Biological Technical Report and Multiple Species Habitat Conservation Plan Consistency Analysis for the McCall Boulevard Widening Project

Riverside County, California

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December 9, 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
°F	Degrees Fahrenheit
BMPs	Best Management Practices
BUOW	Burrowing owl
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society's Electronic Inventory
County	Western Riverside County
CRPR	California Rare Plant Rank
CWA	Clean Water Act

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
ESA	Endangered Species Act
HCP	Habitat Conservation Plan
IA	Implementing Agreement
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
NEPSSA	Narrow Endemic Plant Species Survey Area
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Project	McCall Boulevard Widening Project
RCA	Regional Conservation Authority
RCTLMA	Riverside County Transportation and Land Management Agency
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSAR	Society for the Study of Amphibians and Reptiles
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 INTRODUCTION

KOA Corporation retained ECORP Consulting, Inc. to provide a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the McCall Boulevard Widening Project (Project) located in the City of Menifee, Riverside County, California. A reconnaissance-level biological survey of the Project Area was conducted to document the existing biological resources, to assess the habitat for its potential to support sensitive plant and wildlife species, and to determine whether Project-related impacts would occur to sensitive biological resources, as required under the California Environmental Quality Act (CEQA). A burrowing owl (BUOW; *Athene cunicularia*) habitat assessment of the Project Area was conducted concurrently with the biological reconnaissance survey to determine if any suitable BUOW habitat or suitable BUOW burrows were present. The Survey Area provided suitable habitat for BUOW; therefore, an ECORP biologist conducted a focused burrow survey on the same day as the biological survey.

The surveys were also conducted in accordance with the MSHCP. The MSHCP provides information on plant and wildlife species of concern to the County of Riverside (referred to as Planning Species) and outlines goals for their conservation. Information on the MSHCP can be found at www.rctlma.org (Riverside County Transportation and Land Management Agency [RCTLMA] 2022). The purpose of the study is to comply with the requirements of the MSHCP and identify any biological resources that may require mitigation prior to impacts from development.

1.1 Project Location

The Project Area is located in the City of Menifee, Riverside County, California. The Project Area overlaps with Sections 23 and 24 of Township 05S, Range 03W in the Romoland Quadrangle of the U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figures 1 through 3). The Project Area is located primarily within the McCall Boulevard right-of-way between Antelope Road and Heritage Lake Drive. The coordinates of the approximate center of the Project Area are Latitude 33.721001°, Longitude -117.161659°.

1.2 Project Description

The Proposed Project entails the widening of McCall Boulevard between Antelope Road and Heritage Lake Drive (approximately 0.75 mile) with a new eastbound and westbound traffic lane, widening the two-lane segment of McCall Boulevard to four lanes. The Project would install traffic signals, street lighting, sidewalks, curb and gutter, Americans with Disabilities Act ramps, and a retaining wall. Some existing utilities would need to be relocated as part of the widening. The total area of the Proposed Project is 21.7 acres.

Location: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Location_Vicinity\Location and Vicinity.aprx - McCall Vicinity (trotellini - 11/7/2022)

Map Date: 11/7/2022

Service Layer Credits: Esri, CGIAR, USGS, Loma Linda University, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, Esri, Garmin, FAO, NOAA, USGS, EPA, Esri, USGS

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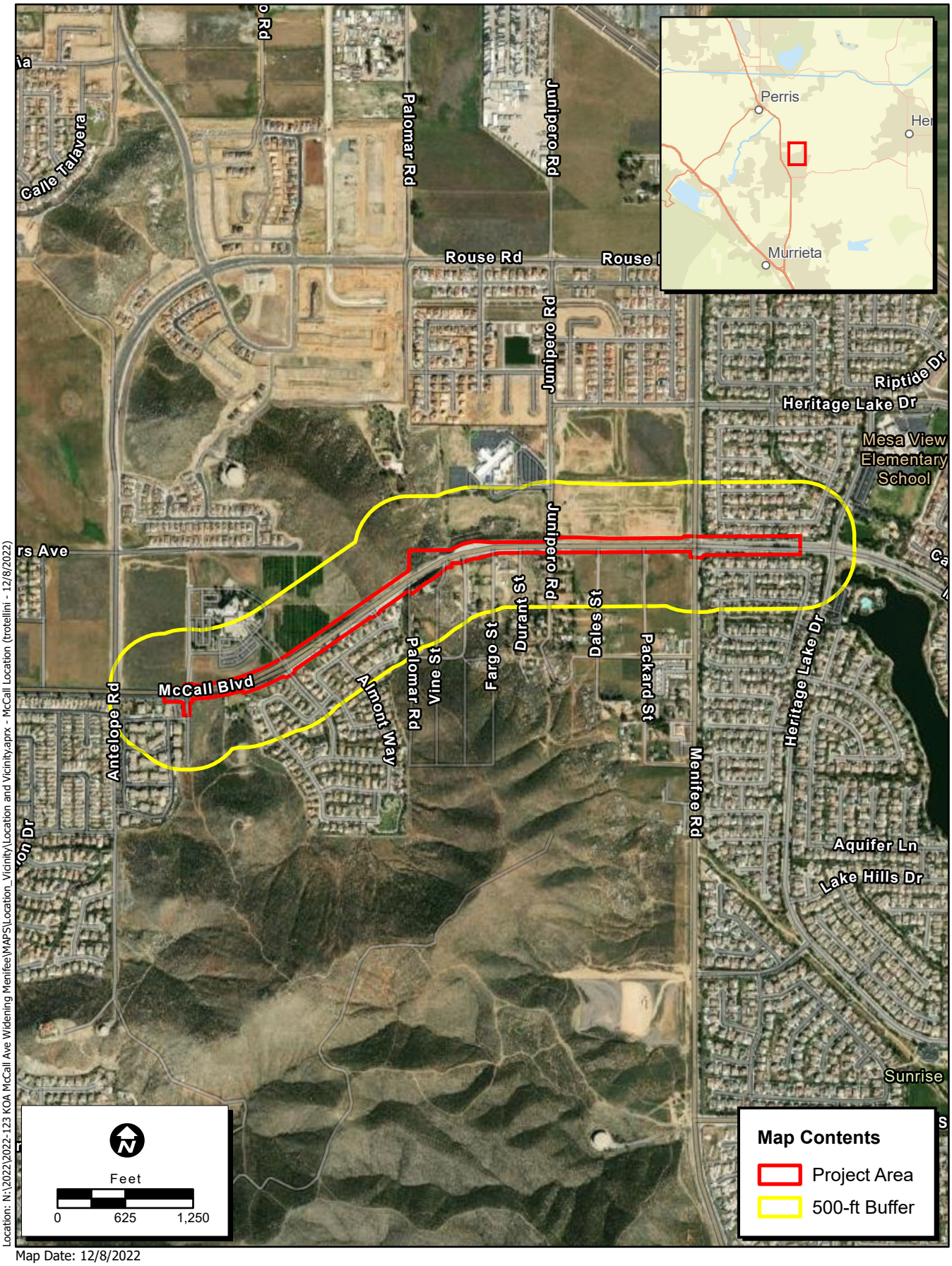
Figure 1. Project Vicinity

2022-123 KOA McCall Ave Widening Menifee



Location: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Location_Vicinity\Location and Vicinity.aprx - McCall Location (trotellini - 12/8/2022)

Map Date: 12/8/2022

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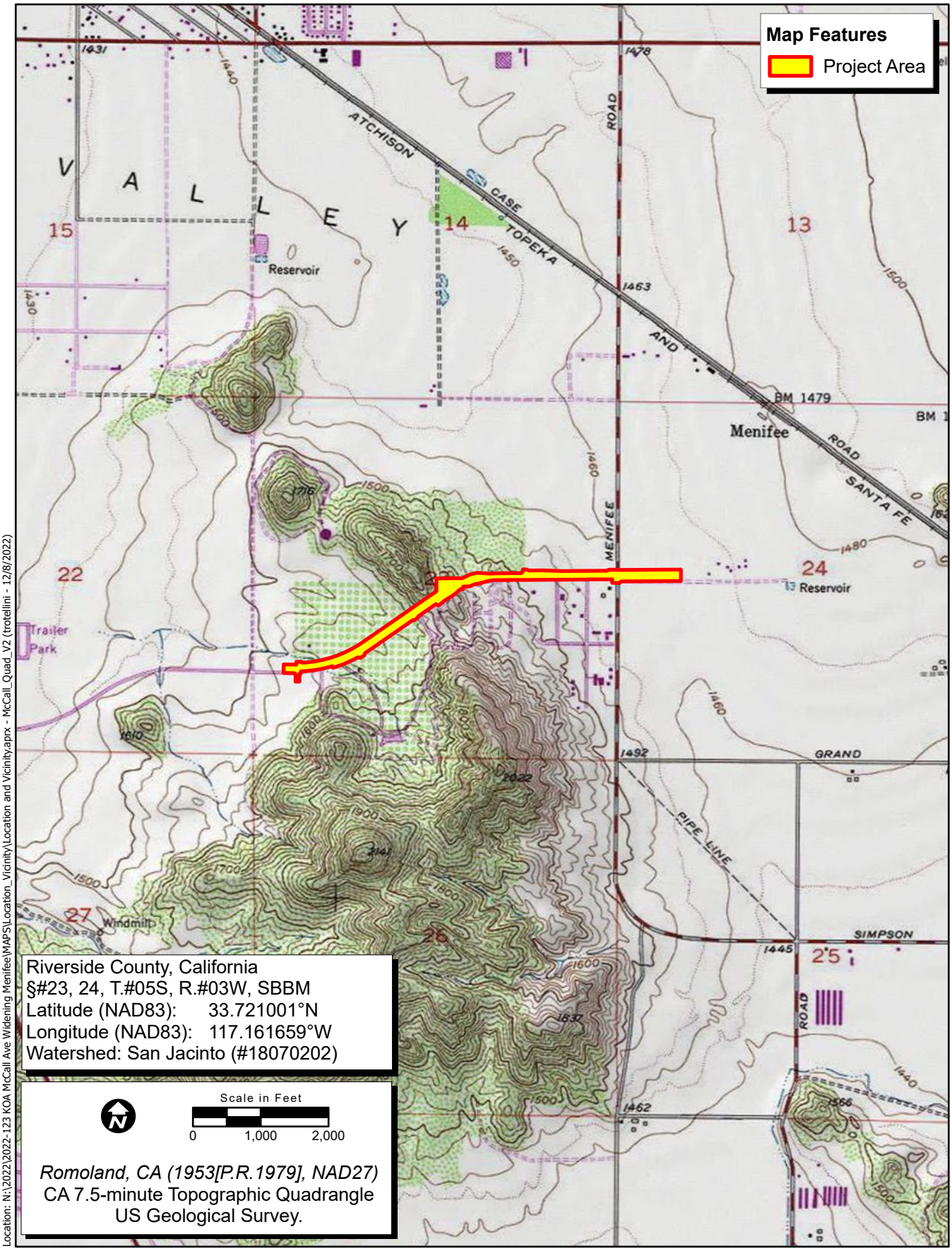
Figure 2. Project Location

2022-123 KOA McCall Ave Widening Menifee



Location: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Location_Vicinity\Location and Vicinity.aprx - McCall_Quad_V2 (trotellini - 12/8/2022)

Map Date: 12/8/2022
Sources: ESRI, USGS

Figure 3. 7.5 Minute USGS Topographic Quadrangle Map

2.0 SPECIAL-STATUS SPECIES REGULATIONS

The Proposed Project shall comply with federal and state regulations for biological resources. The biological reconnaissance survey was conducted to identify potential constraints to Project development and ensure compliance with state and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal National Environmental Policy Act (NEPA), federal Endangered Species Act (ESA), protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code [USC]1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.3 Federal Clean Water Act

Tiering off of the Rivers and Harbors Act of 1899, which primarily pertains to discharge of fill into navigable waters, the purpose of the federal Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The U.S. Army Corps of Engineers

(USACE) regulates discharge of dredged or fill material into Waters of the U.S. under Section 404 of the CWA. *Discharges of fill material* is defined as the addition of fill material into Waters of the U.S., including, but not limited to the following: placement of fill necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR § 328.2(f)]. In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to wetlands, more than 0.5 acre of impact, may require an individual permit. Projects that only minimally affect wetlands, less than 0.5 acre of impact, may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the local Regional Water Quality Control Board (RWQCB) under the authority of the State Water Resources Control Board. For this project, the Colorado River RWQCB has jurisdiction.

A new ruling called the Navigable Waters Protection Rule came into effect June 22, 2020. Under this ruling, the definition of the term *Waters of the U.S* encompasses:

- the territorial seas and traditional navigable waters;
- perennial and intermittent tributaries that contribute surface water flow to such waters;
- certain lakes, ponds, and impoundments of jurisdictional waters; and
- wetlands adjacent to other jurisdictional waters.

This latest Rule also excludes several waters and other features not mentioned in the above definition, including "ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools."

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the State). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal ESA and California ESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the ESA and/or California ESA. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as *endangered* or *rare* and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4 California Fish and Game Code

2.2.4.1 Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement (SAA). Often, projects that require an SAA also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the SAA may overlap.

2.2.4.2 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are protected from *take* pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918 (USFWS 1918).

2.2.5 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County (County) MSHCP (Plan) is a comprehensive, multijurisdictional HCP focusing on conservation of species and their associated habitats in the County. The MSHCP identifies

146 species, referred to as *Covered Species*, for which the ESA and California ESA *take* authorization has been granted to signatories to the Plan as long as they comply with its requirements. Of the 146 Covered Species within the MSHCP, 118 are considered to be *adequately conserved*. The remaining 28 Covered Species will be considered to be adequately conserved when certain landmark conservation requirements are met during the course of future development. The goal of the MSHCP is to maintain the biological and ecological diversity within a rapidly urbanizing region while also improving the future economic development in the County by providing a streamlined regulatory process through which development can proceed in an efficient way.

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, NEPA, the California ESA, and the federal 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, the federal ESA, and the California ESA 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.

2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if a project would:

- 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 CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) 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; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using CDFW's California Natural Diversity Database (CNDDB; CDFW 2022a, 2022b) and California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2022) to determine the special-status plant and wildlife species that have been documented in the vicinity of the Project Area. ECORP conducted a records search for the Project Area boundaries as depicted on USGS 7.5-minute Romoland topographic quadrangle, plus the surrounding eight topographic quadrangles including Steele Peak, Perris, Lakeview, Winchester, Bachelor Mountain, Murrieta, Wildomar, and Lake Elsinore. The CNDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or in the vicinity of the Project.

In addition to biological databases, other resources were reviewed to assess soil types and aquatic resources. A review of the Natural Resources Conservation Service (NRCS 2022) Web Soil Survey occurred to review soil types that have been mapped for the Project Area and 500-foot buffer. The National Wetlands Inventory (NWI; USFWS 2022a) and the corresponding USGS topographic maps were also reviewed to determine if there were any blue-line streams or drainages present on the Project Area that potentially fall under the jurisdiction of either federal or state agencies.

3.1.1 Sensitive Plant Communities

Sensitive plant communities (sensitive habitats), as defined below, are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. Sensitive habitats are often threatened with local extirpation and are therefore considered valuable biological resources. Plant communities are considered *sensitive* by the CNPS and CDFW if they meet any of the following criteria:

- The habitat is recognized and considered sensitive by CDFW, USFWS, and/or special interest groups such as CNPS.
- The habitat is under the jurisdiction of the USACE pursuant to Section 404 of the CWA.
- The habitat is under the jurisdiction of the CDFW pursuant to Sections 1600 through 1612 of the California Fish and Game Code.
- The habitat is known or believed to be of high priority for inventory in the CNDDB.
- The habitat is considered regionally rare.
- The habitat has undergone a large-scale reduction due to increased encroachment and development.
- The habitat supports special-status plant and/or wildlife species (defined below).
- The habitat functions as an important corridor for wildlife movement.

3.1.2 Special-Status Plants and Wildlife

Species of plants and wildlife species are afforded *special status* by federal agencies, state agencies, and/or nongovernmental organizations (e.g., USFWS, CDFW, and U.S. Forest Service) because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as *special-status* species.

Using this information and observations in the field, a list of special-status plant and animal species that have potential to occur within the Project Area was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515;
- are of expressed concern to resource and regulatory agencies or local jurisdictions; and/or
- are covered species under the MSHCP.

