.e, western pond turtle and two-striped garter snake) would not be expected to occur due to lack of suitable habitat (i.e., hydrology, stream type); the drainages in the BSA are ephemeral and do not have enough water to support these species. Therefore, there would be no impact on these species, and no mitigation would be required.

Coast horned lizard, orange-throated whiptail, coastal whiptail, southern California legless lizard, California glossy snake, coast patch-nosed snake, and red-diamond rattlesnake have potential or limited potential to occur in the BSA. Up to 22.527 acres of suitable or marginally suitable habitat for these species (varies by species) could potentially be impacted. A total of 53.182 acres of

undeveloped areas remains in the BSA within the conservation easement areas. Due to the limited amount of habitat loss relative to the availability of habitat for special status reptiles in the Project region, potential impacts would not be expected to reduce the regional population of the species below self-sustaining levels. Therefore, impacts on these species would be considered adverse, but less than significant, and no mitigation would be required.

Birds

Of the 22 special status bird species reported from the Project region, 13 are not expected to occur due to lack of suitable habitat (e.g., marsh or riparian scrub/forest) or because the BSA is outside the subspecies' current known range. There would be no impact on these species, and no mitigation would be required.

The federally Threatened coastal California gnatcatcher has potential to occur in the coastal sage scrub habitats in the BSA. A total of 3.064 acres of suitable habitat for this species is within the maximum total impact area and may be impacted (i.e., within Lots 10, 11, 23, 24, 28, 29, 30, or 31). It should be noted that 8.531 acres of coastal sage scrub would remain in the conservation easement areas. Any impact on coastal California gnatcatcher habitat would be considered potentially significant. Avoidance is recommended, if feasible. If future homeowner projects on Lots 10, 11, 23, 24, 28, 29, 30, or 31 would impact coastal sage scrub, implementation of MM 7 would reduce impacts to less than significant.

Southern California rufous-crowned sparrow may occur in the coastal sage scrub vegetation types in the BSA. A total of 3.064 acres of suitable habitat for this species is within the maximum total impact area and may be impacted. It should be noted that 8.531 acres of coastal sage scrub would remain in the conservation easement areas. Due to the limited amount of habitat loss relative to the availability of habitat for this species in the region, potential impacts would not be expected to reduce the regional population of the species below self-sustaining levels. Therefore, impacts on habitat for this species would be considered adverse, but less than significant, and no mitigation would be required.

Burrowing owl has a limited potential to occur in the BSA. A total of 8.059 acres potentially suitable habitat for this species (i.e., non-native herbaceous) is within the maximum total impact area and may be impacted, while 13.214 acres of non-native herbaceous vegetation would remain in the conservation easement areas. 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 (year-round). Implementation of MM 8 would require pre-construction burrow surveys and establishment of a protective buffer or exclusion and excavation of the burrow following approved guidelines.

Cooper's hawk was observed during the summer 2022 surveys (Ultrasystems 2022). In addition, the following special status raptor species have potential or limited potential to occur in the BSA for foraging: golden eagle, Swainson's hawk, white-tailed kite, merlin, and long-eared owl. A total of 22.527 acres of suitable habitat for these species would be within the maximum total impact area and may be impacted. A total of 53.182 acres of undeveloped areas would remain within the conservation easement areas. Due to the limited amount of habitat loss relative to the availability of habitat for these special status bird species in the region, potential impacts would not be expected to reduce the regional population of these species below self-sustaining levels. Therefore, impacts on foraging habitat for these species would be considered adverse, but less than significant, and no mitigation would be required.

The Cooper's hawk, white-tailed kite, and long-eared owl also have potential or limited potential to nest within or adjacent to the BSA. Impacts on any active migratory bird or raptor nest (common or special status species) would be considered a violation of the MBTA and/or Sections 3503,

3503.5, and 3513 of the *California Fish and Game Code*. The potential loss of an active special status bird species nest would be considered significant. Implementation of MM 4 would require pre-construction surveys to ensure that construction would not violate the provisions of the MBTA or *California Fish and Game Code*.

Mammals

Of the 12 special status mammal species reported from the Project region, 5 of them would not be expected to occur due to lack of suitable habitat or because the BSA is outside their current known range. Therefore, there would be no impact on these species, and no mitigation would be required.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), Bryant's [San Diego desert] woodrat (*Neotoma bryanti* [*lepida*] *intermedia*), and American badger have potential or limited potential to occur in the BSA. A total of 22.527 acres of suitable habitat for these species would be within the maximum total impact area and may be impacted A total of 53.182 acres of undeveloped areas remains within the conservation easement areas. Due to the limited amount of habitat loss relative to the availability of habitat for these special status mammal species in the region, potential impacts would not be expected to reduce the regional population below self-sustaining levels. Therefore, impacts on habitat for these species would be considered adverse, but less than significant, and no mitigation would be required.

Pallid bat, western red bat, and western mastiff bat have potential or limited potential to forage in the BSA. A total of 22.527 acres of suitable habitat for these species would be within the maximum total impact area and may be impacted. A total of 53.182 acres of undeveloped areas would remain within the conservation easement areas. Due to the limited amount of habitat loss relative to the availability of habitat for these special status bat species in the region, potential impacts would not be expected to reduce the regional population of these species below self-sustaining levels. Therefore, impacts on foraging habitat for these species would be considered adverse, but less than significant, and no mitigation would be required.

Western red bat and western mastiff bat have potential to roost in trees in the BSA; bats may roost in large walnut, oak, or non-native trees. A total of 11.404 acres of native and non-native woodland with potential roosting habitat would be within the maximum total impact area and may be impacted. A total of 31.437 acres of native and non-native woodland would remain within the conservation easement areas. However, construction activities could directly impact roosting individuals. Demolition or removal of roosts may be considered significant, depending on the size of the roost. Implementation of MM 9 would reduce impacts to less than significant.

Mountain lions may pass through and hunt throughout the undeveloped areas that could potentially be impacted (i.e., 22.527 acres). The mountain lion is proposed for State listing due to fragmentation of habitat that isolates populations. Although future projects may permanently impact suitable habitat, a total of 53.182 acres of undeveloped areas would remain within the conservation easement area. Additionally, future projects would not create new barriers to movement. Therefore, future projects would not be expected to interfere with movement by mountain lions. In addition, rocky outcroppings or secluded canyons are not present within the maximum potential impact area. Therefore, mountain lions are not expected to den within the maximum potential impact area, and no mitigation would be required.

4.3 INDIRECT IMPACTS

4.3.1 Noise Impacts

Construction of future homeowner projects could increase noise levels in a very localized portion of the BSA (i.e., one lot at a time). During construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and denning activities for a variety of wildlife species within that lot and its immediate vicinity. This impact would be localized in space and relatively short-term in nature; therefore, wildlife would be expected to disperse to adjacent open space during the construction and could return following completion of the construction. Therefore, noise impacts would be considered adverse, but not significant for most wildlife species.

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 increase noise in the immediate vicinity and could interfere with communication between a pair that could affect their nest success. Noise impacts would be considered potentially significant for the coastal California gnatcatcher and nesting birds and raptors. With the implementation of MM 4, indirect noise impacts on the coastal California gnatcatcher and other nesting birds and raptors would be reduced to less than significant.

The future homeowner projects are not expected to change the noise levels from existing conditions. Therefore, long-term noise impacts would be less than significant, and no mitigation would be required.

4.3.2 Increased Dust and Urban Pollutants

Grading activities would disturb soils and result in the temporary accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. The respiratory function of the plants in the area could be impaired when dust accumulation is excessive. This indirect effect of construction of the Project on the native vegetation in the immediate vicinity of the construction area is considered adverse, but less than significant because it would be limited in extent and would not substantially reduce plant populations in the region. Therefore, no mitigation would be required.

During construction, excess silt, petroleum, or chemicals on the soil surface within the construction area could be washed into drainages during storms and may affect areas downstream of the BSA. Adverse effects on water quality could indirectly impact species that use downstream riparian areas by affecting the food web interactions (e.g., abundance of insects or other prey) or through biomagnification (i.e., the buildup of chemicals in body tissues to toxic levels in higher trophic levels). These impacts would be reduced to less than significant with the implementation of MM 10.

