

APPENDIX B

Biological Technical Report

Biological Technical Report

North Bench Recycled Water System Project

San Bernardino County, California

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	CNPS Electronic Inventory
CWA	Clean Water Act

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
ESA	Endangered Species Act
GPS	Global Positioning System
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Project	Oak Valley-Summerwind Offsite Sewer Project
ROW	Right-of-way
SSA	Streambed Alteration Agreement
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
YVWD	Yucaipa Valley Water District

1.0 INTRODUCTION

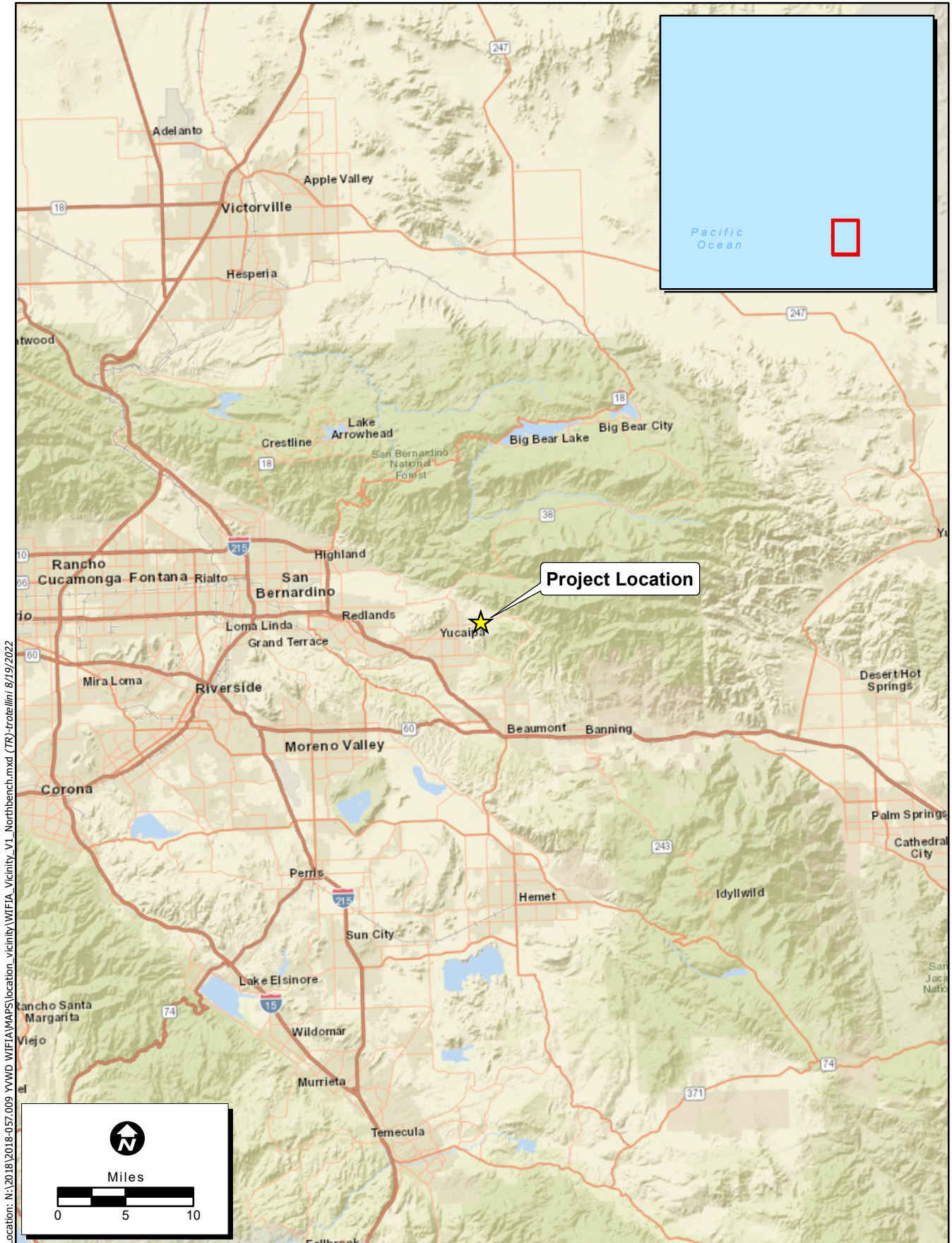
ECORP Consulting, Inc. conducted a biological reconnaissance survey for the Yucaipa Valley Water District's (YVWD) proposed North Bench Recycled Water System Project (Project) in the City of Yucaipa, San Bernardino County, California. The survey was conducted to identify any potential biological resources that could be affected by the Proposed Project, pursuant to the terms of the California Environmental Quality Act (CEQA) and for the purposes of identifying any biological constraints that would affect the proposed site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), and California Fish and Game Code.

1.1 Project Location

The Project site is located in the city of Yucaipa, San Bernardino County (Figure 1). The Project site, as depicted on the U.S. Geological Survey (USGS) 7.5-minute Yucaipa and Forest Falls topographic quadrangles, lies within Sections 28, 29, 30, 31, 32, and 33 of Township 1 South, and Range 1 West (Figure 2). The Project is located approximately 4 miles northeast of the junction of Interstate 10 and Oak Glen Road, and San Bernardino National Forest lands are located to the north and south, less than 1 mile away. The topography surrounding the site consists of flat terrain and gently to moderately rolling hills and foothills, all scattered with grasses and scrub vegetation. Most of the Project is located within the existing public right-of-way (ROW), within the paved roadways, and is surrounded by a combination of undeveloped, low to medium-density residential, and commercial uses. Specifically, the proposed Project pipeline is located within the existing ROW along Oak Glen Road, with extensions from this main pipeline in James Birch Road, Lan Franc Road, Chagall Road, and Martell Avenue to reach booster and reservoir locations. Five smaller areas of the Project are not located within the paved roadway, including 14.1 booster pumping plant (booster), the 16.2, 17.2, and 18.2 booster and recycled water tank (tank) sites, and 20.1 tank site (Figure 3). The proposed location of the 14.1 booster is within a developed existing YVWD water facility and the 16.2 booster/tank site and the 20.1 tank site are planned to occur on partially developed land adjacent to existing YVWD water facilities. The locations for the 17.2 and 18.2 booster/tank sites are within undeveloped land south of Oak Glen Road. The elevation of the Project Site ranges from approximately 2,845 feet to 3,775 feet above mean sea level.

1.2 Project Characteristics

The recycled water distribution system consists of a series of boosters, pipelines, and reservoirs. This Project will extend the eastern most segment of the system from the 14 zone to the future 20 zone to make recycled water service available for current and planned developments in the area (Figures 2 and 3). The first (westernmost) booster station (B-14.1) would be located at the Yucaipa Valley Regional Water Filtration Facility (YVRWFF) at 35477 Oak Glen Road, Yucaipa, California 92399 within the existing footprint at the water plant. The second booster station (B-16.2) and first reservoir (R-16.2) would be located north of Oak Glen Road approximately one mile east of the YVRWFF adjacent to an existing reservoir. The third booster station (B-17.2) and second reservoir (R-17.2) would be located at the eastern end of Lan Franc Road, south of Oak Glen Road. The fourth booster station (B-18.2) and third reservoir (R-18.2) would be located south of Oak Glen Road within undisturbed land.



