Evergreen Commercial Center Initial Study/Mitigated Negative Declaration

Appendix B

Evergreen Commercial Development Project – Biological Resources Technical Report, ESA

July 2022

EVERGREEN COMMERCIAL DEVELOPMENT PROJECT

Biological Resources Technical Report

Prepared for Karen Levitt Ortiz Evergreen Devco, Inc. 2390 East Camelback Road, Suite 410 Phoenix, AZ 85016 July 2022





EVERGREEN COMMERCIAL DEVELOPMENT PROJECT

Biological Resources Technical Report

Prepared for Karen Levitt Ortiz Evergreen Devco, Inc. 2390 East Camelback Road, Suite 410 Phoenix, AZ 85016 July 2022

16755 Von Karman Avenue Suite 200 Irvine, CA 92606 949.753.7001 esassoc.com

Bend Oakland San Diego Camarillo Orlando San Francisco Delray Beach Pasadena Santa Monica Destin Petaluma Sarasota Portland Seattle Irvine Los Angeles Sacramento Tampa



OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Biological Resources Technical Report

			<u>Page</u>
Execut	ive Sumr	nary	ES-1
Chapte	r 1, Intro	duction	1-1
		ct Location and Background	
1		ct Description	
		Tentative Parcel Maps	
		Development Proposal	
		Signage	
		Street Improvements	
		Parking	
		Additional Site Improvements	
		Grading	
	1.2.8	Operation	1-6
Chapte	r 2, Meth	odology	2-1
2	.1 Biolo	gical Study Area	2-1
2	.2 Existi	ng Literature and Database Review	2-1
2		Survey	
		Biological Resources and Existing Conditions	2-2
	2.3.2	Sensitive Natural Communities and Special-Status Plants and	
		Wildlife	2-3
Chapte	r 3, Regu	latory Framework	3-1
-		ral Regulations	
		Federal Endangered Species Act	
		Migratory Bird Treaty Act	
	3.1.3	Clean Water Act	3-3
		Bald and Golden Eagle Protection Act	
3		Regulations	
		California Fish and Game Code	
		California Environmental Quality Act Guidelines, Section 15380	3-5
	3.2.3	California Water Quality Control Act (Porter-Cologne California	
		Water Code Section 13260)	
3		onal or Local Regulations	
	3.3.1	Western Riverside County MSHCP	3-6
Chapte		ing Conditions	
4			
4		al Communities and Land Cover Types	
		Non-Native Grasses and Forbs	
		River Red Gum Groves	
		Scale Broom Scrub (Lepidospartum squamatum Alliance)	
	4.2.4	Disturbed/Developed	4-4

			<u>Page</u>
	4.3	Sensitive Biological Resources	4-5 4-6
	4.4 4.5 4.6	Aquatic Resources	4-7 4-10
Cha	pter 5 , 5.1	Project Impacts and Avoidance, Minimization, and Mitigation Approach to the Analysis	
	5.1	Thresholds of Significance	
	5.3	Impacts Analysis	5-2
	5.4 5.5	Avoidance, Minimization, and Mitigation Measures Cumulative Impacts	
Cha	pter 6.	References Cited	6-1
App A. B.		es al-Status Plant Species al-Status Wildlife Species	
List	of Fig	ures	
	re 2 re 3	Project Location Site Plan Soils Natural Communities and Land Cover Types Aquatic Resources (U.S. and State) within the Project Site CDFW Streams and Associated Vegetation and MSHCP Riparian/Riverine Areas	1-3 4-2 4-3 4-8
List	of Tak	ples	
Tabl Tabl Tabl	e 2	Lot Summary Development Summary Natural Communities and Land Cover Types	1-5

EXECUTIVE SUMMARY

The proposed Evergreen Commercial Development Project is located in a moderately developed portion of the City of Lake Elsinore in western Riverside County. The project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), and lies within the Elsinore Area Plan of the MSHCP. The natural communities and land cover types within the project site primarily consist of disturbed/developed areas, with patches of non-native grasses and forbs, river red gum groves, and scale broom scrub.

No special-status plant species were detected during the focused special-status plant survey. Two special-status wildlife species, Cooper's hawk (*Accipiter cooperii*) and burrowing owl (*Athene cunicularia*), were identified as having a moderate potential to occur on-site. However, the native habitat on-site to support these species is limited. The removal of 1.00 acre of river red gum groves, 0.11 acre of non-native grasses and forbs, and 7.68 acres of disturbed/developed habitat is not expected to threaten regional populations and would therefore not be significant. The project site does not occur within or immediately adjacent to critical habitat.

One sensitive natural community, scale broom scrub, occurs within the drainage (Drainage 1) on the project site and encompasses 0.09 acre. Approximately 0.10 acre (469 linear feet) of potential other waters of the U.S. and State, and 0.26 acre (469 linear feet) of streams and associated vegetation are potentially subject to regulation under Division 2, Chapter 6, Section 1600 et seq. of the California Fish and Game Code (CFGC) and MSHCP riparian/riverine areas and will be impacted by the project. These resources are surrounded by residential and commercial development and persist as fragmented remnants, separated from other resources, and therefore provide limited function; however, impacts to these resources would be considered potentially significant. Incorporation of Mitigation Measure BIO-1 (purchase of mitigation credits at Soquel Canyon Mitigation Bank) would reduce impacts to sensitive natural communities, MSHCP riparian/riverine areas, and aquatic resources to a less-than-significant level. Mitigation Measure BIO-1 applies only to Phase 2 of the proposed project as the sensitive natural communities, MSHCP riparian/riverine areas, and aquatic resources only occur in the southern portion of the project site.

Wildlife migration corridors do not occur within the project site. Thus, no impact to wildlife movement and/or nursery sites is expected as a result of project activities. The proposed project may result in the disturbance of nesting birds (passerine and raptors) protected by the Migratory Bird Treaty Act and CFGC 3503, 3503.5, and 3513. Impacts to nesting birds would be potentially significant. Incorporation of Mitigation Measure BIO-2 (nesting bird survey) would reduce impacts to nesting birds to a less-than-significant level.

The project site does not support regulated palm trees protected under Lake Elsinore Municipal Code, Chapter 5.116, Significant Palm Trees, and no other such local policies or ordinances apply to the project site; therefore, there would be no conflict with local policies or ordinances as a result of project activities.

The proposed project would be consistent with the MSHCP with incorporation of Mitigation Measure BIO-1 (which applies only to Phase 2 of the proposed project), the payment of development fees, and the adherence to Best Management Practices outlined in MSHCP Appendix C (Dudek 2003).

CHAPTER 1

Introduction

1.1 Project Location and Background

Environmental Science Associates (ESA) conducted a biological resources assessment of the Evergreen Commercial Development Project (proposed project) located at the southeast corner of Central Avenue (California State Route 74) and Cambern Avenue (project site) in the City of Lake Elsinore, Riverside County, California. The project site encompasses five parcels, including Assessor's Parcel Numbers (APNs) 377-020-014, 377-020-016, 377-020-017, 377-020-018, and 377-020-019, totaling 8.87 acres (**Figure 1**, Project Location). The project site is within Section 31, Township 5 South and Range 4 West, in the Lake Elsinore, California, 7.5-minute U.S. Geological Survey (USGS) quadrangle.

1.2 Project Description

The proposed project would involve the development of multiple commercial buildings and associated parking (**Figure 2**, Site Plan). Staging for the project would remain entirely within the project site. Project activities would occur in two phases, would involve approximately 4 months of grading and site preparation, and would last between 1.5 and 2 years to complete construction of the buildings and parking lots. Phase 1 of the project would take place in the northern half of the project site, which is disturbed and supports limited biological resources. Phase 2 would occur in the southern half of the project site, which supports a limited amount of fragmented aquatic resources.

The proposed project consists of applications for a Tentative Parcel Map (TPM) No. 38195, TPM No. 38281, a Conditional Use Permit (CUP) No. 2021-09, CUP No. 2021-10, CUP No. 2021-11, CUP No. 2021-12, and a Commercial Design Review (CDR) No. 2021-17, Public Convenience & Necessity (PCN) No. 2021-01, PCN No. 2021-02, and Uniform Sign Program (SIGN) No. 2021-35, which collectively are being processed under Planning Application (PA) No. 2021-34.

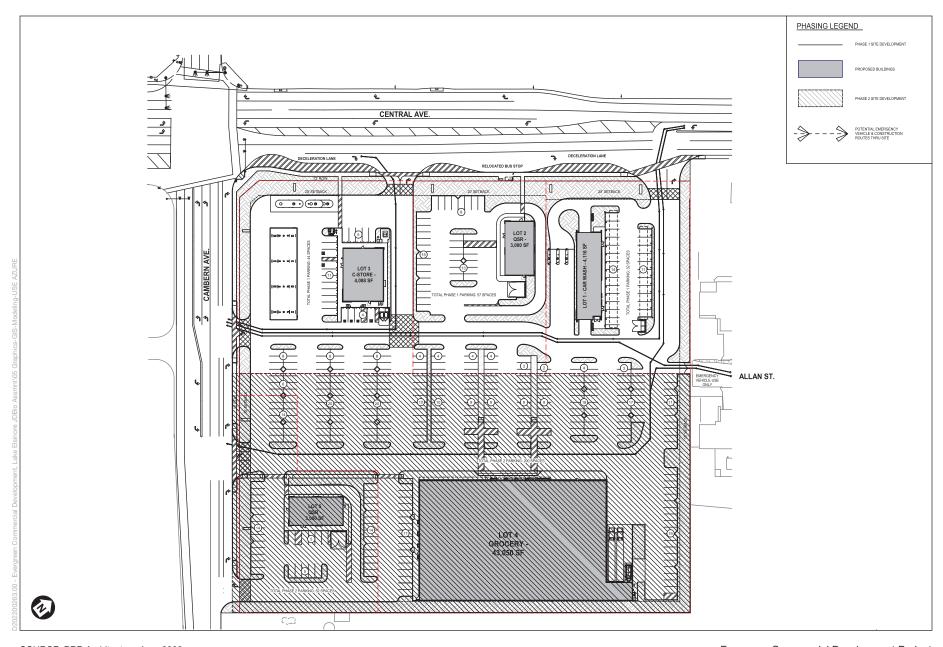


SOURCE: Nearmap, 2022; ESA, 2022

Evergreen Commercial Development Project

Figure 1
Project Location





SOURCE: BRR Architecture, Inc., 2022

Evergreen Commercial Development Project





1.2.1 Tentative Parcel Maps

Evergreen Devco, Inc., the Applicant, proposes to subdivide the existing site into five total lots via TPM No. 38195 and TPM No. 38281 as shown in **Table 1**, Lot Summary.

TABLE 1
LOT SUMMARY

Lot Number	Gross Acreage	Net Acreage
1	1.30	1.19
2	1.20	1.10
3	1.65	1.42
4	3.60	3.59
5	1.13	1.03
Total	8.88 (+/- 8.63)	8.33 (+/- 8.32)

1.2.2 Development Proposal

The Applicant proposes to construct the following improvements in two phases as shown in **Table 2**, Development Summary.

Phase 1

Lot 1: A 4,116-square foot (SF) drive-thru car wash building, 25 self-service vacuum stations, 7 parking spaces, and two (2) monument signs on 1.19 net acres.

Lot 2: A 3,000 SF quick-service restaurant building, 57 parking spaces, and one (1) monument sign on 1.10 net acres.

Lot 3: A 4,088 SF service station with convenience store, fuel canopy with eight (8) pumps, two (2) underground storage tanks (USTs), 43 parking spaces, and two (2) monument signs on 1.42 net acres.

Phase 2

Lot 4: A 43,050 SF grocery store and 184 parking spaces on 3.59 net acres.

Lot 5: A 3,000 SF quick-service restaurant building, 52 parking spaces, and two (2) monument signs on 1.03 net acres.

Pursuant to the C-2 zoning requirements, the project would be subject to a CUP No. 2021-09 for the 4,116 SF Car Wash on Lot 1, CUP No. 2021-10 for the 3,000 SF Quick-service Restaurant with a drive-through lane on Lot 2, CUP No. 2021-11 and PCN No. 2021-01 for the gas station and the 4,088 SF convenience store with concurrent sale of beer and wine for off-site consumption (Type 20 ABC) on Lot 3, PCN No. 2021-02 for the 43,050 SF grocery store for the sale of beer, wine, and distilled spirits for off-site consumption (Type 21 and 86 ABC) on Lot 4, and CUP No. 2021-12 for the 3,000 SF Quick-service Restaurant with a drive-through lane on Lot 5.

