APPENDIX A

Biological Resource Assessment and MSHCP Consistency Analysis

Biological Resources Assessment and MSHCP Consistency Analysis

Riverside Alive Project,
City of Riverside, Riverside County, California

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Executive Summary

Introduction: This report includes the findings of a Biological Resources Assessment (BRA) and Western Riverside County (WRC) Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis conducted by South Environmental for new developments for the Riverside Alive Project (project) in the City of Riverside, California.

Proposed Development: The Project proposes to include a combination of residential, office, retail, hotel, Convention Center expansion, and new parking facilities. No specific development is being proposed currently. The Project is being analyzed on the maximum areas or densities that could be placed within the Project site. The analysis for the Project described below is being conducted on "development envelopes" instead of on specific project details.

The proposed Project would include the demolition of the existing surface parking lot (Lot 33) and Outdoor Plaza. The area being demolished would be fenced with windscreen material to obscure views of the site. The existing Riverside Convention Center building would not be demolished; instead, the expansion of the Convention Center is proposed in a new adjacent building that is approximately 189,000 gross square feet. The existing Convention Center building would be joined with the proposed building in a minimally invasive way so that the existing building could remain open during construction which would eliminate the need to cancel or reschedule events.

Plant Communities/ Land Cover: The project would be constructed on developed / ornamentally landscaped land cover where it has been proposed to expand the existing Riverside Convention Center, develop new hotels, develop new residential units, develop new commercial space, develop new office space, develop new parking spaces, and develop new outdoor community venues (10.3-acres). This land cover for the proposed development does not have the potential to support special-status species because it lacks native habitats and the project site and study area are dense urban development currently. The nearest undeveloped native habitats are 1-mile to the west within the Santa Ana River and surrounding open spaces. However, the project site is separated from these areas by 1-mile of dense urban development and no indirect impacts would result. Because the entirety of the project site is already developed and currently lacks habitat due to urbanization, no direct or indirect impacts to sensitive natural communities, plant communities, or native habitats would result from the project development.

MSHCP Consistency Analysis: Based on the analysis in this report, the project would not impact any resources protected under the MSHCP, including special-status plants or wildlife, burrowing owls, narrow endemic or criteria area plants, water features, or habitat corridors. This is because none of these resources are found within the project site (or study area). The project would redevelop an existing development and no impacts to habitat or undeveloped areas would result. Also, the proposed development would not affect MSHCP habitat or MSHCP undeveloped areas; none occur within 500-feet of the project site. Therefore, the project is consistent with the WRC MSHCP.

Nesting Birds and Raptors: The proposed development would require removal of trees, shrubs, and herbaceous plants in the landscaping and parking lots that could provide potential nesting habitat for birds and raptors protected by the MBTA, MBPA, and the California Fish and Game Code. If present at the time of vegetation removal, active nests, eggs, or young could be destroyed or otherwise disturbed to a point at which the young do not survive, which would be a violation of the MBTA, MBPA, and the Fish and Game Code. In addition, indirect impacts from noise or vibration has the potential to disturb an active bird nest that may occur in adjacent landscaping to the point of failure if the nest is within immediate proximity to project activities, and this would also be a violation of the MBTA and Fish and Game Code. To comply with the MBTA and Fish and Game Code nesting bird surveys and nest avoidance will be implemented as described in BIO-1.

Special-Status Plants: No special-status plants were found during the survey, and none would occur on the site due to a lack of habitat resulting from urban development. Therefore, the project would not have any impact on special-status plants.

Special-Status Wildlife: No special-status wildlife was found during the survey, and none would occur on the site due to a lack of habitat resulting from urban development.

Protected Trees: There are no protected trees on the project site, and therefore none would be impacted by the project.

Water Resources: There are no water resources on the project site, and therefore none would be impacted by the project.

Wildlife Movement Corridors and Habitat Linkages: The project site and study area are entirely developed and do not contain a wildlife movement area. The study area is dense urban development and has not connection to wildlands or undeveloped areas. The nearest open space and wildlife movement areas are approximately 1-mile to the west and include the Santa Ana River and surrounding Lake Evans, Mount Rubidoux Park, and Fairmount Park. These areas are separated from the project site by 1-mile of dense urban development. The proposed project would not construct any new barriers such as fences, walls, or lighting that might deter wildlife from movement areas in the region. The proposed development will not alter any movement areas or have any new affects to the urban/wildlands interface because the resultant development is 1.) distal to wildlife movement areas and 2.) will be similar in scope to the existing development.

Cumulative Impacts: The project is not expected to result in impacts to sensitive or protected biological resources and with the implementation of the nesting bird preconstruction surveys described in this report, the project would have no effect on biological resources. There will be no cumulative impacts to biological resources from the project.

1 Introduction

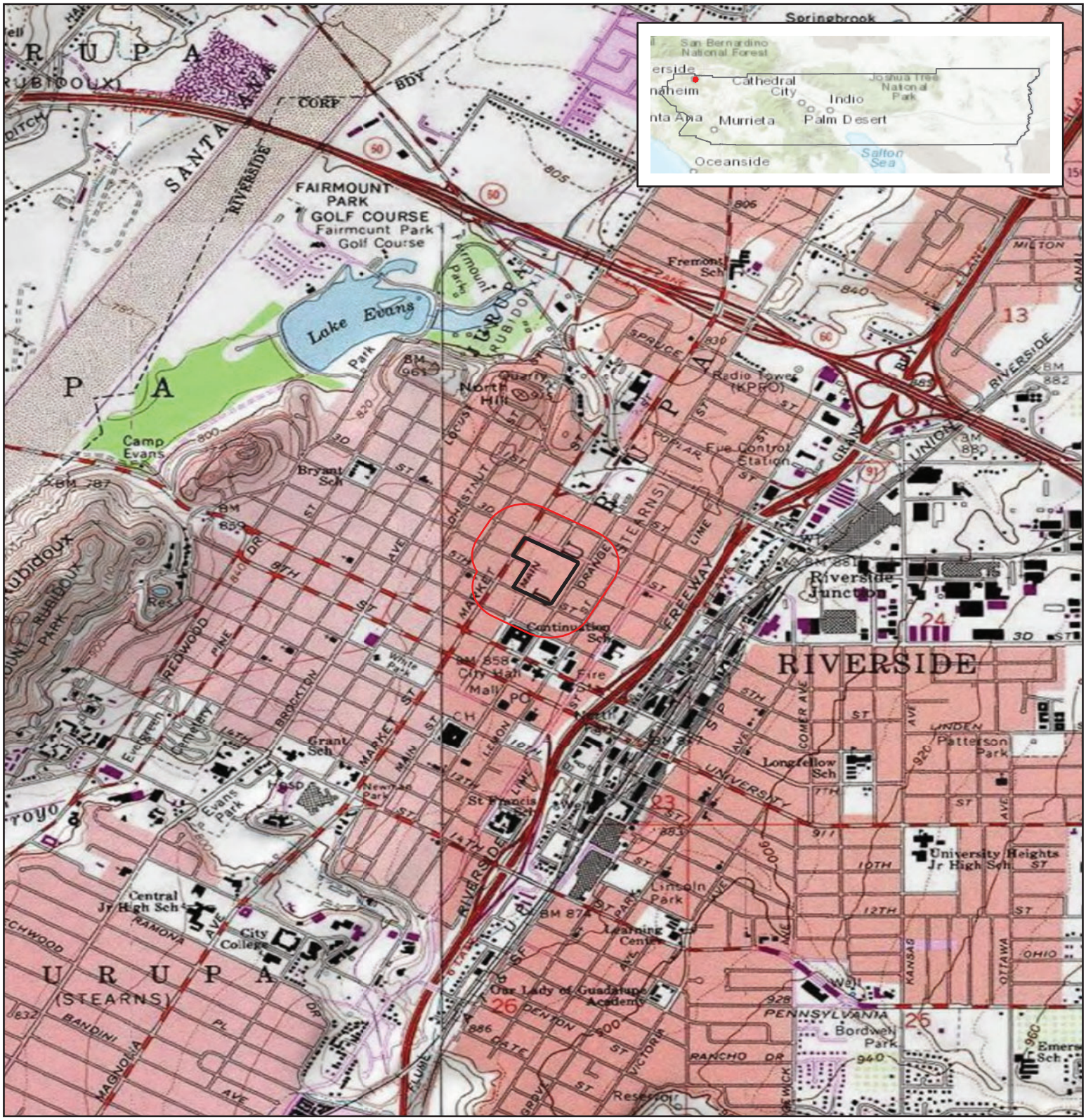
This report includes the findings of a Biological Resources Assessment (BRA) and Western Riverside County (WRC) Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis conducted by South Environmental for new developments for the Riverside Alive Project (project) in the City of Riverside, California. The purpose of this report is to identify and characterize biological resources that occur on the project site and surrounding 500 feet (study area), quantify and assess potential impacts to protected biological resources, and propose measures to reduce impacts to a less than significant level. The scope of this report includes a description of the proposed development, methods used to assess the biological resources, the environmental setting including technical characterizations and maps of vegetation communities, an assessment of the potential for special-status plants and animals to occur on the study area, a description of the regulatory setting, an analysis of the potential for the project to impact biological resources according to the thresholds of the California Environmental Quality Act (CEQA), and detailed recommendations for avoiding or mitigating impacts. The project is within the WRC MSHCP area and the report includes a consistency analysis with the MSHCP requirements. Representative photographs of the study area are in Appendix A.

1.1 Project Description

1.1.1 Location and Setting

The Project site is located in the City of Riverside, California on approximately 10.3 acres and consists the following APNs 213-111-011, 213-111-012, 213-111-014, 213-111-015, 213-111-016. The project site is on the Riverside East USGS 7.5-minute quad in Section 23 of Township 02 South and Range 05 West. The Project site includes the Lot 33 parking lot, the Riverside Convention Center, and Outdoor Plaza in front of the Riverside Convention Center. The Riverside Convention Center is located at 3637 Fifth Street and Lot 33 is the adjoining boundary on Third Street to the north. Local access to the Project site is provided via Main Street, Third Street, Fifth Street, Market Street and Orange Street. (Figure 1 and Figure 2)

The existing Riverside Convention Center offers both indoor and outdoor meeting space. The existing Riverside Convention Center is a 108,000 square-foot building that offers an approximately 50,000 square-feet exhibit hall, ballroom, and meeting areas, and the remaining area is pre-function and concourse space. The building also includes storage space, service corridors, administration area, kitchen, and includes a loading dock. The Outdoor Plaza includes both outdoor meeting space and relaxation area.



Source: ESRI USA Topo Maps and World Topo Map 2024

Figure 1. Project Location

Project Site

Study Area (500-Foot Buffer)

Project Location is within Riverside, California, in Riverside County on the USGS Riverside East 7.5-minute quadrangle map in Section 23 of Township 02 South and Range 05 West

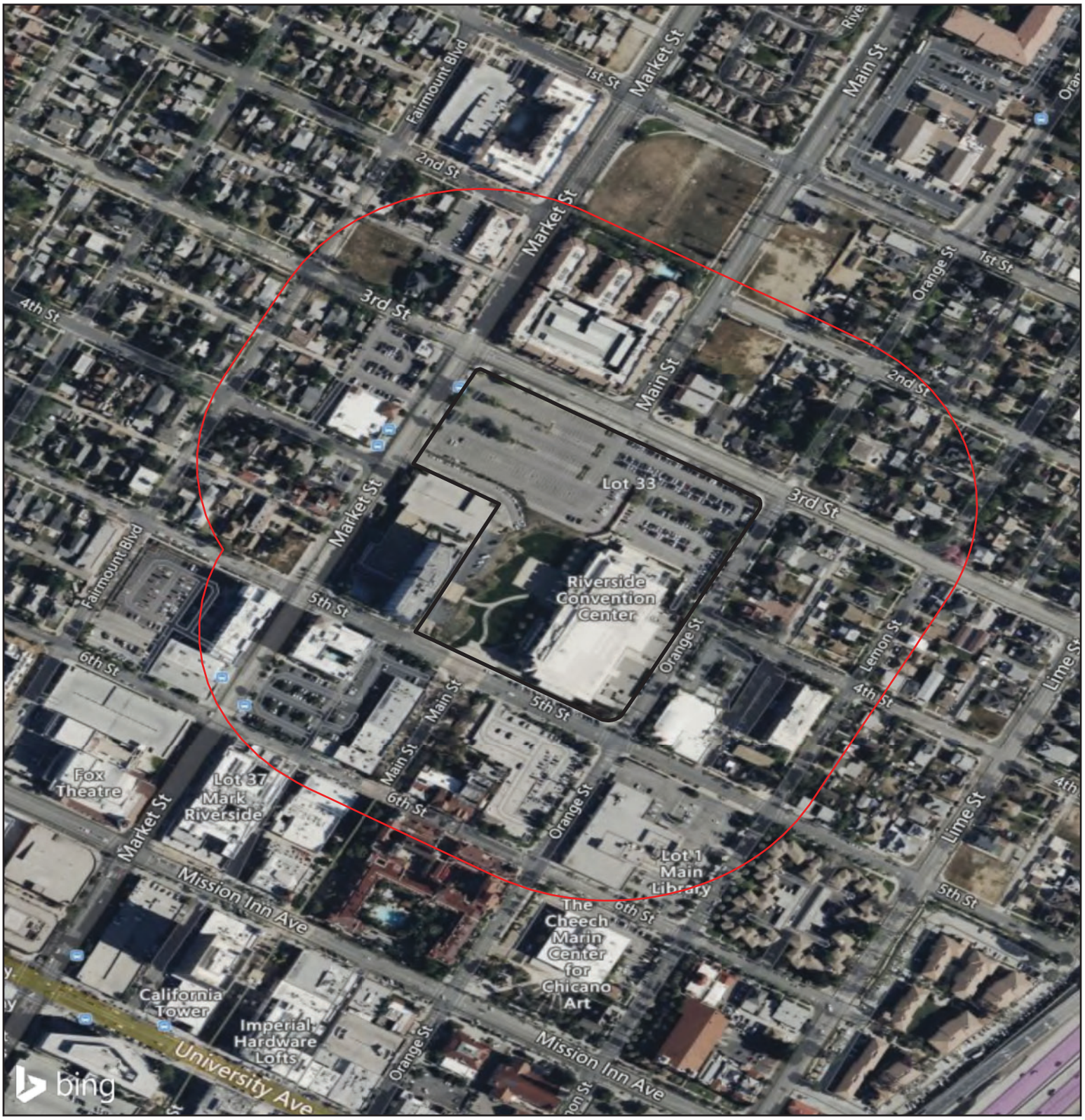
Center Coordinate (Decimal Degrees):
Latitude: 33.9862125N Longitude: -117.3716836W