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Figure 1. Project Vicinity

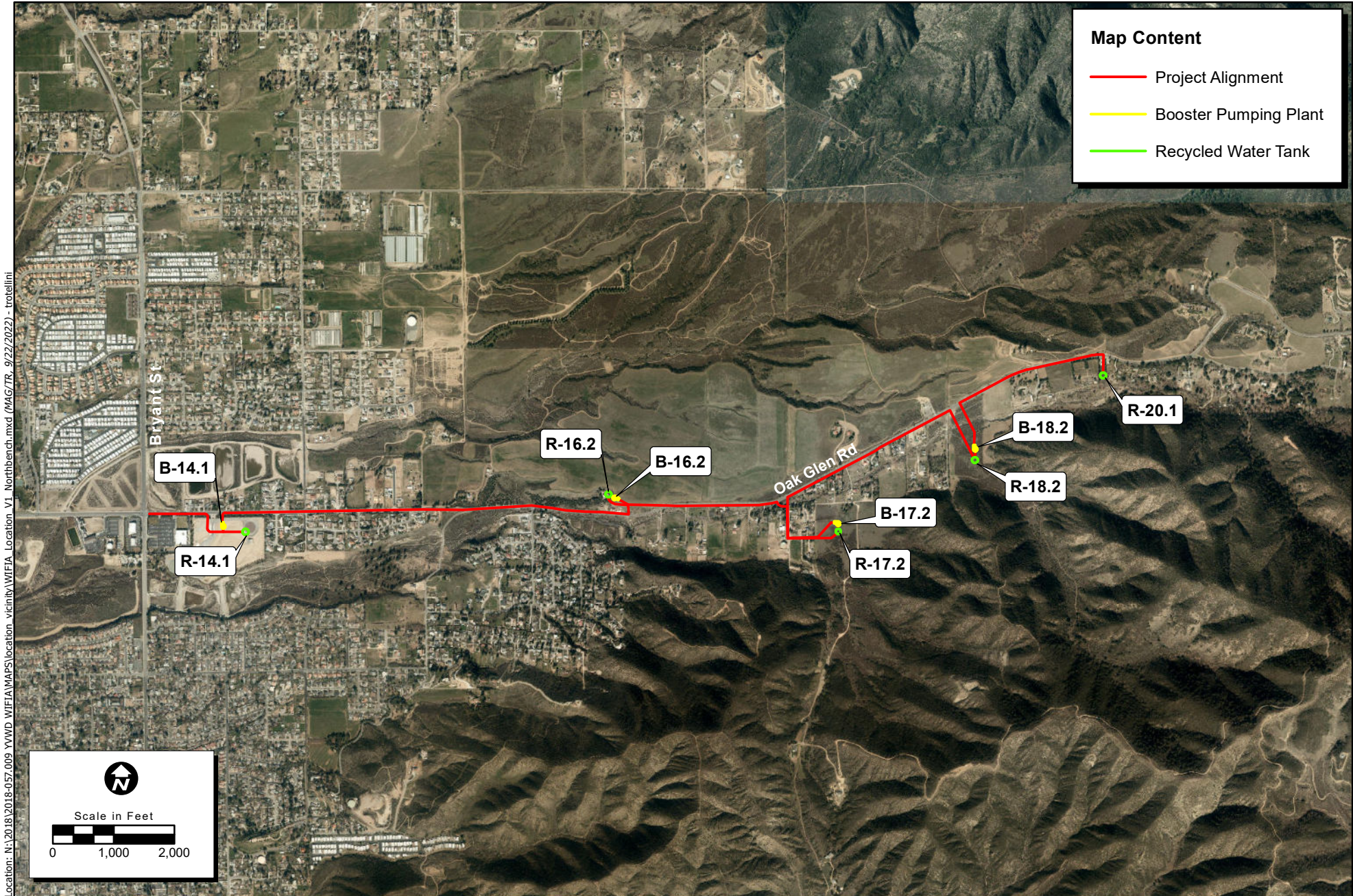
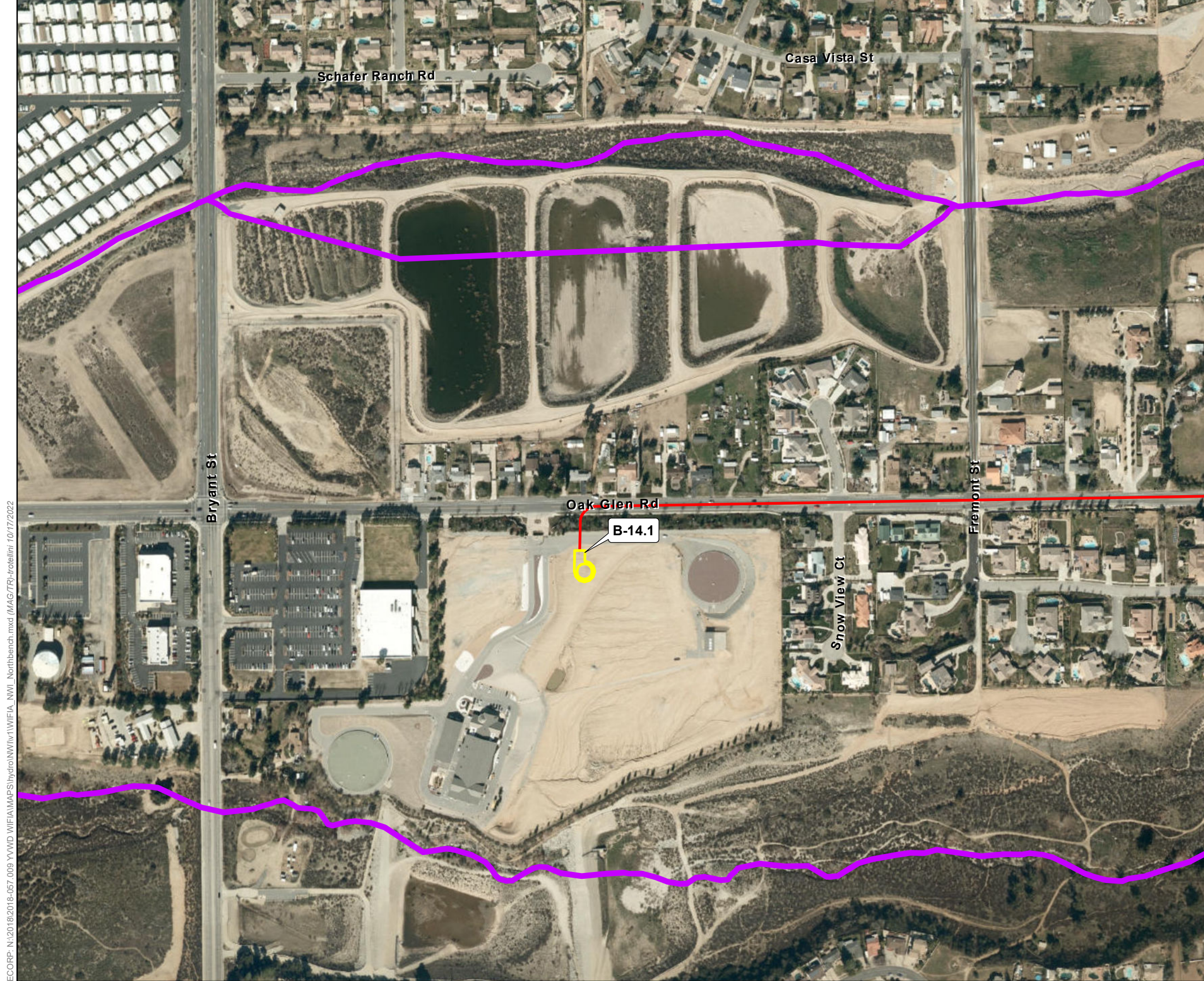