Additional information was gathered from the following sources and includes, but is not limited to:

- *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2022b);
- *Special Animals List* (CDFW 2022c);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *A Manual of California Vegetation*, 2nd Edition (Sawyer et al. 2009);

- *A Manual of California Vegetation*, Online Edition (CNPS 2022b); and
- various online websites (e.g., CalFlora 2022).

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project Area.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

3.1.3 Critical Habitat

The USFWS's online service (Information for Planning and Consulting [IPaC] website) for information regarding threatened and endangered species final critical habitat designations within California was reviewed to determine if the Project is within any species' designated critical habitat (USFWS 2022b).

3.1.4 Western Riverside County Multiple Species Habitat Conservation Plan

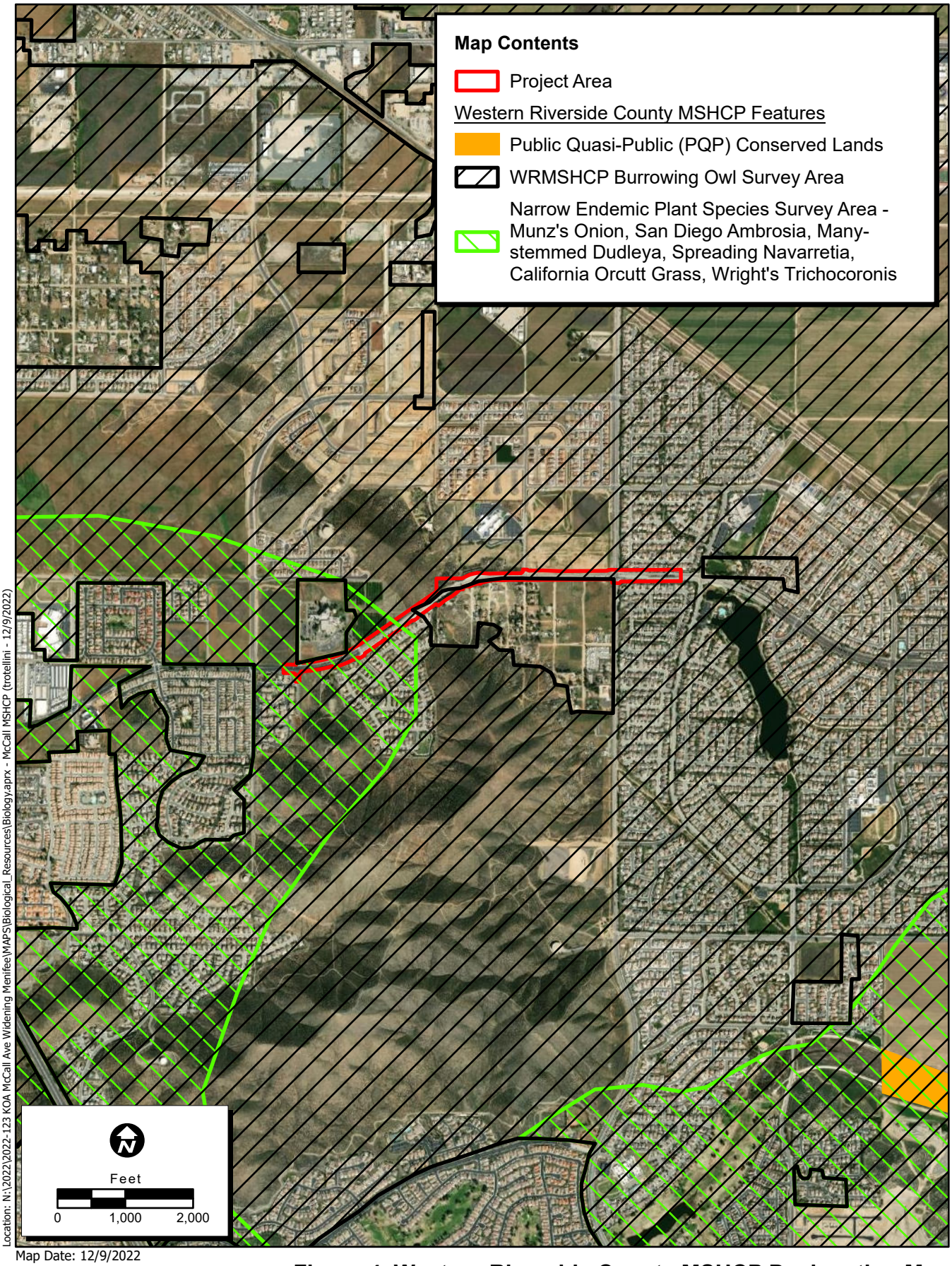
Data regarding the Project Area were reviewed to determine consistency with the MSHCP. The County Regional Conservation Authority (RCA) MSHCP Information Map was queried to determine requirements for habitat assessment(s), potential focused survey(s), or other issues related to biological resources that could exist within the Project Area (RCA 2022).

Section 6.0 of the MSHCP also requires that an assessment of the Project Area be completed to identify any potential Project-related effects on biological resources, including BUOW, riparian/riverine areas, vernal pools, and fairy shrimp, if applicable. In addition, the MSHCP requires that an Urban/Wildlands Interface analysis be conducted to address the indirect effects associated with locating proposed development in the proximity of MSHCP Conservation Areas.

3.2 Biological Surveys

3.2.1 Biological Reconnaissance Survey

ECORP biologist Richard Cravey conducted a biological reconnaissance survey on November 11, 2022. The Survey Area is defined as the Project Area and a 500-foot buffer around the Project Area (Figure 4). The survey consisted of walking the entirety of the Project Area to identify vegetation communities and wildlife habitats and ascertain general site conditions to identify habitat areas that could be suitable for special-status species. Plant and wildlife species observed or detected during the survey were noted, including any special-status species. Locations of special-status species detections were recorded utilizing the ArcGIS Field Maps application running on tablets with a built-in Global Positioning System. The biologist also recorded signs of wildlife species such as wildlife tracks, burrows, nests, scat, and remains. Binoculars were used to aid in the identification of observed wildlife, as necessary. Wildlife



Location: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Biological_Resources\Biology.aprx - McCall MSHCP (trotellini - 12/9/2022)

Map Date: 12/9/2022

Service Layer Credits: Loma Linda University, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, Maxar

Figure 4. Western Riverside County MSHCP Designation Map

field guides and photographs were used to assist with identification of wildlife species during the field survey, as necessary.

Photographs were also recorded during the survey to provide visual representation of the various vegetation communities/land cover types and site conditions within and adjacent to the Project Area. The Project Area was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologist mapped the vegetation communities present within the Project Area and the 500-foot buffer. Aerial photographs and maps were used to assist in the delineation of plant community boundaries. Following field surveys, the plant communities were digitized using Geographic Information System software and a vegetation map was prepared.

Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (SSAR 2017), *Check-list of North American Birds* (Chesser et al. 2022), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

A general survey cannot be used to conclusively determine presence or absence of a species; therefore, assessments of presence/absence and potential for occurrence were made based on presence of suitable habitat to support the species, diagnostic signs (burrows, scat, tracks, vocalizations, and nests), known records or occurrence within the area, known distribution and elevation range, and habitat utilization from the relevant literature.

3.2.2 Burrowing Owl: Habitat Assessment and Focused Burrow Survey

The BUOW habitat assessment followed the guidelines identified in Burrowing Owl Survey Instructions for the Plan Area (County of Riverside 2006). The survey instructions outline the following steps for the MSHCP BUOW assessment:

- Step 1: Habitat Assessment
- Step 2: Locating Burrows and Burrowing Owls
    - Part A: Focused Burrow Survey
    - Part B: Focused Burrowing Owl Surveys (four separate surveys)

The majority of the Project Area is located within the MSHCP Burrowing Owl Survey Area (Figure 4). A BUOW habitat assessment and a focused burrow survey (Step 1 and Step 2/Part A) were performed concurrently with the biological reconnaissance survey in November 2022 to assess whether potentially suitable habitat for BUOW, suitable burrows, or BUOW were present within the Survey Area.

During the surveys, the biologists paid special attention to those habitat areas that appeared to provide suitable habitat for BUOW. Soil conditions, topography, vegetative communities, wildlife, and habitat quality were documented. All encountered burrows or structure entrances were checked for the presence of BUOW, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement at or near a burrow entrance. Natural or manmade structures and debris piles that could support BUOW were also surveyed. Areas that were not accessible by foot were scanned using binoculars for

suitable habitat, including presence of burrows. Areas on private property were not surveyed on foot due to safety issues and inaccessibility.

The methods used to detect and identify BUOW included observation of key signs identified by the California Burrowing Owl Consortium such as sight, scat, tracks, burrows, nests, and calls. All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife.

3.2.3 Narrow Endemic Plant Species Survey Area

The western extent of the Project Area overlaps with the Plan Narrow Endemic Plant Species Survey Area; however, because the survey was conducted in November the results would be invalid because the majority of species (if present) are typically undetectable and/or unidentifiable during the fall/winter.

3.3 Jurisdictional Waters

The following sources were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within the watersheds associated with the Project Area and 500-foot buffer, and other features that might contribute to federal or state jurisdictional authority located within watersheds associated with the Project:

- NWI maps (USFWS 2022a). The NWI database indicates potential wetland areas based on changes in vegetation patterns as observed from satellite imagery. This database is used as a preliminary indicator of wetland habitats because the satellite data are not precise;
- USGS National Hydrography Dataset (USGS 2022). Provides the locations of *blue-line* streams as mapped on 7.5-Minute Topographic Map coverage;
- Aerial Imagery (Google Earth©; Google 2022);
- USGS 7.5-Minute Romoland, CA (1953) Topographic Quadrangle Map; and
- NRCS Web Soil Survey (NRCS 2022).

4.0 RESULTS

Summarized below are the results of the literature review and field survey, including site characteristics, vegetation communities, plants, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

4.1.1 Special-Status Plants and Wildlife

The CNDDB and CNPSEI searches were conducted on November 8, 2022. The database searches identified 66 special-status plant species (including bryophytes), one sensitive natural community, and 31 special-status wildlife species that could occur on and/or near the Project Area. A list was generated

from the results of the literature review and the Project Area was evaluated to determine if the Project Area could support any of the special-status plants (including sensitive natural communities) or wildlife species on the list. Appendix A contains the results of the CNDDB query (5-mile radius results), Appendix B presents the results of the CNPSEI query (nine-quadrangle results), and Appendix C presents results of the IPaC query.

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project Area is not located within any USFWS-designated Critical Habitat. The nearest designated Critical Habitat is located approximately 2.3 miles both west-northwest and west-southwest for the coastal California gnatcatcher (*Polioptila californica californica*).

4.2 Biological Reconnaissance Survey

ECORP biologist Richard Cravey conducted the biological reconnaissance survey on November 11, 2022. The results of the biological reconnaissance survey field visit, including site characteristics, plants and plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are described below. Appendices D and E present plant and wildlife species compendia, respectively. Appendix F presents representative photographs recorded during the survey.

4.2.1 Property Characteristics and Existing Conditions

The Project Area consists of McCall Boulevard and adjacent developed and undeveloped areas. Areas surrounding the Project Area are comprised of a mix of single-family residential developments, mostly fallow and some active agricultural land, open space, and a medical facility.

Soil types within the survey area include several classifications, the majority of which are sandy to fine sandy loam. There are two relatively small areas that were mapped as Auld clay, 8- to 15-percent slopes and Auld cobbly clay, 8- to 50-percent slopes. The area mapped as Auld clay was developed and is currently covered by residential homes. The Auld cobbly clay area is partially developed with residential homes with a small portion that has overlap with the Survey Area buffer, in the western extent and adjacent to Aspel Road (south of McCall Boulevard [NRCS 2022]). The Project Area is generally flat; however, there is a portion that overlaps with a cut-through of a small northern projection of the Menifee Mountain landform that occurred during original construction of McCall Road. Elevations at the Project Area range from approximately 1,470 feet to approximately 1,595 feet above mean sea level.

4.2.2 Land Cover Types/Vegetation Communities

The majority of the approximately 21.7-acre Project Area is within previously developed or disturbed areas along and adjacent to McCall Boulevard. Two vegetation communities (coastal sage scrub and nonnative annual grassland) and five land cover types (agriculture, disturbed [ruderal], landscaped/ornamental, open water, and urban/developed) occur within or adjacent to the Project Area. All vegetation communities and land-cover types within the 500-foot buffer are described below and depicted on Figure 5. The 500-foot buffer totals approximately 168 acres.

Map Features

- Project Area
- 500-ft Buffer

Vegetation Communities and Land Cover Types

- Coastal Sage Scrub
- Disturbed
- Landscaped/Ornamental
- Nonnative Grassland
- Urban/Developed

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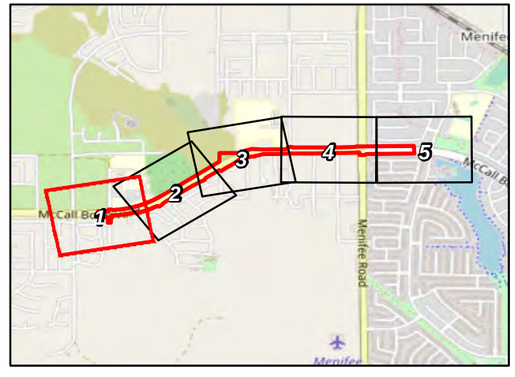

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Map Date: 12/8/2022

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Scale in Feet
0 150

Figure 5. Vegetation Communities and Land Cover Types
Sheet 1 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer

Vegetation Communities and Land Cover Types

- Agriculture
- Coastal Sage Scrub
- Disturbed
- Landscaped/Ornamental
- Urban/Developed

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

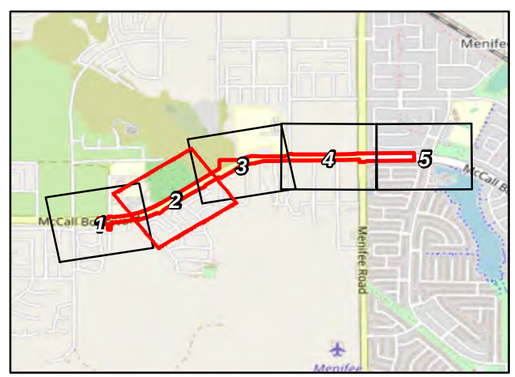

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Figure 5. Vegetation Communities and Land Cover Types
Sheet 2 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer

Vegetation Communities and Land Cover Types

- Coastal Sage Scrub
- Disturbed
- Landscaped/Ornamental
- Urban/Developed

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

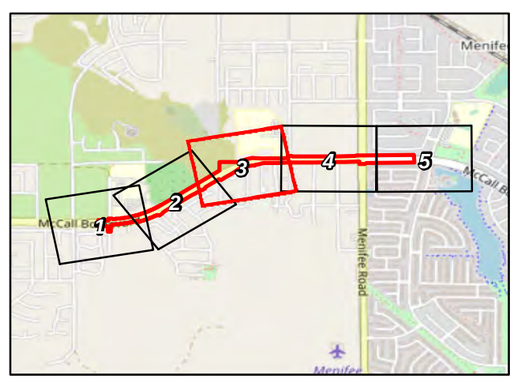

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Figure 5. Vegetation Communities and Land Cover Types
Sheet 3 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer

Vegetation Communities and Land Cover Types

- Coastal Sage Scrub
- Disturbed
- Landscaped/Ornamental
- Urban/Developed

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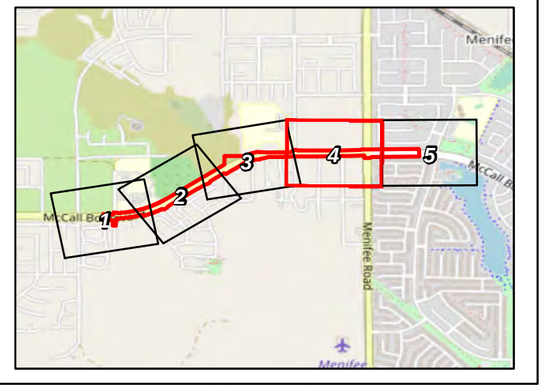

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Scale in Feet
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Figure 5. Vegetation Communities and Land Cover Types
Sheet 4 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer

Vegetation Communities and Land Cover Types

- Landscaped/Ornamental
- Open Water
- Urban/Developed

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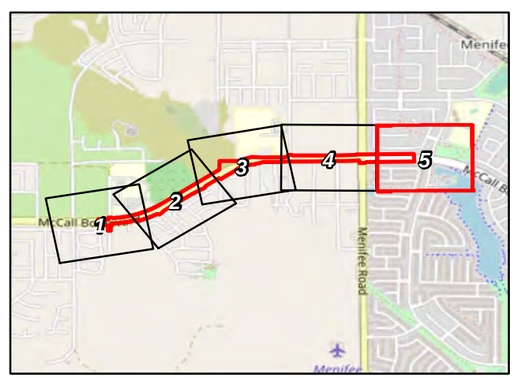

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Map Date: 12/8/2022

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Figure 5. Vegetation Communities and Land Cover Types
Sheet 5 of 5
2022-123 KOA McCall Ave Widening Menifee

4.2.2.1 Coastal Sage Scrub

Coastal sage scrub occurs within 3.44 acres of the Project Area, specifically where McCall Boulevard cuts through a northly extension of the Menifee Mountain landform. Within the Project Area, this vegetation community varies between a relatively undisturbed and disturbed condition. It comprises native species including California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), with brittlebush (*Encelia farinosa*) and black sage (*Salvia mellifera*) also prominent. The most prominent nonnative species include Russian thistle (*Salsola tragus*) and brome grasses (*Bromus* spp.). There is one area approximately 1.0 acre in size that overlaps with disturbed and undisturbed coastal sage scrub. This area is located north of McCall Boulevard, adjacent to the connection with Summit Street (Figure 5, sheet 3). There are approximately 27 acres of coastal sage scrub within the 500-foot buffer.