0 1,000 2,000 Feet

Scale: 1:24,000

N

SOUTH ENVIRONMENTAL



Source: Bing Aerial Imagery 2024

BRA/MSHCP Report for Riverside Alive Project

Figure 2. Project Vicinity

Project Site

Study Area (500-Foot Buffer)

0 225 450 Feet

Scale: 1:4,500

N

SOUTH ENVIRONMENTAL

1.1.2 Proposed Development

The Project proposes to include a combination of residential, office, retail, hotel, Convention Center expansion, and new parking facilities. No specific development application is currently under consideration. The Project is being analyzed on the maximum areas or densities that could be placed with the Project site. The analysis for the Project described below is being conducted on "development envelopes" instead of on specific project details.

The proposed Project would include the demolition of the existing surface parking lot (Lot 33) and Outdoor Plaza. The area being demolished would be fenced with windscreen material to obscure views of the site. The existing Riverside Convention Center building would not be demolished; instead, the expansion of the Convention Center is proposed in a new adjacent building that is approximately 189,000 gross square feet. The existing Convention Center building would be joined with the proposed building in a minimally invasive way so that the existing building could remain open during construction which would eliminate the need to cancel or reschedule events.

The Project proposes a maximum development envelope consisting of residential and non-residential uses. Residential uses proposed are condominiums and a multi-family residential building which would not exceed 95-feet-tall. Non-residential uses proposed would include hotel, office, commercial retail uses, restaurant focused retail, underground parking facility and convention center expansion. Non-residential buildings would not exceed 155-feet tall and the underground parking structure would not exceed a depth of 53-feet below ground surface.

As the Project is an existing developed site, existing utilities are provided within and around the site. Existing utility facilities on-site may be removed, replaced or relocated to provide connection to existing facilities within the roadway rights-of-way. No new services are expected; rather, infrastructure improvements to existing facilities are expected and would be determined as specific buildings and facilities undergo specific entitlement and engineering processing in the future. At present, it is anticipated upgrades would be required to the existing water main (upsize to an 18-inch diameter pipeline) in Third Street between Orange Street and Market Street, and the sewer pipeline in Market Street may need to be upsized to a 15-inch diameter pipeline between Mission Inn Avenue and 11th Street.

1.2 Methodology

This biological resource assessment is based on information compiled through a reconnaissance survey and a literature review involving an assessment of appropriate reference materials and literature regarding the biological resources of the region.

1.2.1 Literature Review

The assessment of the project began with a review of literature relating to the natural resources — flora, fauna, and water resources — that were targeted for study as part of the MSHCP area assessment. To better understand these resources including the occurrence of the aforementioned plants and animals, the following were consulted:

Flora and Fauna

- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was reviewed to identify special-status plants and animals that have previously recorded in the United States Geological Survey (USGS) Riverside East 7.5" quad in which the project site is located, and the eight surrounding USGS 7.5" quads: Fontana, San Barnardino South, Redlands, Sunnymead, Perris, Steele Peak, Lake Matthews, and Riverside West (CDFW 2024a).
- CDFW California Wildlife Habitat Relationships (CWHR) life history accounts and range maps (CDFW 2024b)
- United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC) (USFWS 2024a)
- USFWS Designated and Proposed Critical Habitat GIS data (USFWS 2024b)
- California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2024a)
- Resource Conservation Authority (RCA) MSHCP Information Map online (RCA 2024).

Water Resources

- National Hydrography Dataset (USGS 2024a)
- National Wetlands Inventory (USFWS 2024c)
- California Protected Areas Database (CPAD 2024)
- WRC MSHCP GIS Data (Riverside County 2024)

Soil Resources

- US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soils Database (USDA 2024)

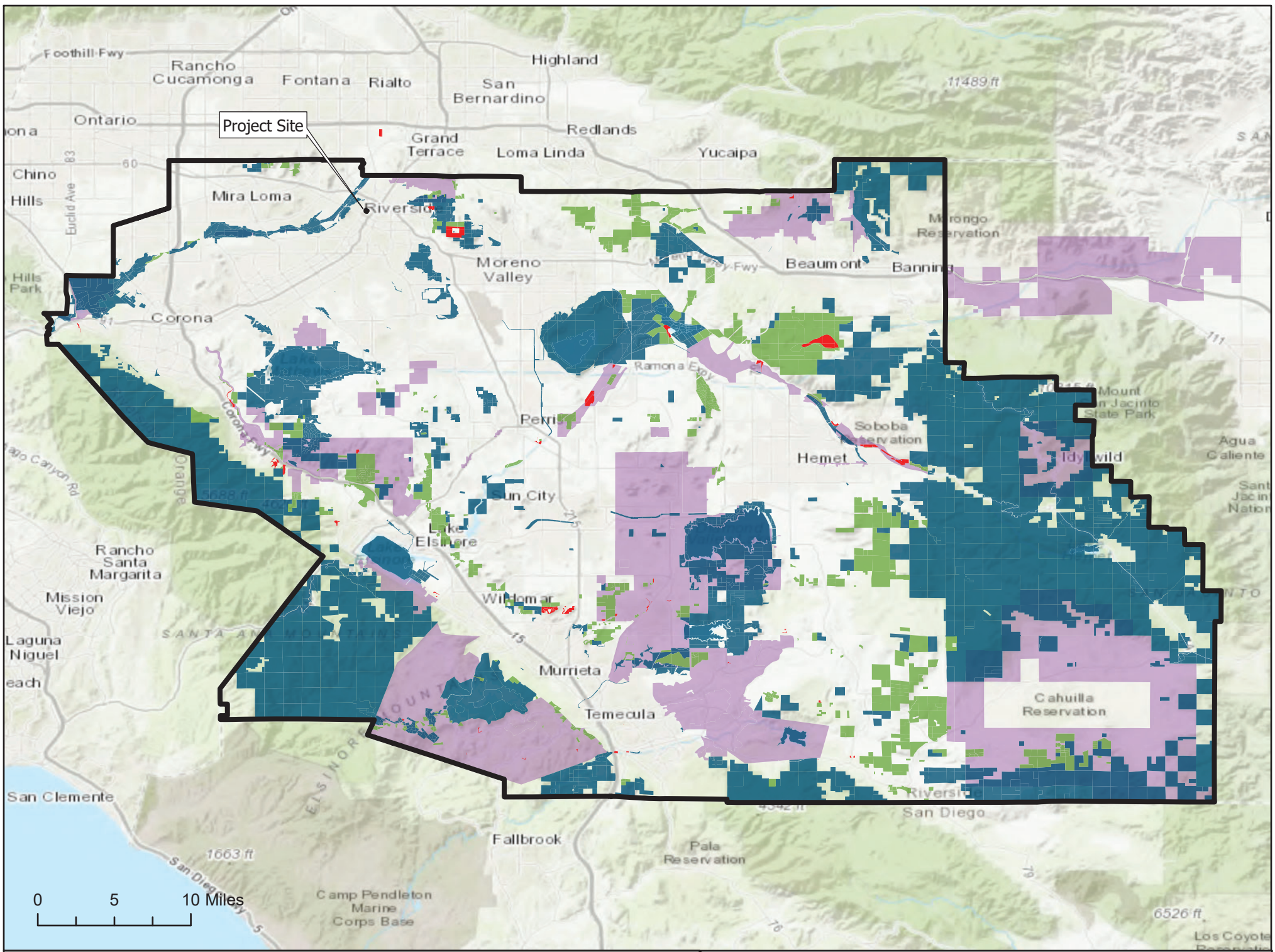
1.2.2 Field Reconnaissance

South Environmental biologist James McNutt conducted a field reconnaissance on March 27, 2024, to record plants and animals observed on the site, characterize and map plant communities according to the WRC MSHCP, and assess the potential for special-status species to occur. The findings described

in the reports are cited in the Literature Review, and results are referenced throughout the analysis in this report.

1.2.3 MSHCP Consistency Analysis

As shown in Figure 3 below, the project site is not within an MSHCP Plan Area Criteria Cell; however, it is within the Cities of Riverside and Norco Area Plan for the MSHCP. This report analyzes the proposed redevelopment project in relation to the goals of the MSHCP and assesses the potential impacts to MSHCP covered species and resources.



Project Site
WRCMSHCP Boundary
Multiple Species Habitat Conserved Lands
RCA Conservation Easements
Public/Quasi-Public Lands
Policy Areas

Figure 3. WRC MSHCP Overview

Sources:
-ESRI USA Topo Maps 2024
-BING Aerial Basemap 2024
-Riverside County Mapping Portal Data

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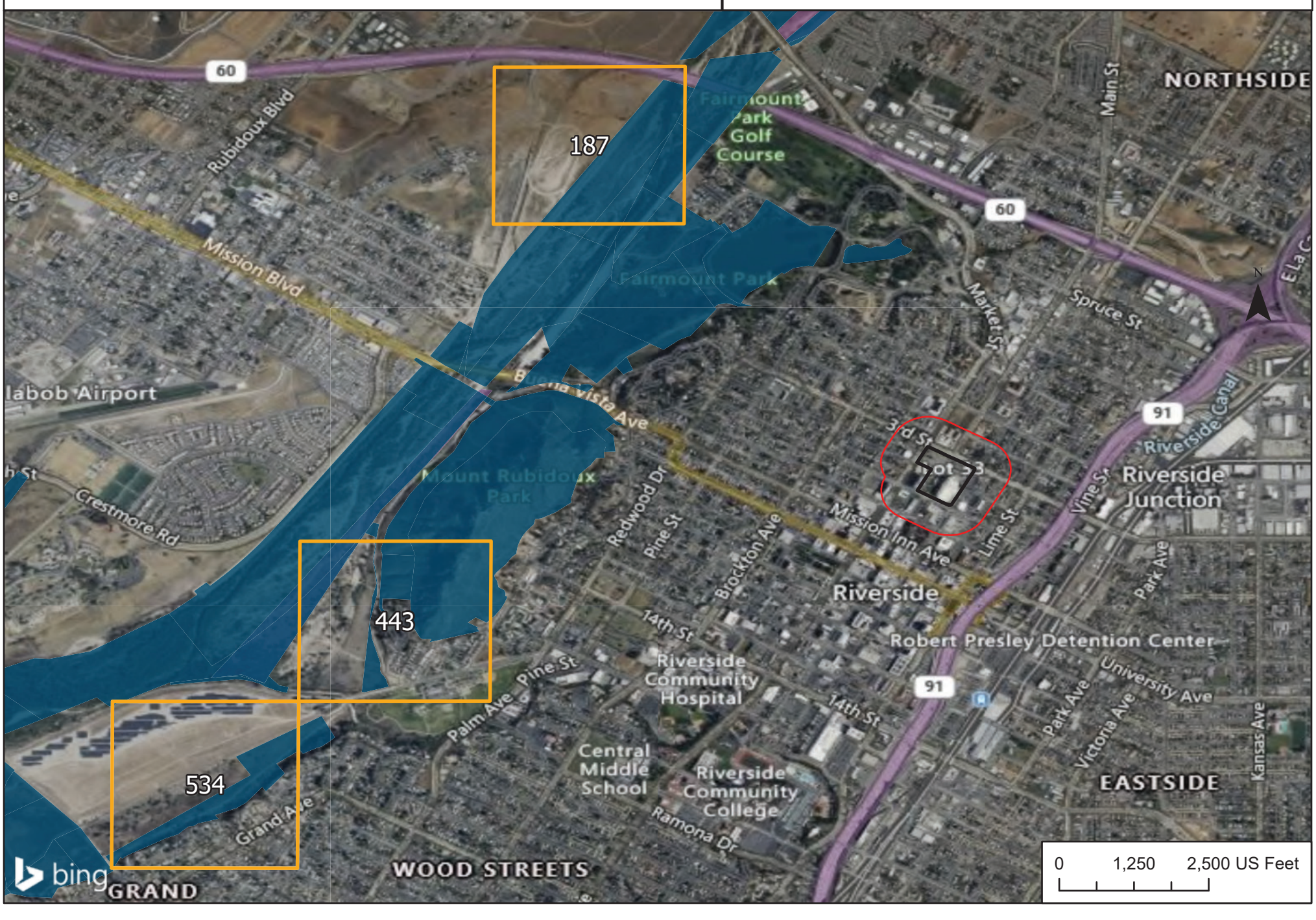


2 Environmental Setting

The project site is located northeast of 5th Street, southwest of 3rd Street, southeast of Market Street, and northwest of Orange Street. More broadly, the project site is northwest of State Highway (SH) 91 and is within the City of Riverside, California. The area within the project site includes developments and ornamental landscaping. The areas surrounding the project site include developments and ornamental landscaping in all directions. The project site and study area are within a dense urban environment within the City of Riverside.