Figure 2. Project Location

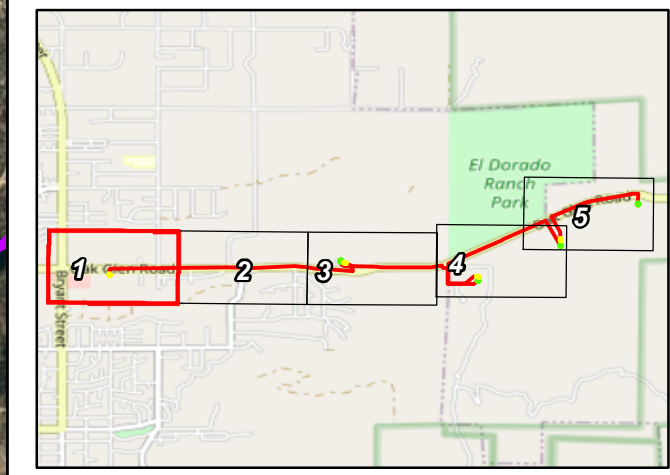
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- Map Features**
- Project Alignment
 - Booster Pumping Plant
- NWI Features**
- Riverine

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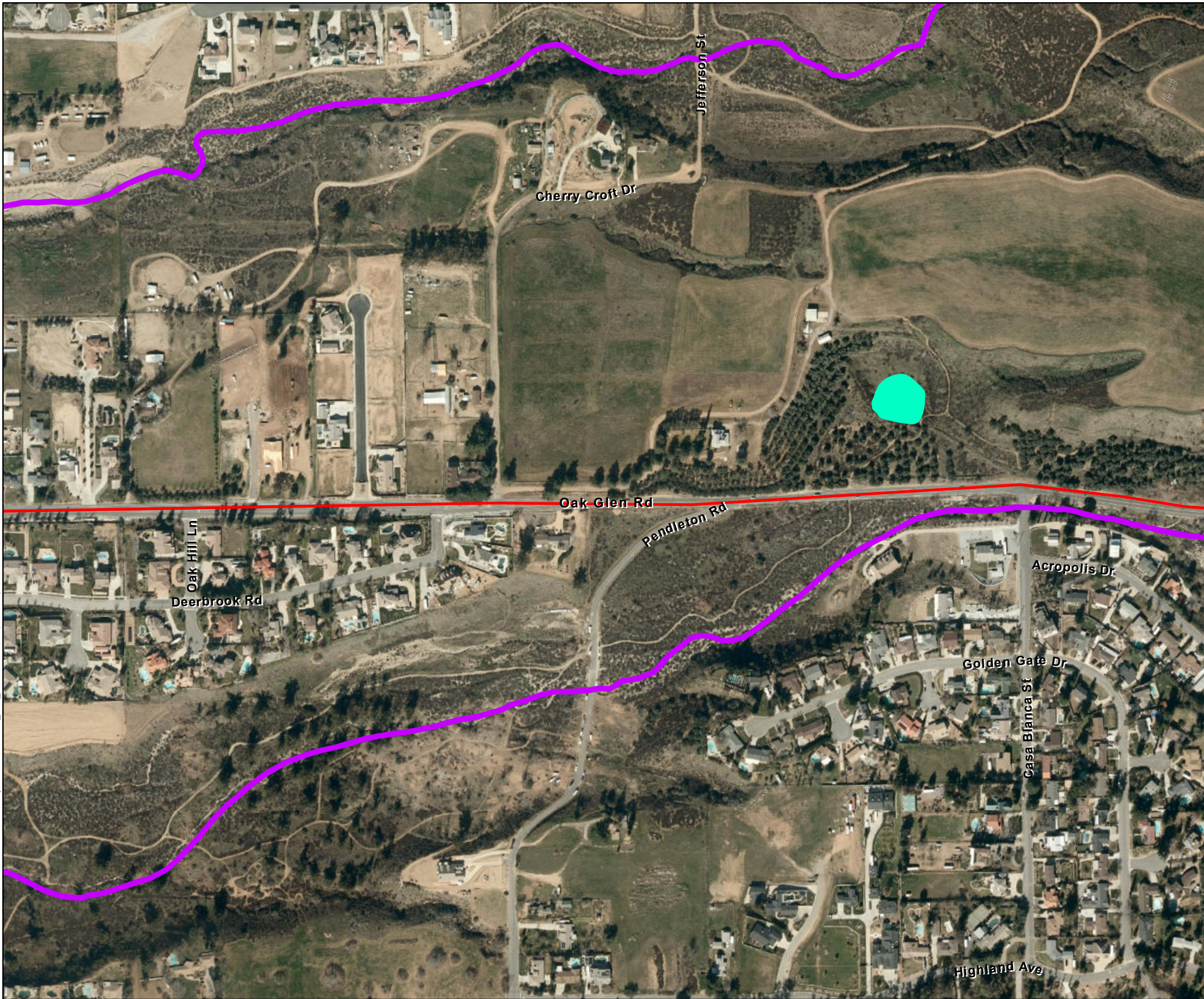


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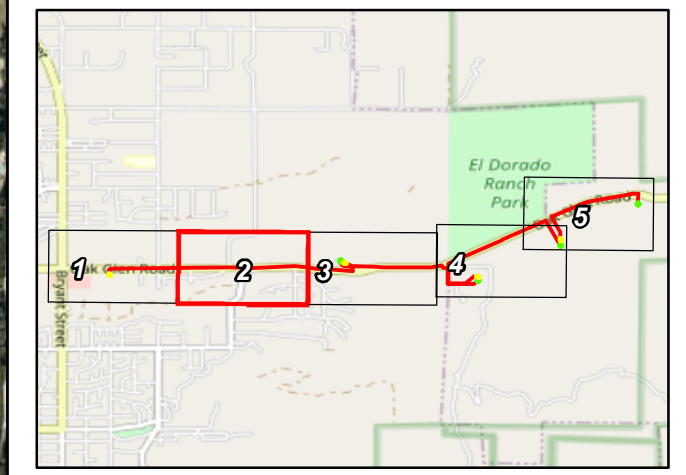
Figure 3. National Wetlands Inventory
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- Project Alignment
- NWI Features**
- Freshwater Pond
 - Riverine