4.2.2.2 Nonnative Grassland

Nonnative grassland does not occur within the Project Area; however, it was observed in the buffer in the western extent of the Survey Area (Appendix F, Photo 5). It consists primarily of brome and fescue (*Festuca* sp.) grasses with various weedy broadleaf species also present. There are approximately 4 acres of nonnative grassland within the 500-foot buffer.

4.2.2.3 Disturbed (Ruderal)

Disturbed (ruderal) is considered a land-cover type rather than a vegetation community. The disturbed designation indicates a location that has experienced disturbances, typically associated with human activities. Disturbed areas may be actively maintained to be free of vegetation or have been compacted or disced to such a degree that native vegetation is very sparse. Plants observed in disturbed areas include species such as Russian thistle (*Salsola tragus*), stinknet (*Oncosiphon pilulifer*), and Italian thistle (*Carduus pycno*cephalus). A total of 3.37 acres of the Project Area is classified as disturbed (ruderal) because it is subject to repeated disturbances (e.g., mowing/discing), largely devoid of native vegetation, and is dominated by open areas or nonnative weedy and ruderal vegetation (Appendix F, Photo 3).

4.2.2.4 Open Water

Open water occurs as part of a developed pond within a residential development east of the Project Area and within the 500-foot buffer (Appendix F, Photo 2). Open water does not occur within the Project Area. There is approximately 0.3 acre of open water within the 500-foot buffer.

4.2.2.5 Urban/Developed

Urban/developed is not a vegetation classification, but rather a land-cover type. Approximately two thirds of the Project Area (13.80 acres) is classified as urban/developed because permanent impacts have been made in the form of roads and sidewalks (Appendix F). Roads, sidewalks, residential developments, and a medical facility were also classified as urban/developed. There are approximately 78 acres of urban/developed lands within the 500-foot buffer.

4.2.2.6 Landscaped/Ornamental

Landscaped and ornamental areas are not vegetation classifications, but rather a land-cover type. These areas total 1.12 acres within the Project Area and include vegetation that is regularly maintained and comprised mainly of ornamental plants or turf grasses. There are approximately 11 acres of landscaped/ornamental lands within the 500-foot buffer.

4.2.2.7 Agricultural

Agricultural is not a vegetation classification, but rather a land-cover type. These areas total 5.30 acres within the 500-foot buffer but do not overlap with the Project Area. Agricultural areas within the buffer include orchards. There are approximately 5 acres of agricultural lands within the 500-foot buffer.

4.2.3 Special-Status Plants Observed

Most of the Project Area lacks vegetation due to the high portion of development and level of disturbance. Special-status plants were not observed within the Project Area or the 500-foot buffer.

4.2.4 Special-Status Wildlife Observed

Coastal California gnatcatcher, federally listed (threatened) and a State of California SSC, was detected within coastal sage scrub habitat at one location within the Project Area near its midpoint and at one additional location within the 500-foot buffer, near the western end of the Project Area (Figure 6). Both detections were presumed to be different individuals, unpaired.

Although BUOW were not observed, a total of four potential burrows were observed, one of which was at the edge of the Project Area. Three were encountered at the western end of the Survey Area, and within the buffer. Another potential burrow was located toward the eastern half of the Survey Area, at Dales Street and McCall Boulevard. None of the potential burrows had indication of BUOW sign and were presumed to belong to a small mammal (squirrel or rabbit). Figure 6 depicts the location of potential BUOW burrows.

4.2.5 Potential for Special-Status Plants to Occur in the Project Area

The literature review and database searches identified 66 special-status plant species records within the vicinity of the Project Area; however, none of the records had direct overlap with the Project Area or 500-foot buffer. Due to the level of disturbance/development for much of the Project Area special-status plant species are not expected to occur. The one exception is the portion of the Project Area that is located near McCall Boulevard and Summit Street. This area is north of McCall Boulevard, has an approximate area of 1.0 acre, and comprises relatively undisturbed sage scrub habitat with granite boulder outcrops.

Map Features

- Project Area
- 500-ft Buffer

Survey Results

- Coastal California Gnatcatcher
- Potential Burrowing Owl Burrow

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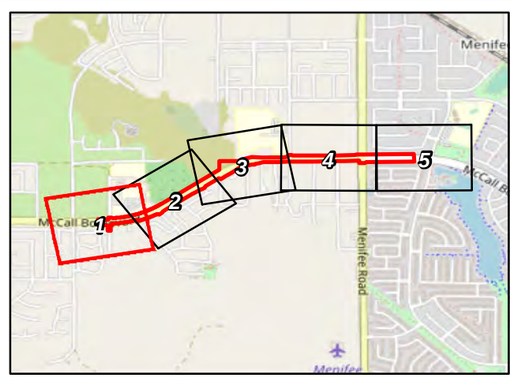

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Map Date: 12/8/2022

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Scale in Feet
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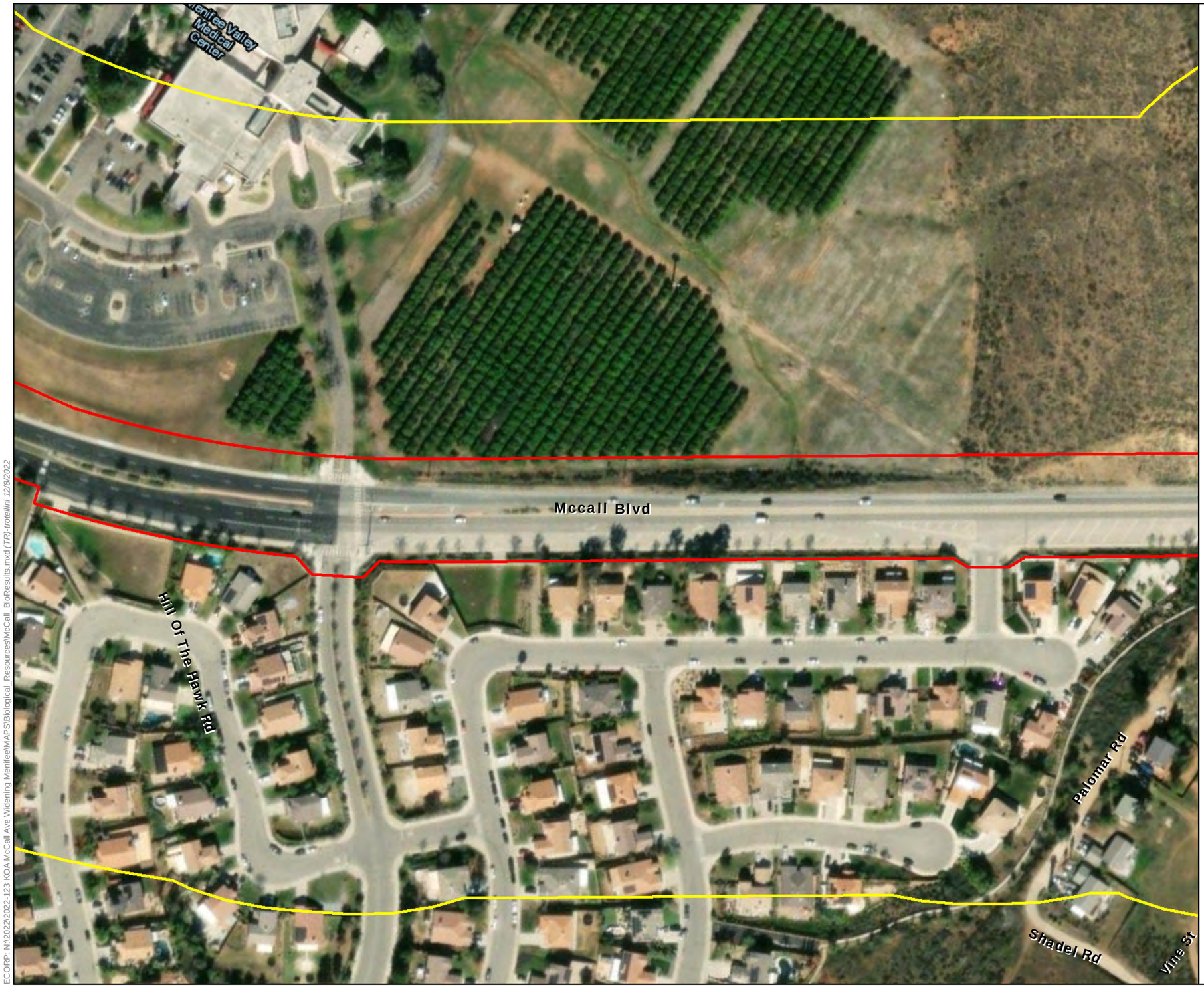
Figure 6. Biological Reconnaissance and Focused Burrow Survey Results
Sheet 1 of 5
2022-123 KOA McCall Ave Widening Menifee



Map Features

- Project Area
- 500-ft Buffer

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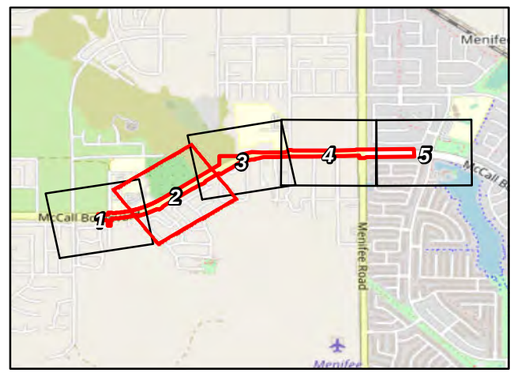

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Figure 6. Biological Reconnaissance and Focused Burrow Survey Results
Sheet 2 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

Project Area

500-ft Buffer

Survey Results

Coastal California Gnatcatcher

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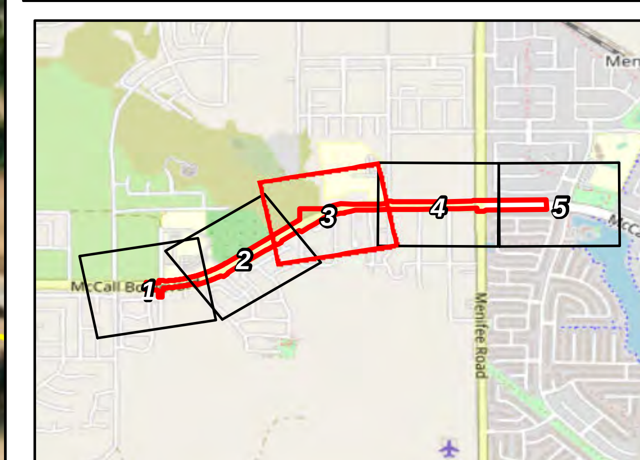

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Map Date: 12/8/2022

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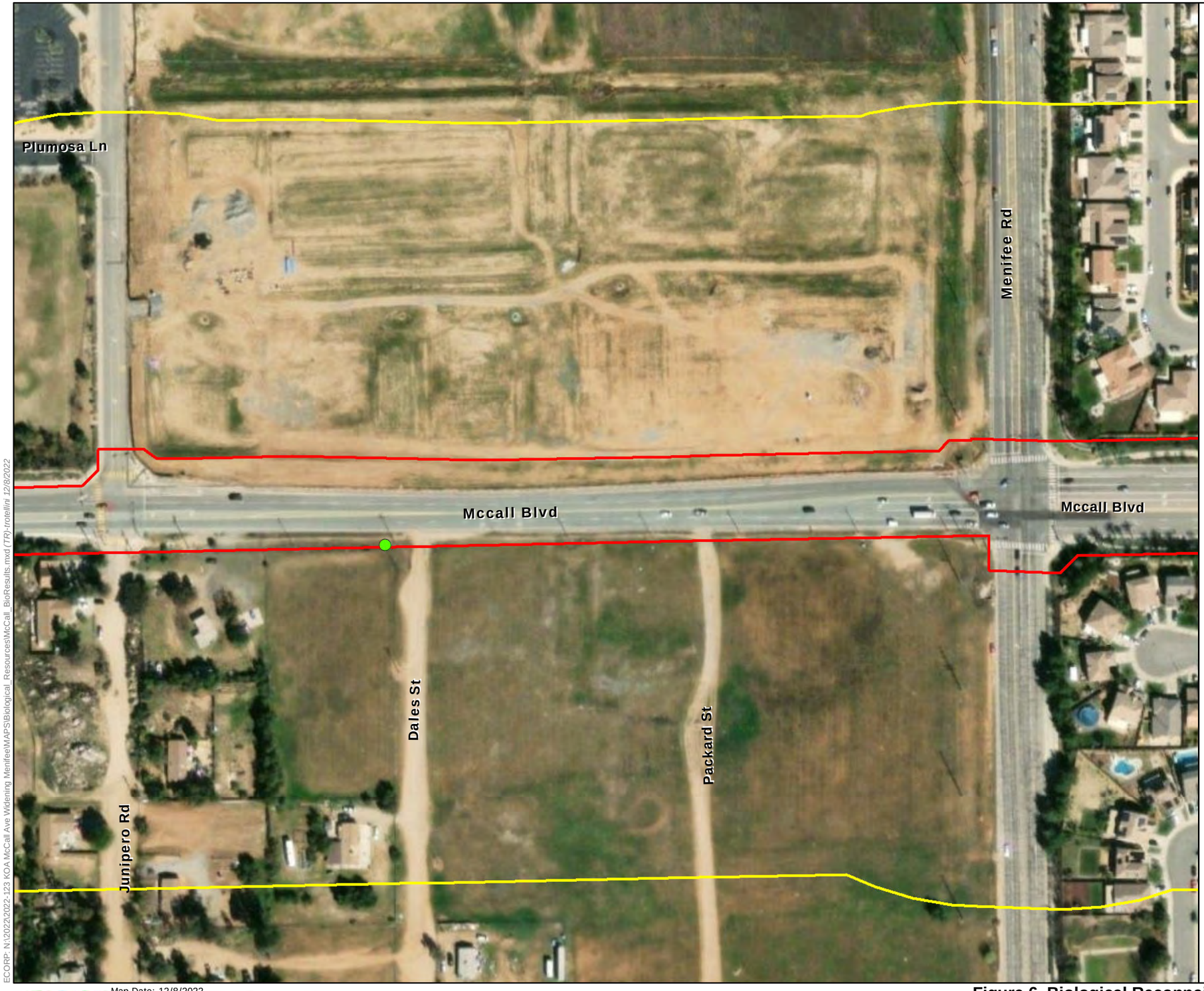
Figure 6. Biological Reconnaissance and Focused Burrow Survey Results
Sheet 3 of 5
2022-123 KOA McCall Ave Widening Menifee