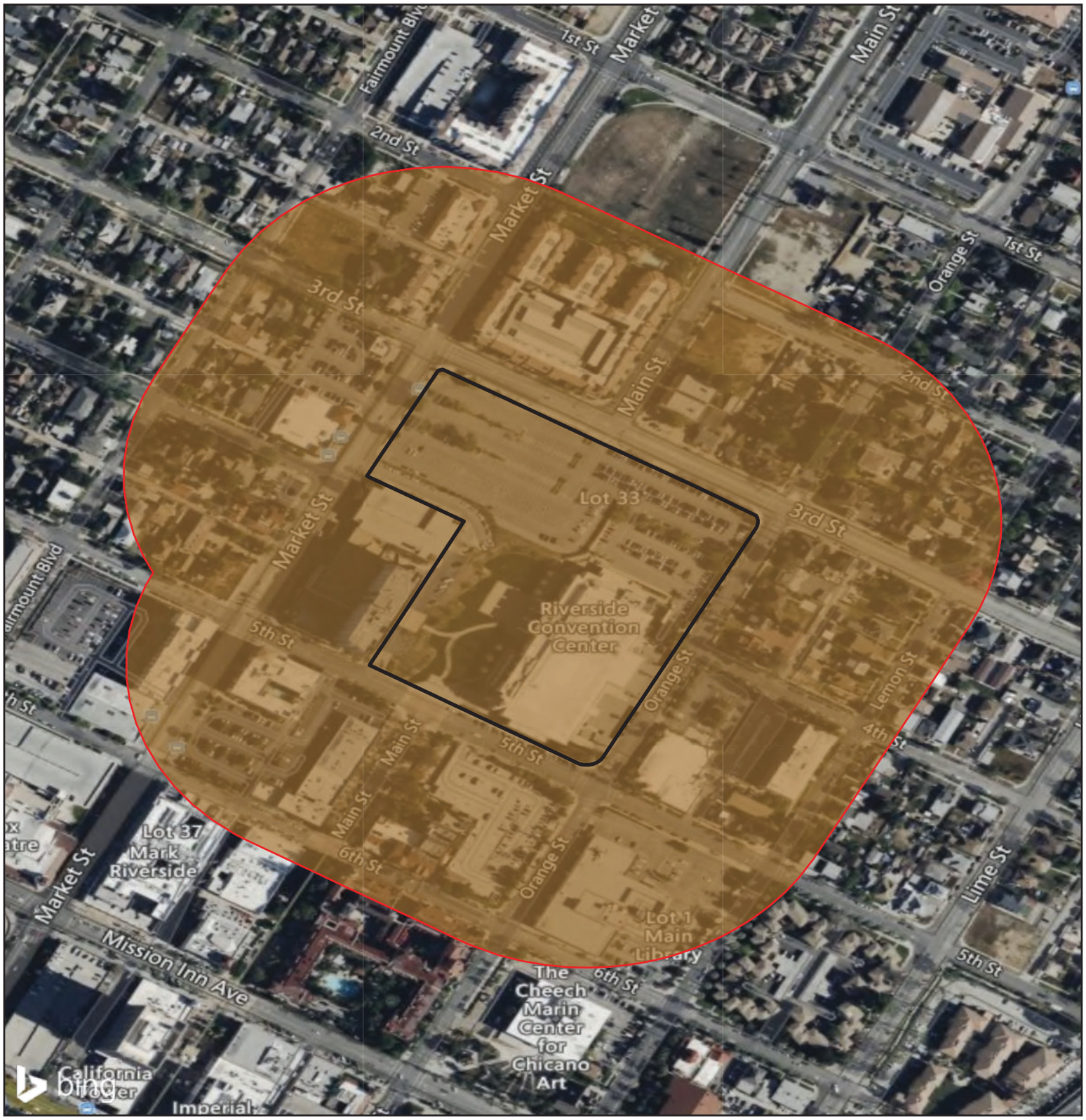
2.1 Topography and Climate

The topography within the study area is relatively flat. The highest elevation for the project site is approximately 860 ft above mean sea level (amsl) at the southeast corner. The lowest elevation for the project site is approximately 842 ft amsl just to the west of the existing convention center (USGS 2024). The climate in the region is hot and dry, with average summer high temperatures in the low to mid-90s and average winter lows in the low 40s. Average yearly rainfall is approximately 10-inches, and the wettest months are December – March. There is almost no precipitation between June-September.

2.2 Soils

One soil type occurs on the project site/ study area as shown in Figure 4 (USDA/NRCS 2024):

- **Buren fine sandy loam, 2 to 8 percent slopes, eroded** occurs throughout the entire study area and project site. This is an alluvial fan and tread soil and is moderately well drained.



Source: Bing Aerial Imagery 2024

BRA/MSHCP Report for Riverside Alive Project

Figure 4. Soils

0 200 400 Feet

Scale: 1:4,000

N

- Project Site
- Study Area (500-Foot Buffer)
- Buren fine sandy loam, 2 to 8 percent slopes, eroded

SOUTH ENVIRONMENTAL

2.3 Plants

A total of 42 plant species were identified on the study area. Two are native to this region of California and 40 are non-native due to the ornamental landscaping and disturbed regions throughout the study area. The habit of the species consisted of succulents, trees, shrubs, perennials, annuals, and palms. A list of the species observed on the site is presented below in Table 1.

Table 1. List of Plants Obvered on the Study Area

Scientific name	Common name	Habit	MSHCP Narrow Endemic	MSHCP Criteria Plant	CRPR*
Acacia confusa	small Philippine acacia	Tree*	--	--	NR
Agapanthus praecox	African lily	Perennial herb*	--	--	NR
Agave americana variegata	variated American aloe	Succulent Perennial*	--	--	NR
Aloe maculata	soap aloe	Succulent Perennial*	--	--	NR
Bromus diandrus	Ripgut brome	Annual herb*	--	--	NR
Bromus madritensis	foxtail brome	Annual herb*	--	--	NR
Bougainvillea glabra	paperflower	Shrub*	--	--	NR
Callistemon citrinus	crimson bottlebrush	Shrub*	--	--	NR
Carpobrotus edulis	iceplant	Perennial herb*	--	--	NR
Chenopodium murale	nettle leaf goosefoot	Annual herb*	--	--	NR
Cordyline australis	New Zealand cabbage tree	Tree*	--	--	NR
Cupressus sempervirens	Italian cypress	Tree*	--	--	NR
Dietes grandiflora	fortnight lily	Perennial herb*	--	--	NR
Ehrharta erecta	upright veldt grass	Perennial herb*	--	--	NR
Erigeron bonariensis	hairy fleabane	Annual herb*	--	--	NR
Erodium cicutarium	Red stem filaree	Annual herb*	--	--	NR
Euonymus japonicus	Japanese euonymus	Shrub*	--	--	NR
Euphorbia tirucalli	pencil tree	Succulent Perennial*	--	--	NR
Ficus benjamina	Weeping fig	Tree*	--	--	NR
Ficus macrocarpa	Chinese banyan	Tree*	--	--	NR
Fraxinus uhdei	tropical ash	Tree*	--	--	NR
Fraxinus velutina	velvet ash	Tree*	--	--	NR
Grevillea robusta	silky oak	Tree*	--	--	NR
Hordeum murinum	mouse barley	Annual herb*	--	--	NR
Koelreuteria paniculata	golden raintree	Tree*	--	--	NR
Lagerstroemia indica	crepe myrtle	Tree*	--	--	NR
Malva parviflora	cheeseweed	Annual herb*	--	--	NR
Muhlenbergia rigens	deergrass	Perennial herb*	--	--	NR
Nassella cernua	Nodding needlegrass	Perennial herb*	--	--	NR

Scientific name	Common name	Habit	MSHCP Narrow Endemic	MSHCP Criteria Plant	CRPR*
Pachycereus schottii	Senita cactus	Succulent Perennial*	--	--	NR
Parkinsonia aculeata	Jerusalem thorn	Tree*	--	--	NR
Philodendron bipinnatifidum	tree philodendron	Shrub*	--	--	NR
Phoenix roebelenii	pygmy date palm	Tree*	--	--	NR
Phormium tenax	New Zealand flax	Perennial herb*	--	--	NR
Platanus racemosa	western sycamore	Tree	--	--	NR
Rhaphiolepis indica	Indian hawthorn	Shrub*	--	--	NR
Sonchus oleraceus	common sowthistle	Annual herb*	--	--	NR
Stenotaphrum secundatum	St. Augustine grass	Perennial herb*	--	--	NR
Strelitzia reginae	bird of paradise	Perennial herb*	--	--	NR
Taraxacum officinale	dandilion	Perennial herb*	--	--	NR
Tulbaghia violacea	society garlic	Perennial herb*	--	--	NR
Washingtonia filifera	California fan palm	Tree	--	--	NR
*Non-native, NR = Not ranked					

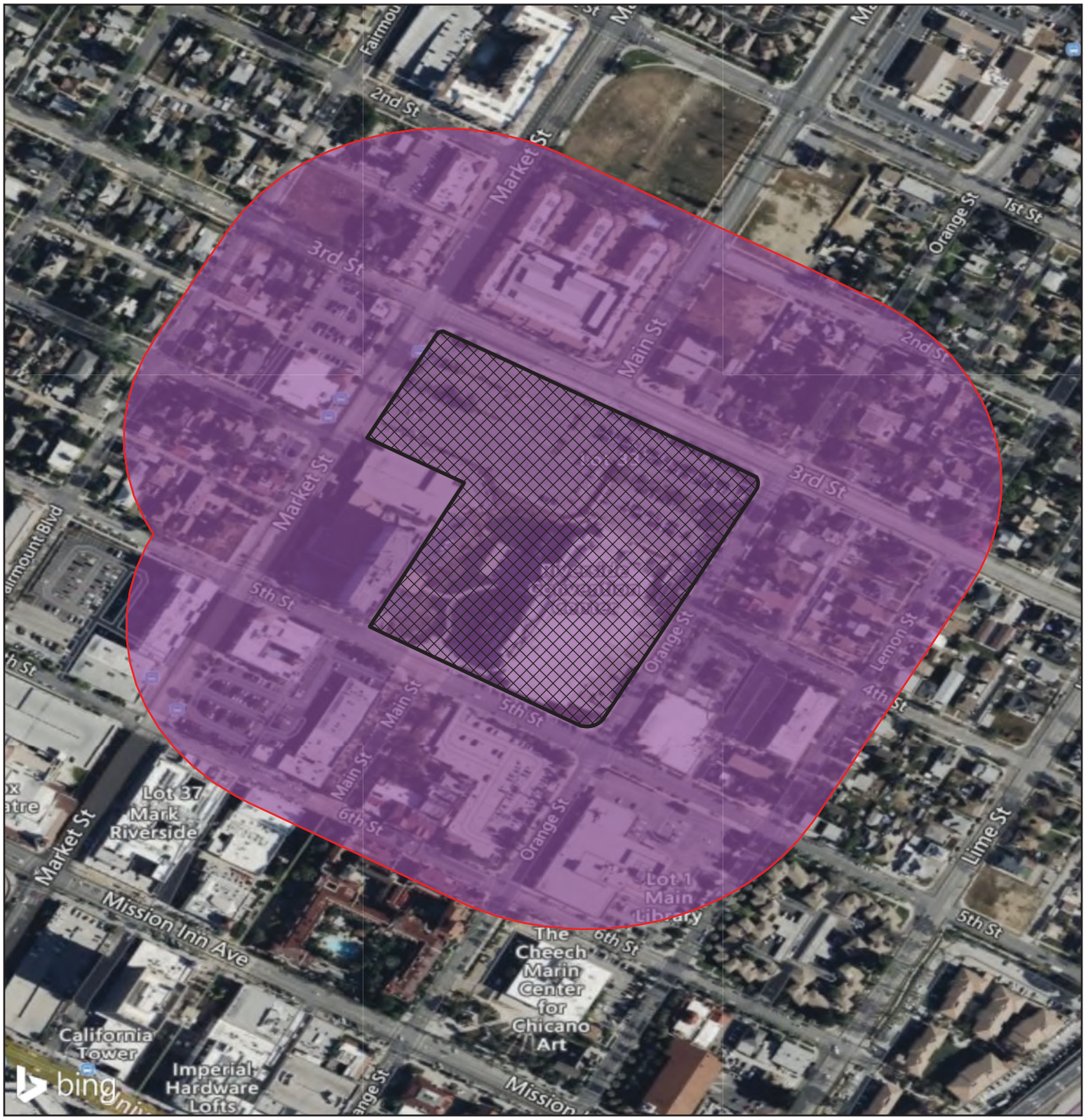
2.4 Plant Communities and Land Cover

The entire study area and project site is characterized by developed areas and ornamental landscaping as shown in Figure 5 and summarized in Table 2 below. There are no undeveloped areas or native plant communities or habitats found within the study area.