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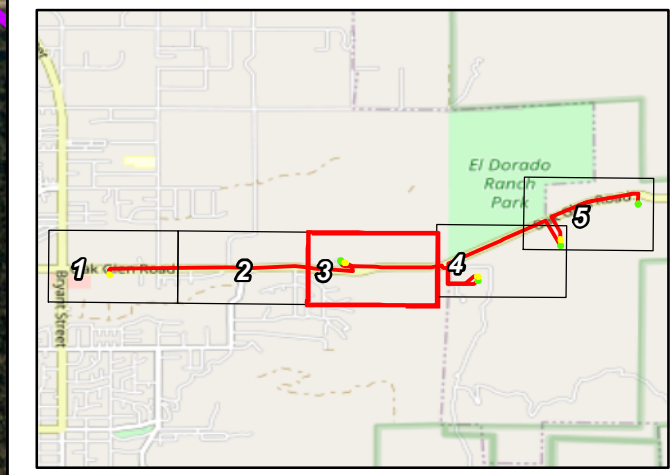
Figure X-X. National Wetlands Inventory
Sheet 2 of 5
2018-057.009 WIFIA Projects - North Bench RW System



- Map Features**
- Project Alignment
 - Booster Pumping Plant
 - Recycled Water Tank
- NWI Features**
- Riverine

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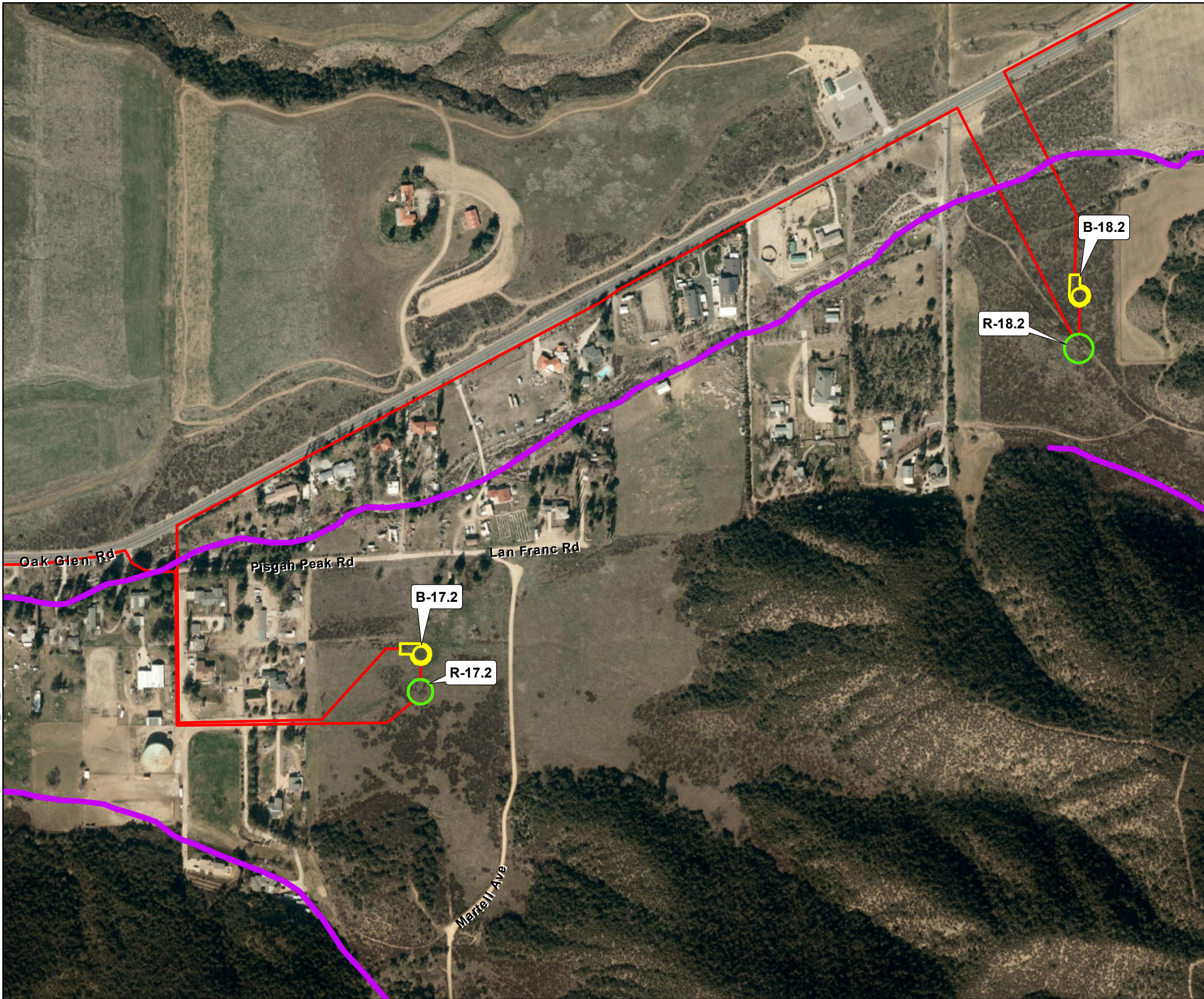
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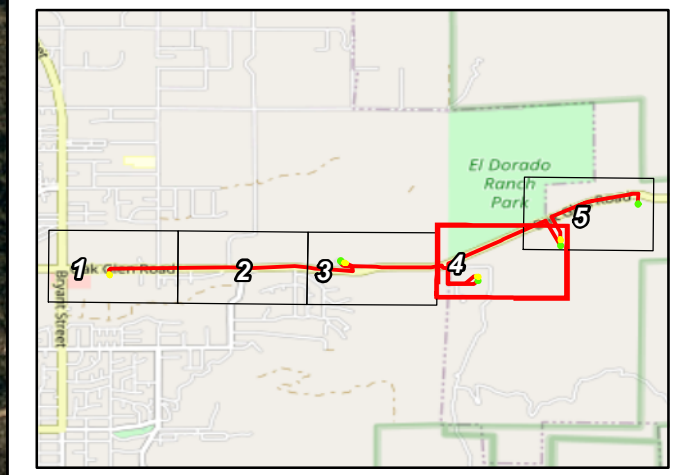