Pollutants, such as pesticides or herbicides, may be used in the installation of new landscaping. These chemicals may have a negative effect on native plant or wildlife species and their use may be considered potentially significant. It is expected that chemicals used in new landscaping would be the same as those currently. Furthermore, homeowners are expected to use chemicals approved for residential use. Therefore, this impact would be considered less than significant and no mitigation would be required.

4.3.3 Invasive Exotic Plant Species

Landscaping that includes the installation of non-native, invasive plant species (e.g., species listed in the California Invasive Plant Council's invasive plant inventory [Cal-IPC 2023]) can be detrimental to surrounding native habitat. Invasive species are often more adapted to a wider

variety of growing conditions and can out-compete native plant populations for available nutrients, prime growing locations, and other resources. They may hybridize with native species, thereby impacting the genetic integrity of the native species. Because these plants reproduce so quickly and in such large amounts, they can quickly replace many native plant populations, resulting in lower species diversity, low of areas suitable for breeding and/or nesting by wildlife species, changes in riparian ecosystems, and overall reduction in habitat functions and values.

This impact would be considered potentially significant. Implementation of MM 11 would reduce this impact to less than significant.

4.3.4 Night Lighting

Night lighting may impact the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to night lighting. Of greatest concern is the effect on small, ground-dwelling animals that use the darkness to hide from predators and bats, owls, and mountain lion, which are specialized night foragers.

Construction activities would not involve night work and, therefore, would not impact nocturnal and crepuscular wildlife species. While there is existing development (including lighting of homeowners' backyards and landscaping) in the BSA, future projects may include the installation of additional lighting that could negatively impact nocturnal and crepuscular wildlife species within the lots as well as in the surrounding adjacent open space. Implementation of MM 12 would reduce this impact to less than significant.

4.3.5 Bird Strikes

A potential long-term, operational impact associated with installation of large areas of glass (e.g., infinity edge pools, wind screens) concerns bird strike mortality and injury. Ornithologists estimate that up to a billion birds are killed or injured annually by collisions with clear and reflective sheet glass and plastic (Klem 2009). It is thought that they cannot distinguish between the reflection on the glass/plastic surface and the natural landscape. Installation of structures with glass surfaces have the potential to result in bird strikes given the proximity to natural open space areas. The potential loss of a federally-listed species due to bird strikes is potentially significant. Implementation of MM 13 would ensure that potential impacts are less than significant.

4.3.6 Human Activity

Given the developed nature of the BSA, individual homeowner projects are not expected to increase human activity. Therefore, there would be no long-term impact, and no mitigation would be required.

During construction, there would be a slight increase in human activity within one lot at a time. This would incrementally increase the disturbance of the natural open space immediately adjacent to the construction areas. This increased activity could potentially disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species. Increased human activity could deter wildlife from using habitat adjacent to construction. This impact would be highly localized and relatively short-term in nature; wildlife would be expected to disperse to adjacent open space. Therefore, this impact would be considered adverse, but less than significant, and no mitigation would be required.

4.4 MITIGATION MEASURES

This section focuses on the development of MMs for those impacts of the Project found to be significant or potentially significant. Strategies to mitigate each impact to a less than significant level are identified and described in the following section.

4.4.1 Mitigation Measure 1: Environmentally Sensitive Areas

Avoidance. Impacts on sensitive natural communities (i.e., coast prickly pear scrub, California walnut groves, and California walnut groves [disturbed]), jurisdictional features, Threatened and Endangered and CRPR 1B and 2B plant locations shall be avoided or minimized to the extent practicable during Project design. While not required, it is recommended that other coastal sage scrub and coast live oak woodland communities and CRPR 3 and 4 locations also be avoided to the extent practicable. Project plans shall be submitted to the City demonstrating that sensitive natural communities, jurisdictional features, special status plant locations, and other native vegetation types have been avoided to the extent practicable. If any sensitive natural communities, jurisdictional features, special status plant locations, or other native vegetation types are located within 500 feet of the project, they will be shown on project plans and labeled Environmentally Sensitive Areas. If the sensitive natural communities, jurisdictional features, special status plant locations, or other native vegetation types are located within 200 feet, the plans shall include a note with the information below with regard to “Protection” of these resources.

Protection. If a future homeowner project involves vegetation clearing and/or the use of mechanized equipment, and the lot has sensitive habitats (i.e., coast prickly pear scrub, California walnut groves, and California walnut groves [disturbed]), jurisdictional features, or Threatened and Endangered and CRPR 1B or 2B plant locations within 200 feet of the project limits, the limits shall be marked prior to the initiation of project activities. While not required, it is recommended that this protection also be implemented if other native vegetation types (i.e., coastal sage scrub and coast live oak woodland) or CRPR 3 or 4 plant locations are present within 200 feet of project limits. Sensitive natural communities, jurisdictional features, special status plant locations, as well as other native vegetation types (i.e., Environmentally Sensitive Areas), outside the limits shall be avoided during project activities. No equipment, spoils piles, materials storage, or other disturbance shall occur within sensitive natural communities, jurisdictional features, special status plant locations or other native vegetation types (i.e., Environmentally Sensitive Areas).

4.4.2 Mitigation Measure 2: Protected Trees

Removal of mature significant trees protected by the City of San Dimas Municipal Code shall be avoided to the extent practicable. Mature significant trees may include native or non-native species in developed or undeveloped areas, if they meet the size requirement for a mature significant tree under the City’s code. Prior to removal of mature significant trees, homeowners shall follow the procedures for tree removal described in San Dimas Municipal Code 18.162 (see https://file.lacounty.gov/SDSInter/acwm/216023_SanDimasMC.pdf, Chapter 18.162: Tree Preservation). This Code requires that a tree inventory be prepared by a Certified Arborist to map trees on the property. If determined necessary through the City’s review process, conditions for removal of a mature significant tree may include tree replacement at a 2:1 ratio with a minimum 15-gallon box tree(s), or other replacement of equivalent value and size, within the subject property. No grading or building permits shall be issued and no mature significant trees shall be removed until approved as described in San Dimas Municipal Code 18.162. San Dimas Municipal Code 18.162 also requires protection of existing mature significant trees during project activities and prohibits topping and/or excessive pruning of a mature significant tree that would result in significant damage to the tree to the point that it may limit future growth, as determined by a Certified Arborist.

To assist homeowners in the BSA, the Home Owner's Association (HOA) could retain a Certified Arborist to prepare a Native Tree Inventory for the entire BSA. Following the preparation of the Native Tree Inventory, a map overlay could be made showing native trees to be avoided in order to avoid the need for tree permitting. The preparation of a single Native Tree Inventory throughout the BSA would provide an efficiency of scale that would be more cost-effective than the preparation of individual tree surveys by lot.

4.4.3 Mitigation Measure 3: Jurisdictional Permitting

If the project activities would occur within 200 feet of a potential drainage, including potential jurisdictional features shown on Figure 7, or other topographic features that may comprise a bed, bank, or channel, a formal Jurisdictional Delineation shall be prepared by a qualified Regulatory Specialist. The project shall follow avoidance and protective measures described under MM 1.

To assist homeowners in the BSA, the HOA could retain a Regulatory Specialist to prepare a Jurisdictional Delineation for the entire BSA. This would identify jurisdictional features and associated regulatory authority for each lot. Following the preparation of the Jurisdictional Delineation, a map overlay could be made showing jurisdictional features to be avoided in order to avoid the need for further regulatory permitting. The preparation of a single Jurisdictional Delineation throughout the BSA would provide an efficiency of scale that would be more cost-effective than the preparation of individual Jurisdictional Delineations by lot. However, the Jurisdictional Delineation may need to be periodically updated if regulatory requirements change over time.

If project activities would impact features under the jurisdiction of the USACE (if applicable), CDFW, and/or RWQCB, the homeowner shall obtain all necessary permits for impacts to jurisdictional areas. Potential mitigation options shall include payment of an in-lieu mitigation fee to an approved mitigation bank; long-term preservation of existing jurisdictional habitat at an on-site or off-site location; or another strategy as approved by the USACE, CDFW, and/or RWQCB. Jurisdictional areas shall be replaced at a minimum 1:1 ratio, or as otherwise determined by the resource agencies during permitting. The appropriate jurisdictional permits must be obtained and mitigation must be secured (i.e., in-lieu mitigation fee paid or demonstration of long-term preservation has been obtained) prior to issuance of a grading or building permit.