Map Features

- Project Area
- 500-ft Buffer

Survey Results

- Potential Burrowing Owl Burrow

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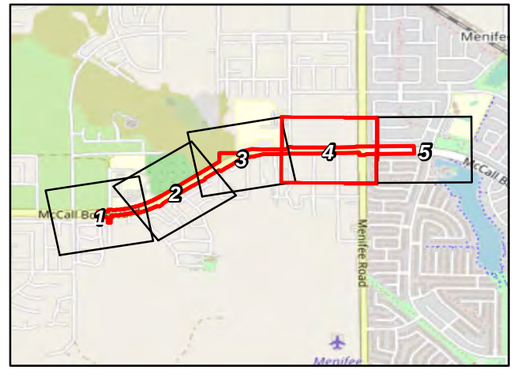

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Scale in Feet
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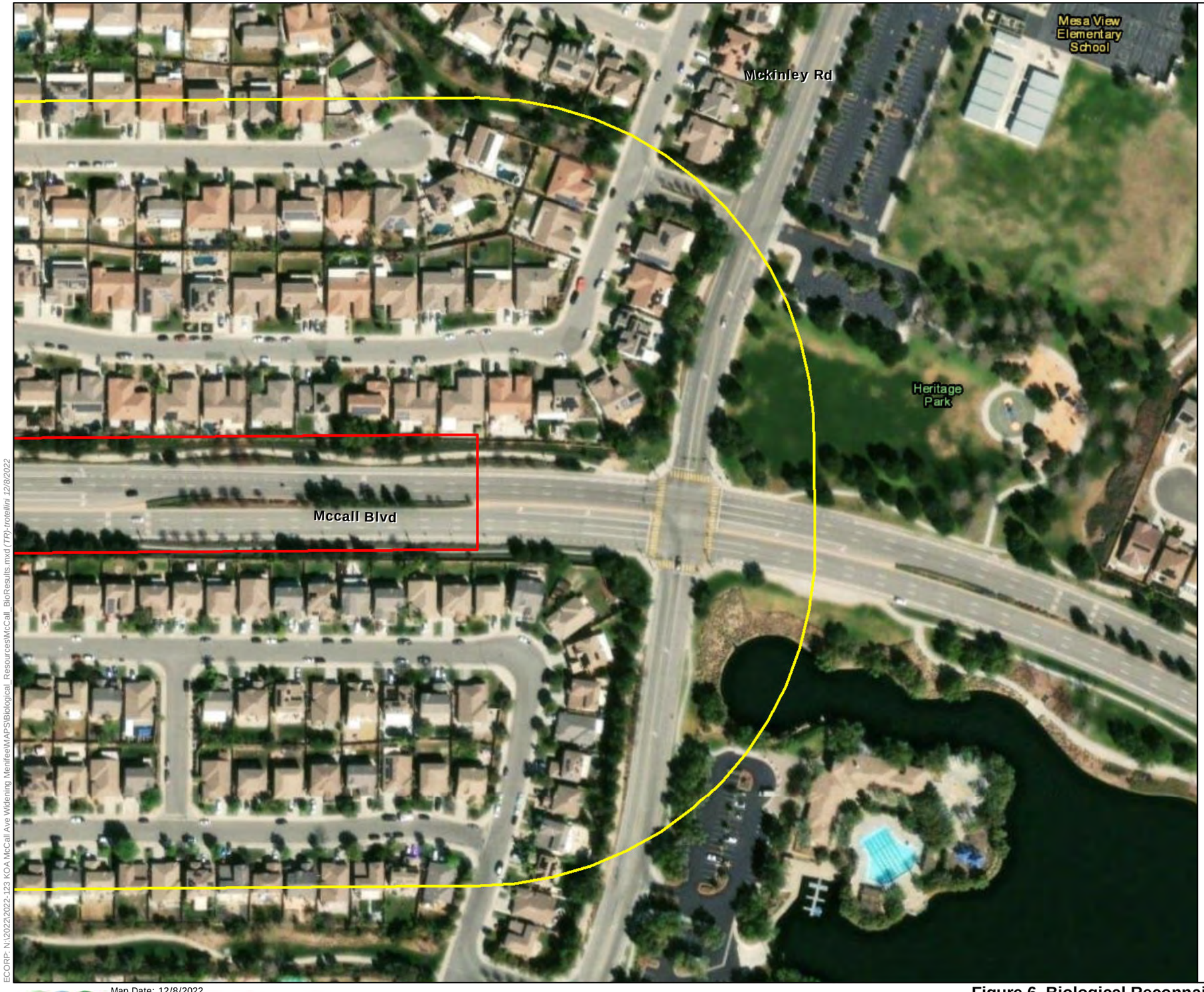
Figure 6. Biological Reconnaissance and Focused Burrow Survey Results
Sheet 4 of 5
2022-123 KOA McCall Ave Widening Menifee



Map Features

- Project Area
- 500-ft Buffer

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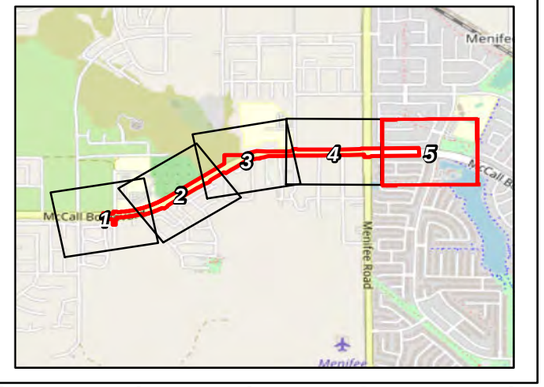

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Figure 6. Biological Reconnaissance and Focused Burrow Survey Results
Sheet 5 of 5
2022-123 KOA McCall Ave Widening Menifee

4.2.5.1 Special-Status Plant Species with Potential to Occur

Of the 66 special-status plant species queried through database review, a total of three are expected to have the potential to occur due to suitable habitat and a likelihood of presence based on other records in the vicinity. The following 10 special-status plants have the potential to occur within the undisturbed coastal sage scrub habitat that exists within the Project Area. Furthermore, these species were determined to have the potential to occur due to proximity of the Project Area to other records.

- Parry's spineflower (*Chorizanthe parryi* var. *parryi*), California Rare Plant Rank (CRPR) 1B.1, MSHCP Covered;
- Long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), CRPR 1B.2, MSHCP Covered; and
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*), CRPR 2B.2.

4.2.6 Potential for Special-Status Wildlife to Occur in the Project Area

The literature review and database searches identified 31 special-status wildlife species records within 5 miles of the Project Area. The one record that overlapped the Project Area was a Stephens' kangaroo rat (*Dipodomys stephensi*) record from 1988, which was mapped as a polygon with nonspecific accuracy. There were no other records found that had direct overlap with the Project Area or 500-foot buffer. Due to the level of disturbance/development for much of the Project Area special-status wildlife species are not expected to occur. The one exception is the portion of the Project Area that is located near McCall Boulevard and Summit Street. This area is north of McCall Boulevard, has an approximate area of 1.0 acre, and comprises relatively undisturbed sage scrub habitat with granite boulder outcrops.

4.2.6.1 Special-Status Wildlife Species with a Potential to Occur

Of the 31 special-status wildlife species queried through database review a total of four are expected to have the potential to occur due to suitable habitat and a likelihood of presence based on other records in the vicinity. The following four special status plants have the potential to occur within the undisturbed coastal sage scrub habitat that exists within the Project Area. Furthermore, these species were determined to have the potential to occur due to proximity of other records to the Project Area.

- BUOW, CDFW SSC, MSHCP Covered;
- Stephens' kangaroo rat, federally and state-listed (threatened), MSHCP Covered;
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), CDFW SSC, MSHCP Covered; and
- San Diego desert woodrat (*Neotoma lepida intermedia*), CDFW SSC, MSHCP Covered.

4.2.7 Burrowing Owl Habitat Assessment, Focused Burrow Survey and Focused Surveys

An ECORP biologist conducted a habitat assessment and focused burrow survey on November 11, 2022. Survey details are presented in Table 1. Suitable BUOW habitat and potential burrows were identified in select areas of the Project Area. A total of four burrows that were of appropriate size and shape for BUOW use were identified during the focused burrow survey, but BUOWs and BUOW sign (e.g., whitewash, pellets, feathers) were neither observed nor detected. Burrows observed likely belonged to California ground squirrels (*Otospermophilus beecheyi*). The burrow locations were mapped and are included on Figure 6. A representative photo of one potential BUOW burrow is included in Appendix F.

Table 1. Burrowing Owl Survey Details

Date/Time	Survey	Surveyors	Conditions
11/11/2022 0605-1100	Habitat Assessment, Focused Burrow Survey, and Burrowing Owl Survey	Richard Cravey	Temperature: 51-72°F Cloud Cover: 25-40% Wind: 1-3 miles per hour

4.3 Habitat for Raptors and Migratory Birds

Potential nesting habitat for ground-nesting bird species, migratory birds, and raptors is present within and outside of the Project Area, mainly within the ornamental trees and coastal sage scrub areas. The disturbed areas and undeveloped areas of the Survey Area also provide marginal foraging habitat for various avian species.

4.4 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The Project Area was assessed for its ability to function as a wildlife corridor. The Project is not located within an MSHCP Area Plan Subunit and is not located within any of the identified existing or proposed Cores and Linkages. The Project Area is disturbed and is generally surrounded by human development. It is not likely that the Project Area functions in local wildlife movement due to the fact that it is adjacent to paved roads that serve as a busy thoroughfare for traffic. Additionally, the Project Area is relatively isolated from large, contiguous blocks of native habitat. Menifee Mountain provides a large amount of open space and natural areas, but that landform does not have direct connection to any other open space areas. Salt creek is located approximately 1.5 miles southeast of the Project Area. Interstate 215 runs north-south and to the west of the Project Area and is a large barrier to regional wildlife movement.

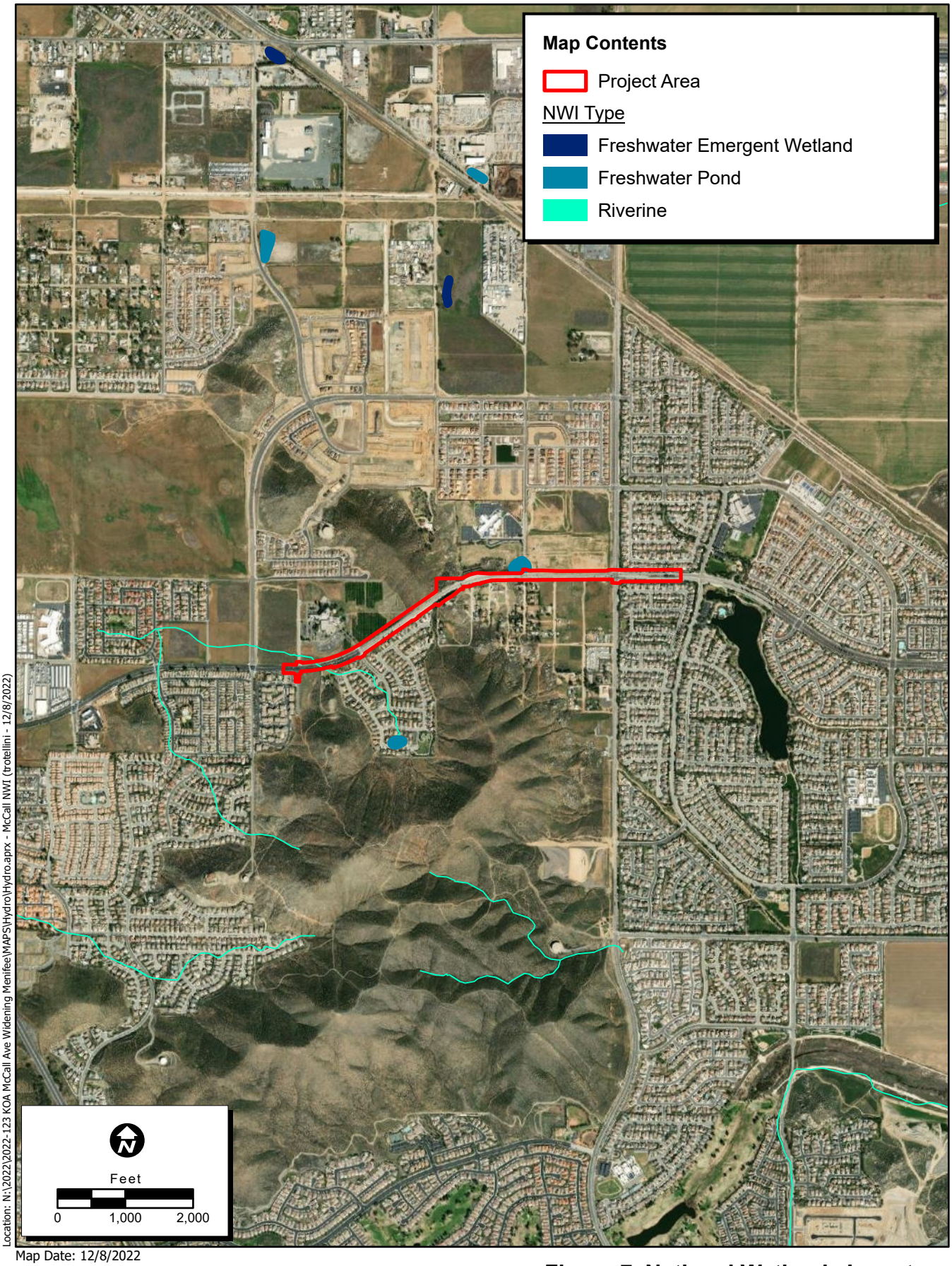
4.5 Jurisdictional Waters – Preliminary Resources Delineation

4.5.1 National Wetland Inventory

Based on the results of the literature review, the Project Area does not appear to have any state or federally protected wetlands or Waters of the U.S. The NWI query resulted in a total of two features that have overlap with the Project Area that include a riverine feature and a freshwater pond (USFWS 2022a). These two NWI mapped features are shown on Figure 7. Both features have been disrupted and removed due to human development.

4.5.2 Aquatic Resources

One feature that could potentially be categorized as an aquatic resource was observed in the western extent of the Survey Area. A street drain daylights on the north side of McCall Boulevard and there is a shallow vegetated swale (ephemeral drainage) that appears to convey runoff during inclement weather. There did not appear to be any evidence of wetland/riparian habitat within the Project Area or the 500-foot buffer. The swale does not appear to flow to any streams or drainage channels based on review of aerial imagery (Figure 8).