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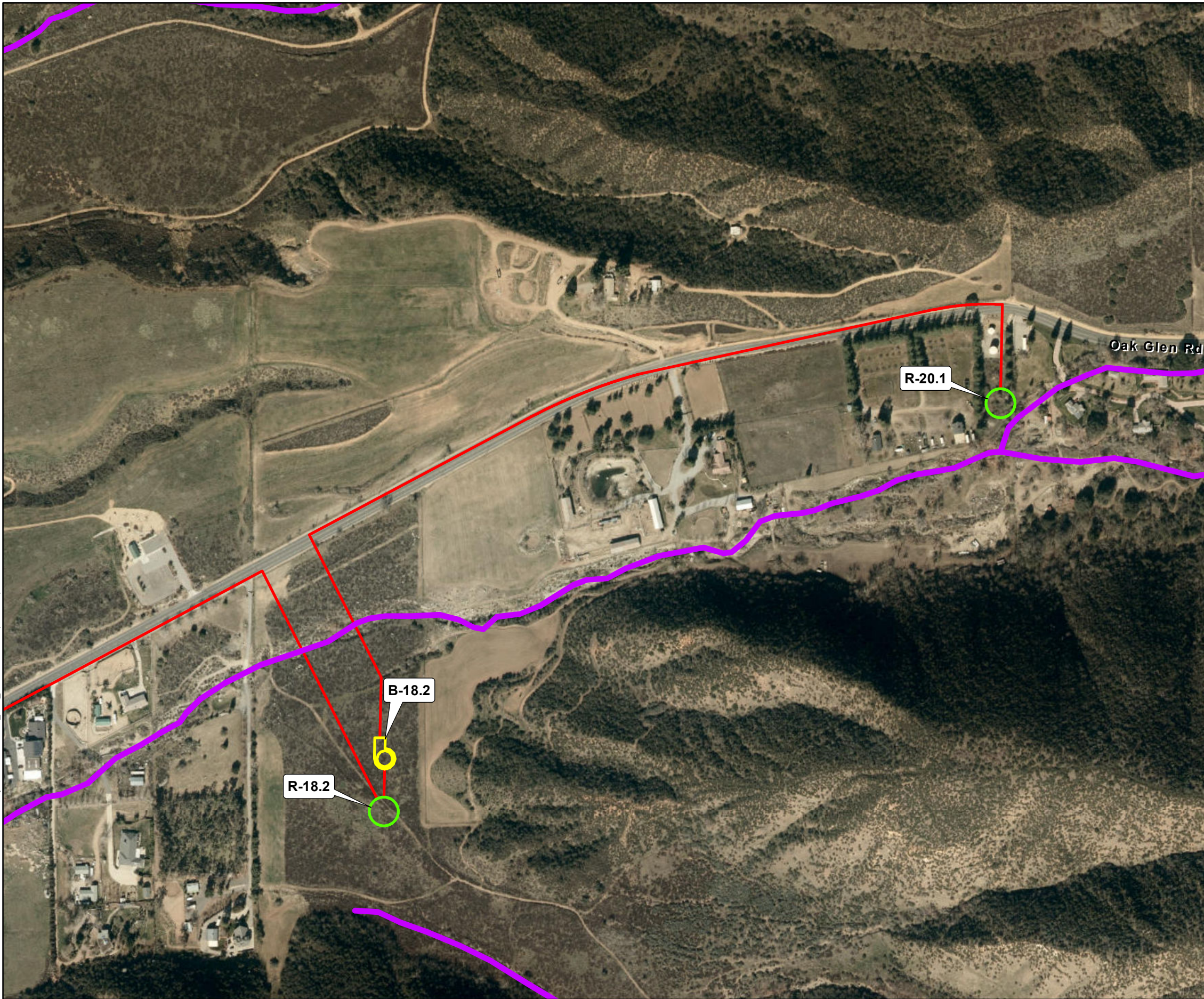


- Map Features**
- Project Alignment
 - Booster Pumping Plant
 - Recycled Water Tank
- NWI Features**
- Riverine

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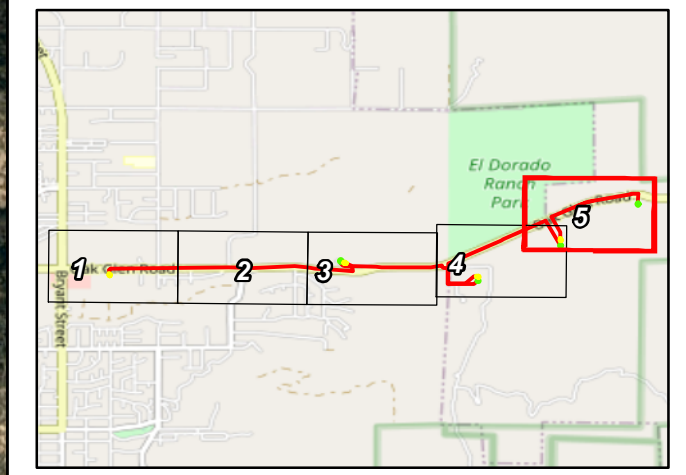


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- Project Alignment
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Map Date: 10/17/2022



Figure X-X. National Wetlands Inventory
Sheet 5 of 5
2018-057.009 WIFIA Projects - North Bench RW System

The fourth (easternmost) reservoir (R-20.1) would be constructed south of Oak Glen Road adjacent to an existing reservoir approximately two miles east of the first reservoir. The 3.4-mile pipeline to connect these facilities would be constructed in the existing roadway along Oak Glen Road with pipeline with extensions from this main pipeline in James Birch Road, Lan Franc Road, Chagall Road, and Martell Avenue to reach booster and reservoir locations. Diesel emergency backup generators will be included at each booster location. The Project comprises approximately 4.0 acres of disturbance (2.4 acres of pipeline and 1.6 acres of other facilities).

2.0 SPECIAL-STATUS SPECIES REGULATIONS

This biological reconnaissance survey was conducted to identify potential biological resource constraints 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 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 (ITPs) where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 Migratory Bird Treaty Act

The 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 including 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

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.” Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) acts as a cooperating agency to set policy, guidance, and criteria for use in evaluation permit applications and also reviews USACE permit applications.

The USACE regulates “fill” or dredging of fill material within its jurisdictional features. “Fill material” means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. Per regulations passed in 2020, called the Navigable Waters Protection Rule, the USACE no longer takes jurisdiction over Waters of the U.S. that are deemed as ephemeral in hydrological regime.

The Regional Water Quality Control Board (RWQCB) regulates water quality issues under Section 401 of the CWA. For instances where a Section 404 permit is required, the permit is called a Water Quality Certification. If a Section 404 permit is not required, the RWQCB may issue either a Notice of Applicability or a Report of Waste Discharges under the Porter-Cologne Water Quality Control Act.

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 the 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 and California ESAs. 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 federal or California ESAs. 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 ITPs 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 California Fish and Game Commission (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 draft Streambed Alteration Agreement (SAA) for measures to protect affected fish and wildlife resources. The final SAA is obtained once the measures contained within are mutually agreed upon by CDFW and the applicant.

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 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds 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 the 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, NCCP, 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 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 the CDFW's California Natural Diversity Database (CNDDDB; CDFW 2022a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2022) to determine the special-status plant and wildlife species that have been documented near the Project Site. ECORP searched CNDDDB and CNPSEI records within the Project Site boundaries as depicted on USGS 7.5-minute Yucaipa and Forest Falls topographic quadrangles, plus the surrounding ten topographic quadrangles including Harrison Mountain, Keller Peak, Big Bear Lake, Moonridge, San Gorgonio Mountain, Cabazon, Beaumont, El Casco, Sunnymead, and Redlands. The CNDDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), or other special-status species or habitat that may occur within or near the Project. 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); and
- various online websites (e.g., Calflora 2022; USFWS 2022b).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project Site 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, 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; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

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 Site based on the following guidelines:

Present: The species was observed on site during a site visit or focused survey.

High: Habitat (including soils and elevation factors) for the species occurs within the Project Site and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.

Moderate: Habitat (including soils and elevation factors) for the species occurs within the Project Site and a documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Site; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project Site.

Low: Limited or marginal habitat for the species occurs within the Project Site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

Presumed Absent: Species was not observed during a site visit (if it was a species expected to be observed) or during focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project Site.

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.