TABLE 2
DEVELOPMENT SUMMARY

Proposed Lot Number	Proposed Gross Acres	Proposed Net Acres	Proposed Development (Conceptual)	Proposed FAR
Phase 1				
1	1.30	1.19	 Car wash (4,116 SF) 25 self-serve vacuum stations 7 parking spaces Two monument signs Trash enclosure Site lighting 	.0797
2	1.20	1.10	 Quick-service restaurant (3,000 SF) 57 parking spaces Monument sign Site lighting Trash enclosure 	.0629
3	1.65	1.42	 Service station with convenience store (4,088 SF) Fuel canopy with 8 pump islands 43 parking spaces Two USTs Two monument signs Site lighting Trash enclosure 	.0659
Phase 2				
4	3.60	3.59	 Grocery store (43,050 SF) 184 parking spaces Site lighting Trash enclosure 	.2756
5	1.13	1.03	 Quick-service restaurant (3,000 SF) 52 parking spaces Two monument signs Site lighting Trash enclosure 	.0672

1.2.3 Signage

The uniform sign program (SIGN No. 2021-35) for the Project intended to create an integrated framework for all signage within the center to allow for business branding and identification while complementing the character of the center via architectural compatibility. The sign program includes proposed freestanding signs, a blueprint for building/wall signage, and all other types of contemplated signage that would be allowed in the center. The larger Center identification signs situated at the primary driveway entrances into the center will feature the grocery anchor tenant prominently with panels for the other prospective 4 tenants within the center. The sign program is also proposing a 6' tall freestanding monument sign for each remaining outparcel featuring a single business name/logo with consistent base and sign structure to match the rest of the signs architectural theme.

1.2.4 Street Improvements

Off-site street improvements within the public right-of-way on Central Avenue and Cambern Avenue, along the project site's frontages, would conform with the City's roadway design standards. Two-way vehicular driveways are proposed from Central Avenue into Lots 1 and 3, and from Cambern Avenue into Lots 3 and 5. An emergency vehicle only access is also proposed from Allan Street, a residential street to the east, into Lot 1. All vehicular driveways are proposed to be served by dedicated right turn only lanes traveling northbound and eastbound, and by median left turn lanes traveling southbound and westbound. Pedestrian access to the site will be provided by new sidewalks along both street frontages. A future Riverside Transit Agency (RTA) bus shelter is anticipated along eastbound Central Avenue adjacent to Lot 2.

1.2.5 Parking

The Project Site would include a total of 368 vehicular parking spaces between all five lots, which exceeds the City's parking requirement of 286 spaces based on the proposed mixed of uses for the project. Parking space total includes the 25 self-service vacuum stations on Lot 1. ADA accessible parking spaces will be provided throughout the project site in accordance with California Building Code (CBC) requirements. Shared access easements shall link all five lots to allow for seamless use of the shared parking lot by visitors to the project site arriving from both Central Avenue and Cambern Avenue.

1.2.6 Additional Site Improvements

The proposed project includes approximately 56,360 SF of landscaping, which is 15.56% landscape coverage. Landscaping would be provided in the setbacks areas along the perimeter of the project site, between the operational areas of each pad tenant, and interspersed throughout the shared parking lot. Paved areas for parking and circulation would cover 247,767 SF, or 68.64% of the project site. The entire site would include on-site stormwater management improvements, area lighting, walls and fencing, and a security gate for the emergency vehicle access at Allan Street. Site improvements will be completed in two phases consistent with the phasing plan for project buildout.

1.2.7 Grading

The project site is generally flat and has already been cleared of most vegetation. Building pads will need to be overexcavated, recompacted and filled prior to construction. Precise grading is anticipated to require 51,000 cubic yards (CY) of exported soils and 60,000 CY of imported soils, for a total of 9,000 CY of net import fill soils. The maximum grading cut depth will be 10.7 feet, with a maximum fill depth of 1 foot.

1.2.8 Operation

Operation of the overall project site would be 24-hours per day, seven (7) days per week. Individual hours of operation will be determined by each pad tenant but are anticipated to concentrate within conventional business hours. The proposed convenience store would be single-story and include restrooms and retail space. The proposed gas station would entail eight (8) fuel

pumps, servicing up to 16 vehicles at one time. The two quick-service restaurants include drive-thru queuing lanes in addition to on-site parking spaces. The carwash includes a drive-thru queuing area and self-service vacuum stations for customers. The grocery store includes a parking lot for customers and staff as well as loading dock area for delivery vehicles on the east side of the building.

Biological Resources Technical Report

This page intentionally left blank

CHAPTER 2

Methodology

2.1 Biological Study Area

The biological study area consists of the 8.87-acre project site, which encompasses five parcels, including APNs 377-020-014, 377-020-016, 377-020-017, 377-020-018, and 377-020-019.

2.2 Existing Literature and Database Review

ESA reviewed previous environmental documentation and publications related to biological and aquatic resources that occur on-site, and conducted queries of available resource inventory databases to analyze the potential for sensitive resources to occur within or immediately adjacent to the project site. The literature and database review included the following sources:

- Preliminary Habitat Assessment APN 377-020-014, 377-020-016, 377-020-017, 377-020-018, 377-020-019 (Gonzales 2022a)
- Preliminary Delineation of Waters of the United States, Department of Fish and Wildlife, Regional Water Quality Control Board, and 6.1.2 MSHCP Western Riverside County Jurisdictional Habitats for APN 377-020-014, 377-020-016, 377-020-017, 377-020-018, 377-020-019 (Gonzales 2022b)
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base
 (CNDDB) (CDFW 2022a). The database was queried for special-status species records in the
 Lake Elsinore USGS 7.5-minute quadrangle and eight surrounding quadrangles, including
 Alberhill, Lake Mathews, Murrieta, Perris, Romoland, Sitton Peak, Steele Peak, and
 Wildomar to provide background information on species within the project vicinity (i.e.,
 within an approximate 5-mile radius).
- Sensitive Natural Communities (CDFW 2022b).
- BIOS Habitat Connectivity Viewer (CDFW 2022c).
- Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022). The database was queried for special-status species records in the Lake Elsinore USGS 7.5-minute quadrangle and eight surrounding quadrangles, including Alberhill, Lake Mathews, Murrieta, Perris, Romoland, Sitton Peak, Steele Peak, and Wildomar.
- Arid West Supplement to the 1987 Wetlands Delineation Manual (USACE 2008a).
- A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b).
- Field Indicators of Hydric Soils in the United States, Version 7.0 (USDA 2010).
- Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2022a).

- Agricultural Applied Climate Information System (AgACIS) (USDA 2022b).
- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2022a).
- Information for Planning and Consultation (IPaC) (USFWS 2022b).
- National Wetlands Inventory (USFWS 2022c).

2.2.1 Regional Connectivity, Wildlife Movement, and Habitat Linkages

Pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Sections 6.1.1-6.1.5, ESA conducted an analysis of wildlife habitat linkages as they pertain to a review of the urban/wildlands interface. The analysis of wildlife habitat linkages associated with the project site and its immediate vicinity is based on information compiled from literature; MSHCP mapped habitat linkages (Figure 3-2, *Schematic Cores and Linkages Map* in the MSHCP [2004]); analysis of the Criteria Area conservation language as it relates to habitat cores and linkages; analysis of aerial photographs; and direct observations (including sign, tracks and physical movement barriers, including recent development) made in the field during the biological survey. The discussions in this report are intended to focus on wildlife movement associated with the project site and the immediate vicinity.

2.3 Field Survey

2.3.1 Biological Resources and Existing Conditions

A general biological site investigation and a focused special-status plant survey were conducted by ESA biologists Daryl Koutnik and Robert Sweet on March 3, 2022. The biologists conducted the survey by walking the project site to map existing vegetation and assess the potential for special-status plants and wildlife to occur. The vegetation mapping and focused rare plant survey efforts were conducted pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018), with the exception of mapping CDFW sensitive communities; a Combined Rapid Assessment and Relevé form was not completed when determining the presence of and/or boundaries of sensitive communities. However, a visual inspection of species composition was deemed sufficient by the surveying biologists to accurately describe each community. In addition, an aquatic resource delineation was conducted at the same time as the general biological site investigation.

All incidental visual observations of flora and fauna, including sign (i.e., presence of scat), as well as any audible detections were noted during the site investigation and considered when assessing potential for special-status species to occur. All native and non-native natural communities and land cover types were mapped based on current existing conditions, and then digitized on aerial maps using Geographic Information System software (i.e., ArcGIS). Most descriptions of vegetation were characterized in the field in accordance with *A Manual of California Vegetation* (Manual) (Sawyer et al. 2009); however, others were based on dominant species or notable features when a vegetation alliance listed in the Manual was not appropriate. A detailed description of each natural community and land cover type is provided in Section 4.3.

2.3.2 Sensitive Natural Communities and Special-Status Plants and Wildlife

ESA assessed the potential for sensitive biological resources to occur within the project site.

Sensitive Natural Communities

Sensitive natural communities and habitats are defined by the CDFW as those natural communities that have a reduced range and/or are imperiled as a result of residential and commercial development, agriculture, energy production and mining, or an influx of invasive and other problematic species. Vegetation communities are evaluated using NatureServe's Heritage Methodology (NatureServe 2022), which is based on the knowledge of range and distribution of a specific vegetation type and the proportion of occurrences that are of good ecological integrity. The communities and habitats are evaluated at both global (natural range within and outside of California [G]) and subnational (state level for California [S]) status ranks, each ranked from 1 ("critically imperiled" or very rare and threatened) to 5 (demonstrably secure). Natural communities and habitats with state ranks of S1–S3 are considered sensitive and may require review when environmental impacts are evaluated. When a community is given a rank of NR, this indicates that it has not yet been ranked under NatureServe (CDFW 2022a).

Special-Status Plants and Wildlife

Special-status plants and wildlife are defined as those that, because of their recognized rarity or vulnerability to various forms of habitat loss or population decline, are considered by federal, state, or other agencies to be under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation and others have been designated as special-status on the basis of adopted local policies (e.g., city and county) or the educated opinion of various resource interest groups (e.g., Western Bat Working Group [WBWG]). Special-status wildlife is defined as any of the following:

- Plant and wildlife species that are listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA).
- Plant and wildlife species that meet the definitions of rare or endangered under California Environmental Quality Act (CEQA) Guidelines Section 15380.
- Wildlife designated by CDFW as species of special concern (SSC), included on the Watch List, or considered "Special Animals."
- Wildlife fully protected in California (California Fish and Game Code [CFGC] Sections 3511, 4700, 5050, and 5515).
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (California Rare Plant Rank [CRPR] 1A, 1B, 2A, and 2B plants) in California.
- Plants listed by the CNPS as plants for which more information is needed to determine their status and plants of limited distribution (CRPR 3 and 4 plants).
- Plants listed as rare under the California Native Plant Protection Act (CFGC 1900 et seq.).
- Bird species protected by the Migratory Bird Treaty Act (MBTA).

- Eagles protected by the Bald and Golden Eagle Protection Act (BGEPA)
- Bat species considered priority by the WBWG.

Aquatic Resources

The project site was assessed for its potential to support jurisdictional areas based on the presence of definable channels (bed and bank), ordinary flow (Ordinary High Water Mark [OHWM]), hydrology, vegetation communities, and Riparian/Riverine resources that are subject to the United States Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the Clean Water Act, CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the CFGC, the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and Section 13260 of the California Water Code, i.e., the Porter-Cologne Water Quality Control Act, and riparian/riverine resources pursuant to Section 6.1.2 of the MSHCP (MSHCP 2004).

Other Waters of the U.S.

Other waters of the U.S. refer to those hydric features that are regulated by the Clean Water Act but are not wetlands (33 CFR 328.4). These features extend to the OHWM, defined in 33 CFR 328.3 as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; or the presence of litter and debris. In the Arid West region of the United States, waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic ordinary high-water delineations are associated with the commonly occurring ephemeral/intermittent channel forms that dominate the Arid West landscape" (USACE 2008b). Delineation methods for "other waters of the U.S." were completed in accordance with A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (USACE 2008b).

According to the most recent guidance provided in the Navigable Waters Protection Rule Vacatur, adopted on January 5, 2022, the USACE and Environmental Protection Agency (EPA) have reverted to the pre-2015 definition of "waters of the United States" and now take jurisdiction over the following:

- 1. Traditional navigable waters (TNWs), which is defined as all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- 2. Wetlands adjacent to TNW, including adjacent wetlands that do not have a continuous surface connection to TNW.
- 3. Non-navigable tributaries of TNW that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months).
- 4. Wetlands adjacent to non-navigable tributaries as defined above, that have a continuous surface connection to such tributaries (e.g., they are not separated by uplands, a berm, dike, or similar feature).

The EPA and the USACE decide jurisdiction over the following waters, based on a fact-specific analysis to determine if there is a significant nexus, as described below, to a TNW.

- 1. Non-navigable tributaries that are not relatively permanent.
- 2. Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- 3. Wetlands that are adjacent to but do not directly abut a relatively permanent non-navigable tributary.

The EPA and the USACE generally do not assert jurisdiction over the following features:

- 1. Swales or erosional features (e.g., gullies, small washes characterized by low-volume, infrequent, or short-duration flow).
- 2. Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Other Waters of the State

Other waters of the state, when they overlap with waters of the U.S., are those that are regulated under Section 401 of the Clean Water Act and are delineated using the same methodology as waters of the U.S. However, these waters are not subject to determining a nexus to a TNW. In the absence of waters of the U.S., waters may be regulated under the Porter-Cologne Water Quality Control Act if project activities, discharges, or proposed activities or discharges could affect surface, coastal, or ground waters. The permit requested by the applicant and issued by the RWQCB is either a Water Quality Certification in the presence of waters of the U.S. or a Waste Discharge Requirement (WDR) in the absence of waters of the U.S.