Table 2. Summary of Plant Communities on the Study Area and Project Site

Community or Cover Type	Acres on Study Area	Acres on Project Site	Acres Permanently Impacted by Project
Developed / Ornamental Landscaped	60.62	10.28	10.28
Total	**60.62**	**10.28**	**10.28**

- **Developed / Ornamental Landscaped** areas are found on all of the study area and on all of the project site. The developed areas include buildings, driveways, parking lots, and sidewalks. Ornamental landscaping is mixed with the developed areas. All of the observed plants occur on this land cover.



Source: Bing Aerial Imagery 2024

Figure 5. Plant Communities and Land Cover

0 200 400 Feet

Scale: 1:4,000

N

Project Site

Study Area (500-Foot Buffer)

Proposed Development Footprint

Plant Communities and Land Cover

Developed / Ornamentally Landscaped

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2.5 Wildlife

No wildlife was observed during the site visit, but species commonly found in parks are expected to occur. Table 3 below shows records for wildlife occurrences on the project site from iNaturalist (iNaturalist, 2024).

Table 3. Summary of Wildlife Recorded to iNaturalist on the Study Area

Scientific name	Common name	Status
Birds		
Melospiza lincolnii	Lincoln' s sparrow	None
Pheucticus melanocephalus	black-headed grosbeak	None
Setophaga coronata ssp. auduboni	Audubon's Warbler	None
Mammals		
Mephitis mephitis	striped skunk	None
Procyon lotor	common racoon	None
Sciurus niger	fox squirrel	None

2.6 Special-Status Species

The literature analysis of the CNDDB, CNPS, and IPAC databases for special-status species known to occur within a 9-quad search surrounding the project site resulted in 125 special-status species, including 65 animals and 60 plants. The list includes rare, threatened, endangered species at a federal and state level. In the case of plants, it also includes California Rare Plant Rank (CRPR) species with a classification of 1-4.

Special-Status Plants

The 60 special-status plant species that CNDDB, CNPS, and IPAC identify as occurring in the region of the project and an assessment of their likelihood to inhabit the project site are presented in Appendix B. No special-status plant species were observed during the survey. Based on the analysis in Appendix B, none of the special-status plants have the potential to occur in the project site due to a lack of native habitat. The site is entirely developed and lacks native habitats that are required for special-status plant species to occur.

Special-Status Wildlife

The 65 special-status animal species that CNDDB, CNPS, and IPAC identify as occurring in the region of the project and an assessment of their likelihood to inhabit the project site are presented in Appendix B. No special-status animal species were observed during the survey. Based on the analysis in Appendix B, none of the special-status animals have the potential to occur on the project site due to a lack of habitat. The site is entirely developed and lacks native habitats that are required for special-status animal species to occur.

2.7 Sensitive Natural Communities

CDFW 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* defines sensitive natural communities as those that are "of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." CDFW considers a natural community sensitive if it has a Global or State rarity rank of 1-3, which includes communities that are vulnerable (G3/S3), imperiled (G2/S2), and critically imperiled (G1/S1). CDFW uses the alliances and groups described in the California Natural Community List (CDFW 2024c) and the California Natural Communities List from A Manual of California Vegetation Online (CNPS 2024b) to characterize California's natural communities. The current global and state rarity rank for natural communities of California are listed in these resources. The entire study area and project site is developed / ornamentally landscaped and does not have a Global or State rarity rank and lacks native habitats; therefore, no sensitive natural communities occur on the study area or project site.

2.8 Protected Trees

"The Riverside County "Code of Ordinances" protects native trees on private and public property that are at an elevation of >5,000-ft and are "at least thirty (30) feet and are not less than twelve (12) inches in diameter when measured four and one-half feet above the ground."

The "Open Space and Conservation Element" is a general vision document that discusses protection of different plant communities and native tree species primarily in relation to the MSHCP. The trees on the site are not special-status species or conservation species recognized in the MSHCP (e.g., covered, narrow endemic).

No protected trees occur in the study area or the project site.

2.9 Hydrology Features

The project site is located within the Santa Ana watershed (HUC8) and within the Tequesquite Arroyo sub-watershed (HUC12). Based on the literature review and results of the reconnaissance urvey there are no jurisdictional features (i.e. streams, wetlands, drainages, ponds, lakes) within either the study area or the project site.

2.10 Habitat Linkages and Wildlife Migration Corridors

The project site is in the Cities of Riverside and Norco Area Plan for the MSHCP. There are habitat linkages (i.e., wildlife migration corridors) addressing wildlife that are established in the MSHCP (Riverside County 2003) for the Cities of Riverside and Norco Area Plan. From the MSHCP, Table 3-18 "Criteria for Cities of Riverside/Norco" indicates how the Criteria Cells contributes specifically to an established habitat linkage (Riverside County, 2003). The project site is not within a Criteria Cell; therefore, criteria for habitat linkages and wildlife mitigation corridors within the Cities of Riverside and Norco Area Plan do not apply to the project. The study area and project site would not be considered a habitat linkage or wildlife migration

corridor because it is fully developed and surrounded by existing dense urban development and lacks connection to native plant communities or habitats.

3 MSHCP Consistency Analysis

3.1 MSHCP Literature Review

Based on the RCA MSHCP map the project site has the following attributes:

- The project site is within the Cities of Riverside and Norco Area Plan, but not a subunit subject to a Proposed Constrained Linkage;
- The project site is not within a Cell Groups or a Criteria Cell;
- The project is not within an amphibian, burrowing owl, mammal, narrow endemic plant, or criteria area species study area;
- The project is not within a Delhi Sands Flower-loving Fly study area,
- The project site is not within any RCA Conserved Lands
- An analysis of the urban/wildlands interface is required by the MSHCP but the project does not interface with any wildlands and is surrounded by dense urban development.
- The project site is in the Cities of Riverside and Norco Area Plan, the area for which there are several wildlife of conservation concern as follows:
    - Wildlife: black-crowned night heron, burrowing owl, Cooper's hawk, double-crested cormorant, downy woodpecker, least Bell's vireo, loggerhead shrike, osprey, peregrine falcon, southwestern willow flycatcher, tree swallow, western yellow-billed cuckoo, white-faced ibis, white-tailed kite, yellow-breasted chat, yellow warbler, arroyo chub, Santa Ana sucker, bobcat, and western pond turtle.
    - Plants: Santa Ana River woolystar.
- Within the Cities of Riverside and Norco Area Plan, there are several "biological issues and considerations" in the MSHCP (Riverside County, 2003). Several of these are directed toward preserving habitat linkages or corridors and were already mentioned above. Other "biological issues and considerations" address preserving wetlands, or other habitat types for the benefit of special-status plant and animal species. None of these features occur on the project site or study area.

3.2 Criteria Cell

The project site is not within a Criteria Cell. Notably, the project site is currently developed and would not contribute to the biological or habitat value of a Criteria Cell. The conservation area plan of the MSHCP (Riverside County, 2003) indicates that there are no narrow endemic or criteria area plant species present on the project site.

3.3 Urban/Wildlands Interface

Section 6.0 of the MSHCP requires an Urban/Wildlands Interface analysis be conducted in order to address the indirect effects associated with locating proposed development in proximity of MSHCP

Conservation Areas. The project site and study area are entirely developed and do not contain a wildlife movement area. The area is dense urban development and has not connection to wildlands or undeveloped areas. The nearest open space and wildlife movement areas are approximately 1-mile to the west and include the Santa Ana River and surrounding Lake Evans, Mount Rubidoux Park, and Fairmount Park. These areas are separated from the project site by 1-mile of dense urban development. The proposed project would not construct any new barriers such as fences, walls, or lighting that might deter wildlife from movement areas in the region. The proposed development will not alter any movement areas or have any new affects to the urban/wildlands interface because the resultant development is 1.) distal to wildlife movement areas and 2.) will be similar in scope to the existing development.

3.4 MSHCP Consistency Analysis

Based on the analysis in this report, the project would not impact any resources protected under the MSHCP, including special-status plants or wildlife, burrowing owls, narrow endemic or criteria area plants, water features, or habitat corridors. This is because none of these resources are found within the project site (or study area). The project would redevelop an existing development and no impacts to habitat or undeveloped areas would result. Also, the proposed development would not affect MSHCP habitat or MSHCP undeveloped areas; none occur within 500-feet of the project site. Therefore, the project is consistent with the WRC MSHCP.

4 Impacts Analysis

For the purposes of this report, impacts to protected biological resources are analyzed within the context of the regulatory setting. Below is an overview of the federal, state, and local regulations pertaining to protected biological resources in the study area, and an analysis of impacts to those resources that may occur as a result of the proposed development follows.

4.1 Regulatory Setting

4.1.1 Federal Regulations

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

4.1.2 California Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

An Initial Study (IS) is prepared when a proposed action is determined to be a "project" under CEQA. The IS is a checklist that asks specific questions about the project's level of environmental impacts in many categories, including biological resources. The checklist includes a series of questions to determine the projects level of potential impacts in each of the categories. The CEQA Checklist includes the following questions regarding biological resources:

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

Potential level of impact choices includes: No Impacts, Less Than Significant Impact, Less Than Significant with Mitigation Incorporated, and Potentially Significant Impact. For projects that have no impact or less than significant impact a Negative Declaration is prepared, for those with Less Than Significant with Mitigation Incorporated prepare a Mitigated Negative Declaration, and for those with a Potentially Significant Impact prepare an Environmental Impact Report (EIR).

State of California Fish and Game Code Section 3500

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

California Migratory Bird Protection Act

The California Migratory Bird Protect Act (MBPA) was enacted in September 2019 to reinforce the MBTA at the state level. The Act states:

- "It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.) before January 1, 2017, any additional migratory nongame bird that may be designated in that federal act after that date, or any part

of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act before January 1, 2017, or subsequent rules or regulations adopted pursuant to that federal act, unless those rules or regulations are inconsistent with this code." This section is inactive on January 20, 2025 and the following language below will be adopted.

- "It is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 U.S.C. Sec. 703 et seq.), or any part of a migratory nongame bird described in this section, except as provided by rules and regulations adopted by the United States Secretary of the Interior under that federal act." This section is operative starting on January 20, 2025.

4.1.3 Local Regulations

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The MSHCP is an overarching, regional, multi-jurisdictional plan centered on the conservation of species with conservation problems (i.e., special-status species) and their associated habitats in western Riverside County. The MSHCP identified 146 species, termed "Covered Species," and then was given authority to grant federal and California ESA "take" authorizations to regional jurisdictions under the plan when they follow the state and federal ESAs and MSHCP regulations. Of the 146 Covered Species, 118 are considered to be "adequately conserved" and 28 Covered Species will be adequately conserved when certain conservation goals are met in accordance with the MSHCP. The MSHCP was designed to focus on core habitat and linkages in the region in relation to the species designated for protection. Its overall goal is to conserve the biological and ecological diversity in a rapidly developing region while at the same time promoting economic development of western Riverside County.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including state- and federally listed species, as well as other identified sensitive species and/or their habitats. Each city of local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the county and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with CEQA, National Environmental Policy Act (NEPA), the California ESA, and the ESA will be granted. The Development Mitigation Fee varies according to project size and project description and is dependent on development density (Riverside County Ordinance No. 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, and the California and federal ESAs for impacts to the species and habitats covered by the MSHCP, pursuant to agreements with USFWS, CDFW, and/or any other appropriate participating regulatory agencies as set forth in the IA for the MSHCP.

4.2 Project Impacts

4.2.1 Impacts to Plant Communities/Habitat/Sensitive Natural Communities

The project would be constructed on developed / ornamentally landscaped land cover where it has been proposed to expand the existing Riverside Convention Center, develop new hotels, develop new residential units, develop new commercial space, develop new office space, develop new parking spaces, and develop new outdoor community venues (10.3-acres). This land cover for the proposed development does not have the potential to support special-status species because it lacks native habitats and the project site and study area are dense urban development currently. The nearest undeveloped native habitats are 1-mile to the west within the Santa Ana River and surrounding open spaces. However, the project site is separated from these areas by 1-mile of dense urban development and no indirect impacts would result. Because the entirety of the project site is already developed and currently lacks habitat due to urbanization, no direct or indirect impacts to sensitive natural communities, plant communities, or native habitats would result from the project development.

4.2.2 Impacts to Nesting Birds and Raptors

The proposed development would require removal of trees, shrubs, and herbaceous plants in the landscaping and parking lots that could provide potential nesting habitat for birds and raptors protected by the MBTA, MBPA, and the California Fish and Game Code. If present at the time of vegetation removal, active nests, eggs, or young could be destroyed or otherwise disturbed to a point at which the young do not survive, which would be a violation of the MBTA, MBPA, and the Fish and Game Code. In addition, indirect impacts from noise or vibration has the potential to disturb an active bird nest that may occur in adjacent landscaping to the point of failure if the nest is within immediate proximity to project activities, and this would also be a violation of the MBTA and Fish and Game Code. To comply with the MBTA and Fish and Game Code nesting bird surveys and nest avoidance will be implemented as described in BIO-1.

BIO-1: Preconstruction Nesting Bird and Raptor Survey

- If possible, ground disturbing activities and vegetation removal should be timed to occur between September 1 – January 31, which is outside the bird and raptor nesting season.