4.4.4 Mitigation Measure 4: Nesting Birds/Raptors

To the extent possible, vegetation clearing shall be conducted during the non-breeding season (i.e., September 16 to January 31) in order to minimize 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 Migratory Bird Treaty Act and/or Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code*.

In order to avoid direct impacts on active nests, 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 vegetation clearing or initiation of project activities. 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 and coastal California gnatcatcher (if there is coastal sage scrub). If the Biologist does not find any active nests within or immediately adjacent to the impact area, the vegetation clearing/construction activities shall be allowed to proceed.

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 determine an appropriate protective buffer zone around the nest depending on the

sensitivity of the species and the nature of the construction activity. The protective buffer shall be 25–100 feet for nesting birds and 200–500 feet for special status bird species or nesting raptors. The active nest shall be protected until nesting activity has ended as determined by a qualified Biologist (i.e., nestlings have fledged or the nest has failed). 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.

4.4.5 Mitigation Measure 5: Special Status Plant Species

Prior to removal of vegetation (including coastal sage scrub, native woodland, non-native woodland, or non-native herbaceous vegetation types) for projects requiring a City permit, the homeowner shall retain a qualified Botanist to conducted focused surveys for special status plant species within the proposed impact area. The survey shall be performed during the target species' peak blooming period in accordance with the most current protocols approved by CDFW and CNPS. Because blooming periods overlap, generally one early spring (i.e., March/April) and one late spring/early summer (May/June) survey can be conducted to cover all target species. The peak blooming time varies based on the rainfall of the year.

To assist homeowners in the BSA, the HOA could retain a qualified Biologist to conduct a special status plant survey for the entire BSA during a year of adequate rainfall. This would identify special status plant locations for each lot. Following the survey, a map overlay could be made showing special status plant locations to be avoided in order to avoid the need for further mitigation. The preparation of a single special status plant survey throughout the BSA would provide an efficiency of scale that would be more cost-effective than the preparation of individual special status plant surveys by lot.

If no special status plant species are located within 200 feet of project activities, no further measures would be required.

If there is a special status plant location present, but it would not be impacted, avoidance and protective measures described under MM 1 shall be followed.

If a special status plant location is observed within the project impact area, the qualified Biologist conducting the survey shall evaluate the significance with respect to the number of individuals that would be impacted and the status of the species.

- If Nevin's barberry or thread-leaved brodiaea are observed in the impact area and cannot be avoided, any impact on these species shall be considered significant. Prior to impacting individuals of either species, approval shall be required from both the USFWS and CDFW. One of the following mitigation options shall be required: (1) payment of an in-lieu mitigation fee to an approved mitigation bank with credits for the subject species; or (2) preparation of a Special Status Plant Translocation Plan. If translocation is selected, a qualified Restoration Biologist shall be retained to prepare a Special Status Plant Species Translocation Plan for approval by the USFWS and CDFW. The Special Status Plant Translocation Plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plant, (2) mitigation site selection criteria, (3) methods for seed/bulb/corm or individual collection; (4) site preparation and planting implementation, (5) implementation schedule, (6) maintenance plan/guidelines, (7) monitoring plan, and (8) long-term preservation. If seeds/bulbs/corms or individuals will be collected as part of the mitigation strategy, a qualified Restoration Biologist/Seed Collector shall collect seed/bulbs/corms or individuals for translocation and shall store them in appropriate conditions to maintain the viability of the seed.

- If plants with a CRPR of 1B or 2B are observed in the impact area and cannot be avoided, the determination of significance will be based on the size of the impacted population relative to the regional population size. The regional population size will be determined based on the current total population sizes (excluding occurrences considered extirpated) of CNDDB and CCH records from the USGS Baldwin Park, San Dimas, Ontario, La Habra, Yorba Linda, Prado Dam, Azusa, Glendora, and Mt. Baldy 7.5-minute quadrangles. If the impacted population of CRPR 1B or 2B species represents less than five percent of the regional population, the impact will be considered less than significant and no mitigation will be required. If the impacted population of CRPR 1B or 2B species represents five percent or more of the regional population, compensatory mitigation shall be required. One of the following mitigation options shall be required: (1) payment of an in-lieu mitigation fee to an approved mitigation bank with credits for the subject species; (2) collection of seeds/bulbs/corms or individuals by a qualified Seed Collector and donation to the California Botanic Garden for their use; or (3) preparation of a Special Status Plant Translocation Plan. If translocation is selected, a qualified Restoration Biologist shall be retained to prepare a Special Status Plant Species Translocation Plan for approval by the City. The Special Status Plant Translocation Plan shall include the following topics: (1) responsibilities and qualifications of the personnel to implement and supervise the plant, (2) mitigation site selection criteria, (3) methods for seed/bulb/corm or individual collection; (4) site preparation and planting implementation, (5) implementation schedule, (6) maintenance plan/guidelines, (7) monitoring plan, and (8) long-term preservation. If seeds/bulbs/corms or individuals will be collected as part of the mitigation strategy, a qualified Restoration Biologist/Seed Collector shall collect seed/bulbs/corms or individuals for translocation and shall store them in appropriate conditions to maintain the viability of the seed.
- If plants with a CRPR of 3 or 4 are observed in the impact area and cannot be avoided, the impact shall be considered less than significant and no further measures shall be required. However, it should be noted that any Southern California black walnut (CRPR 4.2) meeting the definition of a mature significant tree shall be subject to the requirements of MM 2.

4.4.6 Mitigation Measure 6: Crotch Bumble Bee

If CDFW determines that listing of the Crotch bumble bee is not warranted prior to or during implementation of the project activities, this measure shall not be required.

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

Prior to vegetation clearing or grading, homeowners requiring grading permits shall retain a qualified Biologist to conduct pre-construction focused surveys for Crotch bumble bee within 100 feet of Project impact areas. The survey shall be performed during the appropriate window for this species (i.e., March to July). Three visual surveys will 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 survey area to obtain a 100% survey cover. Transect spacing will depend on the habitat. The Biologist will 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 bumble bee are observed, no further action will be required within the year that the focused survey is conducted. Because Crotch bumble bee moves ground nests annually, the pre-construction focused survey shall be repeated if construction does not begin before the spring (i.e., March 1) following the previous focused survey.

If Crotch bumble bee is present, the Project Applicant shall consult with CDFW to determine if a permit (2081) will be needed. If a ground nest is observed, it shall be protected in place until it is no longer active as determined by a 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; CDFW shall approve the protective buffer distance needed.

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

4.4.7 Mitigation Measure 7: Coastal California Gnatcatcher

Prior to vegetation clearing or construction, homeowners with projects that would impact coastal sage scrub shall retain a qualified Biologist with the appropriate permit to conduct focused surveys for coastal California gnatcatcher within 500 feet of Project impact areas. The survey shall be performed in accordance with the most current protocols approved by the USFWS.

To assist homeowners in the BSA, the HOA could retain a qualified Biologist to conduct a focused coastal California gnatcatcher survey for the entire BSA. Following the survey, a map overlay could be made showing occupied habitat to be avoided in order to avoid the need for further mitigation. Conducting a focused coastal California gnatcatcher survey throughout the BSA would provide an efficiency of scale that would be more cost-effective than the preparation of individual surveys by lot.

If coastal California gnatcatchers are not observed within 500 feet of the project impact area, no further measures would be needed.

If coastal California gnatcatchers are observed within 500 feet of the project impact area, then impacts on coastal sage scrub should be avoided or minimized to the extent practicable. If avoidance of coastal sage scrub is not feasible, then consultation with the USFWS (Section 7 or Section 10) shall be required to determine the appropriate mitigation required prior to removal of coastal sage scrub. Potential mitigation options shall include payment of an in-lieu mitigation fee to an approved mitigation bank; long-term preservation of existing coastal sage scrub habitat occupied by coastal California gnatcatcher at an on-site or off-site location; or another strategy as approved by the USFWS. Coastal sage scrub shall be replaced at a minimum 1:1 ratio, or as otherwise determined by the USFWS. The USFWS approval (under Section 7 or 10 of the FESA) must be obtained and mitigation must be secured (i.e., in-lieu mitigation fee paid or demonstration of long-term preservation has been obtained) prior to issuance of a grading permit.