Location: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Hydro\Hydro.aprx - McCall NWI (trotellini - 12/8/2022)

Map Date: 12/8/2022

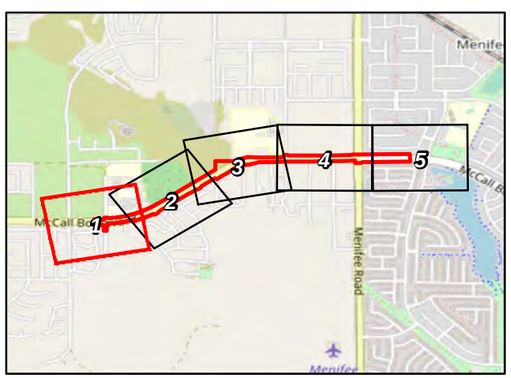
Service Layer Credits: Loma Linda University, County of Riverside, California State Parks, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, Maxar

Figure 7. National Wetlands Inventory

Map Features

- Project Area
- 500-ft Buffer

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



ECORP- N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Hydro\McCall_Drainages.mxd (TR) trotellini 12/8/2022

Map Date: 12/8/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

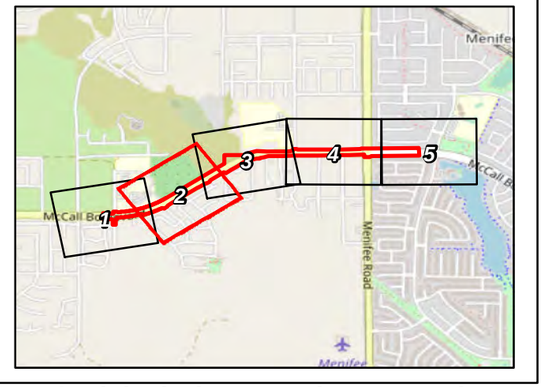
Scale in Feet
0 150

Figure 6. Biological Reconnaissance Drainages
Sheet 1 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer
- Potentially Jurisdictional Drainage

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



ECORP: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\HydroMcCall_Drainages.mxd (TR)-trotellini 12/8/2022

Map Date: 12/8/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

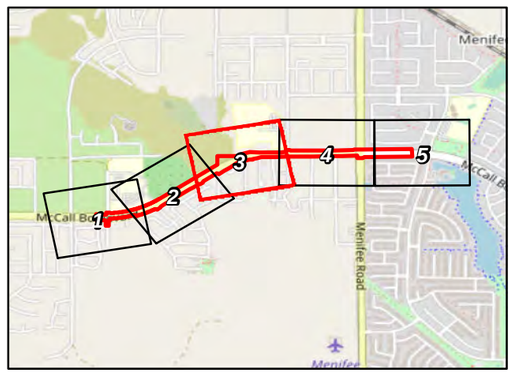
Scale in Feet
0 150

Figure 6. Biological Reconnaissance Drainages
Sheet 2 of 5
2022-123 KOA McCall Ave Widening Menifee

Map Features

- Project Area
- 500-ft Buffer

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



ECORP- N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\HydroMcCall_Drainages.mxd (TR)-trotellini 12/8/2022

Map Date: 12/8/2022

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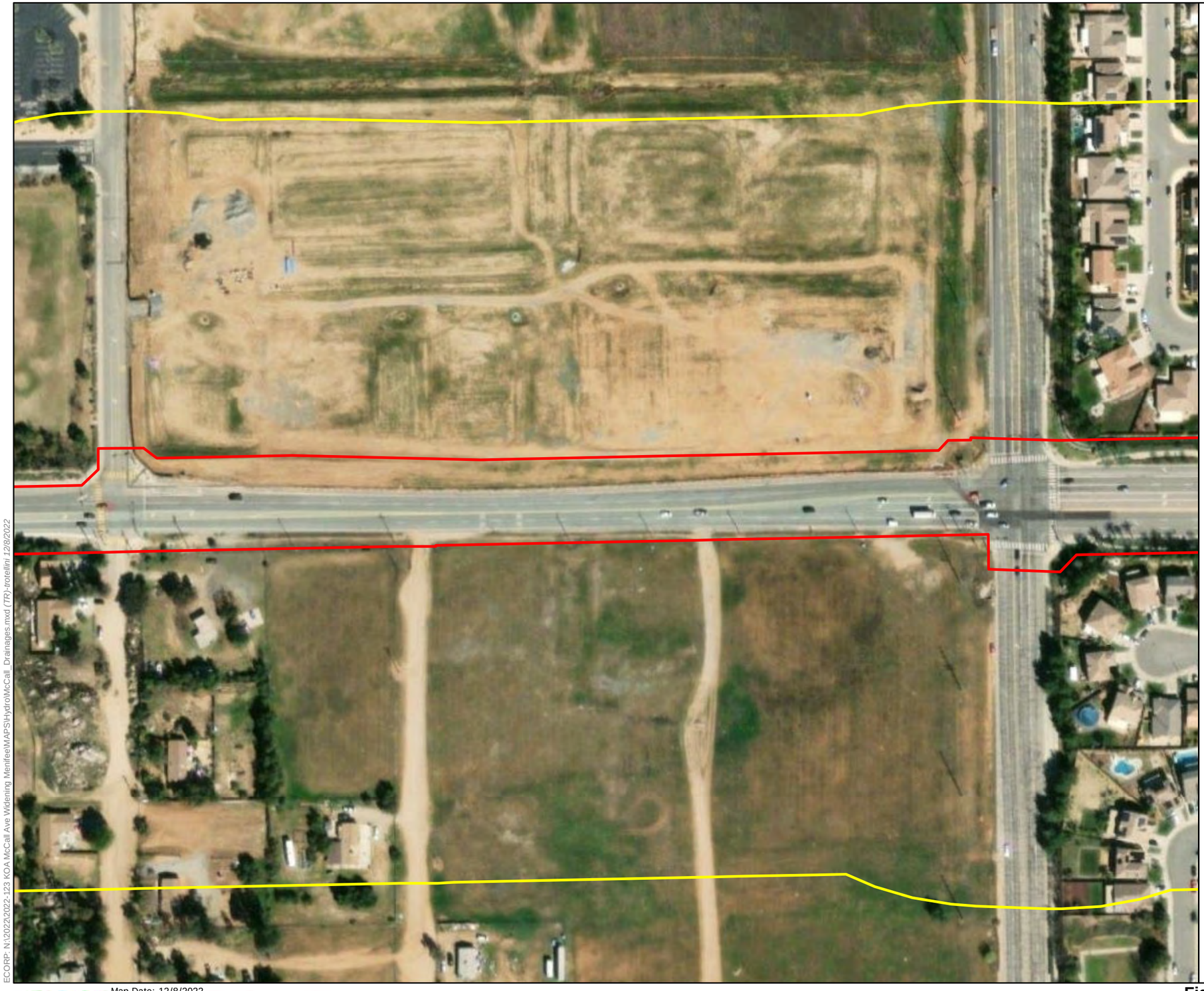
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 150

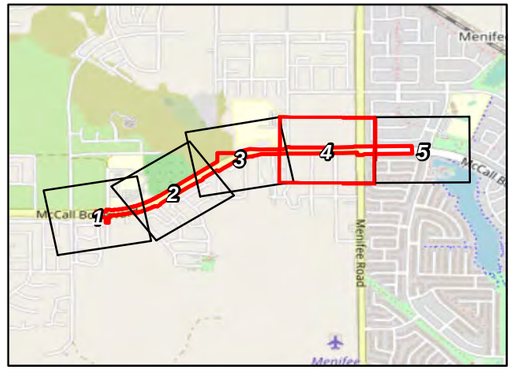
Figure 6. Biological Reconnaissance Drainages
Sheet 3 of 5
2022-123 KOA McCall Ave Widening Menifee



Map Features

- Project Area
- 500-ft Buffer

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



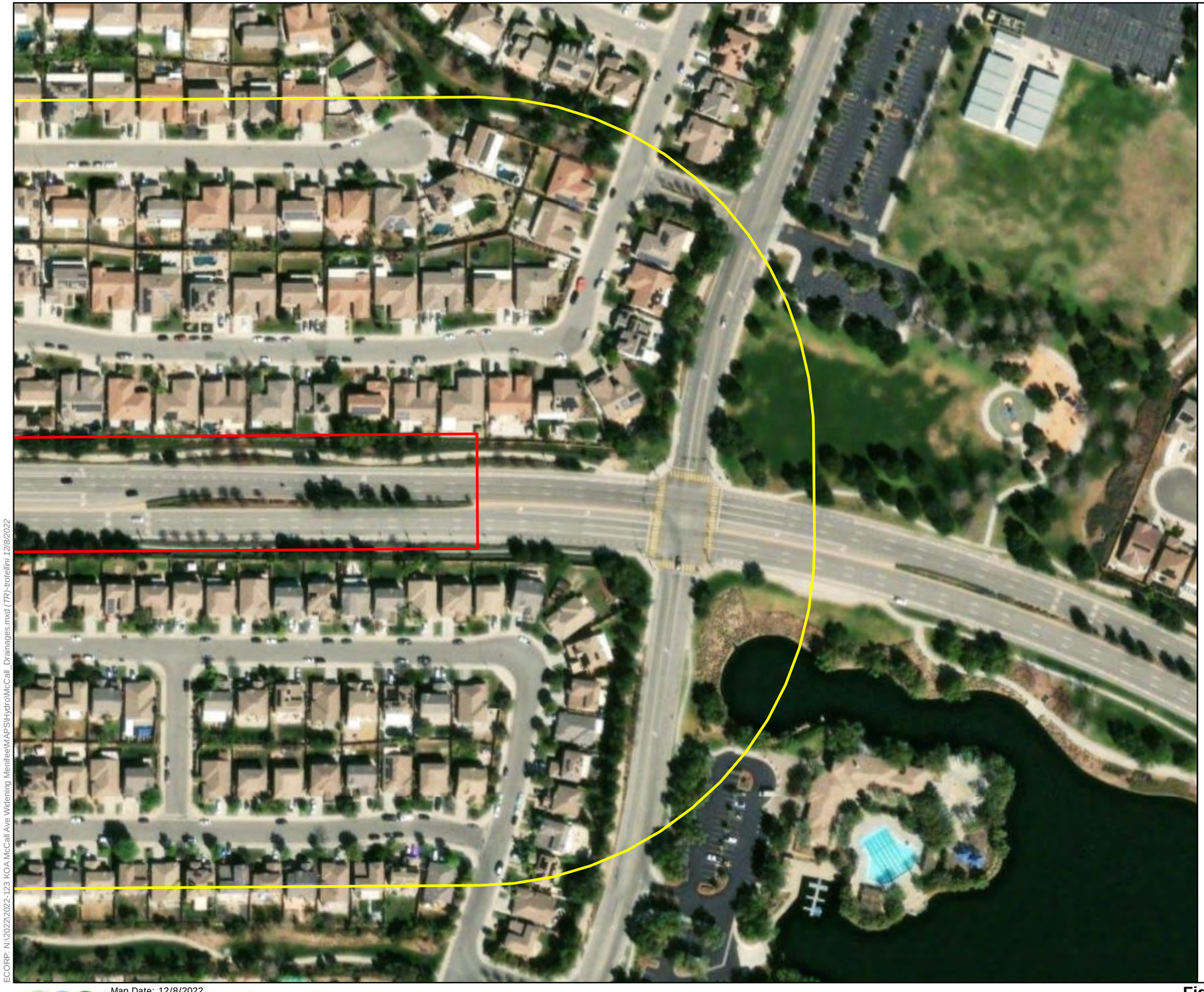
ECORP: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\Hydro\McCall_Drainages.mxd (TR) -trotellini 12/8/2022

Map Date: 12/8/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 150

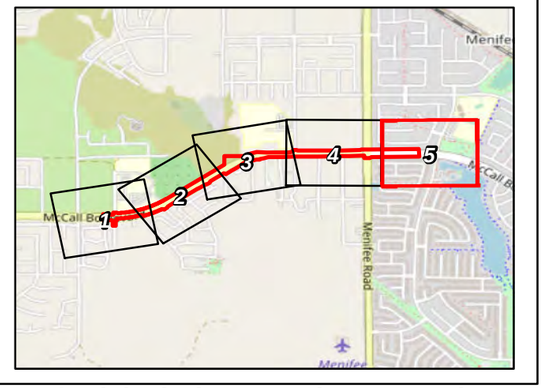
Figure 6. Biological Reconnaissance Drainages
Sheet 4 of 5
2022-123 KOA McCall Ave Widening Menifee



Map Features

- Project Area
- 500-ft Buffer

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



ECORP: N:\2022\2022-123 KOA McCall Ave Widening Menifee\MAPS\HydroMcCall_Drainages.mxd (TR) trotellini 12/8/2022

Map Date: 12/8/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 150

Figure 6. Biological Reconnaissance Drainages
Sheet 5 of 5
2022-123 KOA McCall Ave Widening Menifee

5.0 WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

This MSHCP analysis evaluates the Proposed Project with respect to the Project's compliance with MSHCP Reserve assembly requirements, Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools), Section 6.1.3 (Protection of Narrow Endemic Plant Species), Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface), and Section 6.3.2 (Additional Survey Needs and Procedures). These resources were assessed during the reconnaissance survey and are discussed below in relation to the Project.

5.1 Reserve Assembly Analysis

The Project Area is located within the planning area for the MSHCP, but outside of any Cell Groups, Criteria Cells, and Subunit designations (RCA 2022). As such, the Project is not subject to the Joint Project Review or Habitat Acquisition and Negotiation processes.

5.2 Riparian/Riverine, Vernal Pool, and Fairy Shrimp Habitat Assessment (Multiple Species Habitat Conservation Plan Section 6.1.2)

Section 6.1.2 of the MSHCP states that:

> "riparian/riverine resources are lands which contain habitat dominated by trees, shrubs, persistent emergent [wetland plant species], or emergent mosses and lichens, which occur close to or which depend upon moisture from a nearby freshwater source; or areas with freshwater after flow during all or a portion of the year"

and

> "vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season."

In accordance with Section 6.1.2 of the MSHCP, a habitat assessment was performed for riparian and riverine communities, vernal pools, and fairy shrimp.

The only aquatic feature identified within the Project Area that may potentially be considered a resource under the jurisdiction of the USACE, Regional Water Quality Control Board (RWQCB), and CDFW is an ephemeral drainage north of McCall Boulevard, east of the citrus grove that is adjacent to the medical facility (Figure 8). A wetland delineation is recommended to fully assess this resource and potential impacts from Project activities.

All other drainages within the Project Area are manmade, including gutters, culverts, and storm drains. Such features are likely not jurisdictional to state and federal agencies and do not meet the MSHCP definitions of riparian or riverine habitat due to their functionality as stormwater conveyance, isolation from natural drainages, lack of wetland characteristics, and lack of correspondence to historic, natural

drainage features. The Project Area does not contain vernal pool habitat or suitable habitat for fairy shrimp, nor is riparian vegetation present within the Project Area.

5.3 Protection of Narrow Endemic Plant Species (Multiple Species Habitat Conservation Plan Section 6.1.3)

The RCA MSHCP Information Map was reviewed to determine whether the Project Area is located within a Narrow Endemic Plant Species Survey Area (NEPSSA), in accordance with Section 6.1.3 of the MSHCP. A small section in the western portion of the Project Area is located within the mapped NEPSSA for Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading Navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wrights trichocoronis (*Trichocoronis wrightii* var. *wrightii*) (Figure 4). The survey was not conducted at the appropriate time of year for detection of most rare plant species in the Plan area; therefore, surveys for narrow endemic plant species are recommended.

5.4 Burrowing Owl Habitat Assessment and Focused Surveys (Multiple Species Habitat Conservation Plan Section 6.3.2)

Projects within the MSHCP BUOW Survey Area are subject to the MSHCP BUOW survey requirements. The majority of the Project Area is within the MSHCP BUOW Survey Area (Figure 4). In accordance with Section 6.3.2 of the MSHCP, a habitat assessment for BUOW was performed on November 11, 2022 in accordance with Step 1 of the MSHCP BUOW survey guidelines (County of Riverside 2006). Potentially suitable BUOW habitat was identified through the presence of open grassland and potentially suitable burrows. Therefore, a focused burrow survey (Step 2, Part A) was conducted within the entire Project Area and by binoculars within a 500-foot buffer zone. Four burrows of suitable size and shape for BUOW usage were identified within the Project Area during the focused surveys, one within the Project Area and three within the 500-foot buffer (Figure 6), but BUOWs and BUOW sign (e.g., whitewash, pellets, feathers) were neither observed nor detected. California ground squirrels, a small mammal species that BUOWs often rely on for burrow construction, were associated with the burrows on site. A representative photo of one of the potential BUOW burrows identified during the focused burrow survey can be found in Appendix F.

Due to the presence of suitable habitat including presence of potential burrows within and adjacent to the Project Area, four focused BUOW surveys (Step 2, Part B) are to be conducted, most effectively within the BUOW breeding season (March 1 through August 31), and a preconstruction survey will need to be conducted no more than 30 days prior to site disturbance to maintain compliance with the BUOW protection measures in the MSHCP (RCTLMA 2022). The preconstruction survey shall follow the protocols set forth in the MSHCP BUOW survey guidelines (County of Riverside 2006) and the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation (CDFG 2012).

5.5 Urban/Wildlands Interface Guidelines (Multiple Species Habitat Conservation Plan Section 6.1.4)

The requirements for Urban/Wildlands Interface for the management of edge factors do not apply to the Project Area because the Project Area is not situated adjacent to any wildlands or MSHCP-designated Conservation Areas. A net long-term increase of edge impacts is not expected as a result of this Project.

5.6 Additional Surveys Needs and Procedures (Multiple Species Habitat Conservation Plan Section 6.3.2)

The Project Area is not located within the amphibian species, criteria area species, or mammalian species survey areas. Therefore, no further habitat assessments or surveys, other than the aforementioned BUOW, focused rare plant, and wetland delineation surveys, are recommended or required.

6.0 BEST MANAGEMENT PRACTICES

The Western Riverside MSHCP Volume 1, Appendix C, outlines standard Best Management Practices (BMPs) which are intended in part to reduce impacts to plant communities, special-status plant and wildlife species, and jurisdictional waters. Because the Project Area is located within the MSHCP boundary, the Project will be required to comply with the standard BMPs found in Appendix C of the MSHCP. The Project will comply with the following BMPs as applicable. It is important to note many of these BMP's are not applicable as the Project Area does not have any sensitive habitat. Regardless, the following standard MSHCP BMPs have been included as required:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the ESA [Act] and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project Area boundaries within which the Project activities must be accomplished.