A review of the Natural Resources Conservation Service (NRCS 2022) National Wetlands Inventory (NWI; (USFWS 2022a), National Hydrology Dataset (USGS 2022), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project Site that potentially fall under the jurisdiction of either federal or state agencies.

3.2 Field Survey

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking and driving all areas of the Project alignment to determine the vegetation communities and wildlife habitats present on and adjacent to the site. Areas that were not accessible by foot were scanned using binoculars for suitable habitat. The biologist documented the plant and animal species present on the Project Site, and the location and condition of the Project Site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project Site. The Project Site 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 documented the vegetation communities present on the Project Site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. 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 (2017), *Checklist of North American Birds* (Chesser et al. 2020), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in North American Datum 1983, Universal Transverse Mercator coordinates, Zone 11S.

4.0 RESULTS

Summarized below are the results of the literature review and field surveys including site characteristics, vegetation communities, 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 literature review and database searches identified 85 special-status plant species and 49 special-status wildlife species that could occur near the Project Site. A list was generated from the results of the

literature review and the Project Site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list.

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

The Project Site is not located within any USFWS-designated critical habitat. Southwestern willow flycatcher designated critical habitat is present approximately 0.02 mile south of the Project Site on the east end of the alignment. Impacts are not expected to the critical habitat because the critical habitat is not in the immediate area of the Project Site.

4.1.3 State- or Federally Protected Wetlands and Waters of the United States

The desktop review of the NWI showed one mapped aquatic feature (Oak Glen Creek) within the Project Site. The Project pipelines connecting the 17.2 and 18.2 booster/tanks cross this aquatic feature in four locations sites (Figure 3, Sheets 4 and 5). The NWI mapping designation (R4SBC) indicates a Riverine, Intermittent Streambed that is Seasonally Flooded (USFWS 2022a). The USGS topographic map shows a mapped blue-line stream in the same location as the aquatic drainage feature mapped within the NWI (USGS 2022). This feature was also confirmed in the field.

4.2 Biological Reconnaissance Survey

The biological reconnaissance surveys were conducted on September 13, 2022, and October 14, 2022 by ECORP wildlife biologist Phillip Wasz with assistance from biologist Chelsie Brown. Mr. Wasz has extensive experience conducting reconnaissance- and protocol-level surveys for wildlife and plant species in southern California. Summarized below are the results of the biological reconnaissance survey including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 4-1.

Date	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	end	Min	Max	min	max	min	max
9/13/2022	0745	1030	65	73	85	85	0-3	0-3
10/14/2022	0830	0930	62	66	100	100	0-3	0-3

4.2.1 Property Characteristics

Most of the Project pipeline is located within the existing ROW along Oak Glen Road with shorter segments located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road. There are five areas within the alignment that extend beyond existing road ROWs: the 14.1 booster site is located at the western end of the alignment at an existing YVWD water facility; the 16.2 booster/tank site and the 20.1 tank site occur adjacent to existing YVWD water facilities on partially

developed land; and 17.2 and 18.2 booster/tank sites are located within undeveloped land south of Oak Glen Road. Disturbances located within the ROW portion of the Project Site included paved roads and residential and commercial developments. The primary disturbances observed in the Project Areas located outside of the ROW included vehicle tracks, fire breaks, and discing. Most of the Project is bounded by open space and low- to medium-density residential development, with some commercial development. At the time of the survey, the area had recently experienced a large mudslide event along Oak Glen Road and within Oak Glen Creek. Water was observed running down sections of Oak Glen Road and flowing within Oak Glen Creek. Mudslide clean-up activities could create additional disturbances to the Project Site. Representative site photographs are presented in Appendix A.

The following soils are present on the Project Site and on the land adjacent to the paved ROW:

- Greenfield sandy loam, 2- to 9-percent slopes
- Hanford coarse sandy loam, 2- to 9-percent slopes
- Oak glen gravelly sandy loam, 9- to 15-percent slopes
- Saugus sandy loam, 30- to 50-percent slopes
- Soboba gravelly loamy sand, 0- to 9-percent slopes
- Tujunga loamy sand, 0- to 5-percent slopes

4.2.2 Vegetation Communities

Vegetation communities present on the Project Site include California buckwheat scrub and nonnative grassland. There were also two land cover types, developed and disturbed, present within the Project alignment. These plant communities are briefly described below. A full list of plant species observed on and immediately adjacent to the Project Site is included in Appendix B.

4.2.2.1 California Buckwheat Scrub

California buckwheat scrub habitat is present at the 17.2 and 18.2 booster/tank sites, located within undeveloped land south of Oak Glen Road. The 17.2 booster/tank site is located south of Chagall Road and east of Lan Franc Road toward the center of the Project alignment. The second location, the 18.2 booster/tank, occurs in the eastern portion of the Project alignment where the alignment changes from a northwest to a southeast direction. This community is typically dominated or codominated by California buckwheat (*Eriogonum fasciculatum*). Vegetation at the time of survey ranged from an intermittent to continuous canopy with shrubs less than 4 feet tall. Plant species within this community that were present on the Project Site include Menzies' fiddleneck (*Amsinckia menziesii*), bromegrass (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), California buckwheat, and slender buckwheat (*Eriogonum gracile*). Photographs 6 and 8 in Appendix A depict the California buckwheat scrub present within the Project Site.

4.2.2.2 Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. 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. Disturbed habitat was identified north and south of Oak Glen Road in two of the areas adjacent to an existing YVWD water facility (16.2 booster/tank and 20.1 tank). This land cover is present on an isolated slope adjacent to an existing water tank. This patch was surrounded by nonnative grassland to the east. It is likely that this disturbed area had been cleared and graded in the past. The disturbed habitat was largely devoid of native vegetation was dominated by nonnative weedy and ruderal vegetation. Plants present in this land cover type within the Project Site included nonnative weedy species such as black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), short-podded mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola tragus*) but also included a few native species including ragweed (*Ambrosia* sp.), California buckwheat, and phacelia (*Phacelia* sp.). One nonnative sapling, tree tobacco (*Nicotiana glauca*), was present within this land cover type and was approximately 10 feet tall at the time of the survey.

4.2.2.3 Nonnative Grassland

Nonnative grassland was present adjacent to the disturbed land cover and occurs north of Oak Glen Road at the 16.2 booster/tank site, in an area adjacent to an existing YVWD water facility's access road. Nonnative grassland communities are largely devoid of native vegetation due to human disturbance and are dominated by open areas of nonnative grasses including nonnative weedy and ruderal vegetation. Vegetation height at the time of survey ranged from approximately 1 foot to 3.5 feet. Plants present in this community onsite included primarily nonnative grass species such as wild oat (*Avena fatua*), bromegrass, and cheatgrass. Soils within this community appeared mechanically disturbed (e.g., disced) and were loose and friable at the time of the survey.

4.2.2.4 Developed

The majority of the Project Site occurs within the existing paved road ROW and consists of developed land cover. Developed is not a vegetation classification, but rather a land cover type. Areas identified as developed have been constructed upon or otherwise physically altered to an extent that natural vegetation communities are no longer supported. Areas classified as developed were heavily disturbed due to paved roads and low- to medium-density residential development with some commercial development. Portions of the developed areas on the Project Site contained small strips of ornamental and landscaped vegetation. The 14.1 booster site and the 20.1 tank site, as well as the existing public ROW, contained developed land cover.