- If ground disturbing activities or vegetation removal (including tree trimming) are scheduled between February 1 – August 31, which is the bird nesting season, a preconstruction survey for nesting birds should be conducted within 72 hours prior to construction activities. The survey should be conducted by a qualified biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the affected area and suitable habitat within a 500-foot buffer, or a buffer size determined by the qualified biologist based on level of proposed disturbance and access. If no active nests are found, no additional measures are required.

- If active nests are found the biologist will map the location and document the species and nesting stage. A no-work buffer will be established around the active nest as determined by the qualified biologist and based on the species sensitivity to disturbance and the type and duration of the disturbance. No construction activities shall occur within the no-work buffer until the biologist has determined the nest is no longer active.

4.2.3 Impacts to Special-Status Species

No special-status plants were found during the survey, and none would occur on the site due to a lack of habitat resulting from urban development. No special-status wildlife was found during the survey, and none would occur on the site due to a lack of habitat resulting from urban development. Cumulatively, no impacts (direct or indirect) to special-status species would be expected from the project because the study area and project site are fully developed areas that lack native habitats where special-status species would not occur.

4.2.4 Impacts to Water Resources

No jurisdictional waters are on the study area or project site; therefore, the proposed project will have no impact on jurisdictional waters.

4.2.5 Impacts to Protected Trees

There are no protected trees on the project site, and none would be impacted by the project.

4.2.6 Impacts to Wildlife Movement Corridors and Habitat Linkages

The project site and study area are entirely developed and do not contain a wildlife movement area. The study area is dense urban development and has no connection to wildlands or undeveloped areas. The nearest open space and wildlife movement areas are approximately 1-mile to the west and include the Santa Ana River and surrounding Lake Evans, Mount Rubidoux Park, and Fairmount Park. These areas are separated from the project site by 1-mile of dense urban development. The proposed project would not construct any new barriers such as fences, walls, or lighting that might deter wildlife from movement areas in the region. The proposed development will not alter any movement areas or have any new affects to the urban/wildlands interface because the resultant development is 1.) distal to wildlife movement areas and 2.) will be similar in scope to the existing development.

4.2.7 Impacts to WRC MSHCP Areas

Based on the analysis in this report, the project would not impact any resources protected under the MSHCP, including special-status plants or wildlife, burrowing owls, narrow endemic or criteria area plants, water features, or habitat corridors. This is because none of these resources are found within the project site (or study area). The project would redevelop an existing development and no impacts to

habitat or undeveloped areas would result. Also, the proposed development would not affect MSHCP habitat or MSHCP undeveloped areas; none occur within 500-feet of the project site. Therefore, the project is consistent with the WRC MSHCP.

4.2.8 Cumulative Impacts

The project is not expected to result in impacts to sensitive or protected biological resources and with the implementation of the nesting bird preconstruction surveys described in this report, the project would have no effect on biological resources. There will be no cumulative impacts to biological resources from the project.

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Appendix A

Photograph Log

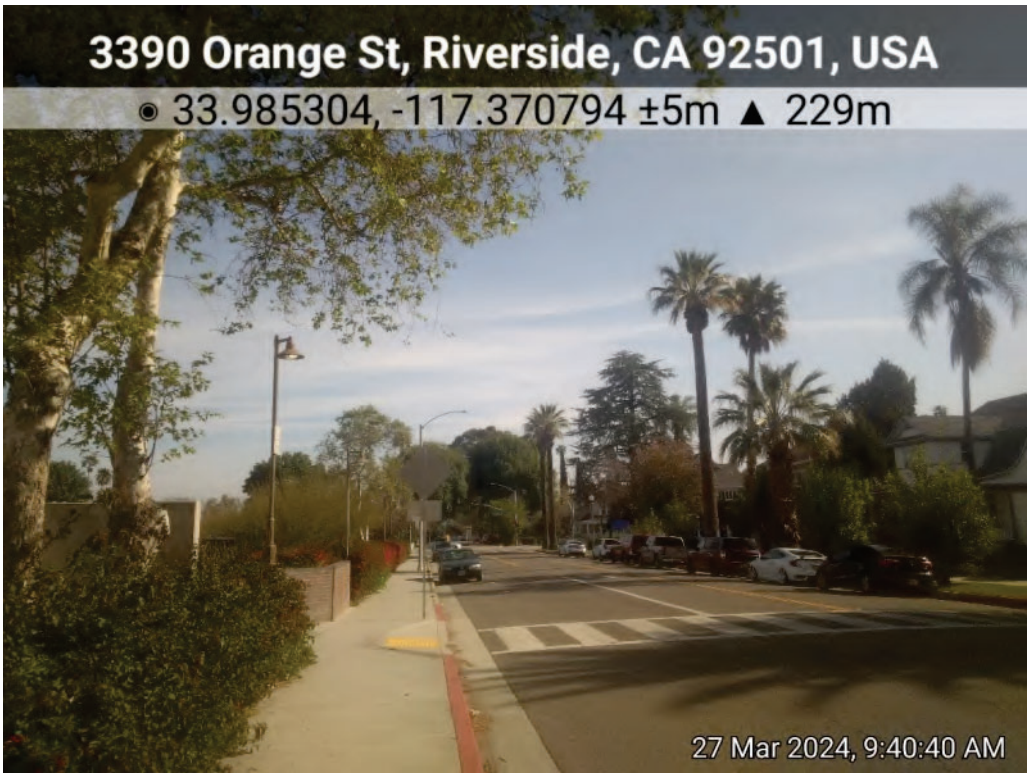

Photo 1. View of project site southeastern boundary, facing northeast.

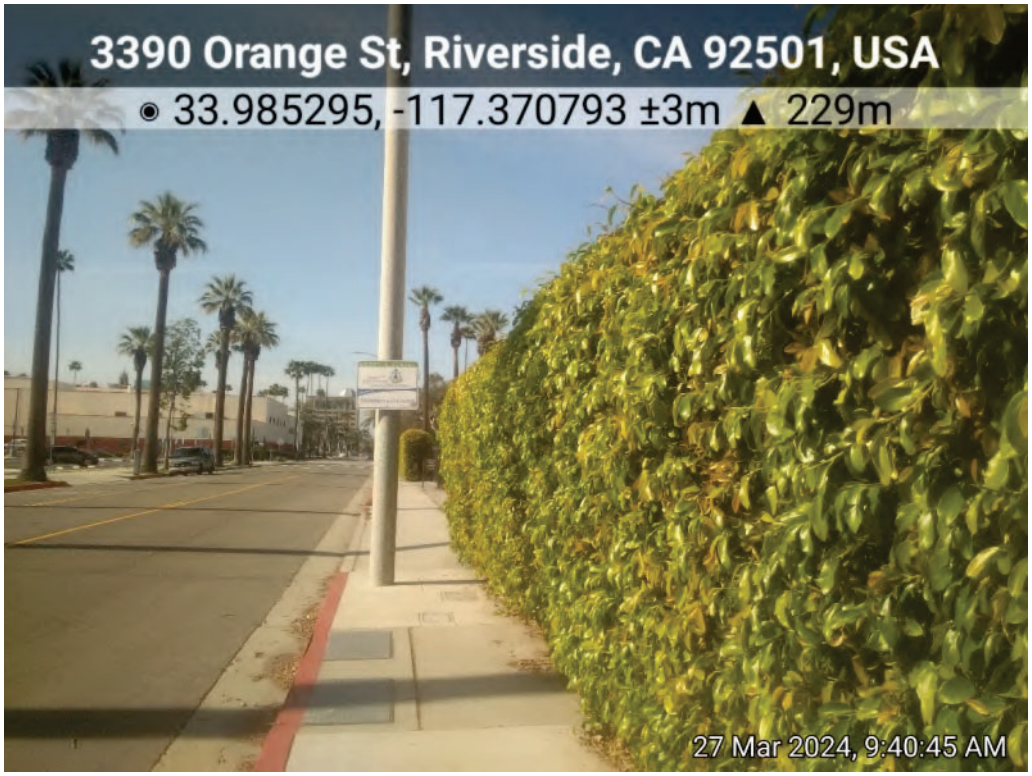

Photo 2. View of project site southeastern boundary, facing southwest.

Photo 3. View of project site southeastern boundary from southeastern corner, facing northeast.

Photo 4. View of project site southwestern boundary from southeastern corner, facing northwest.

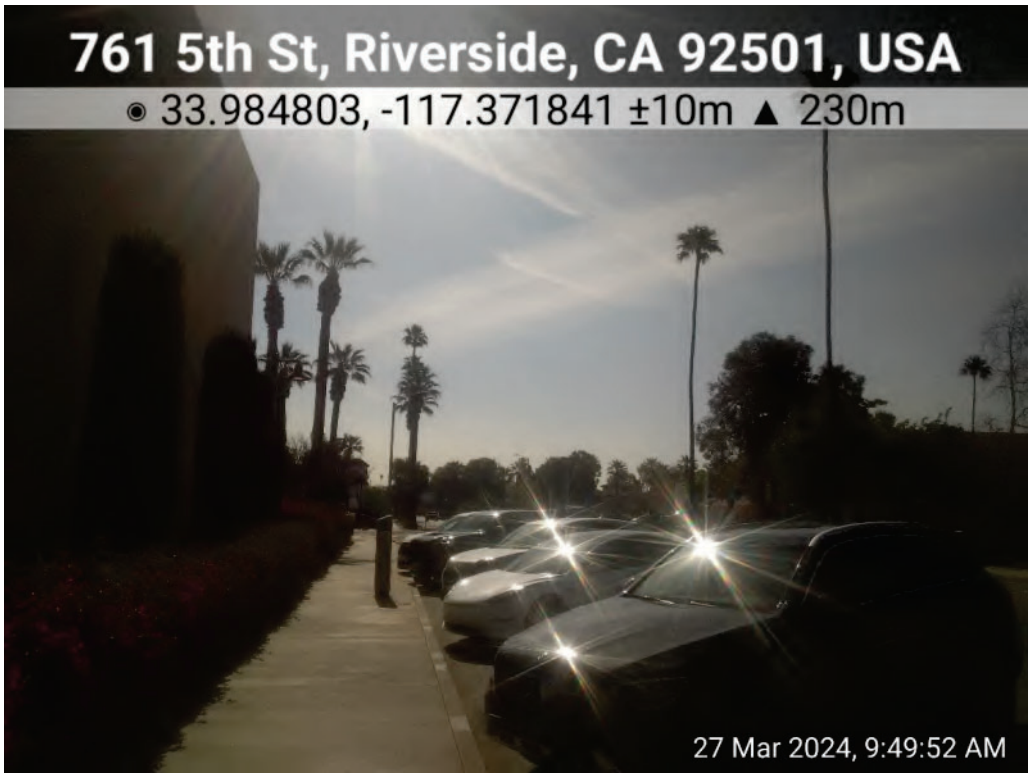

Photo 5. View of project site southwestern boundary, facing southeast.

Photo 6. View of Convention Center entrance from 5th Street along southwestern border, facing northwest.

Photo 7. View of courtyard area on the project site, facing northeast.

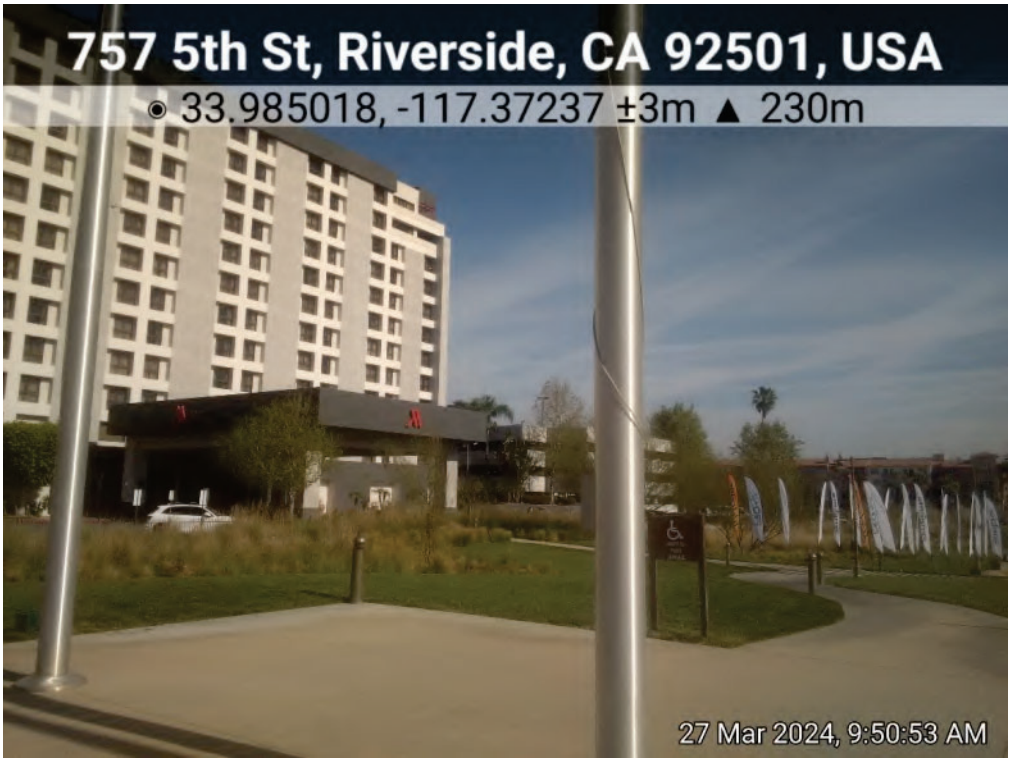

Photo 8. View of courtyard area and Marriot hotel parking area on the project site, facing northwest.