Most projects involving water bodies or drainages that display a "bed and bank" (i.e., OHWM) are regulated by the RWQCB, the principal state agency overseeing water quality at the local/regional level.

Streams and Associated Vegetation and MSHCP Riparian/Riverine Areas

Pursuant to Division 2, Chapter 6, Section 1600 et seq. of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife (streams and associated vegetation). A notification of a Lake or Streambed Alteration Agreement (LSAA) must be submitted to CDFW for "any activity that may substantially change the bed, channel, or bank of any river, stream, or lake." In addition, CDFW has authority, under the CFGC, over wetland and riparian habitats associated with lakes and streams. The CDFW reviews proposed actions and, if necessary, submits to the applicant a draft Streambed Alteration Agreement (SAA) that includes measures to protect affected fish and wildlife resources. The final SAA is mutually agreed upon by CDFW and the applicant.

Pursuant to MSHCP Section 6.1.2, Protection of Species Associated with Riparian Areas and Vernal Pools, the potential effect of proposed project activities occurring within the MSHCP must be assessed regarding any and all impacts to riparian/riverine areas. Riparian/riverine areas include "those that contain habitat dominated by trees, shrubs, persistent emergents, or emergent

mosses and lichens, which occur close to, or which depend upon soil moisture from a nearby water source; or areas with freshwater flow during all or a portion of the year" (Dudek 2003).

Potentially jurisdictional CDFW streams and associated vegetation, and MSHCP riparian/riverine areas, are determined by establishing the area within the top of bank (TOB), defined as the furthest break in slope or change in substrate, from the bed of the channel, prior to reaching adjacent upland areas (assuming the absence of riparian vegetation), and/or extent of riparian/wetland vegetation.

CHAPTER 3

Regulatory Framework

This section provides a summary of the federal, state, and local environmental regulations that govern the biological resources applicable to the project site. This section also provides a summary of other state and local environmental guidelines or listings that evaluate the rarity of species or the habitats they depend on.

3.1 Federal Regulations

3.1.1 Federal Endangered Species Act

The United States Congress passed the FESA in 1973 to protect those species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [(3)(19)]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] Section 17.3). "Harass" is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

Section 7 of the FESA requires federal agencies, in consultation with and assistance from the Secretary of the Interior or the Secretary of Commerce, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. The USFWS and National Marine Fisheries Service (NMFS) share responsibilities for administering the FESA. Regulations governing interagency cooperation under Section 7 are found in CCR Title 50, Part 402. Section 7 is triggered when a federal permit or other authorization is considered by a federal agency, or the project receives federal funding. The need for federal regulatory permits (i.e., Clean Water Act [CWA] Section 404 permit issued by the USACE) provides a "federal nexus" by which a Section 7 consultation can occur. This statute imposes the obligation on federal agencies to ensure that their actions (such as issuing federal CWA permits) are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its designated critical habitat. This obligation is enforced through the procedural requirement that agencies, such as the USACE, initiate consultation with USFWS on any actions that may affect a threatened or endangered species. The USFWS will determine the

proposed action is not likely to adversely affect threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species, or a Biological Opinion issued at the conclusion of consultation will include a statement authorizing "take" (to harass, harm, pursue, hunt, wound, kill, etc.) that may occur incidental to an otherwise legal activity.

Section 9 lists those actions that are prohibited under the FESA. Although take of a listed species is prohibited, it is allowed when it is incidental to an otherwise legal activity. Section 9 prohibits take of listed species of fish, wildlife, and plants without special exemption. The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

Section 10 provides a means whereby a non-federal action with the potential to result in take of a listed species can be allowed under an incidental take permit which may be issued once a Habitat Conservation Plan (HCP) is approved. Application procedures are found at 50 CFR 13 and 17 for species under the jurisdiction of USFWS and 50 CFR 217, 220, and 222 for species under the jurisdiction of NMFS.

In addition, a local regulatory program established by the MSHCP and associated governing documents provides for regional conservation of many species while also allowing limited impacts to biological resources in association with planned development. The MSHCP establishes an alternative pathway to the Section 10 and Section 7 procedures by which local projects in the Plan Area may receive both State and federal incidental take authorization for species identified as "covered" and "conditionally covered", based on compliance with relevant conditions set forth in the plan. Further details about the regional MSHCP and its provisions for incidental take coverage are discussed in Section 3.3.1 below.

3.1.2 Migratory Bird Treaty Act

The MBTA generally prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except as provided by the statute. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. It further provides that it is unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird…" (16 United States Code [USC] 703).

The MBTA, first enacted in 1916, prohibits any person, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention...for the protection of migratory birds...or any part, nest, or egg of any such bird" (16 U.S. Code 703).

3.1.3 Clean Water Act

Pursuant to Section 404 of the CWA, the USACE is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the United States, which include those waters listed in 33 CFR Part 328 (Definitions). USACE, with oversight by the U.S. EPA, has the principal authority to issue CWA Section 404 Permits.

Pursuant to Section 401 of the CWA, the RWQCB certifies that any discharge into jurisdictional waters of the United States will comply with state water quality standards. The RWQCB has the principal authority to issue a CWA Section 401 water quality certification or waiver.

3.1.4 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act was originally enacted in 1940 as the Bald Eagle Protection Act to protect bald eagles, and was later amended to include golden eagles. The Act prohibits the taking, possession, or commerce in bald and golden eagles, parts, feathers, nests, or eggs with limited exceptions. Take is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb", and includes both direct taking of individuals and take due to disturbance. "Disturb" is defined 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 any 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." ¹

The definition of "disturb" is further defined by USFWS as follows:

"In addition to immediate impacts, this definition also covers impacts that result from human-caused alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagles return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering." ²

Bald and golden eagles may not be taken for any purpose unless a permit is issued prior to the taking. Activities which can be authorized by permit include scientific collection/research, exhibition, tribal religious, depredation, falconry, and the taking of inactive eagle nests, which interfere with resource development or recovery operations. Currently, USFWS has a permitting process proposed for other activities that would allow disturbance to eagles or take of an eagle nest where their location poses a risk to human or eagle safety.

¹ 50 CFR 22.3

² USFWS. 2007. National Bald Eagle Management Guidelines

3.2 State Regulations

3.2.1 California Fish and Game Code

The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the CESA (Sections 2050–2115) and Streambed Alteration Agreement regulations (Sections 1600–1616). These sections are described further below.

CFGC Sections 1600-1616

Pursuant to Section 1600 et seq. of the CFGC, the CDFW (formerly California Department of Fish and Game) regulates activities of an applicant's project that would substantially alter the flow, bed, channel, or banks of streams or lakes, unless certain conditions outlined by CDFW are met by the applicant. The limits of CDFW jurisdiction are defined in CFGC Section 1600 et seq. as the "bed, channel, or bank of any river, stream," or lake designated by CDFW in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit." However, in practice, CDFW usually extends its jurisdictional limit and assertion to the top of a bank of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider.

California Endangered Species Act (CFGC Section 2050 et seq.)

CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under CESA. For projects that would affect a listed species under both CESA and FESA, compliance with FESA would satisfy CESA if CDFW determines that the federal incidental take authorization is "consistent" with CESA under CFGC Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project operator would have to apply for a take permit under Section 2081(b).

In addition, a local regulatory program established by the MSHCP and associated governing documents provides for regional conservation of many species while also allowing limited impacts to biological resources in association with planned development. The MSHCP establishes an alternative pathway to the Section 2080.1 and Section 2081(b) procedures by which local projects in the Plan Area may receive both State and federal incidental take authorization for species identified as "covered" and "conditionally covered", based on compliance with relevant conditions set forth in the plan. Further details about the regional MSHCP and its provisions for incidental take coverage are discussed in Section 3.3.1 below.

Title 14 California Code of Regulations (CCR) 1.72 defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

This also includes the habitat upon which they depend for continued viability (CFGC Division 5, Chapter 1, Section 45, and Division 2, Chapter 1, Section 711.2[a]).

CFGC Sections 2080 and 2081

Section 2080 of the CFGC states that "No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081, CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through Incidental Take permits or Memoranda of Understanding if the take is incidental to an otherwise lawful activity, impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by CDFW, which makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Since the MSHCP provides coverage for take of some State-listed species, there would not be a need for an additional 2081 permit process unless a project does not comply with MSHCP requirements and may result in take of a State-listed species or if a State-listed species not covered by the MSHCP were to result in take. Further details about the regional MSHCP are discussed in Section 3.3.1 below.

CFGC Sections 3503, 3503.5, and 3513

Sections 3503, 3503.5, and 3513 of the CFGC prohibit the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds; or the taking of any nongame bird pursuant to CFGC Section 3800. CFGC Section 3513 adopts the federal migratory bird take provisions under the MBTA that prohibit the intentional take or possession of birds designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations pursuant to the MBTA.

3.2.2 California Environmental Quality Act Guidelines, Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the CFGC dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a species that has not been listed by either USFWS or CDFW but otherwise has some status as a special-status species. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources,

including natural communities. CEQA calls for an assessment of whether any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed by CNDDB as sensitive are considered by CDFW to be significant resources and fall under the State CEQA Guidelines for addressing impacts. Local planning documents such as General Plans often identify these resources as well.

3.2.3 California Water Quality Control Act (Porter-Cologne California Water Code Section 13260)

The State Water Resources Control Board (SWRCB) and the RWQCB (together "Boards") are the principal State agencies with primary responsibility for the coordination and control of water quality. The Boards regulate activities pursuant to Section 401(a)(1) of the federal CWA as well as the Porter Cologne Water Quality Control Act (Porter-Cologne) (Water Code Section 13260). Section 401 of the CWA specifies that certification from the State is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the State in which the discharge originates or will originate, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

Under Porter-Cologne, the Legislature declared that the "State must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation..." (California Water Code Section 13000). Porter-Cologne grants the Boards the authority to implement and enforce the water quality laws, regulations, policies and plans to protect the groundwater and surface waters of the State. It is important to note that enforcement of the State's water quality requirements is not solely the purview of the Boards and their staff. Other agencies (e.g., CDFW) have the ability to enforce certain water quality provisions in state law.

3.3 Regional or Local Regulations

3.3.1 Western Riverside County MSHCP

Per CFGC Sections 2800-2840, the Natural Community Conservation Planning (NCCP) Act (the Act), authorized the preparation of NCCPs to protect natural communities and species while allowing a reasonable amount of economic development.

The MSHCP, adopted by the County of Riverside on June 17, 2003, serves as a HCP pursuant to the Act and pursuant to Section 10 (a)(1)(B) of the FESA. The Implementation Agreement (IA) sets forth the implementation requirements for the MSHCP as well as procedures and minimization measures related to take of habitats and species considered for conservation. Implementation of the MSHCP authorizes participating jurisdictions to "take" specified plant and wildlife species within the MSHCP Plan Area. In addition, the wildlife agencies, namely USFWS and CDFW, allow take of habitat or individual species outside of the MSHCP Conservation Area in exchange for the assembly and management of a coordinated MSHCP Conservation Area. The assembly and long-term management of the MSHCP Conservation Area is the responsibility of

the Riverside County, Federal, and State governments; Cities within the western portion of Riverside County; and private and public entities that conduct activities which would potentially impact the habitats and species considered for conservation under the MSHCP.

Biological Resources Technical Report

This page intentionally left blank

CHAPTER 4

Existing Conditions

The proposed project is located in a moderately developed portion of the City of Lake Elsinore in western Riverside County within the San Jacinto Valley watershed. Regional geographic features around the area include Lake Elsinore and the Cleveland National Forest to the southwest, Canyon Lake to the east, and scattered pockets of development in all directions. The project site is located within the Western Riverside County MSHCP, and lies within the Elsinore Area Plan of the MSHCP.

4.1 Soils

The Soil Survey of Western Riverside Area identified two soil series mapped within the boundary of the project site, which are described below (NRCS 2022a). The extent and locations of these soils on the project site are shown in **Figure 3**, Soils.

Arbuckle gravelly loam, 2 to 9 percent slopes, dry MLRA 19: Soils in this series are well-drained on alluvial fans. These soils developed in alluvium derived from igneous, metamorphic, and sedimentary rock. This is not a hydric soil.