4.4.8 Mitigation Measure 8 Burrowing Owl

Per the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), the homeowner 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 and no greater than 30 days prior to ground disturbance in each Project area (year-round). The pre-construction survey shall include the area of proposed disturbance plus a 500-foot buffer (if access is available).

If an active burrow is observed outside the breeding season (i.e., September 1 to January 31) and it cannot be avoided, the burrowing owl shall be passively excluded from the burrow following methods described in 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, the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools.

If an active burrow is observed outside the breeding season (i.e., September 1 to January 31) and it can be avoided, the Biologist shall determine an appropriate protective buffer for the burrow. The designated protective buffer will be clearly marked in the field and mapped as an Environmentally Sensitive Area on construction plans.

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 (minimum 300 to 500 feet) based on the sensitivity of the individuals and the type of construction activities. The designated protective buffer will be clearly marked in the field and mapped as an Environmentally Sensitive Area on construction plans.

Upon completion of the pre-construction burrowing owl survey, a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey 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.

4.4.9 Mitigation Measure 9: Roosting Bats

The bats with potential to roost in the BSA (i.e., western red bat and western mastiff bat) roost in trees. If native or non-native trees are proposed for removal, then either tree removal shall be conducted between September and November (to avoid the bat maternity and the bat hibernation season), or the tree removal will occur under the supervision of a qualified Biologist and will utilize phased tree trimming. First, branches are removed from the trees; lowered to the ground as gently as possible; and left overnight on the ground to allow bats to escape. After they have been left overnight for at least one night, the branches can be chipped and/or removed from the site. The day after branches are cut from the tree, the tree trunk can be cut; lowered to the ground as gently as possible; and left overnight on the ground to allow bats to escape. After the trunk has been left overnight for at least one night, the trunk can be cut into pieces, chipped, and/or removed from the site.

4.4.10 Mitigation Measure 10: Water Quality

The following Best Management Practices (BMPs) shall be used during construction activities:

- Erosion control measures shall be used to minimize erosion (e.g., temporary installation of silt fences, straw wattles, fiber rolls, gravel bags, etc.).
- Wattles used for erosion control shall be biodegradable and certified as weed-free.
- Spoils shall be stockpiled in disturbed areas lacking native vegetation.
- Construction vehicles shall be washed prior to delivery to the site to prevent weed seeds from entering the construction area. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting the site on vehicles.

- Fueling and equipment maintenance shall occur on existing streets or other developed areas. No equipment maintenance shall occur within or adjacent to drainages or native vegetation. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.
- Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of.
- All trash and debris shall be picked up and removed from the site at the end of each workday.
- All work shall be conducted during daylight hours only.

Trenches and excavations shall be covered at the end of each work day or a wood plank shall be placed from the bottom of the trench to the ground level to allow wildlife to escape from the trench/excavation.

4.4.11 Mitigation Measure 11: Invasive Species

Landscaping designs shall be submitted to the City for review to ensure that no invasive, exotic plant species are used in proposed landscaping (i.e., those listed on the California Invasive Plant Council's Invasive Plant Inventory with a Risk Rating of "High" [Cal-IPC 2023]). The review may be conducted by City staff or a qualified Biologist. If a qualified Biologist conducts the review, suitable substitutes should be suggested for any plants not allowed.

4.4.12 Mitigation Measure 12: Night Lighting

Lighting plans shall be submitted to the City for review to ensure that night lighting is focused within the usable backyard space and does not shine into adjacent habitat areas to the extent practicable. Exterior lighting adjacent to natural open space shall be diffused, shielded, and low intensity and located so that direct rays are confined to the developed areas.

4.4.13 Mitigation Measure 13: Bird Strikes

If landscaping or improvements includes installation of glass walls in outdoor areas within 200 feet of coastal sage scrub or native woodlands, landscaping plans shall demonstrates that window/glass used are designed to minimize bird strikes. This may include measures such as angling of windows/glass downward so that the windows reflect the ground instead of the surrounding habitat or sky or the use of bird-safe glass that exhibits the "2×4 Rule", as defined by the American Bird Conservancy. The 2 X 4 Rule 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. Opaque glass can also be used. 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).

5.0 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the recommended measures will mitigate biological impacts to a level that is considered less than significant.

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APPENDIX A

REPRESENTATIVE PHOTOGRAPHS

PHOTO 1: Areas 4a, 4g, and 4f from southwest of Area 3c. California buckwheat scrub, walnut woodland, and coast live oak woodland visible midground; water tank to the west (8/5/2022).

PHOTO 2: Areas 3b and 3c from southwest. Ribbon drain from water tank visible in middle foreground. Also shown: walnut woodland, upland mustards/star thistle fields, California buckwheat scrub, and developed areas (8/5/2022).

PHOTO 3: Area 1c, coast prickly pear scrub (7/1/2022).

PHOTO 4: Area 5f; coastal cactus scrub with buckwheat in foreground, and coast live oak woodland in left background. View is southwest (8/4/2022).

APPENDIX B

PLANT AND WILDLIFE COMPENDIA

PLANT SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
GYMNOSPERMS			
PINACEAE – PINE FAMILY			
*Pinus sp.**	pine	x	x
EUDICOTS			
ADOXACEAE – MUSKROOT FAMILY			
Sambucus mexicana	blue elderberry	x	x
AMARANTHACEAE – AMARANTH FAMILY			
*Amaranthus albus**	tumbleweed	x	
ANACARDIACEAE – SUMAC FAMILY			
Malosma laurina	laurel sumac		
*Schinus molle**	pepper tree	x	x
Toxicodendron diversilobum	western poison oak	x	x
APOCYNACEAE – DOGBANE FAMILY			
Funastrum cynanchoides var. hartwegii	climbing milkweed	x	x
ASTERACEAE – SUNFLOWER FAMILY			
Artemisia californica	California sagebrush	x	x
Baccharis pilularis ssp. consanguinea	coyote brush	x	
Baccharis salicifolia ssp. salicifolia	mule fat	x	
*Carduus pycnocephalus ssp. pycnocephalus**	Italian thistle	x	x
*Centaurea melitensis**	tocalote	x	x
Cirsium occidentale	cobwebby thistle	x	
Erigeron canadensis	horseweed	x	
Gutierrezia microcephala	sticky snakeweed	x	
*Lactuca serriola**	prickly lettuce		x
Malacothrix saxatilis	rocky malacothrix	x	x
Pseudognaphalium biolettii	Bioletti's cudweed	x	
*Silybum marianum**	milk thistle	x	
*Sonchus oleraceus**	common sow thistle		x
BIGNONIACEAE – BIGNONIA FAMILY			
*Jacaranda mimosifolia**	blue jacaranda		x

PLANT SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
BORAGINACEAE – BORAGE FAMILY			
Cryptantha sp.	cryptantha	x	
Phacelia sp.	phacelia		x
BRASSICACEAE – MUSTARD FAMILY			
*Brassica nigra**	black mustard	x	x
*Hirschfeldia incana**	grayish shortpod mustard	x	x
CACTACEAE – CACTUS FAMILY			
*Opuntia ficus-indica**	mission prickly-pear	x	
Opuntia littoralis	coast prickly-pear	x	x
CAPRIFOLIACEAE – HONEYSUCKLE FAMILY			
*Lonicera japonica**	Japanese honeysuckle	x	x
CHENOPODIACEAE – GOOSEFOOT FAMILY			
*Atriplex semibaccata**	Australian saltbush	x	
*Chenopodium album**	lamb's quarters	x	
*Salsola tragus**	Russian thistle	x	
CONVOLVULACEAE – MORNING–GLORY FAMILY			
Calystegia macrostegia	large-bracted morning-glory		x
Cuscuta sp.	dodder	x	x
CUCURBITACEAE – GOURD FAMILY			
Cucurbita foetidissima	buffalo gourd	x	
Marah macrocarpa	chilicothe	x	x
EUPHORBIACEAE – SPURGE FAMILY			
Euphorbia albomarginata	rattlesnake sandmat	x	
*Ricinus communis**	common castor bean	x	x
FABACEAE – LEGUME FAMILY			
Acmispon glaber	deerweed		x
Lupinus succulentus	arroyo lupine	x	x
FAGACEAE – OAK FAMILY			
Quercus agrifolia var. agrifolia	coast live oak	x	x
JUGLANDACEAE – WALNUT FAMILY			
Juglans californica	southern California black walnut	x	x