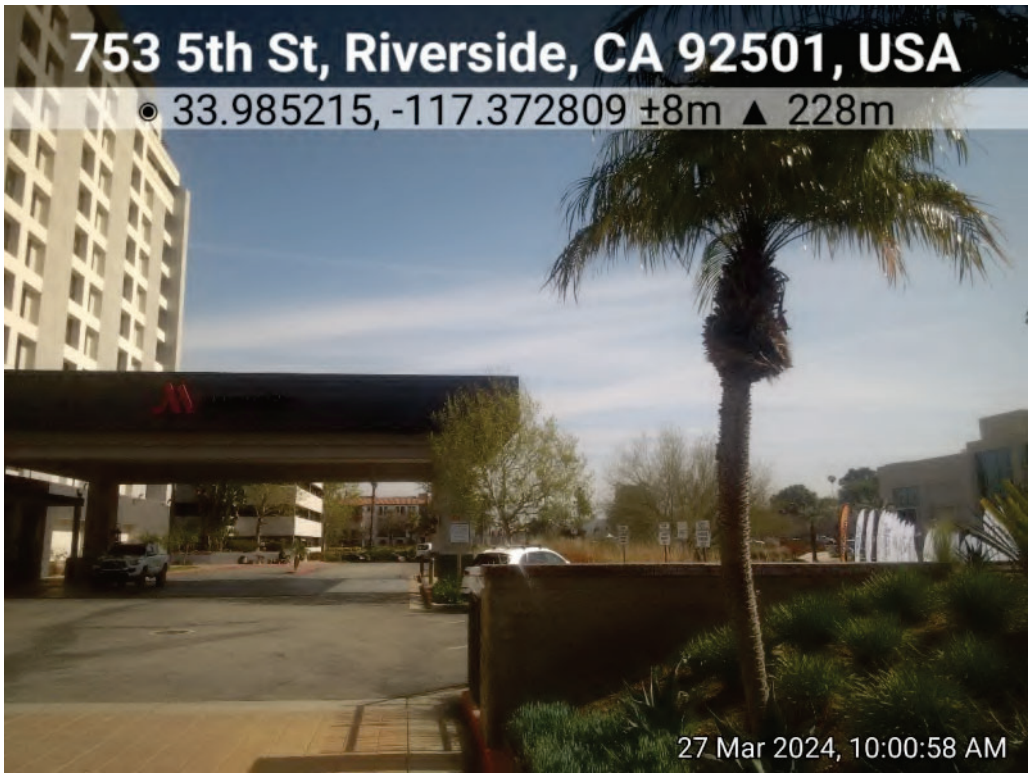

Photo 9. View of Marriot hotel parking area on the project site, facing northeast.

Photo 10. View of courtyard area on the project site, facing northeast.

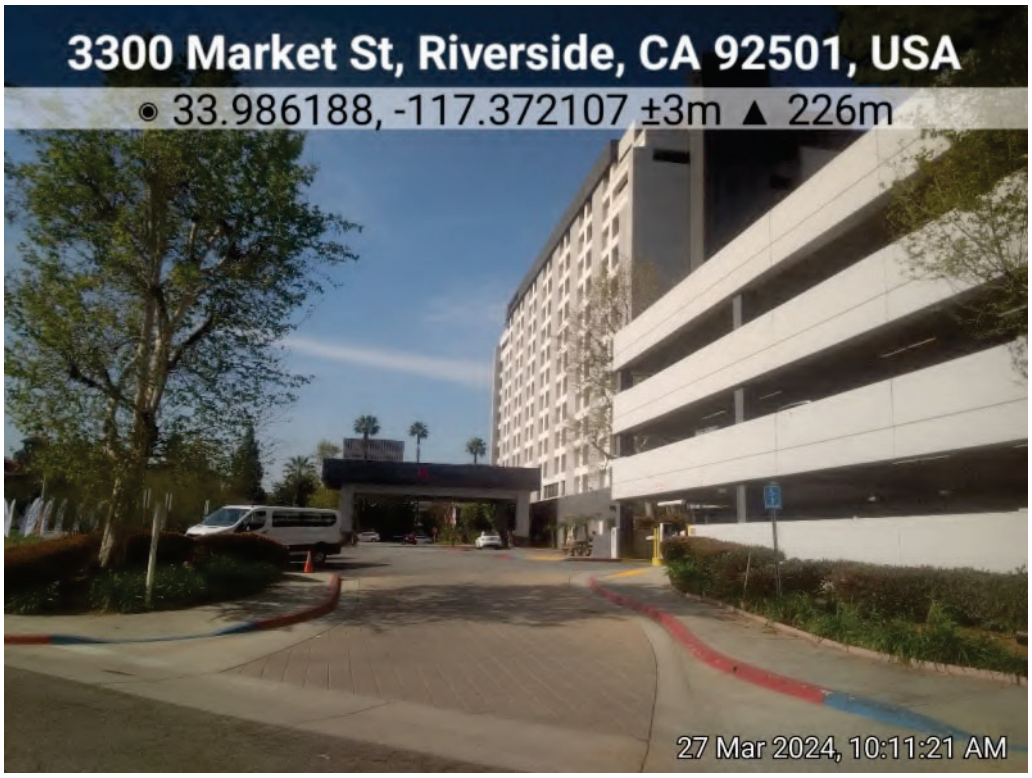

Photo 11. View of project site boundary, facing southwest.

Photo 12. View of project site boundary, facing northwest.

Photo 13. View of parking lot on the project site, facing southeast.

Photo 14. View of employees parking lot on the project site, facing southwest.

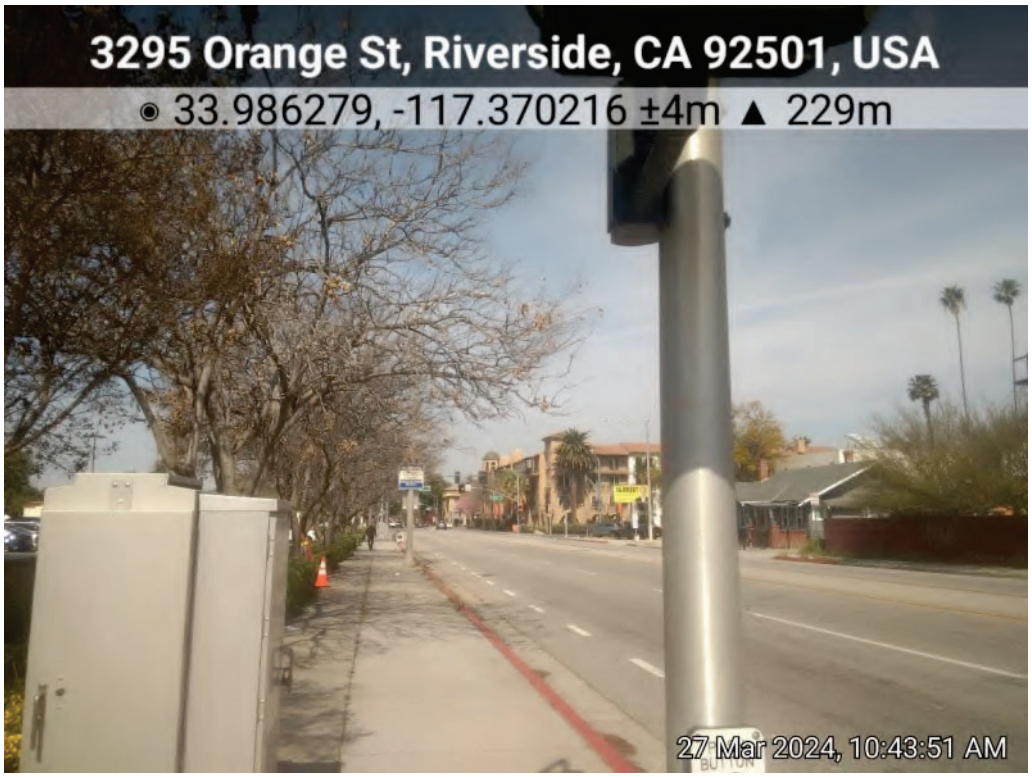

Photo 15. View of project site northeastern boundary from northeastern corner, facing northwest.

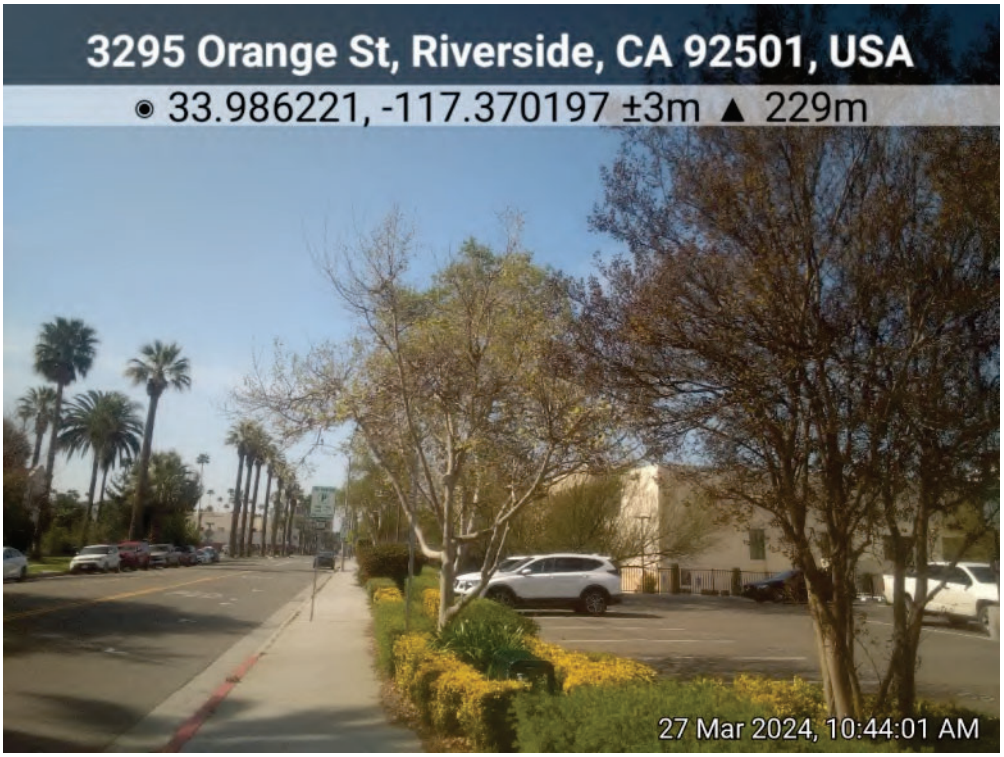

Photo 16. View of project site southeastern boundary from northeastern corner, facing southwest.

Photo 17. View of project site northeastern boundary from northwestern corner, facing southeast.

Photo 18. View of project site northwestern boundary from northwestern corner, facing southwest.

Appendix B

Special-Status Species Analysis

Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status based on adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status species include:

- Plants or wildlife 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 or the California Endangered Species Act;
- Plants or wildlife that meet the definitions of rare or endangered under CEQA Guidelines Section 15380.
- Plants or wildlife covered under an adopted NCCP/HCP;
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (List 1A, 1B and 2 plants) in California;
- Plants listed by the CNPS as plants in which there is limited information about distribution (List 3);
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.);
- Wildlife designated by CDFW as species of special concern;
- Wildlife "fully protected" in California (California Fish and Game Code Sections 3511, 4700, and 5050); and
- Wildlife protected by the Migratory Bird Treaty Act (MTBA).

Federally-Protected Status

All references to Federally-protected species in this BRA include the most current published status or candidate category to which each species has been assigned by USFWS. For purposes of this assessment the following acronyms are used for Federal status species, as applicable:

FE Federally-listed as Endangered

FT Federally-listed as Threatened
FPE Federally proposed for listing as Endangered
FPT Federally proposed for listing as Threatened
FPD Federally proposed for delisting
FC Federal candidate species (former C1 species)

State-Protected Status

For the purposes of this BRA, the following acronyms are used for State status species, as applicable:

SE State-listed as Endangered
ST State-listed as Threatened
SR State-listed as Rare
SCE State candidate for listing as Endangered
SCT State candidate for listing as Threatened
SFP State Fully Protected
SSC California Species of Special Concern

California Rare Plant Rank

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of special-status species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2018). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed six categories of rarity known as the California Rare Plant Rank (CRPR), of which Ranks 1A, 1B, 2A, and 2B are particularly considered sensitive:

Rank 1A Presumed extinct in California.
Rank 1B Plants Rare, Threatened, or Endangered in California and elsewhere.
Rank 2A Presumed extinct in California, but more common elsewhere.
Rank 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
Rank 3 Plants about which we need more information – a review list.
Rank 4 Plants of limited distribution – a watch list.

The CNPS recently added "threat ranks" which parallel the ranks used by the CNDDB. These ranks are added as a decimal code after the CNPS List (e.g., Rank 1B.1). The threat codes are as follows:

.1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
.2 Moderately threatened in California (20-80% occurrences threatened);

.3 Not very threatened in California (<20% of occurrences threatened or no current threats known).