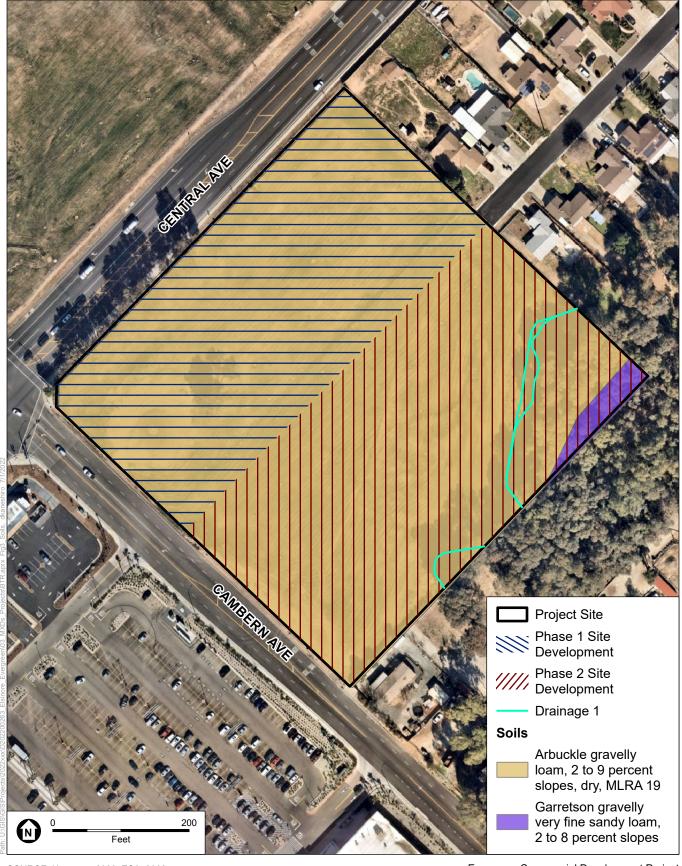
Garretson gravelly very fine sandy loam, 2 to 8 percent slopes: Soils in this series are well-drained soils on alluvial fans. These soils developed in alluvium derived from metasedimentary rock. This is not a hydric soil.

4.2 Natural Communities and Land Cover Types

The natural communities and land cover types are depicted in **Figure 4**, Natural Communities and Land Cover Types, and a summary of acreages within the project site are presented below in **Table 3**, Natural Communities and Land Cover Types.

TABLE 3
NATURAL COMMUNITIES AND LAND COVER TYPES

Natural Communities and Land Cover Types	Project Site (acres)
Non-Native Grasses and Forbs	0.11
River Red Gum Groves	1.00
Scale Broom Scrub	0.09
Disturbed/Developed	7.68
Total	8.87*
* Total may differ from sum of individual numbers due to	rounding.

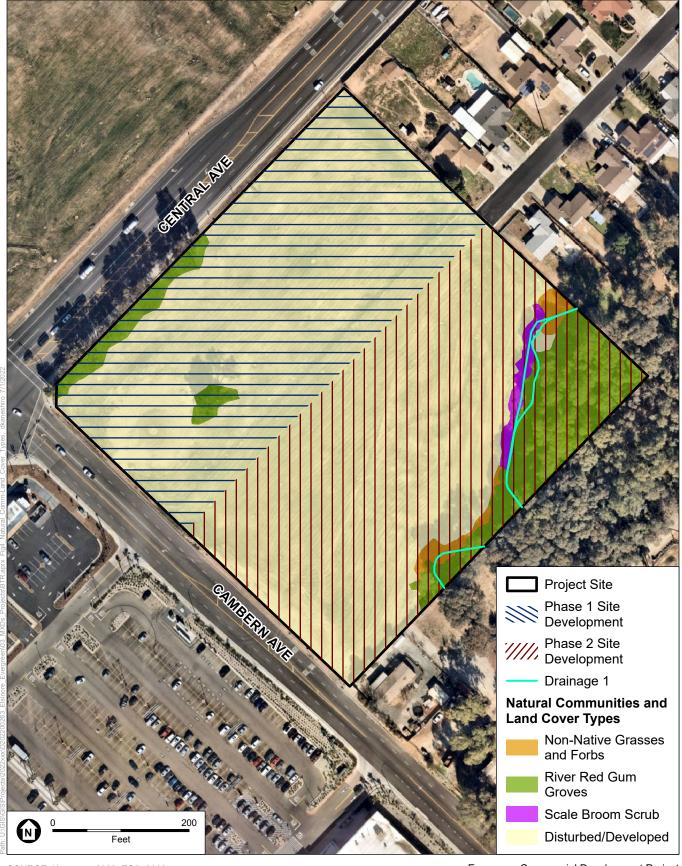


SOURCE: Nearmap, 2022; ESA, 2022

Evergreen Commercial Development Project







SOURCE: Nearmap, 2022; ESA, 2022

Evergreen Commercial Development Project

Figure 4 Natural Communities and Land Cover Types



4.2.1 Non-Native Grasses and Forbs

Non-native grasses occur in the eastern central portion of the project site, along the western bank of the non-vegetated portion of the on-site drainage (referred to in this report as Drainage 1). Vegetation in this community consists of a mixture of non-native grasses and forbs such as slender oat (*Avena barbata*), red brome (*Bromus rubens*), white stemmed filaree (*Erodium brachycarpum*), coastal heron's bill (*E. cicutarium*), and foxtail barley (*Hordeum murinum*). The non-native golden crownbeard (*Verbesina encelioides*) is the only subshrub in this community.

4.2.2 River Red Gum Groves

River red gum groves occur along the southeast (along Drainage 1) and as a landscape row in the northwest project site boundaries, with one isolated cluster in the western portion of the project site. Vegetation in this community consists of a tree canopy dominated by river red gum (*Eucalyptus camaldulensis*) with an understory comprising various grasses and forbs, such as common bedstraw (*Galium aparine*), common chickweed (*Stellaria media*), coastal heron's bill, field bindweed (*Convolvulus arvensis*), blue dicks (*Dichelostemma capitatum*), fringed twinevine (*Funastrum cynanchoides*), and slender oat.

4.2.3 Scale Broom Scrub (*Lepidospartum squamatum* Alliance)

Scale broom scrub occurs within the eastern portion of the project site, along the western bank of Drainage 1. This community is characterized by a dense shrub layer, dominated by scale broom (*Lepidospartum squamatum*) and interspersed with various other shrub species, such as California sagebrush (*Artemisia californica*) and mulefat (*Baccharis salicifolia*). The density of the shrub growth appears to have precluded the development of a mature understory; however, herbaceous species observed along the margins of the community include fiddleneck (*Amsinckia menziesii*) and longstem buckwheat (*Eriogonum elongatum*).

4.2.4 Disturbed/Developed

Disturbed conditions occur throughout much of the project site, west of Drainage 1. Based on review of aerial imagery and existing conditions, it appears that this area is routinely disked or otherwise disturbed for brush clearance purposes. Vegetation in this area consists primarily of herbaceous species such as fiddleneck, shortpod mustard (*Hirschfeldia incana*), pineapple weed (*Matricaria discoidea*), slender keel fruit (*Tropidocarpum gracile*), white-stemmed filaree, and coastal heron's bill. The western project site boundary extends partially into Cambern Avenue, which is developed and devoid of vegetation.

4.3 Sensitive Biological Resources

4.3.1 Special-Status Species

Based on the literature review and field reconnaissance, special-status species were evaluated for their potential to occur within the project site or immediate vicinity, using the following definitions:

- **Present:** Species was observed or detected during project-specific biological surveys.
- **High Potential:** Species identified in the literature search and/or known to occur in the region and suitable habitat is present on the project site. These species are generally common and/or widespread in the project area and vicinity.
- **Moderate Potential:** Species identified in the literature search and/or known to occur in the region and suitable habitat is present within the project site. These species are generally less common and/or widespread than species considered to have "high" potential to occur.
- Low Potential: Species identified in the literature search or known to occur in the region, but the habitat on site is of low or marginal quality and/or the project site occurs outside the species known geographic or elevational range. Distance to nearest known occurrence and the age of last reported local occurrence are also considered.
- Absent/Not Expected: Species known to occur in the region, but deemed absent because the
 project site is outside their known range or elevation, suitable habitat is lacking on the site, or
 the species was not observed during focused surveys and would have been conspicuous if
 present.

Based on the database search results, a list of potentially occurring special-status species was developed and evaluated for the project site. Special-status species with potential to occur were defined as those species whose geographic and elevational range include the project site and that require habitat similar to habitat present within the project site or immediate vicinity.

Special-Status Plants

Special-status plant species include federal and state endangered and threatened species (or candidate); state rare; CNPS ranked species (California Rare Plant Rank [CRPR] 1A, 1B, 2A, and 2B, as jointly determined by CNPS and CDFW); species covered under an adopted NCCP and/or HCP; and species qualifying under State CEQA Guidelines Section 15380 (d).

Of the 73 special-status plant species considered for their potential to occur within the project site, none of these species are expected to occur because the project site lacks suitable habitat and/or is outside of the known elevation range for these species to support these species. Additionally, the project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area as defined by Section 6.1.3 of the MSHCP. Furthermore, a focused special-status plant survey was conducted concurrently with the March 3, 2022 general biological site investigation, and no special-status plant species were detected during the focused special-status plant survey. Species evaluated for potential to occur are summarized in **Appendix A**, *Special-Status Plant Species*.

Special-Status Wildlife

Special-status wildlife species include federal and state endangered and threatened species (or candidate), state fully protected, CDFW Special Animals List, state wildlife species of special concern (SSC), species covered under an adopted NCCP and/or HCP, and species qualifying under State CEQA Guidelines Section 15380 (d).

Of the 17 special-status wildlife species considered for their potential to occur within the project site, 11 species are not expected to occur and four species were assessed as having low potential to occur because the project site lacks suitable habitat and/or is outside of the known range to support these species. Additionally, the project site is not located within the Amphibian Survey Area, Burrowing Owl Survey Area, or Mammal Survey Area as defined by Section 6.3.2 of the MSHCP. No special-status wildlife species were detected during the site investigation. Species evaluated for potential to occur are summarized in **Appendix B**, *Special-Status Wildlife Species*.

Two special-status wildlife species, Cooper's hawk (*Accipiter cooperii*) and burrowing owl (*Athene cunicularia*), were identified as having a moderate potential to occur on-site. However, the native habitat on-site to support these species is limited. For the Cooper's hawk, there is limited suitable nesting habitat within the eucalyptus grove and foraging habitat within the non-native grasses and forbs on-site. The non-native grasses and forbs also provide suitable nesting and foraging habitat for the burrowing owl. However, these habitats are highly disturbed and neither species were observed during the biological surveys. No additional surveys are required as both of these species are adequately conserved under the MSHCP.

4.3.2 Sensitive Natural Communities

Sensitive natural communities are designated as such by various resource agencies, such as the CDFW, or in local policies and regulations. These communities are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution and may be considered threatened enough to warrant some level of protection. Sensitive natural communities include those that are identified in the CDFW *Sensitive Natural Communities* (CDFW 2022b). The CDFW state rank denotes the rarity and endangerment of a vegetation type within the state as described below, with S1 through S3 considered to be a sensitive natural community by CDFW.

State Conservation Rank

- **S1** = Critically Imperiled At very high risk of extirpation due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- **S2** = Imperiled At high risk of extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- **S3** = Vulnerable At moderate risk of extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- **S4** = Apparently Secure At a fairly low risk of extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

S5 = Secure - At very low or no risk of extirpation due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.

One sensitive natural community, *Lepidospartum squamatum* Alliance (scale broom scrub), occurs within the project site and encompasses 0.09 acre (Figure 4). The scale broom scrub and the drainage (Drainage 1) occur within the project site are both entirely surrounded by residential and commercial development and persist as fragmented remnants, separated from other resources, and therefore provide limited function. The drainage and its associated vegetation may support avian nesting, for example, but they are not expected to function as a wildlife corridor, or support other ecosystem processes that accompany functional floodplain communities, where scale broom scrub is typically found. However, this community holds a state rank of S3 and is considered a CDFW sensitive community.

4.3.3 Critical Habitat

The project site does not occur within or immediately adjacent to critical habitat.