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via preexisting access routes to the greatest extent possible.

4. The upstream and downstream limits of the Project's disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.

5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.

6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.

7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

10. The qualified Project biologist shall monitor vegetation clearing to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.

11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to preexisting contours and revegetated with appropriate native species.

12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

13. To avoid attracting predators of the species of concern, the Project Area shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the Proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall

be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

15. The Permittee [County] shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with Project approval conditions including these BMPs.

6.1 Multiple Species Habitat Conservation Plan Consistency Summary

The Project would be consistent with the MSHCP based on the analysis, determinations, and implementation of recommendations made in Section 5. The Project Area is not located within or near an MSHCP Conservation Area. The Project Area also lacks MSHCP Section 6.1.2 riparian/riverine resources, evidence of ponding water and vernal pools, and presence of sensitive vegetation communities.

Narrow endemic plant species are expected to occur within the Project Area based on the lack of suitable habitat; however, focused rare plant surveys are recommended during the appropriate blooming period for target species.

The majority of the Project Area is within the MSHCP BUOW Survey Area; therefore, a Habitat Assessment and a focused burrow survey was conducted. One potential BUOW burrow complex was observed within the Project Area and an additional three were observed within the 500-foot buffer area adjacent to the Project Area. Due to the presence of suitable habitat including presence of potential burrows within and adjacent to the Project Area, four focused BUOW surveys are to be conducted, most effectively within the BUOW breeding season (March 1 through August 31), and a 30-day preconstruction survey for BUOW is to be conducted prior to the initiation of construction to ensure protection for this species and maintain compliance with the BUOW protection measures in the MSHCP (RCTLMA 2022). The preconstruction survey shall follow the protocols set forth in the MSHCP BUOW survey guidelines (County of Riverside 2006) and the CDFG Staff Report on Burrowing Owl Mitigation (CDFG 2012).

There is potential for impacts to occur to the single ephemeral drainage feature identified within and adjacent to the Project Area. However, no riparian habitat is associated with the drainage, therefore focused riparian bird surveys are not recommended. In order to alleviate site runoff during construction, and control water quality, standard BMPs as noted above are recommended to be implemented during construction. These BMPs include clearly delineating the limits of disturbance, dust control measures, and the use of sandbags/straw wattles as appropriate. Further assessment of this feature as a jurisdictional resource is recommended.

7.0 IMPACT ANALYSIS

The Proposed Project Area is dominated by disturbed and developed land. There is an approximately 1.0-acre area with relatively undisturbed coastal sage scrub that could provide suitable habitat for several special-status plants and wildlife. Potential impacts to special-status biological resources resulting from Project activities are presented below.

7.1 Special-Status Species

Impacts to special-status species are expected to be less than significant if mitigation measures are adhered to. During the general reconnaissance survey/BUOW habitat assessment and survey that occurred in support of this document, only one special-status species was detected – the coastal California gnatcatcher. Other than this species it is not anticipated that there will be special-status species present in the Project Area. However, additional surveys and actions will need to occur prior to construction to verify presence or absence of the following species and other resources:

- Coastal California gnatcatcher
- BUOW
- Black-tailed jackrabbit
- Desert woodrat
- Stephens' kangaroo rat
- Nesting birds
- Narrow endemic plant species

The coastal California gnatcatcher was detected during the survey foraging in coastal sage scrub habitat to the south and north of the Project Area. The local landform that supports coastal sage scrub in the vicinity of the Project Area is Menifee Mountain. The original construction of McCall Boulevard cut through an extension of the Menifee Mountain landform, which created an isolated hill covered by coastal sage scrub. There is a possibility that nesting coastal California gnatcatcher could be present within and adjacent to the Project Area at the time of construction. In order to avoid potentially significant impacts to coastal California gnatcatcher (direct and indirect), it is recommended that Mitigation Measure BIO-1 be implemented. The Mitigation Measures for the Proposed Project are discussed in Section 8.0.

The Project Area is located within a designated survey area under the MSHCP for BUOW (RCA 2021). Per MSHCP requirements outlined in Section 6.3.2 in the MSHCP, focused surveys will be required on the Project Area to further ascertain presence of the species. The biological reconnaissance survey and habitat assessment determined that marginally suitable BUOW habitat, including the presence of potential burrows, was present in the Survey Area. California ground squirrel activity was also observed onsite during the survey. The soils within select portions of the Project Area appeared to have been recently disturbed, which reduces the site's suitability for BUOW. No BUOW or BUOW sign were observed during the survey. However, due to the mobile nature of the species, it is possible that BUOW

could use the site prior to the start of Project activities. There is a possibility that BUOW could be present within and adjacent to the Project Area. In order to avoid potentially significant impacts to BUOW (direct and indirect), it is recommended that Mitigation Measure BIO-2 be implemented.

Black-tailed jackrabbit and desert woodrat could utilize the sage scrub habitat that overlaps with the Project Area. There is a possibility that these two species could be present within and adjacent to the Project Area. In order to avoid potentially significant impacts to these species (direct and indirect), it is recommended that Mitigation Measure BIO-3 be implemented.

The Project Area is located within the Stephens' kangaroo rat fee assessment area that requires the payment of the appropriate fee set forth in Riverside County Ordinance No. 663 as mitigation for loss of habitat for the species (County of Riverside 2021). Stephens' kangaroo rat has a low potential to occur on the Project Area due to the marginally suitable habitat present in the coastal sage scrub habitat and loose friable soils; however, the relatively isolated nature of the site being surrounded by urban development and the recent and ongoing mechanical disturbances to soils on the Project Area likely preclude this species from occurring. To offset impacts to the species to less than significant, all applicants for development permits within the fee assessment area must pay a mitigation fee as detailed in Mitigation Measure BIO-4.

The trees on and immediately adjacent to the Project Area as well as coastal sage scrub within and adjacent to the Project Area could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. Furthermore, the Project Area could provide nesting habitat for ground-nesting bird species. In order to avoid potentially significant impacts to these species (direct and indirect), it is recommended that Mitigation Measure BIO-5 be implemented.

The western extent of the Survey Area overlaps with a MSHCP NEPSSA. The survey conducted in support of this document occurred during a time of year when many rare plant species would not be present or identifiable. Prior to construction, surveys for narrow endemic species and other rare plants should occur in suitable habitat. There is a possibility that rare plants could be present within and adjacent to the Project Area. In order to avoid potentially significant impacts to rare plants (direct and indirect), it is recommended that Mitigation Measure BIO-6 be implemented.

7.2 Sensitive Natural Communities

The Project Area does not support any sensitive natural communities. Impacts to sensitive natural communities are not anticipated as a result of this Project.

7.3 State or Federally Protected Wetlands and Waters of the United States

State or federally protected wetlands or Waters of the U.S. were not observed in the Project Area; however, a formal aquatic resource delineation was not conducted. Even if a delineation occurs, the characteristics of the drainage are such that it is anticipated that no impacts to these resources are expected to occur with implementation of BMPs.

7.4 Wildlife Corridors and Nursery Sites

The Project Area is located within and adjacent to areas containing existing disturbances (e.g., paved roads and urban development). The Project Area is disturbed and contains poor vegetative cover that would facilitate wildlife movement. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project Area. No impacts to these resources are expected to occur during the development of the Project Area.

8.0 MITIGATION MEASURES

The following section provides mitigation measures to address the potential impacts to biological resources identified in this document. Recommendations for avoiding impacts to sensitive biological resources are presented below:

BIO-1 Coastal California Gnatcatcher: The MSHCP does not have specific survey requirements for this species. However, within seven days of commencement of construction, a biologist specializing in the identification of coastal California gnatcatcher should survey the Project Area and a 500-foot buffer to determine if this species is present and/or nesting if construction is planned during the breeding season (typically Feb. 1 through August 31). If nesting behavior indicative of an active nest is detected within the Project Area, the location should be avoided until the nest becomes inactive. A biologist will establish an appropriate no-work buffer until the nest becomes inactive. Routine monitoring of the nest should occur to verify that disturbance to the nest is not occurring.

BIO-2 Preconstruction Surveys for Burrowing Owl: Due to the presence of suitable habitat, including potential burrows, four focused burrowing owl surveys shall be conducted on the Project Area and within a 500-foot buffer during the burrowing owl breeding season (March 1 through August 31) in accordance with the Western Riverside MSHCP Burrowing Owl Survey Instructions (County of Riverside 2006). If survey results are negative (i.e., no occupied burrows or live burrowing owls are detected) and ground-disturbing Project activities are scheduled to begin within 30 days of the final survey, then no additional preconstruction survey or biological monitoring requirements will be necessary. If survey results are positive (i.e., presence of occupied burrows with sign present [such as whitewash, feathers, pellets, bones of prey items] or live owls) and impacts to the species are unavoidable, then additional mitigation measures will need to be implemented to offset impacts to burrowing owl. These measures shall be developed in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012) and may include seasonal work restrictions, establishing a non-disturbance buffer around each burrow location, biological monitoring, or passive relocation. If Project ground-disturbing activities are scheduled to occur more than 30 days following the final focused burrowing owl survey, then preconstruction surveys for burrowing owl shall take place no more than 30 days prior to the start of ground-disturbing activities, regardless of whether Project activities are scheduled to occur during the burrowing owl breeding season or not. The surveys shall be performed in accordance with the Western Riverside MSHCP Burrowing Owl

Survey Instructions (County of Riverside 2006) and the CDFG Staff Report on Burrowing Owl Mitigation (CDFG 2012). If preconstruction survey results are negative, no further action is required for protection of burrowing owls. If preconstruction survey results are positive and impacts to burrowing owls are unavoidable, then additional mitigation measures will need to be implemented consistent with those described for positive focused surveys above.

BIO-3 Black-tailed Jackrabbit and Desert Woodrat: If construction activities are planned in areas with coastal sage scrub habitat then a biologist will conduct a pre-activity survey to document presence/evidence of black-tailed jackrabbit or woodrat middens. If potential jackrabbit dens are encountered the biologist will determine if there are multiple entries and collaborate with and monitor equipment operators to ensure that they slowly excavate or grade soil so that the animal(s) has(have) a chance to flee the den, and the work area. If middens are encountered the biologist will explain how to carefully deconstruct the midden with hand tools or equipment. The biologist will monitor workers during deconstruction of the midden to allow for the animal(s) to flee the midden, and work area. The biologist will indicate that deconstruction of a midden should occur carefully and start from the top portion to the lowest portion of the structure, working in thirds of the overall volume of material to the extent possible.

BIO-4 Stephens' Kangaroo Rat Mitigation Fee: All applicants for development permits within the Stephens' kangaroo rat fee assessment area must pay a mitigation fee prior for impacts to covered species and habitat. The amount of the fee required to be paid may vary depending upon a variety of factors, including the type of development application submitted and the applicability of any fee reduction or exemption provisions contained in Riverside County Ordinance No. 663.

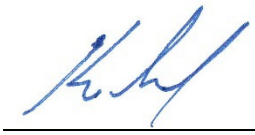
BIO-5 Preconstruction Survey for Nesting Birds: Wherever feasible, any ground-disturbing activities shall be conducted during the nonbreeding season for birds (approximately September 1 through January 31) in order to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than three days prior to the start of construction activities. The nesting bird survey shall include the Project Area and adjacent areas where Project activities have the potential to cause nest failure. If no nesting birds are observed during the survey, site preparation and construction activities may begin. If nesting birds (including nesting raptors) are found to be present, avoidance or minimization measures shall be undertaken to avoid potential Project-related impacts. Measures may include establishment of a non-disturbance buffer until nesting has been completed as determined through periodic nest monitoring by the biologist. The size of the non-disturbance buffer will be determined by the Project biologist. Typically, this is 300 feet from the nest site in all directions (500 feet

is typically recommended by CDFW for raptors) until the juveniles have fledged and there has been no evidence of a second attempt at nesting.

BIO-6 Rare Plant Surveys: Prior to construction and at the appropriate time of year, focused rare plant surveys should occur in all portions of the Project Area that could support rare plants. Surveys must occur during the typical blooming period for all species with the potential to occur within the Project Area as well as those pertaining to the NEPSSA. More than one survey may be necessary to meet this requirement, because blooming periods vary for many plant species. Surveys methods must include 100-percent survey coverage, which can be attained by walking transects spaced appropriately, and no more than 10 meters apart.

9.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or the applicant's representative and that I have no financial interest in the project.

Signed:  Date: December 9, 2022

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APPENDIX A

CNDDB Query Results (5-Mile Radius)