PLANT SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
LAMIACEAE – MINT FAMILY			
*Marrubium vulgare**	common horehound	x	x
Salvia mellifera	black sage	x	x
Trichostema lanceolatum	vinegar weed	x	
MYRTACEAE – MYRTLE FAMILY			
*Eucalyptus spp.**	gum tree	x	x
NYCTAGINACEAE – FOUR O'CLOCK FAMILY			
Bougainvillea sp.	bougainvillea		x
OLEACEAE – OLIVE FAMILY			
*Olea europaea**	European olive		x
PLANTAGINACEAE – PLANTAIN FAMILY			
Penstemon heterophyllus	bunch leaf beardtongue	x	
POLYGONACEAE – BUCKWHEAT FAMILY			
Eriogonum fasciculatum	California buckwheat	x	x
*Polygonum aviculare**	knotweed	x	
RHAMNACEAE – BUCKTHORN FAMILY			
Rhamnus ilicifolia	hollyleaf redberry	x	
ROSACEAE – ROSE FAMILY			
Heteromeles arbutifolia	toyon	x	x
*Rosa sp.**	cultivated rose		x
SALICACEAE – WILLOW FAMILY			
Salix lasiolepis	arroyo willow	x	
SIMAROUBACEAE – SIMAROUBA FAMILY			
*Ailanthus altissima**	tree of heaven	x	
SOLANACEAE – NIGHTSHADE FAMILY			
*Cestrum nocturnum**	night cestrum		x
Datura wrightii	Wright's jimsonweed	x	x
*Nicotiana glauca**	tree tobacco	x	
TAMARICACEAE – TAMARISK FAMILY			
*Tamarix ramosissima**	saltcedar	x	

PLANT SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
MONOCOTS			
AGAVACEAE – AGAVE FAMILY			
Hesperoyucca whipplei	Whipple's chaparral yucca	x	
POACEAE – GRASS FAMILY			
*Avena sp.**	oat		x
*Bromus diandrus**	ripgut grass	x	x
*Bromus rubens**	red brome	x	x
*Hordeum vulgare**	barley		x
Stipa coronata	crested needle grass	x	
* Non-native species			

WILDLIFE SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
MILKWEED BUTTERFLIES			
NYMPHALIDAE – BRUSH-FOOTED BUTTERFLY FAMILY			
	monarch butterfly	x	
LIZARDS			
PHRYNOSOMATIDAE – SPINY LIZARD FAMILY			
Sceloporus occidentalis	western fence lizard	x	x
Uta stansburiana	common side-blotched lizard	x	
BIRDS			
ODONTOPHORIDAE – NEW WORLD QUAIL FAMILY			
Callipepla californica	California quail		x
COLUMBIDAE – PIGEON AND DOVE FAMILY			
*Streptopelia decaocto**	Eurasian collared-dove	x	
Zenaida macroura	mourning dove		x
TROCHILIDAE – HUMMINGBIRD FAMILY			
Calypte anna	Anna's hummingbird	x	x
Selasphorus sasin	Allen's hummingbird		x
ACCIPITRIDAE – HAWK FAMILY			
Accipiter cooperii	Cooper's hawk	x	
Buteo lineatus	red-shouldered hawk	x	
Buteo jamaicensis	red-tailed hawk	x	x
PHASIANIDAE - PARTRIDGE AND TURKEY FAMILY			
*Gallus domesticus**	domestic rooster	x	
PICIDAE – WOODPECKER FAMILY			
Melanerpes formicivorus	acorn woodpecker	x	x
Picoides nuttallii	Nuttall's woodpecker	x	x
TYRANNIDAE – TYRANT FLYCATCHER FAMILY			
Sayornis nigricans	black phoebe		x
Myiarchus cinerascens	ash-throated flycatcher		x
Tyrannus vociferans	Cassin's kingbird	x	x

WILDLIFE SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
Tyrannus verticalis	western kingbird	x	
CORVIDAE – JAY AND CROW FAMILY			
Aphelocoma californica	California scrub-jay	x	x
Corvus brachyrhynchos	American crow	x	x
Corvus corax	common raven		x
HIRUNDINIDAE – SWALLOW FAMILY			
Petrochelidon pyrrhonota	cliff swallow	x	
PARIDAE – TITMOUSE FAMILY			
Baeolophus inornatus	oak titmouse		x
AEGITHALIDAE – BUSHTIT FAMILY			
Psaltriparus minimus	bushtit	x	x
TROGLODYTIDAE – WREN FAMILY			
Troglodytes aedon	house wren	x	
Thryomanes bewickii	Bewick's wren	x	x
SYLVIIDAE – SILVIID WARBLERS FAMILY			
Chamaea fasciata	wrentit		x
MIMIDAE – MOCKINGBIRD AND THRASHER FAMILY			
Mimus polyglottos	northern mockingbird	x	x
STURNIDAE – STARLING FAMILY			
*Sturnus vulgaris**	European starling*		x
BOMBYCILLIDAE – WAXWING FAMILY			
Bombycilla cedrorum	cedar waxwing		x
PTILOGONATIDAE – SILKY-FLYCATCHER FAMILY			
Phainopepla nitens	phainopepla		x
PASSERIDAE – OLD WORLD SPARROW FAMILY			
*Passer domesticus**	house sparrow*	x	
FRINGILLIDAE – FINCH FAMILY			
Haemorhous mexicanus	house finch	x	x
Spinus psaltria	lesser goldfinch	x	x
Spinus tristis	American goldfinch	x	

WILDLIFE SPECIES DETECTED DURING THE SURVEY

Species		Ultrasystems	Psomas
Scientific Name	**Common Name**		
PASSERELLIDAE – NEW WORLD SPARROW FAMILY			
Melozone crissalis	California towhee	x	x
Pipilo maculatus	spotted towhee	x	
ICTERIDAE – BLACKBIRDS AND ORIOLES			
Molothrus ater	brown-headed cowbird		x
MAMMALS			
SCIURIDAE – SQUIRREL FAMILY			
*Sciurus niger**	eastern fox squirrel	x	
Sciurus griseus	western gray squirrel	x	
Otospermophilus beecheyi	California ground squirrel	x	x
GEOMYIDAE – POCKET GOPHER FAMILY			
Thomomys bottae	Botta's pocket gopher	x	
CRICETIDAE – NEW WORLD RATS AND MICE FAMILY			
Neotoma macrotis	big-eared woodrat	x	
LEPORIDAE – HARE AND RABBIT FAMILY			
Sylvilagus audubonii	desert cottontail	x	x
CANIDAE – CANID FAMILY			
Canis latrans	coyote	x	
*Canis lupus familiaris**	domestic dog	x	X
* Non-native species			