4.4 Aquatic Resources

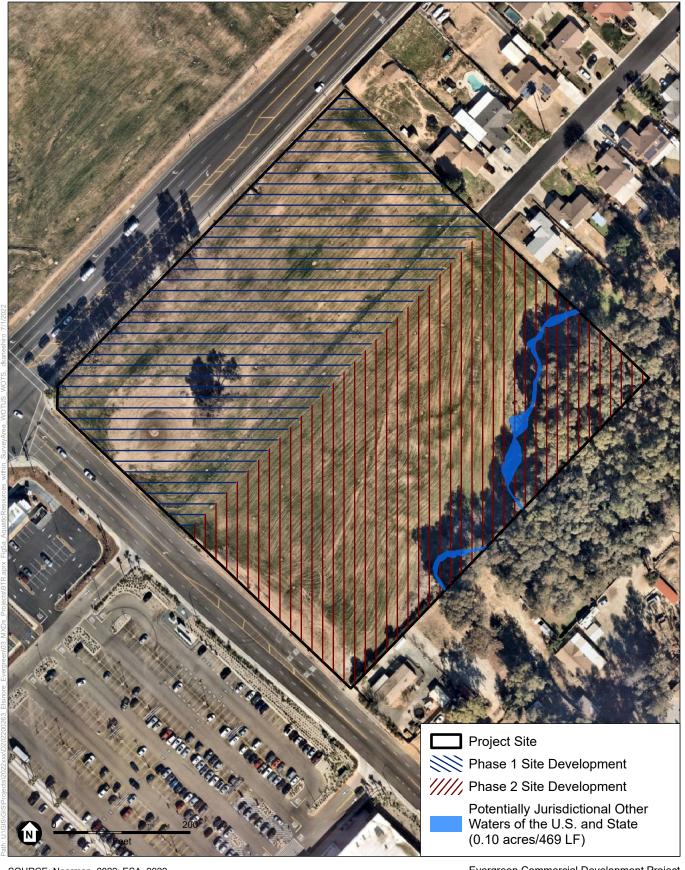
Aquatic resources are depicted in **Figure 5a**, Aquatic Resources (U.S. and State) within the Project Site, and **Figure 5b**, CDFW Streams and Associated Vegetation and MSHCP Riparian/Riverine Areas, and a brief discussion regarding the results of the site inspection is provided below. A more detailed discussion of the aquatic resources found on-site can be found in the *Aquatic Resources Delineation Report* (ESA 2022a), under separate cover.

4.4.1 Waters of the U.S. and State

The limits of potential waters of the U.S. and State were based on the presence of OHWM indicators, such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and/or the presence of litter and debris. Based on these indicators, it was determined that approximately 0.10 acre (469 linear feet) may meet the criteria for waters of the State. While conducting the site inspection, ESA biologists also assessed downstream connectivity of Drainage 1 to determine whether the feature provides a significant nexus to a TNW, and determined that the feature exits the eastern project site boundary and continues downstream for approximately 400 linear feet, before entering a city (Lake Elsinore) storm drain. Unless otherwise demonstrated, it is assumed that this city storm drain exhibits connectivity to a TNW/tributary to a TNW, such as Lake Elsinore and/or Temescal Creek. Therefore, the 0.10 acre (469 linear feet) may also meet criteria for waters of the U.S. No wetlands occur on-site.

4.4.2 CDFW Streams and Associated Vegetation and MSHCP Riparian/Riverine Areas

The boundaries of the CDFW streams and associated vegetation were delineated based on a break in slope at the TOB and/or extent of the scale broom scrub. Approximately 0.26 acre (469 linear feet) may constitute streams and associated riparian vegetation subject to regulation under Division 2, Chapter 6, Section 1600 et seq. of the CFGC. Additionally, these areas also constitute MSHCP riparian/riverine areas. No wetlands occur on-site.



SOURCE: Nearmap, 2022; ESA, 2022

ESA

Evergreen Commercial Development Project





ESA

Evergreen Commercial Development Project

4.5 Regional Connectivity, Wildlife Movement, and Habitat Linkages

Wildlife habitat linkages are areas which link otherwise isolated blocks of habitat to allow wideranging animals to travel, genetic exchange to occur and to allow plants and animals to move in response to environmental changes and natural disasters. Wildlife habitat linkages also allow populations of threatened species to be replenished from other areas via the metapopulation theory (Hilty et al. 2006).

Wildlife habitat linkages mitigate the effects of habitat fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from natural disasters, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife linkages are landscape features that connect and link habitat patches or habitat cores with each other. They serve a similar purpose in that they are areas that allow for animal movement, but they may not have all the resources a particular species needs to complete its life cycle.

As identified in Figure 3-2, Schematic Cores and Linkages Map, of the MSHCP, wildlife migration corridors do not occur within the project site. Additionally, the project site is situated in a developed portion of the city, and Drainage 1 has been heavily modified both upstream and downstream from the project site; as a result, the available habitat is not expected to be used for wildlife migration or dispersal, to any significant degree.

4.6 Regulated Trees

Chapter 5.116, Significant Palm Trees, of the Lake Elsinore Municipal Code regulates the removal, destruction, and relocation of significant palms of five specific species (*Butia capitata*, *Phoenix canariensis*, *Phoenix reclinata*, *Phoenix roebelenii*, and *Washingtonia filifera*) and two palm genera (*Chamaerops* and *Trachycarpus*) that exceed 5 feet in height. No palm trees were identified within the project site. There are no other local policies or ordinances for the protection of other tree species that apply to the project site.

CHAPTER 5

Project Impacts and Avoidance, Minimization, and Mitigation

5.1 Approach to the Analysis

This section describes the potential effects of the proposed project on biological resources that may occur as a result of project implementation. Direct, indirect, temporary, and/or permanent effects to biological resources may occur as a result of project implementation, as defined below:

- **Direct Effects:** Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct effect. Examples include loss of individual species and/or their associated plant communities, diversion of surface water flows, and encroachment into wetlands. Under FESA, direct effects are defined as the immediate effects of a project on a species or its habitat, including construction noise disturbance, sedimentation, or habitat loss.
- Indirect Effects: Biological resources may also be affected in an indirect manner as a result of project-related activities. Under FESA, indirect effects are defined as those effects that are caused by, or would result from, a proposed project but occur later in time and are reasonably certain to occur [50 C.F.R. §402-02]. An example of indirect effects may include irrigation runoff from a developed area into surrounding natural vegetation. Indirect effects could also include increased wildfire frequency as a result of power line failures.
- **Temporary Effects:** Any effects to biological resources that are considered reversible can be viewed as temporary. Examples include the generation of fugitive dust during construction activities.
- Permanent Effects: All effects that result in the irreversible removal of biological resources
 are considered permanent. Examples include constructing a building or permanent road on an
 area with native vegetation, such that the native vegetation is permanently removed and
 replaced with a developed structure.

A project is generally considered to have a significant effect if it proposes or results in any of the effects or conditions described in the significance thresholds discussed below, absent specific evidence to the contrary. Conversely, if a project does not propose or result in any of the following effects or conditions, it would generally not be considered to have a significant effect on biological resources, absent specific evidence of such an effect. These significance thresholds are taken from Appendix G of the State CEQA Guidelines.

5.2 Thresholds of Significance

Based on CEQA Guidelines Appendix G, the project would result in a significant impact on biological resources if it would:

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

5.3 Impacts Analysis

Issue 1: Would the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special-Status Plants

Special-status plants were not identified within the project site during the focused special-status plant survey and, according to Section 6.1.3, Protection of Narrow Endemic Plant Species, and 6.3.2, Additional Survey Needs and Procedures of the MSHCP, the project site does not fall within a required survey area for special-status plants with potential to occur (Dudek 2003). Therefore, with participation in the MSHCP (the City of Lake Elsinore is an MSHCP permittee), impacts to special-status plants would be considered less than significant.

Special-Status Wildlife

Although two special-status wildlife species, Cooper's hawk and burrowing owl, were identified as having a moderate potential to occur on-site (as described in Section 4.3.1 and Appendix B), the native habitat on-site to support these species is limited. The removal of 1.00 acre of river red gum groves, 0.11 acre of non-native grasses and forbs, 7.68 acres of disturbed/developed habitat is not expected to threaten regional populations and would therefore not be significant. The project site is not located in the Amphibian Survey Area, Burrowing Owl Survey Area, or

Mammal Survey Area as defined by Section 6.3.2 of the MSHCP; therefore, further ensuring these impacts are not significant, any potential project impacts to wildlife habitat that might occur would be addressed through participation in the MSHCP.

Critical Habitat

The project site does not occur within or immediately adjacent to critical habitat for any special-status plant or wildlife species; therefore, there would be no impacts to critical habitat as a result of project activities.

Issue 2: Would the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Scale broom scrub is a sensitive community that is present on-site and will be impacted by the project (Figure 4). The removal of approximately 0.09 acre of scale broom scrub would be considered potentially significant. However, incorporation of Mitigation Measure BIO-1 (purchase of mitigation credits at Soquel Canyon Mitigation Bank) would reduce impacts to MSHCP riparian/riverine areas and CDFW sensitive natural communities to a less-than-significant level. Mitigation Measure BIO-1 applies only to Phase 2 of the proposed project as the sensitive community only occurs in the southern portion of the project site. A Determination of Biologically Equivalent or Superior Preservation (DBESP) report, as described in Section 6.1.2 of the MSHCP, will be prepared and will detail the existing conditions, proposed impacts, and proposed mitigation sufficient to offset impacts on scale broom scrub and MSHCP riparian/riverine areas. A more detailed discussion can be found in the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation (ESA 2022b), under separate cover.

Issue 3: Would the proposed project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means?

No wetlands occur on-site and therefore there will be no impacts to state or federally protected wetlands.

Approximately 0.10 acre (469 linear feet) of potential other waters of the U.S. and State, and 0.26 acre (469 linear feet) of streams and associated vegetation are potentially subject to regulation under Division 2, Chapter 6, Section 1600 et seq. of the CFGC and will be impacted by the project (Figures 5a and 5b). Additionally, these areas also constitute MSHCP riparian/riverine areas. Impacts to these aquatic resources would be considered potentially significant. However, incorporation of Mitigation Measure BIO-1 (purchase of mitigation credits at Soquel Canyon Mitigation Bank) would reduce impacts to aquatic resources to a less-than-significant level. Mitigation Measure BIO-1 applies only to Phase 2 of the proposed project as the waters of the U.S. and State only occur in the southern portion of the project site.

Issue 4: Would the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife Movement

As identified in Figure 3-2, Schematic Cores and Linkages Map, of the MSHCP, wildlife migration corridors do not occur within the project site. Additionally, the project site is situated in a developed portion of the city, and Drainage 1 has been heavily modified both upstream and downstream from the project site. As a result, the available habitat is not expected to be used for wildlife migration or dispersal, to any significant degree. Thus, no impact to wildlife movement and/or nursery sites is expected as a result of project activities.

Nesting Birds

The proposed project may result in the disturbance of nesting birds (passerine and raptors) protected by the MBTA and CFGC 3503, 3503.5, and 3513. Impacts to nesting birds would be potentially significant. Incorporation of Mitigation Measure BIO-2 (nesting bird survey) would reduce impacts to nesting birds to a less-than-significant level.

Issue 5: Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Chapter 5.116, Significant Palm Trees, of the Lake Elsinore Municipal Code regulates the removal, destruction, and relocation of significant palms of five specific species (*Butia capitata, Phoenix canariensis, Phoenix reclinata, Phoenix roebelenii*, and *Washingtonia filifera*) and two palm genera (*Chamaerops* and *Trachycarpus*) that exceed 5 feet in height. No palm trees were identified within the project site, and no other such local policies or ordinances apply to the project site; therefore, there would be no conflict with local policies or ordinances as a result of project activities.

Issue 6: Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is located within the Western Riverside County MSHCP, and lies within the Elsinore Area Plan of the MSHCP. However, the project site is not located within a MSHCP Criteria Area, which is comprised of individual Cells or Cell Groups identified to guide assembly of Additional Reserve Lands for the MSHCP Conservation Area. The local jurisdictions participating in the MSHCP, such as the City of Lake Elsinore, are collectively responsible for assembling approximately 97,000 acres of land for the MSHCP Conservation Area. Local acquisition of lands for the MSHCP Conservation Area are purchased by the Western Riverside County Regional Conservation Authority (RCA) from willing sellers using the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process, or other processes, such as the Joint Project/Acquisition Review (JPR) process during which the RCA and appropriate Permittee staff (i.e., City of Lake Elsinore) shall jointly review development applications that are within a Criteria Area and are submitted to a Permittee for consideration). However, since the project site

is not located within a MSHCP Criteria Area and is therefore not subject to the HANS process or the JPR process, the proposed project would not conflict with MSHCP Reserve Assembly goals.

The project's consistency with the MSHCP is summarized below. A more detailed discussion can be found in the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation* (ESA 2022b), under separate cover.

The project site is not within any wildlife migration corridors identified in MSHCP Figure 3-2, Schematic Cores and Linkages Map.

With respect to the proposed project's consistency with MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), the removal of approximately 0.26 acre (469 linear feet) of potential MSHCP riparian/riverine areas would be considered potentially significant (Figure 5b). However, incorporation of Mitigation Measure BIO-1 (purchase of mitigation credits at Soquel Canyon Mitigation Bank; applicable only during Phase 2 of the proposed project), the payment of development fees, and the implementation of appropriate Best Management Practices outlined in MSHCP Appendix C (Dudek 2003) would ensure that the project is consistent with the provisions of the MSHCP.

With respect to the proposed project's consistency with MSHCP Section 6.1.3 (Protection of Narrow Endemic Plant Species) and Section 6.3.2 (Additional Survey Needs and Procedures), as stated throughout the document, the project is not located within a Narrow Endemic Plant Species Survey Area as defined by Section 6.1.3, or Amphibian Survey Area, Burrowing Owl Survey Area, or Mammal Survey Area as defined by Section 6.3.2 of the MSHCP. Therefore, impacts to wildlife habitat would be covered through payment of the MSHCP development fees.