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
1	Bryophytes	California screw moss	8	N	20121207	4.4482851	1
	Dicots	Coulter's goldfields	76	S	20030318	2.580914223	1
			104	NW	20100609	3.904357765	1
			114	SW	20150318	2.908229497	1
		little mousetail	23	SE	19930401	2.974737914	1
		long-spined spineflower	57	S	20170512	4.326078806	1
			90	E	20060725	4.782717441	1
		Parish's brittlescale	12	E	19960509	3.197017756	1
			21	N	XXXXXXXX	3.849061256	1
		Parry's spineflower	25	W	19980423	2.517779651	1
			65	E	20060613	4.753765135	1
			66	E	19920423	2.614780186	1
			67	W	20010419	2.653535442	1
			68	SW	2003XXXX	4.604070495	1
			69	SW	2001XXXX	3.502652947	1
			70	SW	20000525	3.144617393	1
			115	SE	20050421	4.466134766	1
			143	SW	20170419	3.651975804	1
		Payson's jewelflower	7	N	19820426	4.559345529	1
			8	N	19820426	4.160886586	1
			9	N	19820426	3.884701139	1
			12	E	190204XX	2.901879513	1
		Robinson's pepper-grass	130	SW	20080415	1.157495979	1
		San Jacinto Valley crownscale	2	NW	20150605	3.479970949	1
			26	NW	2000XXXX	3.100624589	1
		smooth tarplant	12	NW	20080626	4.137906403	1
			13	N	19900725	3.77133432	1
			14	NW	20150605	4.165140341	1
			36	E	20130509	4.316919966	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
1	**Dicots**	smooth	**37**	SE	20060921	4.662099738	1
			43	SE	20150521	2.291475729	1
			44	E	19880810	4.230512309	1
			72	SW	20040527	3.872204932	1
			74	N	2000XXXX	4.106637445	1
			75	SW	XXXXXXXX	4.026293983	1
			80	E	20030612	3.482175291	1
			100	NW	20080415	3.48956005	1
			115	E	20060921	4.481415084	1
			117	SE	20130507	3.659351936	1
			118	S	20210524	3.125254699	1
			119	S	20150730	3.643773659	1
			120	SW	20170419	2.912921024	1
			126	NW	2000XXXX	3.029638905	1
			135	SW	20150414	1.921719868	1
			141	NW	2008XXXX	4.451592182	1
			147	SE	20150521	3.640067535	1
			150	SW	20130520	3.282040563	1
		spreading navarretia	**17**	NW	19950726	4.013555114	1
			46	S	20050507	2.580914223	1
			47	NW	20200616	3.998939488	1
			72	S	20150506	4.739033353	1
			74	N	2000XXXX	4.587932732	1
			90	NW	20150410	3.817502184	1
	Monocots	California Orcutt grass	**2**	S	19410608	1.312780114	1
			40	S	20150506	4.737898984	1
		Munz's onion	**21**	S	18970505	0	1
			22	SW	19620416	4.318695181	1
		thread-leaved brodiaea	**1**	NW	2000XXXX	3.406240013	1
			2	NW	20000505	3.950375103	1
			25	W	20150429	4.589083095	1
			65	N	20170406	4.275944057	1
			87	NW	20080626	4.479742865	1
2	**Amphibians**	western spadefoot	**320**	S	20050312	3.168537981	1
			335	W	20030529	2.621874156	1
			338	SE	20040310	3.577866735	1
			390	E	2006XXXX	4.398372378	1
			964	SE	20120528	4.170632708	1
			965	E	20100320	2.183807669	1
			966	SE	20050331	3.318074939	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Amphibians**	western	**967**	E	20170129	0.813590553	1
			968	N	20120516	0.919052282	1
			969	NW	20150811	0.738982238	1
			970	NW	20160209	4.295696877	1
			971	SE	20040417	2.715055102	1
			972	SE	20040417	2.240334555	1
			1005	N	20170324	4.841017736	1
			1006	N	20110315	4.410299868	1
	Arachnids	Icenogle's socalchemmis spider	**1**	E	19711103	3.567609867	1
	Birds		**2**	E	19971211	2.185090413	1
		Bell's sage sparrow	**10**	SW	20010625	3.210221404	1
			28	SE	20020604	2.680911721	1
			29	W	200004XX	2.890915946	1
			32	W	199904XX	3.226158228	1
			51	E	2006XXXX	4.978893072	1
		burrowing owl	**99**	N	19891007	2.446702844	1
			247	NW	199705XX	4.256788912	1
			424	NW	200106XX	2.781323994	1
			425	W	19990510	3.214323539	1
			442	W	2002XXXX	2.621708126	1
			448	S	20020327	4.474749517	1
			626	W	19980304	3.352549016	1
			627	W	19980304	3.591987163	1
			629	E	20020802	4.782706721	1
			630	E	20060721	1.436640905	1
			641	E	20060710	1.436640905	1
			685	S	20030819	3.323305529	1
			747	S	20050716	2.372264822	1
			762	S	2005XXXX	4.219224924	1
			953	W	20051228	2.578413266	1
			969	S	20050924	3.76018875	1
			977	E	20060621	1.436640905	1
			990	SE	20070816	4.325889066	1
			1075	SW	20050121	4.316484673	1
			1077	E	20060710	1.436640905	1
			1078	E	20060810	1.436640905	1
			1079	NE	20060712	2.42322184	1
			1080	E	20060712	1.436640905	1
			1081	E	20060721	1.436640905	1
			1082	E	20060602	1.436640905	1
			1083	E	20060721	1.436640905	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Birds**	burrowing owl	**1084**	E	20060721	1.436640905	1
			1085	E	20060710	1.436640905	1
			1086	E	20060615	1.436640905	1
			1087	E	20060615	1.436640905	1
			1088	E	20060615	1.436640905	1
			1089	E	20050606	1.436640905	1
			1090	E	2006XXXX	1.436640905	1
			1091	E	20060721	1.436640905	1
			1092	E	2006XXXX	1.436640905	1
			1093	E	2006XXXX	1.436640905	1
			1094	E	20060606	1.436640905	1
			1095	E	20060710	1.436640905	1
			1096	NE	20050620	2.42322184	1
			1517	SE	20070618	4.029220358	1
			1518	E	20060705	3.916462474	1
			1519	E	20060705	4.241957572	1
			1522	E	20060706	4.714416917	1
			1529	SW	20070616	4.169101897	1
			1530	S	20070618	3.766592858	1
			1531	S	20070618	4.10766221	1
			1532	S	20070618	4.455828185	1
			1533	S	20070618	4.670543127	1
			1534	SW	20070617	3.055131011	1
			1535	SW	20070628	2.828000961	1
			1536	SW	20070617	3.680444641	1
			1537	S	20160820	3.158819471	1
			1538	SW	20070618	2.778565034	1
			1539	S	20070618	3.070105523	1
			1540	S	20070618	3.69191883	1
			1767	NW	20070625	4.621695484	1
			1940	N	20150831	0.72441912	1
		California horned lark	**35**	W	20000331	2.892840216	1
			39	SW	20010625	3.210221404	1
			42	SE	2002XXXX	2.681490458	1
			47	S	20030321	2.202640891	1
			84	N	20150831	0.707144376	1
		coastal California gnatcatcher	**532**	W	20030330	2.473361978	1
			556	SW	20010430	3.168502146	1
			580	SW	20010625	4.638313189	1
			597	W	2001XXXX	4.29124581	1
			605	SW	20010625	3.224334531	1
			732	SE	20020418	3.970921896	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Birds**	coastal	**733**	SE	20020514	2.981802873	1
			734	SW	20020425	3.216509403	1
			736	S	20180524	4.224215241	1
			738	SW	199904XX	4.234756536	1
			739	N	200206XX	0.07013261	1
			749	W	199904XX	4.133248327	1
			750	S	19990531	0.545985633	1
			847	S	20020911	1.269796458	1
		ferruginous hawk	**1**	NE	1989XXXX	3.731713275	1
			64	SE	20080108	1.584969572	1
			65	SE	20071227	3.995215172	1
			66	S	20080108	4.404905947	1
			77	E	20060110	4.62520878	1
		golden eagle	**2**	S	19740525	0	1
		least Bell's vireo	**408**	W	20110725	4.997259278	1
		loggerhead shrike	**23**	E	2006XXXX	4.605966404	1
			24	SE	2006XXXX	4.465994989	1
			50	SE	20070330	0.748324955	1
		southern California rufous-crowned sparrow	**33**	W	19980423	2.517779651	1
			40	W	200004XX	2.890915946	1
			42	SW	20010625	3.210221404	1
			107	SE	2002XXXX	3.674850755	1
			108	SE	20020604	2.680111935	1
			113	W	199904XX	3.226158228	1
			167	SE	2005XXXX	4.296887837	1
			168	E	2006XXXX	4.781162828	1
		white-tailed kite	**115**	E	2006XXXX	4.424900431	1
	Crustaceans	Riverside fairy shrimp	**26**	SE	20040403	2.752308421	1
			35	S	20060216	4.024164594	1
	Insects	Crotch bumble bee	**211**	NE	19460722	1.912622287	1
			212	SW	200106XX	4.470986856	1
			213	W	19750713	3.394957283	1
			214	NW	19730408	4.489305208	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Insects**	quino checkerspot butterfly	**88**	SE	1997XXXX	3.399115006	1
	Mammals	Dulzura pocket mouse	**1**	E	19930708	0.674207862	1
		Los Angeles pocket mouse	**26**	E	19930708	0.674207862	1
		northwestern San Diego pocket mouse	**79**	S	19920128	1.518169946	1
		San Bernardino kangaroo rat	**79**	S	19380108	0	1
		San Diego black-tailed jackrabbit	**6**	W	19980423	2.517779651	1
			16	SW	20010625	3.210221404	1
			43	SE	19970715	3.757196407	1
			72	W	20030409	2.7731762	1
			77	E	2006XXXX	4.914418551	1
			78	E	2006XXXX	4.839181062	1
			100	N	20150831	0.750307854	1
		southern grasshopper mouse	**32**	S	19320926	0	1
			33	NW	19230923	4.489305208	1
		Stephens' kangaroo rat	**6**	W	19880910	4.494716283	1
			7	E	19880813	3.133405283	1
			28	E	200509XX	0.843515683	1
			30	NW	19230923	4.489305208	1
			36	N	19880816	0.032639507	1
			42	W	1999XXXX	2.606999496	1
			48	N	19880918	3.578966512	1
			132	NW	19880910	3.75164477	1
			133	S	19890827	3.035839768	1
			134	SW	19900927	4.323840817	1
			135	W	19980506	3.165711195	1
			136	SW	19890102	3.00898222	1
			137	S	19900124	1.13845573	1
			138	S	19880816	2.778607409	1
			140	SE	199001XX	1.144828498	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Mammals**	Stephens'	**141**	NW	19900709	4.378653577	1
			142	S	19880816	0	1
			143	SW	19880816	0.692718554	1
			144	S	19880816	0.409337345	1
			145	SW	19880816	4.676188066	1
			146	W	19980312	4.075896656	1
			190	N	19880918	3.262927056	1
			191	N	19880918	2.675280634	1
			230	NE	19980623	2.861124176	1
		western mastiff bat	**33**	SW	20010625	3.210221404	1
			81	W	19900221	0.691532327	1
		western yellow bat	**18**	NE	19870819	1.912622287	1
			30	W	19820809	0.691532327	1
	Reptiles	California glossy snake	**106**	NW	19300420	4.489305208	1
			112	W	19770716	4.66691991	1
		coast horned lizard	**4**	E	XXXXXXXX	2.901879513	1
			8	NW	19300527	4.489305208	1
			517	SE	19970715	3.757196407	1
			767	N	19290601	4.694076672	1
		coastal whiptail	**32**	SW	20010625	3.210221404	1
			48	SE	2002XXXX	3.675839507	1
			73	SE	199707XX	2.941408938	1
		orange-throated whiptail	**55**	NW	19180326	4.489305208	1
			126	N	19890611	3.55332884	1
			182	NE	19900611	3.054394878	1
			282	W	20030529	2.77852559	1
			287	W	19990510	2.745814372	1
			293	SW	20010625	3.210221404	1
			321	S	199906XX	0.555407899	1
			346	SE	199707XX	2.941408938	1
			364	S	20050327	3.939603998	1
			375	SE	19650501	4.771574808	1
			390	E	2006XXXX	4.98731319	1
			391	SE	2006XXXX	4.363782151	1
		red-diamond rattlesnake	**48**	E	19800329	1.62615364	1
			53	NE	19230516	1.912622287	1
			73	SW	20010625	3.210221404	1

Element Type	Taxonomic Group	Common Name	Occurrence #	Direction	Site Date	Miles from Project	Count of Occurences
2	**Reptiles**	red-diamond	**99**	SE	19970715	4.149183386	1
			106	SE	2006XXXX	4.043365821	1
		Southern California legless lizard	**386**	N	20161015	2.744178831	1
			387	NE	20181112	2.892994229	1
		western pond turtle	**849**	NW	1987XXXX	4.489305208	1
3	**Riparian**	Southern Cottonwood Willow Riparian Forest	**96**	S	19800504	4.185220774	1

APPENDIX B

CNPSEI Query Results (Nine-Quadrangle)

Appendix B: CNPSEI Query Results (9-Quadrangle)

Scientific Name	Common Name	Family	Lifeform	CRPR	Other Status	CESA	FESA	Blooming Period	Date Added
Abronia villosa var. *aurita*	chaparral sand-verbena	Nyctaginaceae	annual herb	1B.1	BLM_S; SB_CalBG/RSABG; USFS_S	None	None	(Jan)Mar-Sep	1/1/2001
Allium marvinii	Yucaipa onion	Alliaceae	perennial bulbiferous herb	1B.2	BLM_S; USFS_S	None	None	Apr-May	1/1/2001
Allium munzii	Munz's onion	Alliaceae	perennial bulbiferous herb	1B.1	SB_CalBG/RSABG	CT	FE	Mar-May	1/1/1980
Almutaster pauciflorus	alkali marsh aster	Asteraceae	perennial herb	2B.2		None	None	Jun-Oct	3/14/2017
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	1B.1	SB_CRES	None	FE	Apr-Oct	1/1/1974
Amsinckia douglasiana	Douglas' fiddleneck	Boraginaceae	annual herb	4.2	SB_CalBG/RSABG; SB_SBBG	None	None	Mar-May	8/20/2007
Arctostaphylos rainbowensis	Rainbow manzanita	Ericaceae	perennial evergreen shrub	1B.1	BLM_S; USFS_S	None	None	Dec-Mar	1/1/1994
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	Fabaceae	perennial shrub	1B.1	SB_CalBG/RSABG; USFS_S	None	None	Dec-Jun	1/1/1994
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	Chenopodiaceae	annual herb	1B.1	SB_CalBG/RSABG	None	FE	Apr-Aug	1/1/1988
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	1B.1	SB_CRES; USFS_S	None	None	Jun-Oct	1/1/1988
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	SB_CalBG/RSABG	None	None	Apr-Oct	1/1/1994
Ayenia compacta	California ayenia	Malvaceae	perennial herb	2B.3	SB_CalBG/RSABG	None	None	Mar-Apr	1/1/1974
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	1B.1	SB_CalBG/RSABG; SB_SBBG	CE	FE	(Feb)Mar-Jun	1/1/1980
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	1B.1	SB_CalBG/RSABG; SB_CRES	CE	FT	Mar-Jun	1/1/1974

Appendix B: CNPSEI Query Results (9-Quadrangle)

Scientific Name	Common Name	Family	Lifeform	CRPR	Other Status	CESA	FESA	Blooming Period	Date Added
Brodiaea santarosae	Santa Rosa Basalt brodiaea	Themidaceae	perennial bulbiferous herb	1B.2	USFS_S	None	None	May-Jun	2/5/2008
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	SB_CalBG/RSABG; SB_SBBG	None	None	(Feb)Mar-Jun	1/1/1974
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	4.2	SB_CalBG/RSABG	None	None	May-Jul	1/1/1994
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	1B.2	SB_CalBG/RSABG; USFS_S	None	None	May-Jul	1/1/1994
Carex buxbaumii	Buxbaum's sedge	Cyperaceae	perennial rhizomatous herb	4.2		None	None	Mar-Aug	1/1/2001
Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	4.2	USFS_S	None	None	(Feb)Mar-May(Jun)	1/1/1974
Centromadia pungens ssp. *laevis*	smooth tarplant	Asteraceae	annual herb	1B.1	SB_CalBG/RSABG	None	None	Apr-Sep	1/1/1994
Chorizanthe leptotheca	Peninsular spineflower	Polygonaceae	annual herb	4.2		None	None	May-Aug	1/1/1994
Chorizanthe parryi var. *parryi*	Parry's spineflower	Polygonaceae	annual herb	1B.1	BLM_S; SB_CalBG/RSABG; USFS_S	None	None	Apr-Jun	1/1/1994
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	Polygonaceae	annual herb	1B.2	BLM_S; SB_CalBG/RSABG; SB_CRES	None	None	Apr-Jul	1/1/1994
Clinopodium chandleri	San Miguel savory	Lamiaceae	perennial shrub	1B.2	BLM_S; SB_CRES; USFS_S	None	None	Mar-Jul	1/1/1974
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	4.2	SB_CRES	None	None	Mar-Jul	1/1/1994
Cryptantha wigginsii	Wiggins' cryptantha	Boraginaceae	annual herb	1B.2		None	None	Feb-Jun	5/21/2013
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	4.2		None	None	(Mar)Apr-Nov	1/1/2001

Appendix B: CNPSEI Query Results (9-Quadrangle)

Scientific Name	Common Name	Family	Lifeform	CRPR	Other Status	CESA	FESA	Blooming Period	Date Added
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	1B.1	SB_CalBG/RSABG	CE	FE	Apr-Jun	1/1/1980
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	1B.2	SB_CalBG/RSABG; USFS_S	None	None	Apr-Jul	1/1/1974
Eryngium aristulatum var. *parishii*	San Diego button-celery	Apiaceae	annual/perennial herb	1B.1	SB_CalBG/RSABG; SB_CRES	CE	FE	Apr-Jun	1/1/1974
Erythranthe diffusa	Palomar monkeyflower	Phrymaceae	annual herb	4.3	SB_CalBG/RSABG	None	None	Apr-Jun	1/1/1974
Geothallus tuberosus	Campbell's liverwort	Sphaerocarpaceae	ephemeral liverwort	1B.1	IUCN_CR	None	None		1/1/2001
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	4.2	SB_CalBG/RSABG; SB_CRES	None	None	Mar-May	1/1/1980
Hesperocyparis forbesii	Tecate cypress	Cupressaceae	perennial evergreen tree	1B.1	BLM_S; SB_CalBG/RSABG; SB_CRES; SB_UCSC; SB_USDA; USFS_S	None	None		1/1/1974
Holocarpha virgata ssp. *elongata*	graceful tarplant	Asteraceae	annual herb	4.2	SB_CRES	None	None	May-Nov	1/1/1994
Hordeum intercedens	vernal barley	Poaceae	annual herb	3.2	SB_CalBG/RSABG	None	None	Mar-Jun	1/1/1994
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	4.2	IUCN_NT; SB_CalBG/RSABG; SB_USDA	None	None	Mar-Aug	1/1/1994
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	4.2	SB_CalBG/RSABG; SB_CRES	None	None	(Mar)May-Jun	1/1/1988
Juncus luciensis	Santa Lucia dwarf rush	Juncaceae	annual herb	1B.2	BLM_S; USFS_S	None	None	Apr-Jul	4/30/2009
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	1B.1	BLM_S; SB_CalBG/RSABG; SB_SBBG	None	None	Feb-Jun	1/1/1994