APPENDIX C

PROJECT IMPACTS BY PARCEL

TABLE C-1
VEGETATION ACREAGE WITHIN THE 35% LOT COVERAGE

Parcel	California Sagebrush Scrub (Disturbed	California Buckwheat Scrub	California Buckwheat Scrub (Disturbed)	California Sagebrush – California Buckwheat Scrub	California Sagebrush – Black Sage Scrub	California Walnut Groves	California Walnut Groves (Disturbed)	Coast Live Oak Woodland (Disturbed)	Coast Prickly Pear Scrub	Developed/ Ornamental	Pepper Tree Groves	Eucalyptus Groves	Upland Mustards or Star-thistle Fields	Upland Mustards or Star-thistle Fields (Mowed)	Total
1	—	—	—	—	—	—	—	—	—	0.799	—	—	—	—	**0.799**
2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.788	**0.788**
3	—	—	—	—	—	—	—	0.117	—	0.367	—	—	—	0.056	**0.540**
4	—	—	—	—	—	—	—	0.030	—	0.328	—	—	—	0.132	**0.490**
5	—	—	—	—	—	—	—	—	—	0.297	—	—	—	0.176	**0.473**
6	—	—	—	—	—	—	—	—	—	0.277	—	—	—	0.395	**0.672**
7	—	—	—	—	—	0.081	—	—	—	0.474	—	—	—	0.092	**0.647**
8	—	—	—	—	—	0.130	0.313	—	—	0.298	—	—	0.004	—	**0.745**
9	—	—	—	—	—	0.035	0.019	—	—	1.129	—	0.076	0.120	—	**1.379**
10	0.040	—	—	—	—	0.034	—	—	—	0.053	—	0.266	0.599	—	**0.992**
11	—	0.711	0.074	—	0.981	0.804	0.030	—	0.003	1.084	—	—	0.010	—	**3.697**
12	—	—	—	—	—	—	0.001	—	—	0.691	—	—	—	—	**0.692**
13	—	—	—	—	—	—	—	—	—	0.314	—	—	—	0.015	**0.329**
14	—	—	—	—	—	—	—	—	—	1.358	—	—	—	—	**1.358**
15	—	—	—	—	—	—	0.032	—	—	0.342	—	—	0.207	—	**0.581**
16	—	—	—	—	—	—	0.081	—	—	0.501	—	—	0.248	0.181	**1.011**
17	—	—	—	—	—	0.050	—	0.012	—	0.481	—	—	—	—	**0.543**
18	—	—	—	—	—	0.121	—	0.019	—	0.244	—	—	—	—	**0.384**
19	—	—	—	—	—	0.306	—	—	—	0.000*	—	—	—	0.043	**0.349**
20	—	—	—	—	—	—	—	—	—	0.244	—	—	—	—	**0.244**
21	—	—	—	—	—	—	—	—	—	0.324	—	—	—	—	**0.324**
22	—	—	—	—	—	—	—	—	—	0.370	—	—	—	—	**0.370**
23	—	—	—	—	—	0.224	—	—	—	0.273	—	—	—	—	**0.497**
24	—	0.004	—	—	—	—	0.627	—	—	0.391	—	—	—	0.028	**1.050**
25	—	—	—	—	—	0.441	0.257	—	—	0.189	—	0.214	—	0.048	**1.149**
26	—	—	—	—	—	0.055	—	—	—	0.528	—	—	—	0.437	**1.020**
27	—	—	—	—	—	0.285	—	—	—	0.303	—	—	—	—	**0.588**
28	—	—	—	—	—	0.178	—	—	—	0.664	—	—	—	—	**0.842**
29	—	—	—	—	—	—	—	—	—	0.592	—	—	—	0.250	**0.842**
30	—	0.101	—	—	—	—	—	—	—	—	—	—	—	0.265	**0.366**
31	—	0.103	—	—	—	0.191	—	—	—	—	—	—	—	0.301	**0.595**
32	—	—	—	—	—	0.303	—	—	—	—	—	—	—	0.289	**0.592**
33	—	—	—	—	—	0.134	—	—	—	0.024	—	—	—	0.420	**0.578**
34	—	—	—	—	—	—	—	—	—	0.511	—	—	—	—	**0.511**
35	—	—	—	—	—	—	—	—	—	0.437	—	—	—	—	**0.437**
36	—	—	—	—	—	—	—	—	—	0.493	—	—	—	—	**0.493**
Open Space	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
Total	**0.040**	**0.919**	**0.074**	**0.000**	**0.981**	**3.372**	**1.360**	**0.178**	**0.003**	**14.380**	**0.000**	**0.556**	**1.188**	**3.916**	**26.967**

TABLE C-2
VEGETATION ACREAGE WITHIN THE CONCEPTUAL GRADING AREA – 20 FEET BEYOND THE 35% LOT COVERAGE AREA

Parcel	California Sagebrush Scrub (Disturbed	California Buckwheat Scrub	California Buckwheat Scrub (Disturbed)	California Sagebrush – California Buckwheat Scrub	California Sagebrush – Black Sage Scrub	California Walnut Groves	California Walnut Groves (Disturbed)	Coast Live Oak Woodland (Disturbed)	Coast Prickly Pear Scrub	Developed/ Ornamental	Pepper Tree Groves	Eucalyptus Groves	Upland Mustards or Star-thistle Fields	Upland Mustards or Star-thistle Fields (Mowed)	Total
1	—	—	—	—	—	—	—	—	—	0.068	—	—	—	—	**0.068**
2	—	—	—	—	—	—	—	—	—	—	—	—	—	0.088	**0.088**
3	—	—	—	—	—	—	—	0.012	—	—	—	—	—	0.021	**0.033**
4	—	—	—	—	—	—	—	0.004	—	—	—	—	—	0.065	**0.069**
5	—	—	—	—	—	—	—	—	—	—	—	—	—	0.065	**0.065**
6	—	—	—	—	—	—	—	—	—	—	—	—	—	0.049	**0.049**
7	—	—	—	—	—	0.022	—	—	—	—	—	—	—	0.037	**0.059**
8	—	—	—	—	—	0.013	0.015	—	—	—	—	—	0.004	—	**0.032**
9	—	—	—	—	—	—	—	—	—	0.032	—	—	0.056	—	**0.088**
10	—	—	—	—	—	—	—	—	—	—	—	—	0.039	—	**0.039**
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
12	—	—	—	—	—	—	0.014	—	—	0.055	—	—	—	—	**0.069**
13	—	—	—	—	—	—	—	—	—	0.005	—	—	—	0.053	**0.058**
14	—	—	—	—	—	—	—	—	—	0.129	—	—	—	—	**0.129**
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
16	—	—	—	—	—	—	—	—	—	—	—	—	0.024	0.032	**0.056**
17	—	—	—	—	—	0.044	—	0.005	—	0.024	—	—	—	—	**0.073**
18	—	—	—	—	—	0.036	—	0.026	—	—	—	—	—	—	**0.062**
19	—	—	—	—	—	0.061	—	—	—	—	—	—	—	—	**0.061**
20	—	—	—	—	—	0.002	—	—	—	0.057	—	—	—	—	**0.059**
21	—	—	—	—	—	0.004	—	—	—	0.067	—	—	—	—	**0.071**
22	—	—	—	—	—	—	—	—	—	0.054	—	—	—	—	**0.054**
23	—	—	—	—	—	0.068	—	—	—	0.000*	—	—	—	—	**0.068**
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
25	—	—	—	—	—	0.020	0.050	—	—	—	—	—	—	0.008	**0.078**
26	—	—	—	—	—	0.005	—	—	—	0.023	—	—	—	0.066	**0.094**
27	—	—	—	—	—	0.091	—	—	—	—	—	—	—	—	**0.091**
28	—	—	—	—	—	0.065	—	—	—	—	—	—	—	—	**0.065**
29	—	—	—	0.002	—	—	—	—	—	0.023	—	—	—	0.045	**0.070**
30	—	—	—	—	—	—	—	—	—	—	—	—	—	0.084	**0.084**
31	—	—	—	—	—	0.029	—	—	—	—	—	—	—	—	**0.029**
32	—	—	—	—	—	0.008	—	—	—	—	—	—	—	—	**0.008**
33	—	—	—	—	—	0.011	—	—	—	0.000*	—	—	—	0.042	**0.053**
34	—	—	—	—	—	—	—	—	—	0.050	—	—	—	—	**0.050**
35	—	—	—	—	—	—	—	—	—	0.063	—	—	—	—	**0.063**
36	—	—	—	—	—	—	—	—	—	0.083	—	—	—	—	**0.083**
Open Space	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
Total	**0.000**	**0.000**	**0.000**	**0.002**	**0.000**	**0.479**	**0.079**	**0.047**	**0.000**	**0.733**	**0.000**	**0.000**	**0.123**	**0.655**	**2.118**