Section 6.1.4 of the MSHCP specifies that certain guidelines should be implemented for proposed projects located adjacent to or connected with existing conservation lands/lands described for conservation within the MSHCP Conservation Area; these include Public/Quasi-Public Land (PQP) Lands and conserved portions of the Criteria Area. The various guidelines include the management of site drainage/runoff and toxics/pollutants, grading, lighting, noise, invasive plant species, and wildlife barriers, to ensure that pre-project conditions are maintained during and following the completion of construction, to the degree feasible. The proposed project is not situated within, adjacent to, or connected with PQP Lands, or the Criteria Area; therefore, Section 6.1.4 of the MSHCP does not apply to this project, which would be consistent.

Therefore, as summarized above, the proposed project would be consistent with the MSHCP.

5.4 Avoidance, Minimization, and Mitigation Measures

To minimize and avoid significant impacts to sensitive biological resources as a result of proposed project implementation, the following mitigation measures are recommended.

Measure to Mitigate Potentially Significant Impacts to Sensitive Natural Communities and MSHCP Riparian/Riverine Habitat

Mitigation Measure BIO-1: Mitigation for the permanent removal of 0.10 acre (469 linear feet) of potential other waters of the U.S. and State subject to Sections 404 and 401 of the CWA, and 0.26 acre (469 linear feet) of potential CDFW streams and associated vegetation subject to CFGC Code Section 1600, and MSHCP riparian/riverine areas (inclusive of the 0.09 acre of scale broom scrub [a CDFW sensitive natural community]) will be addressed through the purchase of credits from the Soquel Canyon Mitigation Bank, or other agency-approved mitigation bank or inlieu fee program, at a minimum of 1:1 impact-to-replacement ratio. BIO-1 applies only to Phase 2 of the proposed project as the sensitive natural community and MSHCP riparian/riverine habitat only occurs in the southern portion of the project site. A DBESP report, as described in Section 6.1.2 of the MSHCP, will be prepared and will detail the existing conditions, proposed impacts, and proposed mitigation sufficient to offset impacts on scale broom scrub and MSHCP riparian/riverine areas.

Measure to Mitigate Potentially Significant Impacts to Nesting Birds

Mitigation Measure BIO-2: If construction is scheduled to commence during the avian nesting season (February 1-August 31), a qualified biologist should conduct a nesting bird survey within 7 days of the anticipated initial construction (clearing and grubbing of potential nesting vegetation) start date to identify any active nests within 500 feet of the project site. If an active nest is detected, a suitable avoidance buffer will be established by the biologist in the field. Construction activities will remain outside of the buffer until a qualified biologist determines that the nest is no longer active (e.g., chicks have fledged). Appropriate buffers distances generally include up to 300 feet for passerine species and up to 500 feet for raptors; however, these may be reduced at the discretion of the biologist, depending on the site-specific factors, such as the location of the nest, species tolerance to human presence, and the types of construction-related noises, vibrations, and human activities that would occur. If initial construction (clearing and grubbing) temporarily ceases for a period greater than 7 days, and activities expect to recommence during the avian nesting season, the project site (including surrounding 500 feet) will be resurveyed. Following the initial construction (clearing and grubbing), if there is no longer suitable habitat for nesting birds within the project area, a nesting bird survey shall no longer be required.

5.5 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent

with an adopted general, specific, master, or comparable programmatic plan (Section 15130(b)(1)(B)). CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

As discussed above, the project site consists of mostly disturbed/developed areas with patches of river red gum groves, non-native grasses and forbs, and scale broom scrub, and is surrounded primarily by a moderately developed portion of the City of Lake Elsinore. Phase 2 of the proposed project would impact Drainage 1, which includes a sensitive natural community; potential USACE, RWQCB, and CDFW jurisdiction; and MSHCP riparian/riverine resources. However, all impacts would be fully mitigated (as outlined in Section 5.4). As such, there would be no cumulatively considerable impacts to biological resources. Similarly, any related project that may occur in the area in the future would be required, through the CEQA review and permit issuance processes, to mitigate their respective impacts upon biological resources to less than significant levels. Furthermore, the MSHCP addresses cumulative impacts for western Riverside County. The MSHCP identifies areas for long-term conservation and management. As such, with MSHCP compliance, cumulative impacts of proposed projects within authorized take lands within the MSHCP are minimized through the conservation of land. Therefore, implementation of the proposed project, in conjunction with other past, present, or reasonably foreseeable future projects, would not result in a significant cumulative impact related to biological resources.

Biological Resources Technical Report

This page intentionally left blank

CHAPTER 6

References Cited

- California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.
- _____. 2022a. California Natural Diversity Data Base (CNDDB). https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed March 22, 2022.
- _____. 2022b. Sensitive Natural Communities. Sacramento, CA: CDFW, Natural Heritage Division, 2021. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed March 22, 2022.
- _____. 2022c. BIOS Habitat Connectivity Viewer.
 https://apps.wildlife.ca.gov/bios/?bookmark=648. Accessed June 27, 2022.
- California Native Plant Society (CNPS). 2022. *Inventory of Rare and Endangered Vascular Plants of California*. http://rareplants.cnps.org/. Accessed March 22, 2022.
- Dudek & Associates (Dudek). 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP, Volumes I and II. Prepared for County of Riverside Transportation and Lands Management Agency, Prepared by Dudek & Associates, Inc. Approved June 17, 2003
- Environmental Laboratory. 1987. U.S. Army Corps of Engineers Wetland Delineation Manual. Prepared for the U.S. Army Corps of Engineers.
- ESA. 2022a. *Proposed Commercial Development Aquatic Resources Delineation Report.*Prepared for the Evergreen Devco, Inc. July 2022.
- ESA. 2022b. Proposed Commercial Development Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation. Prepared for the Evergreen Devco, Inc. July 2022.
- Fahrig, L. and Merriam, G. 1985. *Habitat Patch Connectivity and Population Survival*. Ecology 66(6): 1762-1768.
- Google Earth Pro. 2022. Aerial Imagery. Accessed June 24, 2022.
- Gonzales Environmental Consulting, LLC (Gonzales Environmental). 2022a. *Habitat Assessment APN 377-020-014, 377-020-016, 377-020-017, 377-020-018, 377-020-019 in the City of Elsinore, Riverside County; USGS 7.5-minute Lake Elsinore Topographic Quadrangle Map in Section 30 and Partial Section 31 of Township 5 South, Range 4 West.* May 6, 2021; Revised January 28, 2022.

- Gonzales Environmental Consulting, LLC (Gonzales Environmental). 2022b. Delineation of Waters of the United States, Department of Fish and Wildlife, Regional Water Quality Control Board, and 6.1.2 MSHCP Western Riverside County Jurisdictional Habitats for APN 377-020-014, 377-020-016, 377-020-017, 377-020-018, 377-020-019 in the City of Elsinore, Riverside County; USGS 7.5-minute Lake Elsinore Topographic Quadrangle Map in Section 30 and Partial Section 31 of Township 5 South, Range 4 West. January 28, 2022.
- Harris, Larry D., and P.B. Gallagher. New initiatives for wildlife conservation: the need for movement corridors. *In Defense of Wildlife: Preserving Communities and Corridors*. Washington, D.C.: Defenders of Wildlife, 1989.
- Hilty, J., W. Lidicker, Jr., and Merenlender, A. 2006. Corridor Ecology: The Science and Practice of Linking Landscapes for Biodiversity Conservation. Island Press, Washington, D.C.
- NatureServe. 2022. NatureServe. https://www.natureserve.org/
- Noss, R. F. 1983. A Regional Landscape Approach to Maintain Diversity. BioScience 33(11): 700-706.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society, Sacramento, CA. 1300 pp.
- Simberloff, D., Cox, J. 1987. *Consequences and Costs of Conservation Corridors*. Conservation Biology 1: 63-71.
- U.S. Army Corps of Engineers (USACE). 2008a. Arid West Supplement to the 1987 Wetlands Delineation Manual.
- _____. 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2010. Field Indicators of Hydric Soils in the United States, Version 7.0.
- _____. 2022a. NRCS Web Soil Survey.
 http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 22, 2022.
- _____. 2022b. Agricultural Applied Climate Information System (AgACIS). http://agacis.rcc-acis.org/?fips=06071. Accessed March 22, 2022.
- U.S. Fish and Wildlife Service (USFWS). 2022a. Critical Habitat Portal. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf 75b8dbfb77: Accessed March 22, 2022.
- _____. 2022b. *Information for Planning and Consultation* (IPaC). https://ecos.fws.gov/ipac/location/index. Accessed on June 27, 2022.
- _____. 2022c. *National Wetland Inventory*. https://www.fws.gov/wetlands/data/Mapper.html. Accessed March 22, 2022.