Potential to Occur Assessment

Special-status species that **present** or are **likely** (high or medium potential) to occur within the parcel are a based on one or more of the following:

- the direct observation of the species within the parcel during any field surveys;
- a record reported in the CNDDB, CNPS, or IPAC; and
- the parcel is within known distribution of a species and contains appropriate habitat.

Special-status species that are **unlikely** (low potential) to occur are based on one of the following:

- the parcel has the general habitat types but lacks necessary habitat elements such as suitable microhabitat or soils; or
- the parcel is outside the known elevation range or distribution of the species, and has otherwise suitable habitats;

Special-status species that have no potential to occur on the parcel are labeled as **none** due to the absence of suitable habitat.

Special-Status Animals

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Accipiter cooperii	Coopers hawk	Birds	None	None	CDFW_WL-Watch List	Woodlands and forests, or suburban areas with mature trees	Requires tall trees for nesting and open areas such as meadows or forest edges for hunting	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Actinemys pallida	southwestern pond turtle	Reptiles	Proposed Threatened	None		Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater.		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Agelaius tricolor	Tricolored Blackbird	Birds	None	Threatened	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None	CDFW_WL-Watch List	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Generally, south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges,	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Artemisiospiza belli belli	Bell's sparrow	Birds	None	None	CDFW_WL-Watch List	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Asio otus	long-eared owl	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Athene cunicularia	burrowing owl	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Bombus crotchii	Crotch Bumble Bee	Insects	None	Candidate Endangered	IUCN_EN-Endangered	Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	None. The project site lacks habitat and food resources for the species.
Buteo regalis	ferruginous hawk	Birds	Non	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Buteo swainsoni	Swainson's Hawk	Birds	None	Threatened	BLM_S-Sensitive | IUCN_LC-Least Concern	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None	AFS_Th-Threatened | IUCN_EN-Endangered	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Ceratochrysis longimala	desert cuckoo wasp	Insects	None	None				Low. The record is from 1915 and the recorded is possibly, or likely, extirpated.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Mammal	None	None		Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego, Riverside, San Bernardino, and Los Angeles Counties, inclusive of Orange County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Charadrus nivosus nivosus	Western snowy plover	Birds	Endangered	None		Sandy beaches, salt pond levees and shores of large alkali lakes.	Needs sandy, gravelly or friable soils for nesting.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Cicindela tranquebarica viridissima	greenest tiger beetle	Insects	None	None		Inhabits the woodlands adjacent to the Santa Ana River basin.	Usually found in open spots between trees.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Coccyzus americanus occidentalis	Western Yellow-Billed Cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive | USFS_S-Sensitive	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Coturnicops noveboracensis	yellow rail	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Summer resident in eastern Sierra Nevada in Mono County.	Freshwater marshlands.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Crotalus ruber	red-diamond rattlesnake	Reptiles	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Danaus plexippus	monarch butterfly	Insects	Candidate for Listing			Monarch butterflies live mainly in prairies, meadows, grasslands and along roadsides.		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Dipodomys merriami parvus	San Bernardino Kangaroo Rat	Mammals	Endangered	Candidate Endangered	CDFW_SSC-Species of Special Concern	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Dipodomys stephensi	Stephens' Kangaroo Rat	Mammals	Threatened	Threatened	IUCN_VU-Vulnerable	Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	None	None	USFS_S-Sensitive	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Elanus leucurus	white-tailed kite	Birds	None	None	CDFW_FP-Fully Protected	savannas, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	NABCI_RWL-Red Watch List	Riparian woodlands in Southern California.		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Emys marmorata	western pond turtle	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Eremophila alpestris actia	California horned lark	Birds	None	None	CDFW_WL-Watch List	grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above tree line.		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Eugnosta busckana	Busck's gallmoth	Insects	None	None		Coastal southern California.	Tiny micro-moth (1 cm) with larva forming galls on host plant Encelia californica (California brittlebush). Adult flight period is during winter, generally from November to February, and have been reported at UV lights and porch lights.	None. The project site lacks habitat and food resources for the species.
Eumops perotis californicus	western mastiff bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	None. The project site lacks habitat and food resources for the species.
Falco columbarius	merlin	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches.	Clumps of trees or windbreaks are required for roosting in open country.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Gila orcuttii	arroyo chub	Fish	None	None	AFS_VU-Vulnerable | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered	CDFW_FP-Fully Protected	Coastal areas with mature trees, cliffs, or man-made structures	within two and a half miles of the coast, bays, rivers, lakes, or other bodies of water	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Icteria virens	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern	Brushy tangles, briars, stream thickets with dense vegetation		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Lanius ludovicianus	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Lasiurus xanthinus	western yellow bat	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	None. The site lacks habitat for the species.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
					Conservation Concern			
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	None	None	-	open grasslands, agricultural fields, and sparse coastal scrub.		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Myotis yumanensis	Yuma myotis	Mammals	None	None	BLM_S-Sensitive | IUCN_LC-Least Concern | WBWG_LM-Low-Medium Priority	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Neolarra alba	white cuckoo bee	Insects	None	None		Known only from localities in Southern California.	Cleptoparasitic in the nests of perdita bees.	None. The project site lacks habitat for the species.
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Oncorhynchus mykiss irideus pop. 10	Steelhead - Southern California DPS	Fish	Endangered	Candidate Endangered	AFS_EN-Endangered	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Onychomys torridus ramona	southern grasshopper mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Pandion haliaetus	osprey	Birds	None	None	CDFW_WL-Watch List	Rivers, lakes, coast with shallow water and plentiful fish		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Polioptila californica californica	Coastal California Gnatcatcher	Birds	Threatened	None	CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
Rana muscosa	southern mountain yellow-legged frog	Amphibians	Endangered	Endangered	CDFW_WL-Watch List | IUCN_EN-Endangered | USFS_S-Sensitive	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes.	Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	Endangered	None		Found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. Oviposition req. shade.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	None	None	AFS_TH-Threatened | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Salvadora hexalepis virgultea	coast patch-nosed snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	desert scrub, grassland, chaparral, sagebrush plains, and pinyon-juniper woodlands		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC-Species of Special Concern	montane chaparral, riparian woodland, open ponderosa pine and mixed conifer habitats with substantial amounts of brush		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Spea hammondii	western spadefoot	Amphibians	Proposed Threatened	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern |	Occurs primarily in grassland habitats, but can be found in valley-	Vernal pools are essential for breeding and egg-laying.	None. The project site is entirely developed / ornamental

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Project Site
					IUCN_NT-Near Threatened	foothill hardwood woodlands.		landscaped; therefore, it lacks habitat for the species.
Spinus lawrencei	Lawrences goldfinch	Birds	None	None	-	dry, open oak woodlands with chaparral, weedy fields, and a source of freshwater		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	Endangered	None	IUCN_EN-Endangered CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	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. Hatch in warm water later in the season.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Strix occidentalis occidentalis	California spotted owl	Birds	Proposed Endangered	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40%.	Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Taxidea taxus	American badger	Mamml	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern
Thamnophis hammondii	two-striped gartersnake	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Vireo bellii pusillus	Least Bell's Vireo	Birds	Endangered	Endangered	IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Special-Status Plants

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Abronia villosa var. aurita	chaparral sand-verbena	Plants	None	None	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral, coastal scrub, desert dunes.	Sandy areas. -60-1570 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Allium marvinii	Yucaipa onion	Plants	None	None	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral.	In openings on clay soils. 850-1070 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Allium munzii	Munz's onion	Plants	Endangered	Candidate Threatened	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Ambrosia pumila	San Diego ambrosia	Plants	Endangered	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, coastal scrub, valley and foothill grassland.	Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Arctostaphylos rainbowensis	rainbow manzanita	Plants	None	None	BLM_S-Sensitive | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Chaparral.	Usually found in gabbro chaparral.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Arenaria paludicola	marsh sandwort	Plants	Endangered	Endangered	SB_SBBG-Santa Barbara Botanic Garden	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Artemisia palmeri	San Diego sagewort	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub.	In drainages and riparian areas in sandy soil within chaparral and other habitats.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Asplenium vespertinum	western spleenwort	Plants	None	None		Chaparral, cismontane woodland, coastal scrub.	Rocky sites.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Astragalus brauntonii	Braunton's milk-vetch	Plants	Endangered	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Astragalus hornii var. hornii	Horn’s milk vetch	Plants	None	None	BLM_S-Sensitive	Meadows and seeps, playas.	Lake margins, alkaline sites	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	Plants	Endangered	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Playas, valley and foothill grassland, vernal pools.	Alkaline areas in the San Jacinto River Valley. 35-460 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Atriplex parishii	Parish's brittlescale	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Vernal pools, chenopod scrub, playas.	Usually on drying alkali flats with fine soils	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Atriplex serenana var. davidsonii	Davidson's saltscale	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal bluff scrub, coastal scrub.	Alkaline soil	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Berberis nevinii	Nevin's Barberry	Plants	Endangered	Endangered	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Brodiaea filifolia	three-leaved brodiaea	Plants	Threatened	Endangered	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Calochortus plummerae	Plummer's mariposa-lily	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Carex comosa	bristly sedge	Plants	None	None	IUCN_LC-Least Concern	Marshes and swamps, coastal prairie, valley and foothill grassland.	Lake margins, wet places; site below sea level is on a Delta island	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Caulanthus simulans	Payson's jewelflower	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Chaparral, Coastal scrub		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Centromadia pungens ssp. laevis	smooth tarplant	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Chloropyron maritimum ssp. maritimum	Salt Marsh Bird's-Beak	Plants	Endangered	Endangered	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | SB_SBBG-Santa Barbara Botanic Garden	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Chorizanthe leptotheca	Peninsular spineflower	Plants	None	None		Chaparral, Coastal scrub, Lower montane coniferous forest	alluvial fan	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Chorizanthe parryi var. parryi	Parry's spineflower	Plants	None	None	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Chorizanthe polygonoides var. longispina	long-spined spineflower	Plants	None	None	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Gabbroic clay. 30-1630 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Plants	None	None	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture | USFS_S-Sensitive	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Convolvulus simulans	small-flowered morning-glory	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral (openings), Coastal scrub, Valley and foothill grassland		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Plants	None	None		Marshes and swamps (freshwater).	Freshwater marsh	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Deinandra paniculata	paniculate tarplant	Plants	None	None		Coastal scrub, Valley and foothill grassland, Vernal pools		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Dodecahema leptoceras	Slender-Horned Spineflower	Plants	Endangered	Endangered	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Dudleya multicaulis	many-stemmed dudleya	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 1-910 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Eriastrum densifolium ssp. sanctorum	Santa Ana River Woollystar	Plants	Endangered	Endangered	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Eryngium aristulatum var. *parishii*	San Diego button celery	Plants	Endangered	Endangered	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Vernal pools, coastal scrub, valley and foothill grassland.	San Diego mesa hardpan and claypan vernal pools and southern interior basalt flow vernal pools; usually surrounded by scrub. 15-880 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Galium californicum ssp. primum	Alvin Meadow bedstrawPlants	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral, lower montane coniferous forest.	Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Harpagonella palmeri	Palmer's grapplinghook	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Plants	None	None		Marshes and swamps (coastal salt and freshwater).		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Hordeum intercedens	vernal barley	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal dunes, Coastal scrub, Valley and foothill grassland (depressions, saline flats), Vernal pools		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Horkelia cuneata var. puberula	mesa horkelia	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Imperata brevifolia	California satintail	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden | USFS_S-Sensitive	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Juglans californica	Southern California black walnut	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | IUCN_NT-Near Threatened | SB_USDA-US Dept of Agriculture	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	alluvial	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Plants	None	None	BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Coastal salt marshes, playas, vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Plants	None	None		Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Lycium parishii	Parish's desert-thorn	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Coastal scrub, Sonoran desert scrub.	-3-570 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Malacothamnus parishii	Parish's bush-mallow	Plants	None	None		Chaparral, coastal sage scrub.	In a wash. 305-455 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Monardella pringlei	Pringle's monardella	Plants	None	None		Coastal scrub.	Sandy hills.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Microseris douglasii ssp. platycarpha	small-flowered microseris	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Cismontane woodland, Coastal scrub, Valley and foothill grassland, Vernal pools		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Monardella pringlei	Pringle's monardella	Plants	None	None		Coastal scrub.	Sandy hills. 300-400 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Myosurus minimus ssp. apus	little mousetail	Plants	None	None	SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Vernal pools, valley and foothill grassland.	Alkaline soils.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Nasturtium gambelii	Gambel's water cress	Plants	Endangered	Threatened	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_SBBG-Santa Barbara Botanic Garden	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Navarretia fossalis	Spreading navarretia	Plants	Threatened	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Vernal pools, chenopod scrub, marshes and swamps, playas.	San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. 15-850 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Phacelia stellaris	Brand's star phacelia	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Coastal scrub, coastal dunes.	Open areas. 3-370 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Pseudognaphalium leucocephalum	white rabbit-tobacco	Plants	None	None		Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Quercus engelmannii	Engelmann oak	Plants	None	None	IUCN_EN-Endangered | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland		None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Ribes divaricatum var. parishii	Parish's gooseberry	Plants	None	None		Riparian woodland.	Salix swales in riparian habitats.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Romneya coulteri	Coulter's matilija poppy	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub	Burned areas (often)	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Senecio aphanactis	chaparral ragwort	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Sidalcea neomexicana	salt spring checkerbloom	Plants	None	None	USFS_S-Sensitive	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Scientific Name	Common Name	Taxonomic Group	Federal Listing	State Listing	Other Status	General Habitat	Microhabitat	Potential to Occur on Study area
Sphenopholis obtusata	prairie wedge grass	Plants	None	None		Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Symphyotrichum defoliatum	San Bernardino aster	Plants	None	None	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Texosporium sancti-jacobi	woven-spored lichen	Plants	None	None		Chaparral.	Open sites; in California with Adenostoma fasciculatum, Eriogonum, Selaginella. Found on soil, small mammal pellets, dead twigs, and on Selaginell	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Tortula californica	California screw moss	Plants	None	None	BLM_S-Sensitive	Chenopod scrub, valley and foothill grassland.	Moss growing on sandy soil.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	Plants	None	None		Marshes and swamps, riparian forest, meadows and seeps, vernal pools.	Mud flats of vernal lakes, drying river beds, alkali meadows.	None. The project site is entirely developed / ornamental landscaped; therefore, it lacks habitat for the species.