TABLE C-3
VEGETATION ACREAGE WITHIN THE CONSERVATION EASEMENT

Parcel	California Sagebrush Scrub (Disturbed	California Buckwheat Scrub	California Buckwheat Scrub (Disturbed)	California Sagebrush – California Buckwheat Scrub	California Sagebrush – Black Sage Scrub	California Walnut Groves	California Walnut Groves (Disturbed)	Coast Live Oak Woodland (Disturbed)	Coast Prickly Pear Scrub	Developed/ Ornamental	Pepper Tree Groves	Eucalyptus Groves	Upland Mustards or Star-thistle Fields	Upland Mustards or Star-thistle Fields (Mowed)	Total
1	—	—	—	—	—	—	—	—	—	0.579	—	—	—	0.004	**0.583**
2	—	—	—	—	—	—	—	0.309	0.030	0.252	—	—	—	0.333	**0.924**
3	—	—	—	—	—	—	—	0.200	0.106	—	—	—	—	0.432	**0.738**
4	—	0.107	—	—	—	0.005	—	0.030	—	0.010	—	—	—	0.411	**0.563**
5	—	0.165	—	—	—	0.008	—	—	—	—	—	—	—	0.354	**0.527**
6	—	—	0.340	—	—	—	—	—	—	—	—	—	—	0.621	**0.961**
7	—	—	0.332	—	—	0.135	—	—	—	—	—	—	—	0.237	**0.704**
8	—	—	0.060	—	—	0.867	0.000*	—	—	0.008	—	—	0.211	—	**1.146**
9	—	—	0.101	—	—	0.175	0.582	—	—	—	—	0.030	1.349	—	**2.237**
10	—	—	0.173	—	—	0.394	0.061	—	—	0.001	—	0.115	1.029	—	**1.773**
11	—	0.316	0.847	—	1.890	7.237	1.393	—	3.383	0.007	0.657	—	0.492	—	**16.222**
12	—	—	—	—	—	0.297	0.812	—	—	0.000*	—	—	—	—	**1.109**
13	—	—	—	—	—	—	0.052	—	—	—	—	—	0.000*	—	**0.052**
14	—	—	—	—	—	0.047	0.484	—	—	—	—	—	0.561	—	**1.092**
15	—	—	—	—	—	0.067	0.854	—	—	—	—	—	0.544	—	**1.465**
16	—	—	—	—	—	0.000*	0.496	—	—	—	—	—	1.197	—	**1.693**
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
24	—	—	—	—	—	—	2.160	—	—	—	—	—	—	0.456	**2.616**
25	—	—	—	—	—	1.048	0.913	—	—	—	—	—	—	0.176	**2.137**
26	—	—	—	—	—	0.944	—	—	—	—	—	—	—	0.397	**1.341**
27	—	—	—	—	—	0.440	—	—	—	0.000*	—	—	—	—	**0.440**
28	—	—	—	—	—	0.677	—	—	—	—	—	—	—	0.220	**0.897**
29	—	—	—	0.216	—	0.247	—	0.056	—	—	—	—	—	0.064	**0.583**
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
31	—	—	—	0.013	—	0.945	—	—	—	—	—	—	—	—	**0.958**
32	—	—	—	—	—	1.027	—	—	—	—	—	—	—	—	**1.027**
33	—	—	—	—	—	0.715	—	—	—	—	—	—	—	0.028	**0.743**
34	—	—	—	—	—	0.472	—	0.047	—	0.020	—	—	—	0.018	**0.557**
35	—	—	—	—	—	0.160	—	0.171	—	0.073	—	—	—	—	**0.404**
36	—	—	—	—	—	0.018	—	0.006	—	0.579	—	—	—	—	**0.603**
Open Space	—	0.452	—	—	—	3.282	2.802	—	—	0.997	—	—	1.748	2.332	**11.613**
Total	**0.000**	**1.040**	**1.853**	**0.229**	**1.890**	**19.207**	**10.609**	**0.819**	**3.519**	**2.526**	**0.657**	**0.145**	**7.131**	**6.083**	**55.708**

TABLE C-4
VEGETATION ACREAGE WITHIN THE REMAINDER OF THE PARCEL

Parcel	California Sagebrush Scrub (Disturbed	California Buckwheat Scrub	California Buckwheat Scrub (Disturbed)	California Sagebrush – California Buckwheat Scrub	California Sagebrush – Black Sage Scrub	California Walnut Groves	California Walnut Groves (Disturbed)	Coast Live Oak Woodland (Disturbed)	Coast Prickly Pear Scrub	Developed/ Ornamental	Pepper Tree Groves	Eucalyptus Groves	Upland Mustards or Star-thistle Fields	Upland Mustards or Star-thistle Fields (Mowed)	Total
1	—	—	—	—	—	—	—	—	—	0.821	—	—	—	0.005	**0.826**
2	—	—	—	—	—	—	—	0.106	—	—	—	—	—	0.359	**0.465**
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
10	0.049	—	—	—	—	0.006	—	—	—	0.019	—	0.018	0.130	—	**0.222**
11	—	0.020	—	—	0.609	0.342	0.021	—	0.326	0.160	—	—	—	—	**1.478**
12	—	—	—	—	—	—	0.073	—	—	0.137	—	—	—	—	**0.210**
13	—	—	—	—	—	—	0.079	—	—	0.098	—	—	0.070	0.260	**0.507**
14	—	—	—	—	—	—	0.207	—	—	0.397	—	—	0.417	—	**1.021**
15	—	—	—	—	—	—	0.024	—	—	0.095	—	—	0.025	—	**0.144**
16	—	—	—	—	—	—	0.013	—	—	0.107	—	—	0.095	0.137	**0.352**
17	—	—	—	—	—	0.616	—	0.169	—	0.144	—	—	—	0.006	**0.935**
18	—	—	—	—	—	0.213	—	0.379	—	0.065	—	—	—	0.004	**0.661**
19	—	—	—	—	—	0.539	—	—	—	0.009	—	—	—	0.037	**0.585**
20	—	—	—	—	—	0.224	—	—	—	0.170	—	—	—	—	**0.394**
21	—	—	—	—	—	0.317	—	—	—	0.217	—	—	—	—	**0.534**
22	—	—	—	—	—	0.259	—	0.102	—	0.267	—	—	—	0.001	**0.629**
23	—	0.004	—	—	—	0.410	—	0.001	—	0.115	—	—	—	0.347	**0.877**
24	—	0.017	—	—	—	—	0.039	—	—	0.071	—	—	—	0.039	**0.166**
25	—	—	—	—	—	0.063	0.025	—	—	0.037	—	0.078	—	0.046	**0.249**
26	—	—	—	—	—	0.130	—	—	—	0.123	—	—	—	0.199	**0.452**
27	—	—	—	—	—	0.433	—	—	—	0.114	—	—	—	—	**0.547**
28	—	—	—	0.020	—	0.447	—	—	—	0.149	—	—	—	—	**0.616**
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
Open Space	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
Total	**0.049**	**0.041**	**0.000**	**0.020**	**0.609**	**3.999**	**0.481**	**0.757**	**0.326**	**3.315**	**0.000**	**0.096**	**0.737**	**1.440**	**11.870**