4.2.3 Wildlife

Wildlife species observed and detected on the Project Site, or adjacent, were characteristic of California buckwheat scrub, nonnative grassland, and disturbed habitat as well as developed areas. Four mammal species were detected on and in the vicinity of the Project Site: coyote (*Canis latrans*), Botta's pocket

gopher (*Thomomys bottae*), mule deer (*Odocoileus hemionus*), and California ground squirrel (*Otospermophilus beecheyi*). Eight bird species were also detected on and in the vicinity of the Project site including red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), acorn woodpecker (*Melanerpes formicivorus*), California towhee (*Melospiza crissalis*), and European starling (*Sturnus vulgaris*). Due to the level of human activity and majority of the Project alignment occurring within developed areas, the property represents relatively low-quality habitat for most wildlife species. A complete list of wildlife species observed on or immediately adjacent to the Project Site is included in Appendix C.

4.2.4 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site

The literature review and database searches identified 85 special-status plant species and 49 special-status wildlife species that occur on or near the Project Site. However, with the majority of the Project alignment contained within the existing paved road ROW, many of the species are presumed absent from the Project Site.

4.2.4.1 Special-Status Plants

No special-status plant species were observed during the biological survey. There were 85 special-status plant species that appeared in the literature review and database searches for the Project Site (CDFW 2022a; CNPS 2022). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. Because the majority of the alignment is located within paved roadways, the discussion of the potential for special-status plant species to occur applies only to the four areas of the alignment that occur in undeveloped or partially developed areas north and south of Oak Glen Road. Of the 85 special-status plants identified, eight species were determined to have a high potential, two species have a moderate potential, and one species has a low potential to occur on the Project Site. The remaining species identified in the literature review are presumed absent from the Project Site.

For the purposes of this study, the results of the literature review were limited to vascular plant species occurring within a 12-quadrangle search of the Project Site. With various habitat types occurring within the 12-quadrangle search, several species appeared in the literature review results that had no potential to occur on or near the Project Site. Additionally, for the purposes of this study, plant species with a CNPS Rare Plant Rank of 1A were eliminated from the analysis because they are presumed to be extirpated from California. Additionally, CNPS Rare Plant Rank 3 or 4 species were eliminated from the analysis because these rankings are considered a review list and a watch list, respectively, and if present these Rank 3 and 4 species are not expected to occur in high density. Descriptions of the CNPS designations can be found in Table 4-2.

Table 4-2. CNPS Status Designations	
List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, but Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
List 1B, 2, and 4 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened / moderate degree and immediacy of threat)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.4.2 Plant Species with a High Potential to Occur

Eight species have a high potential to occur on the Project Site because habitat for the species occurs within the Project Site and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area. The special-status plant species with a high potential to occur are listed below and also detailed in Appendix D.

Chaparral Sand-Verbena (*Abronia villosa* var. *aurita*)

Chaparral sand-verbena is not a federally or state-listed species but does have a CRPR status of 1B.1. The plant species is an annual herb and is typically found in chaparral, coastal scrub, and desert dune habitats. The species is often found in sandy soils. Suitable coastal scrub habitat is present on the Project Site at the proposed locations of the 17.2 and 18.2 booster/tank sites in the California buckwheat scrub community. One recent record (Occurrence # 69) from 2009 occurs approximately 3 miles away (CDFW 2022a). Due to the suitable coastal scrub habitat present on the Project Site in two locations and the recent record within 5 miles, this species has a high potential to occur on the Project Site.

Nevin's Barberry (*Berberis nevinii*)

Nevin's barberry is a federally (endangered) and state-listed (endangered) species and has a CRPR status of 1B.1. The plant species is an annual herb that is endemic to California. The species is typically found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitat and is often in sandy or gravelly soils. Suitable coastal scrub habitat is present on the Project Site at the 17.2 and 18.2 booster/tank sites, where California buckwheat scrub is present. One recent record (Occurrence # 4) from

2009 occurs approximately 3 miles away from the Project Site (CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project Site, this species has been determined to have a high potential to occur on the Project Site.

Parry's Spineflower (*Chorizanthe parryi* var. *parryi*)

Parry's spineflower is not a federally or state-listed species but does have a CRPR status of 1B.1. The plant species is an annual herb that is endemic to California. This species is typically found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitat. The species is generally associated with larger alluvial plains and is often found in sandy or rocky openings. Suitable coastal scrub habitat occurs on the Project Site in the two areas with California buckwheat scrub (17.2 and 18.2 booster/tank sites). Twenty-two (22) recent records have been recorded within 5 miles of the Project Site with the most recent ones (Occurrence # 5, 138, and 151) being from 2018, located approximately 4 miles away (Occurrence # 5 and 138) and 2 miles away (Occurrence # 151; CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project Site, this species has been determined to have a high potential to occur on the Project Site.

White-Bracted Spineflower (*Chorizanthe xanti* var. *leucotheca*)

White-bracted sunflower is not a federally or state-listed species but does have a CRPR status of 1B.2. It is an annual herb that is endemic to the Coachella Valley. This species is typically found in coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon and juniper woodland with sandy or gravelly soils. The Project Site contains suitable coastal scrub habitat in the areas containing California buckwheat scrub (17.2 and 18.2 booster/tank sites). This species has been documented near the Project area 12 times within the past 20 years with the closest record occurring less than one mile from the Project site (Occurrence # 34) in 2011 (CDFW 2022a). Due to the suitable coastal scrub habitat present on the Project site in two locations and the recent records documented within 5 miles, this species has a high potential to occur on the Project site.

Mojave Tarplant (*Deinandra mohavensis*)

Mojave tarplant is a state-listed (endangered) species and has a CRPR status of 1B.3. The plant species is an annual herb that is endemic to California. This species is typically found in chaparral, coastal scrub, and riparian scrub habitats and is often found in mesic soils. Suitable coastal scrub habitat occurs on the Project site in the two areas with California buckwheat scrub (17.2 and 18.2 booster/tank sites). There are two recent records (Occurrences # 8 and 78) located approximately 4.5 and 4 miles away respectively from 2003 and 2012 (CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project site, this species has been determined to have a high potential to occur on the Project site.

California Satintail (*Imperata brevifolia*)

California satintail is not a federally or state-listed species but does have a CRPR status of 2B.1. The plant species is a perennial rhizomatous herb and is typically found in chaparral, coastal scrub, Mojavean desert scrub, alkaline meadows and seeps, and riparian scrub habitats. This herb species is often found in mesic soils. The Project site contains suitable coastal scrub habitat in the areas containing California buckwheat

scrub (17.2 and 18.2 booster/tank sites). One recent record (Occurrence # 1040) from 2010 occurs approximately 3 miles southeast of the Project site (CDFW 2022a). Due to the suitable coastal scrub habitat present on the Project site in two locations and the recent record documented within 5 miles, this species has a high potential to occur on the Project site.