Appendix A Special-Status Plant Species



APPENDIX A: SPECIAL-STATUS PLANT SPECIES

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
BRYOPHYTES (MOSSES)	•	1		
Bryaceae (Moss Family)				
California screw moss Tortula californica	Federal: None State: S2 Local: 1B.2	N/A	Chenopod scrub, Valley and foothill grassland; grows within sandy soils. Elevation range extends from 10-1,640 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
MARCHANTIOPHYTA (LIVERWORT	S)			
Sphaerocarpaceae (Bottle Liverwort Family)				
Campbell's liverwort Geothallus tuberosus	Federal: None State: None Local: 1B.1	N/A	Coastal scrub (mesic), vernal pools. Elevation range extends from 10-600 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
bottle liverwort Sphaerocarpos drewei	Federal: None State: None Local: 1B.1	N/A	Chaparral, coastal scrub; grows within openings. Elevation range extends from 90-600 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
ASCOMYCOTA (LICHENS)	•		·	
CALICIACEAE (Calicium Family)				
woven-spored lichen Texosporium sancti-jacobi	Federal: None State: None Local: 3	N/A	Chaparral; openings, on soil, small mammal pellets, dead twigs, and on <i>Selaginella</i> spp. Elevation range extends from 60-660 meters. Found in Los Angeles, Riverside, San Diego, San Luis Obispo, Santa Barbara, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
ASPLENIACEAE (Spleenwort Family)				
western spleenwort Asplenium vespertinum	Federal: None State: S3.2 Local: 4.2	FebJun.	Rocky, chaparral, cismontane woodland, coastal scrub. Elevation range extends from 180-1,000 meters. Found in Los Angeles, Riverside, San Diego, Orange, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
GYMNOSPERMS				
Cupressaceae (Cypress Family)				
Tecate cypress Hesperocyparis forbesii	Federal: None State: None Local: 1B.1	N/A	Clay, gabbroic or metavolcanic soils associated with closed-cone coniferous forest and chaparral. Elevation range extends from 80-1,500 meters. Found in Riverside, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
ANGIOSPERMS (DICOTYLEDONS)		1		
Apiaceae (Carrot Family)				
San Diego button-celery Eryngium aristulatum var. parishii	Federal: FE State: CE Local: 1B.1 MSHCP	AprJun	Coastal scrub, valley and foothill grassland, vernal pools; grows within San Diego mesa hardpan, claypan vernal pools, southern interior basalt flow vernal pools. Elevation range extends from 20-620 meters. Found in San Diego and Riverside.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Asteraceae (Sunflower Family)				
alkali marsh aster Almutaster pauciflorus	Federal: None State: None Local: 2B.2	JunOct.	Meadows and seeps; alkaline. Elevation range extends from 240-800 meters. Found in Inyo, Kern, Riverside, San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
San Diego ambrosia Ambrosia pumila	Federal: Endangered State: None Local: 1B.1 MSHCP	AprOct.	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; often disturbed areas, sometimes alkaline, clay, sandy. Elevation range extends from 20-415 meters. Found in Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
smooth tarplant Centromadia pungens ssp. laevis	Federal: None State: None Local: 1B.1 MSCHP(d)	AprSep.	Valley and foothill grasslands with poorly drained alkaline soil conditions at low elevations. Elevation range extends from 0-640 meters. Found in Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
paniculate tarplant Deinandra paniculata	Federal: None State: None Local: 4.2	AprNov.	Generally vernally mesic; coastal scrub; valley and foothill grassland; vernal pools. Elevation range extends from 25-940 meters. Found in Orange, Riverside, San Diego, San Bernardino, Santa Barbara counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
graceful tarplant Holocarpha virgata ssp. elongata	Federal: None State: None Local: 4.2 MSHCP(e)	May-Nov.	Chaparral; cismontane woodland; coastal scrub; valley and foothill woodland. Elevation range extends from 60-1,100 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Coulter's goldfields Lasthenia glabrata ssp. coulteri	Federal: None State: None Local: 1B.1 MSHCP (d)	FebJun.	Salt-marsh, playas, vernal-pools, coastal; usually occurs in wetlands but occasionally in non-wetlands. Elevation range extends from 1-1,220 meters. Found in Orange, Riverside, Ventura, San Diego, and possibly Los Angeles, Kern and San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
small-flowered microseris Microseris douglasii ssp. platycarpha	Federal: None State: None Local: 4.2	MarMay	Clay soils in cismontane woodland; coastal scrub; valley and foothill grassland; vernal pools. Elevation range extends from 15-1,070 meters. Found in Los Angeles, Orange, San Diego, Riverside counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
white rabbit-tobacco Pseudognaphalium leucocephalum	Federal: None State: None Local: 2B.2	JulDec.	sandy, gravelly, Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland. Elevation range extends from 0-2,100 meters. Found in Los Angeles, Riverside, Orange, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
San Bernardino aster Symphyotrichum defoliatum	Federal: None State: None Local: 1B.2	JulNov.	Near ditches, springs, and streams; cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic) Elevation range extends from 2-2,040 meters. Found in Los Angeles, Kern, Imperial, Riverside, San Bernardino, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Wright's trichocoronis Trichocoronis wrightii var. wrightii	Federal: None State: None Local: 2B.1 MSHCP(b)	May-Sept.	Meadows and seeps, marshes and swamps, riparian scrub, vernal. Elevation range extends from 5-435 meters. Found in Riverside County.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
San Diego County viguiera Viguiera laciniata	Federal: None State: None Local: 4.2	FebJun.	Chaparral, coastal scrub; grows along slopes and ridgelines. Elevation range extends from 60-750 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
La Purisima Viguiera Viguiera purisimae	Federal: None State: None Local: 2B.3	AprSep.	Coastal bluff scrub, chaparral; Elevation range extends from 365-425 meters. Found in Orange County.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Boraginaceae (Borage Family)				
Douglas' fiddleneck Amsinckia douglasiana	Federal: None State: None Local: 4.2	MarMay	Valley and foothill grassland, oak woodland; grows on substrate composed of Monterey shale within arid habitats. Elevation range extends from 0-1,950 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Palmer's grapplinghook Harpagonella palmeri	Federal: None State: None Local: 4.2 MSHCP	MarMay	Variety of southern California plant communities including sage scrub; clay soils. Elevation range extends from 20-955 meters. Found in Los Angeles, Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Santiago Peak phacelia Phacelia keckii	Federal: None State: None Local: 1B.3 MSHCP	May-Jun.	Within openings in closed-cone coniferous forest and chaparral; occasionally found along streams. Elevation range extends from 545-1,600 meters. Found in Orange and Riverside counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Brassicaceae (Cabbage Family)				
Payton's jewel-flower Caulanthus simulans	Federal: None State: None Local: 4.2 MSHCP	FebJun.	Chaparral, coastal scrub; sandy, granitic. Elevation range extends from 90-2,200 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Robinson's pepper-grass Lepidium virginicum var. robinsonii	Federal: None State: None Local: 4.3	JanJul.	Chaparral and coastal scrub. Elevation range extends from 1-885 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Hammitt's clay-cress Sibaropsis hammittii	Federal: None State: None Local: 1B.2 MSHCP(b)	MarApr.	Chaparral (openings), valley and foothill grassland; clay. Elevation range extends from 730-1,065 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Chenopodiaceae (Goosefoot Family)				
San Jacinto Valley crownscale Atriplex coronata var. notatior	Federal: FE State: None Local: 1B.1 MSHCP(d)	AprAug.	Alkaline flats, playas, valley and foothill grassland, vernal pools. Elevation range extends from 370-488 meters. Found in Riverside and Kern counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Parish's brittlescale Atriplex parishii	Federal: None State: None Local: 1B.1 MSHCP(d)	JunOct.	Shadscale scrub, alkali sinks, freshwater wetlands, wetland-riparian; playas, vernal pools. Elevation range extends from 25-1,900 meters. Found in Orange, Riverside, San Diego, and possibly Los Angeles and San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Davidson's saltscale Atriplex serenana var. davidsonii	Federal: None State: None Local: 1B.2 MSHCP(d)	AprOct.	Coastal sage scrub, wetland-riparian; coastal. Elevation range extends from 10-200 meters. Found in Orange, Riverside, San Diego, and possibly Los Angeles and San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Convolvulaceae (Morning-glory Family)				
small-flowered morning-glory Convolvulus simulans	Federal: None State: None Local: 4.2 MSHCP	MarJul.	Clay soils, serpentinite seeps; openings in chaparral; coastal sage scrub; valley and foothill grassland. Elevation range extends from 0-305 meters. Found in Kern, Los Angeles, Riverside, Orange, San Diego, Santa Barbara counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Crassulaceae (Stonecrop Family)				
many-stemmed dudleya Dudleya multicaulis	Federal: None State: None Local: 1B.2 MSHCP(b)	AprJul.	Chaparral, coastal scrub, valley and foothill grassland often on clay soils. Elevation range extends from 15-790 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
sticky dudleya Dudleya viscida	Federal: None State: None Local: 1B.2 MSHCP(f)	May-Jun.	Chaparral, coastal sage scrub; coastal. Elevation range extends from 10-550 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Ericaceae (Heather Family)				
rainbow manzanita Arctostaphylos rainbowensis	Federal: None State: None Local: 1B.1	DecMar.	Chaparral (rocky). Elevation range extends from 205-670 meters. Found in Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
summer holly Comarostaphylis diversifolia ssp. diversifolia	Federal: None State: None Local: 1B.2	AprJun.	Chaparral, cismontane woodland, mixed chaparral; sometimes found in burned areas. Elevation range extends from 30-790 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Fabaceae (Legume Family)				
pride-of-California Lathyrus splendens	Federal: None State: None Local: 4.3	MarJun.	Chaparral. Elevation range extends from 200-1,525 meters. Found in Los Angeles, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Fagaceae (Oak Family)				
Engelmann oak Quercus engelmannii	Federal: None State: None Local: 4.2 MSHCP	MarJun.	Cismontane woodland, chaparral, riparian woodland, valley and foothill grassland. Elevation range extends from 50-1,300 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Juglandaceae (Walnut Family)				
Southern California black walnut Juglans californica	Federal: None State: None Local: 4.2	MarAug.	Chaparral, cismontane woodland, coastal scrub, riparian woodland; alluvial. Elevation range extends from 50-900 meters. Found in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Lamiaceae (Mint Family)				
San Miguel savory Clinopodium chandleri	Federal: None State: None Local: 1B.2 MSHCP	MarJul.	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Grows within rocky, gabbroic, or metavolcanic soils. Elevation range extends from 120-1,075 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
heart-leaved pitcher sage Lepechinia cardiophylla	Federal: None State: None Local: 1B.2 MSHCP(d)	AprJul.	Closed-cone coniferous forest, chaparral, cismontane woodland. Elevation range extends from 520-1,370 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
intermediate monardella Monardella hypoleuca ssp. intermedia	Federal: None State: None Local: 1B.3	AprSep.	Chaparral, cismontane woodland, lower montane, occasionally coniferous forest; generally grows on steep hillsides with dense brush. Elevation range extends from 400-1,250 meters. Found in Riverside, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Hall's monardella Monardella macrantha ssp. hallii	Federal: None State: None Local: 1B.3 MSHCP	JunOct.	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation range extends from 730-2,195 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
southern mountains skullcap Scutellaria bolanderi ssp. austromontana	Federal: None State: None Local: 1B.2	JunAug.	Chaparral, cismontane woodland, lower montane coniferous forest; typically grows in gravelly soil on moist embankments of montane creeks. Elevation range extends from 425-2,000 meters. Found in Los Angeles, Riverside, San Diego, possibly San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Limnanthaceae (Meadowfoam Family)				
Parish's meadowfoam Limnanthes alba ssp. parishii	Federal: None State: SE Local: 1B.2 MSHCP	AprJun.	Yellow pine forests, freshwater wetlands, wetland-riparian; meadows, vernal pools. Elevation range extends from 600-2,000 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Malvaceae (Mallow Family)				
California ayenia Ayenia compacta	Federal: None State: None Local: 2.3	MarApr.	Creosote bush scrub, washes. Elevation range extends from 150-1,095 meters. Found in Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Nyctaginaceae (Four O'clock Family)				
chaparral sand-verbena Abronia villosa var. aurita	Federal: None State: None Local: 1B.1	JanSep.	Chaparral, coastal scrub, and desert dunes/sandy areas. Elevation range extends from 0-1,600 meters. Found in Los Angeles, Riverside, San Diego, San Bernardino, possibly Orange counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Papaveraceae (Poppy Family)				
Coulter's matilija poppy Romneya coulteri	Federal: None State: None Local: 4.2 MSHCP(e)	MarJul.	Dry washes and canyons in sage scrub and chaparral. Elevation range extends from 0-1,200 meters. Found in Los Angeles, Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Phrymaceae (Lopseed Family)				
Cleveland's bush monkeyflower Diplacus clevelandii	Federal: None State: None Local: 4.2 MSHCP(f)	AprJul.	Chaparral, cismontane woodland, lower montane coniferous forest; grows within disturbed gravelly areas, such as long roadside. Elevation range extends from 450-2,000 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Palomar monkeyflower Eythranthe diffusus	Federal: None State: None Local: 4.3 MSHCP	AprJun.	Chaparral, lower montane coniferous forest. Grows in sandy or gravelly areas. Elevation range extends from 1,220-1,830 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Picrodendraceae (Bitter Tree Family)				
Parry's tetracoccus Tetracoccus dioicus	Federal: None State: None Local: 1B.2	AprMay	Low growing chamise chaparral; prefers Las Posas soils. Elevation range extends from 165-1,000 meters. Found in Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Polemoniaceae (Phlox Family)				
serpentine collomia Collomia diversifolia	Federal: None State: None Local: 4.3	May-Jun.	Chaparral, cismontane woodland; sometimes gravelly, rocky, serpentinite. Elevation range extends from 200-600 meters. Found in Orange County.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
spreading navarretia Navarretia fossalis	Federal: FT State: None Local: 1B.1 MSHCP(b)	AprJun.	Coastal sage scrub, wetland-riparian; occurs almost always under natural conditions in wetlands. Elevation range extends from 30-655 meters. Found in Los Angeles, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
prostrate vernal pool navarretia Navarretia prostrata	Federal: None State: None Local: 1B.1	AprJul	Coastal sage scrub, wetland-riparian; occurs almost always under natural conditions in wetlands. Elevation range extends from 15-1,210 meters. Found in Los Angeles, Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Polygalaceae (Milkwort Family)				
Fish's milkwort Polygala cornuta var. fishiae	Federal: None State: None Local: 4.3 MSHCP (e)	May-Aug.	Cismontane woodland, riparian woodland, chaparral; typically grows among oaks along ridges and scree slopes and is often found along streams. Elevation range extends from 100-1,000 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Polygonaceae (Buckwheat Family)				
peninsular spineflower Chorizanthe leptotheca	Federal: None State: None Local: 4.2	May-Aug.	Sand or gravel; Elevation range extends from 600 (300) -1,600 meters. Found in Kern, Los Angeles, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Parry's spineflower Chorizanthe parryi var. parryi	Federal: None State: None Local: 1B.1	AprJun.	Openings/clearings in coastal or desert sage scrub, chaparral or interface; dry slopes or flat ground; sandy soils. Elevation range extends from 275-1,220 meters. Found in Los Angeles, Riverside, San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
long-spined spineflower Chorizanthe polygonoides var. longispina	Federal: None State: None Local: 1B.2 MSHCP	AprJul.	Primarily associated with clay soils but also found on sandy or gravelly soils within open areas of chaparral, sage scrub, or needlegrass grassland. Elevation range extends from 30-1,530 meters. Found in Orange, Riverside, Santa Barbara, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
slender-horned spineflower Dodecahema leptoceras	Federal: FE State: SE Local: 1B.1	AprJun.	Scrub and chaparral in sandy soils and alluvial fans. Elevation range extends from 200-760 meters. Found in Los Angeles, Riverside, San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Ranunculaceae (Buttercup Family)				
little mousetail Myosurus minimus ssp. apus	Federal: None State: None Local: 3.1 MSHCP(d)	MarJun.	Associated with vernal pools and inundated grassland habitats. Elevation range extends from 20-640 meters. Found in Alameda, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Rosaceae (Rose Family)				
mesa horkelia Horkelia cuneata var. puberula	Federal: None State: None Local: 1B.1	FebJul. (uncommonly Sep.)	Chaparral (maritime), cismontane woodland, coastal scrub/sandy or gravelly. Elevation range extends from 70-810 meters. Found in Los Angeles, Orange, San Bernardino, San Diego, Ventura, possibly Riverside counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
ANGIOSPERMS (MONOCOTYLEDON	IS)	1		
Alismataceae (Water-Plaintain Family)				
Sanford's arrowhead Sagittaria sanfordii	Federal: None State: None Local: 1B.2	May-Oct.	Marshes and swamps. Elevation range extends from 0-650 meters. Found in Orange, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Alliaceae (Liliaceae) (Onion Family-Lily Family)				
Yucaipa onion Allium marvinii	Federal: None State: None Local: 1B.2	AprMay	Chaparral; clay, openings. Elevation range extends from 760-1,065 meters. Found in Orange, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Munz's onion Allium munzii	Federal: FE State: ST Local: 1B.1 MSHCP(b)	MarMay	Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland communities; clay soils. Elevation range extends from 297-1,070 meters. Found in Riverside County.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Cyperaceae (Sedge Family)				
Buxbaum's sedge Carex buxbaumii	Federal: None State: None Local: 4.2	MarAug.	Bogs, fends, meadows, seeps, marshes, and swamps. Elevation range extends from 3-3,000 meters.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Juncaceae (Juncus)				
southwestern spiny rush Juncus acutus ssp. leopoldii	Federal: None State: None Local: 4.2	MarJun.	Mesic soils in coastal dunes; alkaline seeps in meadows; coastal salt marshes and swamps. Elevation range extends from 3-900 meters. Found in Los Angeles, Orange, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Santa Lucia dwarf rush Juncus luciensis	Federal: None State: None Local: 4.2	AprJul.	Chaparral. Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools. Elevation range extends from 300-2,040 meters. Found in Riverside and San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Liliaceae (Lily Family)				
Catalina mariposa lily Calochortus catalinae	Federal: None State: None Local: 4.2	Feb-Jun.	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Typically found in heavy soils within openings. Elevation range extends from 15-700 meters. Found in Los Angele, Orange, Santa Barbara, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
intermediate mariposa lily Calochortus weedii var. intermedius	Federal: None State: None Local: 1B.2 MSHCP	May-Jul.	Coastal scrub, chaparral, valley and foothill grassland on rocky soil and rocky outcrops. Elevation range extends from 105-855 meters. Found in Los Angeles, Orange, Riverside, San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
ocellated Humboldt lily Lilium humboldtii ssp. ocellatum	Federal: None State: None Local: 4.2 MSHCP* USFS	MarJul.	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, openings. Elevation range extends from 30-1,800 meters. Found in Los Angeles, San Bernardino, Riverside, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
lemon lily Lilium parryi	Federal: None State: None Local: 1B.2	JulAug.	Red fir forest, yellow pine forest, wetland- riparian; riparian meadows; usually occurs in wetlands, but occasionally found in non- wetlands. Elevation range extends from 1,220-2,745 meters. Found in Los Angeles, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Poaceae (True Grass Family)				
vernal barley Hordeum intercedens	Federal: None State: None Local: 3.2 MSHCP	MarJun.	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools. Elevation range extends from 5-1,000 meters. Found in Los Angeles, Orange, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
California Orcutt grass Orcuttia californica	Federal: FE State: SE Local: 1B.1 MSHCP (b)	AprAug.	Vernal pools. Elevation range extends from 15-660 meters. Found in Los Angeles, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Ruscaceae (Ruscus Family)				
chaparral nolina Nolina cismontana	Federal: None State: None Local: 1B.2	May-Jul.	Xeric Diegan sage scrubs, open chaparral, coastal scrub; generally grows within sandstone and shale substrates and occasionally within gabbro. Elevation range extends from 140-1,275 meters. Found in Orange, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Project Site
Themidaceae (Butcher's-Broom Family)				
thread-leaved brodiaea Brodiaea filifolia	Federal: FT State: CE Local: 1B.1	MarJun.	Clay soils in coastal scrub, valley and foothill grassland, cismontane woodland, and vernal pools. Elevation range extends from 25-1,120 meters. Found in Los Angeles, Orange, Riverside, San Diego, San Bernardino counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Santa Rosa basalt brodiaea Brodiaea santarosae	Federal: None State: None Local: 1B.2	May-Jul.	Valley and foothill grassland; basaltic. Elevation range extends from 565-1,045 meters. Found in Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.