TABLE C-5
MAXIMUM POTENTIAL VEGETATION IMPACTS

Parcel	California Sagebrush Scrub (Disturbed	California Buckwheat Scrub	California Buckwheat Scrub (Disturbed)	California Sagebrush – California Buckwheat Scrub	California Sagebrush – Black Sage Scrub	California Walnut Groves	California Walnut Groves (Disturbed)	Coast Live Oak Woodland (Disturbed)	Coast Prickly Pear Scrub	Developed/ Ornamental	Pepper Tree Groves	Eucalyptus Groves	Upland Mustards or Star-thistle Fields	Upland Mustards or Star-thistle Fields (Mowed)	Total
1	—	—	—	—	—	—	—	—	—	1.688	—	—	—	0.005	**1.693**
2	—	—	—	—	—	—	—	0.106	—	—	—	—	—	1.235	**1.341**
3	—	—	—	—	—	—	—	0.129	—	0.367	—	—	—	0.077	**0.573**
4	—	—	—	—	—	—	—	0.034	—	0.328	—	—	—	0.197	**0.559**
5	—	—	—	—	—	—	—	—	—	0.297	—	—	—	0.241	**0.538**
6	—	—	—	—	—	—	—	—	—	0.277	—	—	—	0.444	**0.721**
7	—	—	—	—	—	0.103	—	—	—	0.474	—	—	—	0.129	**0.706**
8	—	—	—	—	—	0.143	0.328	—	—	0.298	—	—	0.008	—	**0.777**
9	—	—	—	—	—	0.035	0.019	—	—	1.161	—	0.076	0.176	—	**1.467**
10	0.089	—	—	—	—	0.040	—	—	—	0.072	—	0.284	0.768	—	**1.253**
11	—	0.731	0.074	—	1.590	1.146	0.051	—	0.329	1.244	—	—	0.010	—	**5.175**
12	—	—	—	—	—	—	0.088	—	—	0.883	—	—	—	—	**0.971**
13	—	—	—	—	—	—	0.079	—	—	0.417	—	—	0.070	0.328	**0.894**
14	—	—	—	—	—	—	0.207	—	—	1.884	—	—	0.417	—	**2.508**
15	—	—	—	—	—	—	0.056	—	—	0.437	—	—	0.232	—	**0.725**
16	—	—	—	—	—	—	0.094	—	—	0.608	—	—	0.367	0.350	**1.419**
17	—	—	—	—	—	0.710	—	0.186	—	0.649	—	—	—	0.006	**1.551**
18	—	—	—	—	—	0.370	—	0.424	—	0.309	—	—	—	0.004	**1.107**
19	—	—	—	—	—	0.906	—	—	—	0.009	—	—	—	0.008	**0.995**
20	—	—	—	—	—	0.226	—	—	—	0.471	—	—	—	—	**0.697**
21	—	—	—	—	—	0.321	—	—	—	0.608	—	—	—	—	**0.929**
22	—	—	—	—	—	0.259	—	0.102	—	0.691	—	—	—	0.001	**1.053**
23	—	0.004	—	—	—	0.702	—	0.001	—	0.388	—	—	—	0.347	**1.442**
24	—	0.021	—	—	—	—	0.666	—	—	0.462	—	—	—	0.067	**1.216**
25	—	—	—	—	—	0.524	0.332	—	—	0.226	—	0.292	—	0.102	**1.476**
26	—	—	—	—	—	0.190	—	—	—	0.674	—	—	—	0.702	**1.566**
27	—	—	—	—	—	0.809	—	—	—	0.417	—	—	—	—	**1.226**
28	—	—	—	0.020	—	0.690	—	—	—	0.813	—	—	—	—	**1.523**
29	—	—	—	0.002	—	—	—	—	—	0.615	—	—	—	0.295	**0.912**
30	—	0.101	—	—	—	—	—	—	—	—	—	—	—	0.349	**0.450**
31	—	0.103	—	—	—	0.220	—	—	—	—	—	—	—	0.301	**0.624**
32	—	—	—	—	—	0.311	—	—	—	—	—	—	—	0.289	**0.600**
33	—	—	—	—	—	0.145	—	—	—	0.024	—	—	—	0.462	**0.631**
34	—	—	—	—	—	—	—	—	—	0.561	—	—	—	—	**0.561**
35	—	—	—	—	—	—	—	—	—	0.500	—	—	—	—	**0.500**
36	—	—	—	—	—	—	—	—	—	0.576	—	—	—	—	**0.576**
Open Space	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**0.000**
Total	**0.089**	**0.960**	**0.074**	**0.022**	**1.590**	**7.850**	**1.920**	**0.982**	**0.329**	**18.428**	**0.000**	**0.652**	**2.048**	**6.011**	**40.955**

Note: The maximum potential vegetation impacts represents all areas within the parcel outside the conservation easement.

C-6
MITIAGTION MEASURES APPLICABLE TO EACH LOT NUMBER

Lot Number	Vegetation Types within Potential Impact Area[1]	Mitigation Measure 1: Environmentally Sensitive Areas (Design/Plan Check)	Mitigation Measure 2: Protected Trees (Tree Survey)	Mitigation Measure 3: Jurisdictional Permitting (Survey-Jurisdictional Delineation)[2]	Mitigation Measure 4: Nesting Birds/ Raptors (Construction Timing/ Pre-construction Survey)	Mitigation Measure 5: Special Status Plant Species (Focused Survey)	Mitigation Measure 6: Crotch Bumble Bee (Focused Survey)	Mitigation Measure 7: Coastal California Gnatcatcher (Focused Survey)	Mitigation Measure 8 Burrowing Owl (Pre-construction)	Mitigation Measure 9: Roosting Bats (Construction Timing/BMPs)	Mitigation Measure 10: Water Quality (Construction BMPs)	Mitigation Measure 11: Invasive Species (Design/Plan Check)	Mitigation Measure 12: Night Lighting (Design/Plan Check)	Mitigation Measure 13: Bird Strikes (Design/Plan Check)
Lot 1	None			P							X	X	X	X
Lot 2	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 3	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 4	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 5	Ruderal	X		P	X	X	X		X		X	X	X	X
Lot 6	Ruderal	X		P	X	X	X		X		X	X	X	X
Lot 7	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 8	Woodland, Ruderal	X	X	X	X	X	X		X	X	X	X	X	X
Lot 9	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 10	CSS, Woodland, Ruderal	X	X	X	X	X	X	X	X	X	X	X	X	X
Lot 11	CSS/Cactus Scrub, Woodland, Ruderal	X	X	X	X	X	X	X	X	X	X	X	X	X
Lot 12	Woodland	X	X	X	X	X	X		X	X	X	X	X	X
Lot 13	Woodland, Ruderal	X	X	X	X	X	X		X	X	X	X	X	X
Lot 14	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 15	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 16	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 17	Woodland	X	X	P	X	X	X		X	X	X	X	X	X
Lot 18	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 19	Woodland	X	X	P	X	X	X		X	X	X	X	X	X
Lot 20	Woodland	X	X	P	X	X	X			X	X	X	X	X
Lot 21	Woodland	X	X	P	X	X	X			X	X	X	X	X
Lot 22	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 23	CSS, Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 24	CSS, Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 25	Woodland, Ruderal	X	X	X	X	X	X		X	X	X	X	X	X
Lot 26	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 27	Woodland	X	X	P	X	X	X			X	X	X	X	X
Lot 28	CSS, Woodland, Ruderal	X	X	P	X	X	X	X		X	X	X	X	X
Lot 29	CSS, Ruderal	X		P	X	X	X	X	X		X	X	X	X
Lot 30	CSS, Ruderal	X		P	X	X	X	X	X		X	X	X	X
Lot 31	CSS, Woodland, Ruderal	X	X	P	X	X	X	X	X	X	X	X	X	X
Lot 32	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 33	Woodland, Ruderal	X	X	P	X	X	X		X	X	X	X	X	X
Lot 34	None			P							X	X	X	X
Lot 35	Woodland	X	X	P	X	X	X		X	X	X	X	X	X
Lot 36	None			P							X	X	X	X
Open Space	None [all within Conservation Easement]													

[1] CSS: Coastal sage scrub vegetation types include California sagebrush scrub (disturbed), California buckwheat scrub, California buckwheat scrub (disturbed), California sagebrush – California buckwheat scrub, California sagebrush – black sage scrub, and coast prickly pear scrub.

[1] Woodland: Woodland vegetation types include California walnut groves, California walnut groves (disturbed), and coast live oak woodland (disturbed).

[1] Ruderal: Ruderal vegetation types include upland mustards or star-thistle fields and upland mustards or star-thistle fields (disturbed); these areas are dominated by non herbaceous species.

[2] X - This mitigation measure would be required for the parcel.

[2] P - A formal jurisdictional delineation was not conducted; therefore, it is unknown whether these parcels contain drainage features that were not identified by the National Wetlands Inventory (see Exhibit 10). If a proposed homeowner project would impact a drainage feature, a jurisdictional delineation may be required.

Color Code for Type of Mitigation
Design/Plan Check
Focused Surveys
Pre-construction Survey
Construction Timing/BMP