Appendix C

Biologist Qualifications

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Matthew South

PRINCIPAL BIOLOGIST

Matthew South founded South Environmental in 2018. He is a certified wildlife biologist with over 17 years of professional experience providing natural resources consulting services for a wide variety of clients that include residential, commercial, government, utility, infrastructure, research, and non-profit projects. For the last 14 years, Mr. South has been an environmental consultant in southern California acting as a Wildlife Biologist and Geographic Information System (GIS) Analyst. In early 2018 he started South Environmental and has since been supporting clients in Los Angeles, Ventura, Santa Barbara, San Bernardino, and Riverside Counties.

Mr. South's background in ecology has led to a passion for conservation planning and resources assessments for the purpose of preservation and management. The integration of the latest technologies such as advanced GIS systems, mobile computing, and drone sensing allows him to innovate new data collection, analysis, and collaboration tools for the environmental sciences that produce more accurate data and better-informed resource managers.

EXPERTISE

- **Conservation and Management Planning.** Mr. South's has extensive experience preparing mitigation and monitoring plans, habitat conservation plans, and technical biological resources management plans that are compliant with federal, state, and local regulations. Mr. South is the only active NRCS TSP for Fish and Wildlife Plans Certified in California.
- **Biological Resources Assessment.** Mr. South has completed dozens of biological resources assessments throughout southern California.
- **Rare Plants and Arborist Services.** Mr. South has surveyed and assessed thousands of native and landscaped trees in southern California. He is a certified arborist with 5-years of tree survey experience working closely with some of the most experienced arborists in California. In addition, he has performed hundreds of hours of rare plant surveys and habitat assessments.
- **Wetland & Jurisdictional Delineations.** Mr. South has conducted dozens of jurisdictional and wetland delineations per the guidelines and methods from the US Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the state Regional Water Quality Control Boards (RWQCB).
- **GIS.** Mr. South is an expert at spatial data collection and analysis using ESRI mobile and desktop software products and Trimble hardware.

EDUCATION

B.S., Wildlife Ecology, University of Wisconsin-Madison, 2004

CERTIFICATIONS

Certified Wildlife Biologist, The Wildlife Society 2014

Certified Technical Service Provider (TSP) for Fish and Wildlife Management Plans, USDA NRCS 2017

Authorized Desert Tortoise Biologist – Numerous BOs

Unmanned Aircraft System Pilot Certification, FAA #4177603

TRAINING

Wetland Delineation Training Course – The Wetland Institute (2014)

Southwest Willow Flycatcher Workshop, 2017

USGS Desert Tortoise Health Assessment and Tissue Collection Techniques Training, 2009

SELECT PROJECT EXPERIENCE

EVMWD Rice Canyon Reservoir Access Road and New Conduit Project, City of Lake Elsinore, Riverside County, California (2022). South Environmental was retained to complete biological and cultural resources services. Biological resources work included a Jurisdictional Delineation Report, a Biological Resources Assessment/MSHCP Consistency Analysis, Rare Plant Surveys, Burrowing Owl Surveys, and mitigation planning. Matthew South was the Principal Biologist on the project.

Wendy's in Calimesa Project, Riverside County, California (2023). South Environmental was retained to complete a Biological Resources Assessment and Western Riverside County MSHCP Consistency Analysis Report. Mr. South served as the Principal Biologist on the Project.

Southern California Gas (SCG) As-Needed Biological and Cultural Resources Services (2022-ongoing). As a subconsultant on this contract Mr. South has overseen the assessment numerous resources from single point locations to many miles of pipelines. More recently he has begun to conduct biological assessment in the coastal zone in Santa Barbara County as well as endangered species Biological Assessments (BAs) in support of Coastal Development Permits for SCG. Wetland delineation and permitting, biological resources assessments, and resources surveys and monitoring are services that Mr. South both provides personally and oversees a team of specialists that support the environmental impacts analysis and permitting for SCG.

Southern California Edison (SCE) As-Needed Natural and Cultural Resources Services (2021-ongoing). As a subconsultant on this contract for multiple Primes (SWCA, EI, Rincon, Cardno, and ERM), South Environmental has focused its biological resources services on wetland delineations and permitting efforts for SCE throughout all its regions. From single pole delineations in roadside ditches to several hundred poles through miles of wet meadows in the Sierras, the projects vary in size and complexity as well as location. Primarily, delineations have been in the Sierras with the largest and most complex projects in Inyo and Mono Counties and several in Kern and Tulare. A few of the specific projects include

- Pickle Meadow: Aquatic Resources Delineation Report and Permitting for 300-poles located in a wet meadow behind Bridgeport Reservoir.
- Kern River: Wetland Delineation and Permitting for 15 pole replacements in Kernville.
- June Lake to Tom's Place: Wetland Delineation and Permitting for 40 poles spread through Inyo and Mono Counties.
- Cajon Wash: Jurisdictional Delineation and SBKR Assessment and Permitting for 10 pole replacements and realignment for a capital project located in SBKR Critical Habitat.
- Pipes Wash: Delineation and Permitting for 25-poles that are within Pipes Wash, a large ephemeral wash in the San Bernardino desert.

City of Palmdale - Palmdale Warehouse Project (2022-on going). South Environmental prepared a jurisdictional delineation and permit applications to CDFW and RWQCB for the project. Services included EPIMS application and RWQCB Dredge and Fill Application and coordination including for mitigation management and alternatives analysis. Currently South Environmental is overseeing the compliance monitoring for the project.

City of Los Angeles Recreation and Parks Department Controlled Burn Project Burrowing Owl Surveys and Mitigation (2022). Mr. South planned and implemented a large scale burrowing owl protocol survey at

a model airfield park in the Sepulveda Basin. The survey was conducted over 1,300-acres and two burrowing owls were identified. Mr. South prepared a mitigation plan for conducting the controlled burn and avoiding impacts to burrowing owls.

California Coastal Zone Experience (2018-2024).

- Old Chimney Road Development, Santa Monica Mountains LCP (2018-present). Completed a BRA and oak tree survey per the LCP guidelines and presented to the Environmental Review Board (ERB).
- Gold Stone Road Development, Santa Monica Mountain LCP (2019-present). Completed a BRA, oak tree survey, and native tree survey per the LCP guidelines.
- Entrada Road Development, Santa Monica Mountains LCP (2020). Completed a BRA and oak tree survey per the LCP guidelines.
- Schueren Road Development, Santa Monica Mountains LCP (2019-2020). Completed a wetland delineation according to the California Coastal Commission guidelines.
- Decker Edison Road Development, City of Malibu (2020). Completed a BRA per the City of Malibu LCP guidelines.
- Malibou Lake Developments, North Santa Monica Mountains SEA (2020). Completed a biological resources map per the updated SEA guidelines.
- Medley Lane Development, Santa Monica Mountains LCP (2020). Completed a biological inventory per the guidelines of the Santa Monica Mountains LCP.
- Stunt Road Development, Santa Monica Mountains LCP (2018). Completed a BRA per the LCP guidelines.
- Malibou Lake Mountain Club, North Santa Monica Mountains SEA (2018). Completed permit packages for routine maintenance dredging of the lake, including a BRA, Section 404 CWA permit application, and CDFW Lake and Streambed Alteration Agreement.

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James McNutt, M.S.

Senior Biologist and Lead Waters Delineator

James McNutt is a Senior Environmental Scientist and Lead Delineator with 19 years of professional experience in environmental project management, jurisdictional and wetland delineations, environmental permitting, technical documents, biological resource and community identification, and geology. Mr. McNutt brings over 15 years of experience completing jurisdictional and wetland delineations as a lead delineator in accordance with the U.S. Army Corps of Engineers (USACE) 1987 Delineation Manual Protocols. Mr. McNutt brings 5 years of experience identifying non-wetland features using the Arid West OHWM Identification Manual.

Since starting at South Environmental in early 2021, Mr. McNutt has completed dozens of jurisdictional and wetland delineations throughout Southern California. This experience includes utility project for Southern California Gas (SoCal Gas) and Southern California Edison (SCE) as well as private enterprise developments, and local government projects. He has been responsible for determining the boundary of jurisdictional features using Trimble GIS to accurately collect data, while using modules such as ArcCollector and Survey123 to validate all data collection processes. He is also a GIS analyst that creates figures for data packages regarding jurisdictional delineation reporting and permitting documents.

As a project manager, environmental scientist, and geologist for oil and gas companies, environmental consultants, and agencies in the west and Midwest, he oversaw wetland investigations and delineations on client assets such as leaseholds and drill-sites using the Criteria Determination Methodologies for Vegetation, Soil, and Hydrology. In these roles, he has also completed permit applications and successfully negotiated wetlands and non-wetland permits for dozens of projects, while closely coordinating with clients, agencies, and managers. This includes projects requiring compliance with the implementation of Mitigation Monitoring Reporting Plans, regulatory compliance, and data management processes.

Expertise

- Environmental Regulations and Permitting
- Environmental Project Management
- Jurisdictional and Wetland Delineations
- Biological Habitat Assessment Reporting
- USACE Section 401/404 Compliance
- Biological Data Collection and Assessment Methods

Education

M.S., Earth, Environmental, and Physical Science, Wichita State University, 2012

B.S., Bachelor of Science, Biology, Wichita State University, 2004

Professional Experience

South Environmental (2021-Present), Senior Biologist

AGEISS, Inc. (2020-2021), Environmental Scientist

Timberwolf Environmental (2019), Senior Project Manager

Nebraska Oil and Gas Conservation Commission (2018-2019), Project Manager

Stelbar Oil Corporation, Inc. (2006-2018), Project Manager

GIS

ESRI ArcGIS Pro, ArcCollector, Survey123, AccGIS online

Trimble GPS

SELECT WATERS DELINEATION PROJECT EXPERIENCE

Southern California Gas On-Call Waters Delineation Services. Conducted standard jurisdictional and wetland delineation work, as well emergency repair jurisdictional and wetland delineation work, for biological resource assistance regarding construction and maintenance projects throughout southern California. Activities have included data collection near protected resources for conducting wetland and jurisdictional delineations, jurisdictional delineation and habitat assessment reporting, and permit generation for RWQCB, USACE, and CDFW compliance.

Notable SGC Delineation Projects:

- Aliso Canyon Facility,
- L-85 Line north of Castaic,
- L-404 Line near Oak Park,
- L-127 Line in Montecito,
- Sylmar Gould Canyon, and
- L324 near Salt Canyon Creek

Southern California Edison On-Call Waters Delineation Services. Conducted standard jurisdictional and wetland delineation work, as well emergency repair jurisdictional and wetland delineation work, for biological resource assistance regarding construction and maintenance projects throughout southern California. Activities have included data collection near protected resources for conducting wetland and jurisdictional delineations, jurisdictional delineation and habitat assessment reporting, and permit generation for RWQCB, USACE, and CDFW compliance.

Notable SCE Delineation Projects:

- Dozens of utility projects throuhgout Los Angeles County, San Bernardino County, Riverside County, Ventura County, Kern County, and Santa Barbara County.

Private Development Waters Delineation Services in Southern California. Conducted standard jurisdictional and wetland delineation work and habitat assessment work for biological resource assistance regarding industrial, commercial, and residential projects throughout southern California. Activities have included data collection for conducting wetland and jurisdictional delineations, jurisdictional delineation and habitat assessment reporting, and permit generation for RWQCB, USACE, and CDFW compliance.

Notable Private Development Delineation Projects:

- Trader Joes' Warehouse in Palmdale,
- TTM 48307 housing development near Lakeview Drive in Palmdale,
- land for truck stop developments in Temescal Valley,
- land for housing developments in Lake Elsinore,
- land for industrial development near the Los Angeles River in Long Beach,
- Avenue I and 30th Street in Lancaster,
- Silverlake Equestrian Park in Norco, and

- land for housing developments in San Bernardino County.

Local Government Environmental Services in Southern California. Conducted standard jurisdictional and wetland delineation work and habitat assessment work for biological resource assistance regarding municipal and county projects throughout southern California. Activities have included data collection for conducting wetland and jurisdictional delineations, jurisdictional delineation and habitat assessment reporting, and permit generation for RWQCB, USACE, and CDFW compliance.

Notable Local Government Delineation Projects:

- Bell Canyon Creek for City of Los Angeles Recreation and Parks Department,
- Bronson Canyon Playground in Griffith Park for City of Los Angeles Recreation and Parks Department,
- Rice Canyon for EVMWD,
- Almond Street Road extension in Rancho Cucamonga, and
- land near Santa Clara River for city of Oxnard Fire Station.