¹ Sensitivity Status

Federal

FE Federally Endangered
FT Federally Threatened
FC Federal Candidate

FPE Federally Proposed as Endangered FPT Federally Proposed as Threatened FPD Federally Proposed for Delisting

State

SE State Listed as Endangered
ST State Listed as Threatened
SCE State Candidate for Endangered
SCT State Candidate for Threatened

SR State Rare

Local

CRPR California Rare Plant Ranks:

California Rare Plant Rank 1A Plants presumed extirpated in California and either rare or extinct elsewhere

California Rare Plant Rank 1B Plants rare, threatened, or endangered in California and elsewhere California Rare Plant Rank 2A Plants presumed extirpated in California but common elsewhere

California Rare Plant Rank 2B Plants rare, threatened, or endangered in California, but common elsewhere

California Rare Plant Rank 3 Plants about which more information is needed, a review list

California Rare Plant Rank 4 Plants of limited distribution, a watch list

Threat Code extensions and their meanings:

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

MSHCP (a)	Surveys may be required as part of wetlands mapping per MSHCP Section 6.1.2.
MSHCP (b)	Surveys may be required within Narrow Endemic Plant Species survey area per MSHCP Section 6.1.3.
MSHCP (c)	Surveys may be required per MSHCP Section 6.3.2.
MSHCP (d)	Surveys may be required within Criteria Area per MSHCP Section 6.3.2.
MSHCP (e)	These Covered Species will be considered to be Covered Species Adequately Conserved when conservation requirements identified in species-specific
	conservation objectives have been met per MSHCP Section 9.0 (Table 9-3).
MSHCP (f)	These Covered Species will be considered to be Covered Species Adequately Conserved when a Memorandum of Understanding is executed with the Forest

Western Riverside County Multiple Species Habitat Conservation Plan covered species

Service that addresses management for these species on Forest Service Land per MSHCP Table 9-3.

² Sources for Preferred Habitat:

MSHCP

California Native Plant Society. 2022. CNPS Rare Plant Inventory. Available online at: https://rareplants.cnps.org/. Accessed on June 28, 2022. Calflora. 2022. Information on Wild California Plants. Available online at: https://www.calflora.org/. Accessed on June 28, 2022. CDFW. 2022. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed on June 28, 2022.

Source: ESA, 2022.

Appendix B Special-Status Wildlife Species



APPENDIX B: SPECIAL-STATUS WILDLIFE SPECIES

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Project Site
Invertebrates			
Order Anostraca (fairy shrimp) Crustacea			
Riverside fairy shrimp Streptocephalus woottoni	Federal: FE State: None Local: (MSHCP) WS	Endemic to western Riverside, Orange and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains greater than 12 inches in depth. Hatch in warm water later in the season. Typically observed January through March.	Not Expected. No evidence of ponding was observed for vernal pools and the soil survey data did not reveal the presence of clay lenses or other soils typical of vernal pools. Past ponding within the drainage occurred from a fallen eucalyptus tree blocking water flow.
Order Coleoptera (beetles) Insecta			
Senile tiger beetle Cicindela senilis frosti	Federal: None State: None Local: None	Inhabits marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Order Lepidoptera (butterflies & moths) Insecta			
Quino checkerspot butterfly Euphydryas editha quino	Federal: FE State: None Local: None	Sunny openings within native and non-native grasslands, coastal sage scrub, open chaparral, and other open plant community types with rocky outcroppings, cryptogrammic crusts, and presence of host plant species (<i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Castilleja exserta</i>) and nectar sources. Hills and mesas near the coast.	Not Expected. The project site is highly disturbed due to previous grading and on-going weed abatement activities, which have removed the majority of vegetation on-site. No suitable host plants occur on the project site. Additionally, no focused surveys are required as this species is adequately conserved under the MSHCP.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Project Site
AMPHIBIANS	•		
Spadefoot Toads Scaphiopodidae			
western spadefoot Spea hammondii	Federal: None State: SSC Local: (MSHCP) AC	Mixed woodland, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Prefers washes and other sandy areas with patches of brush and rocks. Rain pools or shallow temporary pools, which do not contain bullfrogs, fish, or crayfish are necessary for breeding. Perennial plants necessary for its major food-termites.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
REPTILES		•	
Spiny Lizards Phrynosomatidae			
coast horned lizard Phrynosoma blainvillii	Federal: None State: SSC Local: (MSHCP) AC	Prefers sandy riparian and sage scrub habitats but also occurs in valley-foothill hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits. Requires open areas for sunning, bushes and loose soil for cover and abundant supply of harvester ants.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat. No sandy soils or harvester ants observed.
Whiptails & Relatives Teiidae			
orange-throated whiptail Aspidoscelis hyperythra	Federal: None State: WL Local: (MSHCP) AC	Species requires intact habitat within chaparral, cismontane woodland, and coastal scrub plant communities. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food-termites.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat. No sandy soils or termites observed.
Boas Boidae			
coastal rosy boa Lichanura trivirgata rosafusca	Federal: None State: None Local: None	Rocky areas of chaparral and coastal sage scrub habitats. Attracted to water sources such as permanent and intermittent streams, but does not require permanent water.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat. Drainage is ephemeral and no rocky habitats within or near project site.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Project Site
Vipers Viperiidae			
red-diamond rattlesnake Crotalus ruber	Federal: None State: SSC Local: (MSHCP) AC	Known to occur in chaparral, Mojavean desert scrub, and Sonoran desert scrub communities. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat. No scrub communities or dense vegetation present.
BIRDS			
Hawks, Kites, Harriers, & Eagles Accipitridae			
Cooper's hawk Accipiter cooperii	Federal: None State: WL Local: (MSHCP) AC	Inhabits cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest, or other forest habitats near water. Nests and forages near open water or in riparian vegetation.	Moderate Potential. Limited suitable nesting habitat within the eucalyptus grove and foraging habitat within the non-native grasses and forbs occur onsite. However, these habitats are highly disturbed and this species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.
white-tailed kite Elanus leucurus	Federal: None State: FP Local: (MSHCP) AC	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes nest to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
True Owls Strigidae			
burrowing owl Athene cunicularia	Federal: BCC State: SSC Local: (MSHCP) AS	Inhabits coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, annual and perennial grasslands, bare ground, and disturbed habitats characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel.	Moderate Potential. Suitable habitat occurs within the non-native grasses and forbs on-site. However, this species was not observed during the biological surveys, and no additional surveys are required as the species is adequately conserved under the MSHCP.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Project Site
Vireos Vireonidae			
least Bell's vireo Vireo bellii pusillus	Federal: FE State: SE, SSC Local: (MSHCP) WS	Known to occur in riparian forest, scrub, and woodland habitats. Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Highly territorial and nests primarily in willow, mule fat, or mesquite habitats.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Gnatcatchers Polioptilidae			
coastal California gnatcatcher Polioptila californica californica	Federal: FT State: SSC Local: (MSHCP) AC	Species is an obligate, permanent resident of coastal sage scrub habitats dominated by California sagebrush and flat-topped buckwheat, mainly on cismontane slopes below 1,500 feet in elevation. Low coastal sage scrub in arid washes, on mesas and slopes.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Sparrows Passerellidae			
southern California rufous-crowned sparrow Aimophila ruficeps canescens	Federal: None State: WL Local: (MSHCP) AC	Known to frequent relatively steep, often rocky hillsides with grass and forb species. Resident in southern California coastal sage scrub and mixed chaparral habitats.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
Bell's sparrow Artemisiospiza belli belli	Federal: None State: WL Local: (MSHCP) AC	Inhabits large, unfragmented blocks of coastal sage scrub, southern mixed chaparral habitats.	Not Expected. This species is not expected to occur within the project site due to lack of suitable habitat.
MAMMALS			
Rabbits & Hares Leporidae			
San Diego black-tailed jackrabbit Lepus californicus bennettii	Federal: None State: SSC Local: None	Inhabits open grasslands, agricultural fields, and sparse coastal scrub where they occur primarily in arid regions with short grass.	Low Potential. Limited suitable habitat within the non-native grasses and forbs occurs on-site. However, the habitat is highly disturbed and this species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Project Site
Kangaroo rats, Pocket mice, & Kangaroo mice Heteromyidae			
Stephens' kangaroo rat Dipodomys stephensi	Federal: FE State: ST Local: (MSHCP) AC	Inhabits annual and perennial grassland habitats, but may occur in coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas. Known to occur in sparse perennial vegetation with firm soil, "neither hard nor sandy."	Low Potential. Limited suitable habitat within the non-native grasses and forbs occurs on-site. However, the habitat is highly disturbed and this species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP (the project site is within the SKR fee area).

¹ Sensitivity Status

Federal (USFWS)

BGEPA Bald and Golden Eagle Protection Act

FE Federally Endangered
FT Federally Threatened

FPE Federally Proposed as Endangered FPT Federally Proposed as Threatened

State

FP Fully Protected
SE State Endangered
ST State Threatened

SCE State Candidate as Endangered SCT State Candidate as Threatened SSC State Species of Special Concern

WL Watch List

WBWG Western Bat Working Group Regional Priority

Matrix Species

Local

Western Riverside County MSHCP (MSHCP)

- WS = Wetland Species under the MSHCP additional surveys may be required as part of wetlands mapping per the MSHCP
- AS = Additional surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.
- AC = Adequately Conserved Species under the MSHCP

² Sources for Preferred Habitat:

CDFW. 2022a. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed on June 28, 2022.

CDFW. 2022b. California Wildlife Habitat Relationships. Available online at: https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range. Accessed on June 28, 2022.

Source: ESA, 2022.