Scientific Name	Common Name	Family	Lifeform	CRPR	Other Status	CESA	FESA	Blooming Period	Date Added
Lathyrus splendens	pride-of-California	Fabaceae	perennial herb	4.3	SB_CalBG/RSABG	None	None	Mar-Jun	1/1/1974
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	4.3		None	None	Jan-Jul	1/1/1994
Lilium humboldtii ssp. *ocellatum*	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	SB_CalBG/RSABG; SB_CRES	None	None	Mar-Jul(Aug)	1/1/1980
Lilium parryi	lemon lily	Liliaceae	perennial bulbiferous herb	1B.2	SB_CalBG/RSABG; USFS_S	None	None	Jul-Aug	1/1/1974
Limnanthes alba ssp. *parishii*	Parish's meadowfoam	Limnanthaceae	annual herb	1B.2	BLM_S; SB_CalBG/RSABG; SB_USDA; USFS_S	CE	None	Apr-Jun	1/1/1974
Microseris douglasii ssp. *platycarpha*	small-flowered microseris	Asteraceae	annual herb	4.2	SB_CRES	None	None	Mar-May	1/1/2001
Monardella hypoleuca ssp. *intermedia*	intermediate monardella	Lamiaceae	perennial rhizomatous herb	1B.3		None	None	Apr-Sep	10/16/2012
Myosurus minimus ssp. *apus*	little mousetail	Ranunculaceae	annual herb	3.1	SB_CRES	None	None	Mar-Jun	1/1/1980
Nama stenocarpa	mud nama	Namaceae	annual/perennial herb	2B.2		None	None	Jan-Jul	1/1/1994
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	1B.1	SB_CalBG/RSABG; SB_CRES	None	FT	Apr-Jun	1/1/1980
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	1B.2		None	None	Apr-Jul	1/1/2001
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	1B.1	SB_CalBG/RSABG; SB_CRES	CE	FE	Apr-Aug	1/1/1974
Polygala cornuta var. *fishiae*	Fish's milkwort	Polygalaceae	perennial deciduous shrub	4.3		None	None	May-Aug	1/1/1974
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	2B.2		None	None	(Jul)Aug-Nov(Dec)	11/3/2006

Appendix B: CNPSEI Query Results (9-Quadrangle)

Scientific Name	Common Name	Family	Lifeform	CRPR	Other Status	CESA	FESA	Blooming Period	Date Added
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	4.2	IUCN_EN	None	None	Mar-Jun	1/1/1988
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	4.2	SB_CalBG/RSABG	None	None	Mar-Jul(Aug)	1/1/1974
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	1B.2	SB_CalBG/RSABG; USFS_S	None	None	Jun-Aug	1/1/1994
Sibaropsis hammittii	Hammitt's clay-cress	Brassicaceae	annual herb	1B.2	SB_CalBG/RSABG; USFS_S	None	None	Mar-Apr	1/1/2001
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	2B.2	USFS_S	None	None	Mar-Jun	1/1/1994
Sphaerocarpos drewiae	bottle liverwort	Sphaerocarpaceae	ephemeral liverwort	1B.1	IUCN_EN	None	None		1/1/2001
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	SB_CalBG/RSABG; SB_CRES; USFS_S	None	None	Jul-Nov	1/1/2004
Texosporium sancti-jacobi	woven-spored lichen	Caliciaceae	crustose lichen (terricolous)	3		None	None		3/1/2014
Tortula californica	California screw moss	Pottiaceae	moss	1B.2	BLM_S	None	None		1/1/2001
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	Asteraceae	annual herb	2B.1		None	None	May-Sep	1/1/1988
Viguiera laciniata	San Diego County viguiera	Asteraceae	perennial shrub	4.3	SB_CalBG/RSABG; SB_CRES	None	None	Feb-Jun(Aug)	1/1/1974

APPENDIX C

IPaC Query Results

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat Dipodomys merriami parvus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3495	Threatened

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Western Snowy Plover Charadrius nivosus nivosus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8035

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad Anaxyrus californicus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3762	Endangered
California Red-legged Frog Rana draytonii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Quino Checkerspot Butterfly Euphydryas editha quino (=E. e. wrighti) Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/5900	Endangered

Crustaceans

NAME	STATUS

Riverside Fairy Shrimp Streptocephalus woottoni — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/8148

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/498

Flowering Plants

NAME	STATUS

California Orcutt Grass Orcuttia californica — Endangered

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/4923

Munz's Onion Allium munzii — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/2951

San Diego Ambrosia Ambrosia pumila — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/8287

San Diego Button-celery Eryngium aristulatum var. parishii — Endangered

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/5937

San Jacinto Valley Crownscale Atriplex coronata var. notatior Wherever found There is **final** critical habitat for this species. However, no *actual* acres or miles were designated due to exemptions or exclusions. See Federal Register publication for details. https://ecos.fws.gov/ecp/species/4353	Endangered
Slender-horned Spineflower Dodecahema leptoceras Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4007	Endangered
Spreading Navarretia Navarretia fossalis Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/1334	Threatened
Thread-leaved Brodiaea Brodiaea filifolia Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Coastal California Gnatcatcher Polioptila californica californica https://ecos.fws.gov/ecp/species/8178#crithab	Final
Quino Checkerspot Butterfly Euphydryas editha quino (=E. e. wrighti) https://ecos.fws.gov/ecp/species/5900#crithab	Final

Spreading Navarretia	Navarretia fossalis https://ecos.fws.gov/ecp/species/1334#crithab	Final
Thread-leaved Brodiaea	Brodiaea filifolia https://ecos.fws.gov/ecp/species/6087#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird *Selasphorus sasin* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Tern *Chlidonias niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093	Breeds May 15 to Aug 20
Black-chinned Sparrow *Spizella atrogularis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Bullock's Oriole *Icterus bullockii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Thrasher *Toxostoma redivivum* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

Clark's Grebe *Aechmophorus clarkii* — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat *Geothlypis trichas sinuosa* — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Golden Eagle *Aquila chrysaetos* — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch *Carduelis lawrencei* — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit *Limosa fedoa* — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Mountain Plover *Charadrius montanus* — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3638

Nuttall's Woodpecker *Picoides nuttallii* — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse *Baeolophus inornatus* — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events

for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

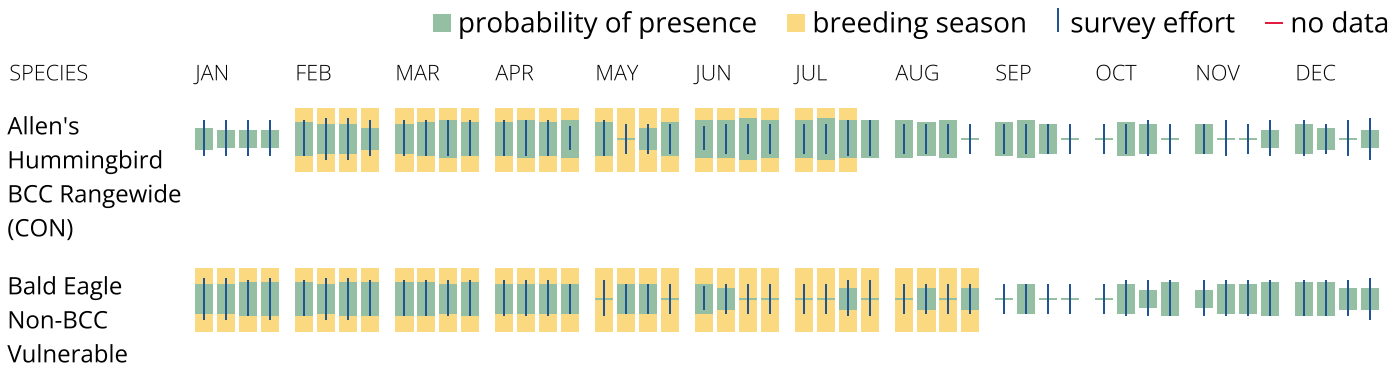
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

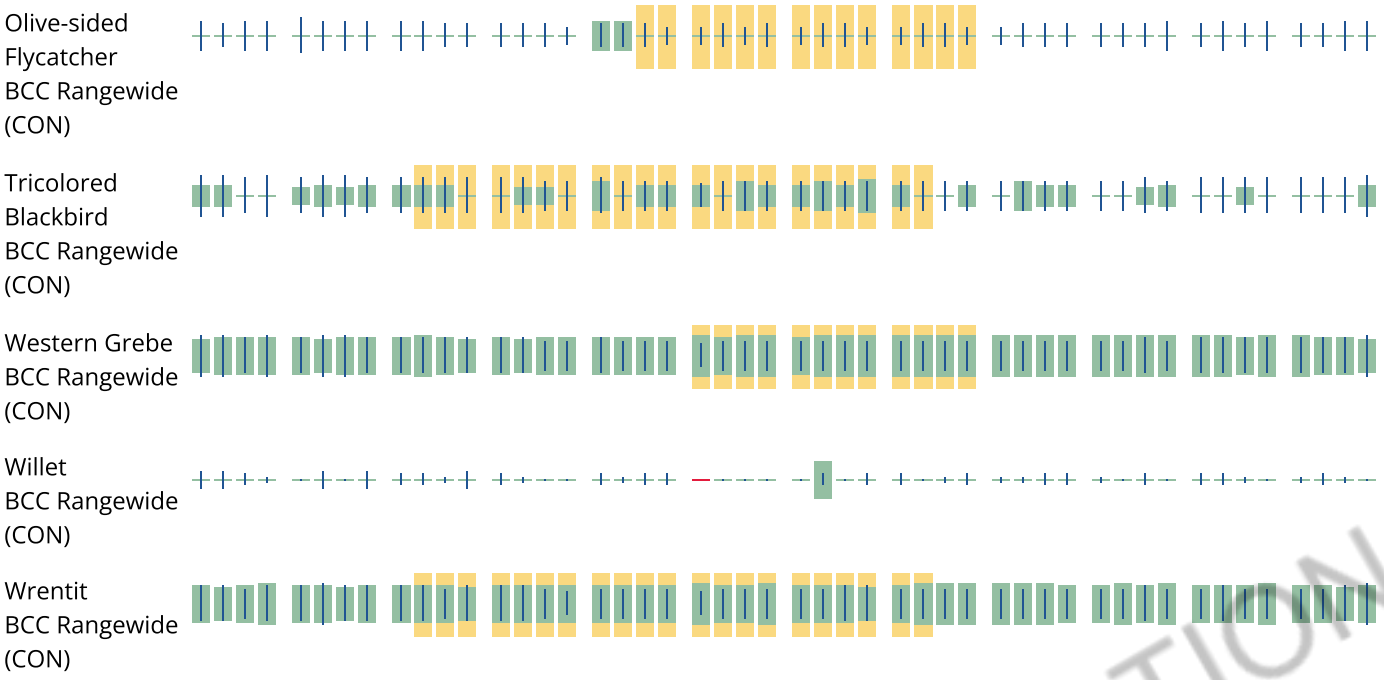
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX D

Plant Species Compendium

Scientific Name	Common Name
VASCULAR PLANTS	
ANGIOSPERMS (DICOTYLEDONS)	
AMARANTHACEAE	**AMARANTH FAMILY**
*Amaranthus albus**	pigweed amaranth
ASTERACEAE	**SUNFLOWER FAMILY**
Ambrosia acanthicarpa	annual bursage
Artemisia californica	California sagebrush
Baccharis salicifolia	mulefat
*Cardus pycnocephalus**	Italian thistle
Encelia farinosa	brittlebush
Erigeron canadensis	horseweed
Heterotheca grandiflora	telegraph weed
Holocarpha sp.	narrow tarplant
*Oncosiphon pilulifer**	stinknet
Pseudognaphalium californicum	California everlasting
*Sonchus sp.**	sowthistle
Stephanomeria exigua	small wirelettuce
BIGNONIACEAE	**BIGNONIA FAMILY**
Chilopsis linearis	desert willow
BORAGINACEAE	**BORAGE FAMILY**
Amsinckia intermedia	common fiddleneck
BRASSICACEAE	**MUSTARD FAMILY**
*Hirschfeldia incana**	short-podded mustard
Brassica spp.*	mustard spp.
BORAGINACEAE	**BORAGE FAMILY**
Phacelia sp.	phacelia
CACTACEAE	**CACTUS FAMILY**
Cylindropuntia bernardina	valley cholla
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
*Chenopodium murale**	nettle leaf goosefoot
*Salsola tragus**	Russian thistle; tumbleweed
CRASSULACEAE	**STONECROP FAMILY**
Dudleya lanceolata	lanceleaf liveforever
EUPHORBIACEAE	**SPURGE FAMILY**
Croton setiger	dove weed
FABACEAE	**PEA FAMILY**
*Acacia sp.**	acacia species
Acmispon glaber	deerweed
*Medicago polymorpha**	bur clover
GERANIACEAE	**GERANIUM FAMILY**
*Erodium cicutarium**	coastal heron's bill
LAMIACEAE	**MINT FAMILY**
Salvia apiana	white sage
Salvia mellifera	black sage

MALVACEAE	**MALLOW FAMILY**
*Malva parviflora**	cheeseweed mallow
MYRTACEAE	**MYRTLE FAMILY**
*Eucalyptus sp.**	gum tree
NICTAGINACEAE	**FOUR O'CLOCK FAMILY**
Mirabilis laevis	desert wishbone bush
PHRYMACEAE	**LOPSEED FAMILY**
Diplacus sp.	monkeyflower species
POLYGONACEAE	**BUCKWHEAT FAMILY**
Eriogonum deflexum	flat topped buckwheat
Eriogonum fasiculatum	California buckwheat
PORTULACACEAE	**PORTULACA FAMILY**
*Portulaca oleracea**	common purslane
SALICACEAE	**WILLOW FAMILY**
Salix laevigata	red willow
Salix sp.	willow species
SOLANACEAE	**NIGHTSHADE FAMILY**
Datura wrightii	Jimson weed
*Nicotiana glauca**	tree tobacco
TAMARICACEAE	**TAMARISK FAMILY**
*Tamarix sp.**	tamarisk species
VIBURNACEAE	**HONEYSUCKLE FAMILY**
Sambucus nigra	black elderberry
ANGIOSPERMS (MONOCOTYLEDONS)	
CYPERACEAE	**SEDGE FAMILY**
Cyperus sp.	flat sedge species
POACEAE	**GRASS FAMILY**
*Avena fatua**	wild oat
*Bromus sp.**	bromus species
*Bromus diandrus**	ripgut brome
*Cynodon dactylon**	bermuda grass
*Lamarckia aurea**	goldentop grass
*Poa annua**	annual blue grass
*Polypogon monspeliensis**	annual beard grass
*Schismus sp.**	shismus species

*non-native species

APPENDIX E

Wildlife Species Compendium

Scientific Name	Common Name
REPTILIA (REPTILES)	
Phrynosomatidae	**Spiny Lizards, Horned Lizards, etc.**
Sceloporus occidentalis	western fence lizard
Uta stansburiana elegans	side-blotched lizard
AVES (BIRDS)	
Accipitridae	**Hawks, Kites, & Eagles**
Buteo jamaicensis	red-tailed hawk
Columbidae	**Pigeons and Doves**
Zenaida macroura	mourning dove
Corvidae	**Jays and Crows**
Corvus corax	common raven
Falconidae	**Falcons**
Falco sparverius	American kestrel
Fringillidae	**Finches**
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch
Icteridae	**Blackbirds**
Sturnella neglecta	western meadowlark
Mimidae	**Mockingbirds & Thrashers**
Mimus polyglottos	northern mockingbird
Toxostoma redivivum	California thrasher
Odontophoridae	**New World Quails**
Callipepla californica	California quail
Passerellidae	**New World Sparrows**
Artemisiospiza nevadensis	sagebrush sparrow
Melozone crissalis	California towhee
Passerculus sandwichensis	savannah sparrow
Zonotrichia leucophrys	white-crowned sparrow
Passeridae	**Old World Sparrows**
*Passer domesticus**	house sparrow
Polioptilidae	**Gnatcatchers & Gnatwrens**
*Polioptila californica californica***/****	coastal California gnatcatcher
Sylviidae	**Sylviid Warblers**
Chamaea fasciata	wrentit
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's wren
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Tyrannus vociferans	Cassin's kingbird

* nonnative species

**Species of Special Concern (SSC)

*** Federally-Listed (Threatened) Species

APPENDIX F

Representative Photographs

Photo 1. View of coastal sage scrub in the foreground and ornamental landscaping and McCall Boulevard within developed land in the background, facing southwest.

Photo 2. View of ornamental landscaping within developed land and open water, facing east.

Photo 3. View of disturbed (ruderal) land in the foreground and midground, ephemeral drainage in the midground, and citrus orchards within developed land in the background, facing northwest.

Photo 4. View of coastal sage scrub north of McCall Boulevard, facing west.

Photo 5. View of disturbed area at western extent of survey area, facing west.

Photo 6. Representative photo of potentially suitable BUOW burrow (no sign), facing south.