Salt Spring Checkerbloom (*Sidalcea neomexicana*)

Salt spring checkerbloom is not a federally or state-listed species but does have a CRPR status of 2B.2. It is a perennial herb and is typically found chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas in mesic, alkaline soils. The Project site contains suitable coast scrub habitat within the California buckwheat scrub vegetation community. The 17.2 and 18.2 booster/tank sites are the two areas within the Project site that contain this suitable habitat. One recent record occurs within 5 miles with the record occurring less than 1 mile southeast of the Project site in 2011 (Occurrence # 23; CDFW 2022a). Due to the suitable coastal scrub habitat present on the Project site and the recent record within 5 miles, this species has a high potential to occur on the Project site.

San Bernardino Aster (*Symphyotrichum defoliatum*)

San Bernardino aster is not a federally or state-listed species but does have a CRPR status of 1B.2. It is a perennial rhizomatous herb that is endemic to California. This species is typically found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic) habitat. The species is often found in disturbed areas and near ditches, streams, or springs. Suitable coastal scrub habitat occurs on the Project site in the two areas with California buckwheat scrub (17.2 and 18.2 booster/tank sites). The 18.2 booster/tank site also has a small stream, Oak Glen Creek, running through it that could offer marginally suitable habitat. This species was documented approximately 2 miles away in 2010 (Occurrence # 105; CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the documented record of the species within 5 miles of the Project site, this species has a high potential to occur on the Project site.

4.2.4.3 Plant Species with a Moderate Potential to Occur

Two plant species were found to have a moderate potential to occur on the Project site. The site provides marginal or limited amounts of habitat (including soils and elevation factors) onsite in the disturbed nonnative grassland community and recently documented observations occur within 5 miles of the Project site; or a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site. The special-status plant species with moderate potential to occur are listed below and detailed in Appendix D.

- Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*), CRPR 1B.1
- Mesa horkelia (*Horkelia cuneata* var. *puberula*), CRPR 1B.1

4.2.4.4 Plant Species with a Low Potential to Occur

The following species has a low potential to occur on the Project site because limited or marginal habitat for these species occurs on site and a recently documented observation occurs within the database

search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search. The special-status plant species with low potential to occur is listed below and detailed in Appendix D.

- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*), CRPR 2B.2

4.2.4.5 Special-Status Wildlife

No special-status wildlife species were observed during the survey of the site. Of the 49 special-status wildlife species identified in the literature review, one was found have a high potential to occur, eight have a moderate potential to occur, and 10 have a low potential to occur on the Project Site. The remaining species are presumed absent from the Project Site.

4.2.4.6 Wildlife Species with a High Potential to Occur

One special-status wildlife species was determined to have a high potential to occur on the Project Site because habitat for the species occurs within the Project Site and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area. The special-status wildlife species with a high potential to occur is described below and detailed in Appendix E.

Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)

Northwestern San Diego pocket mouse is a CDFW SSC that is typically found in sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland habitats. Suitable habitat for this species is present in the California buckwheat scrub and nonnative grassland habitats on the Project site. Nine records of this species are documented within 5 miles of the Project site with the closest record being 2 miles away in 2016 (CDFW 2022a). Due to the presence of suitable habitat for this species and the recent documented records near the Project site, this species has been determined to have a high potential to occur on the Project site within the California buckwheat scrub and nonnative grassland habitats.

4.2.4.7 Wildlife Species with a Moderate Potential to Occur

Eight special-status wildlife species were found to have a moderate potential to occur on the Project site. The site provides marginal or limited amounts of habitat (including soils and elevation factors) onsite in the California buckwheat scrub and nonnative grassland communities and recently documented observations occur within 5 miles of the Project site; or a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site. The special-status wildlife species with moderate potential are listed below and detailed in Appendix E.

- California glossy snake (*Arizona elegans occidentalis*), CDFW SSC
- Coast horned lizard (*Phrynosoma blainvillii*), CDFW SSC
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*), CDFW SSC

- Loggerhead shrike (*Lanius ludovicianus*), CDFW SSC
- Purple martin (*Progne subis*), CDFW SSC
- Western yellow bat (*Lasiurus xanthinus*), CDFW SSC
- San Diego desert woodrat (*Neotoma lepida intermedia*), CDFW SSC
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), CDFW SSC

4.2.4.8 Wildlife Species with a Low Potential to Occur

The following 10 species have a low potential to occur on the Project site because limited or marginal habitat for these species occurs on site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search. The special-status wildlife species with low potential to occur are listed below and detailed in Appendix E.

- Western spadefoot (*Spea hammondi*), CDFW SSC
- Red-diamond rattlesnake (*Crotalus ruber*), CDFW SSC
- Burrowing owl (*Athene cunicularia*), CDFW SSC
- Golden eagle (*Aquila chrysaetos*), CDFW Fully Protected
- Swainson's hawk (*Buteo swainsoni*), state listed (threatened)
- White-tailed kite (*Elanus leucurus*), CDFW Fully Protected
- Coastal California gnatcatcher (*Polioptila californica californica*), federally listed (threatened) and CDFW SSC
- Yellow warbler (*Setophaga petechia*), CDFW SSC
- Pallid bat (*Antrozous pallidus*), CDFW SSC
- American badger (*Taxidea taxus*), CDFW SSC

4.2.5 Raptors and Migratory Birds

Suitable nesting habitat for numerous species of migratory birds protected under the federal MBTA and California Fish and Game Code is present on the Project Site in the ornamental trees along the developed portion of the Project and within the shrubs in the undeveloped areas. Therefore, nesting birds could use the Project site during the nesting bird season (typically February 1 through August 31).

4.2.6 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a

corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. Most of the Project site occurs within the existing paved public ROW. The existing ROW portion of the Project site as well as the proposed locations of 14.1 booster/tank site and the 20.1 tank site are bordered by residential and commercial development which greatly reduces the areas value as a wildlife movement corridor. The proposed locations of the 17.2 and 18.2 booster/tank sites likely provide wildlife movement opportunities because they consist of open and unimpeded land. In addition, the shrubs in these areas could provide some cover for larger animals. Although most of the Project is within the existing paved road ROW, the surrounding area north of much of Oak Glen Road is open and unimpeded land. Wildlife could cross the Project site on the paved road in this area. Although the Project is situated along Oak Glen Creek, this drainage would not provide movement corridors for wildlife. Additionally, the disturbances from vehicles on the paved road ROW (Oak Glen Road) would likely deter wildlife from moving through the area. Therefore, the Project site is not considered a linkage or corridor between natural habitat areas.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project site is generally classified as developed land primarily (paved surfaces) except for the five areas where boosters and reservoirs would be constructed and where the pipeline alignment travels north and south of Oak Glen Road to connect the boosters and reservoirs to the main pipeline in Oak Glen Road. Two of the Project Areas south of Oak Glen Road (17.2 and 18.2 booster/tank sites) contain undeveloped land with California buckwheat scrub. The Project areas north of Oak Glen Road (16.2 booster/tank site) occurs on partially developed land adjacent to existing YVWD water facility on nonnative grassland and disturbed land cover. The 20.1 tank site also occurs on partially developed land adjacent to an existing YVWD water facility. The final area proposed outside of the public ROW (14.1 booster site) is located at a developed existing YVWD water facility. Based on the presence of suitable habitat and documented records of the species within 5 miles of the Project site, eight special-status plant species (chaparral sand-verbena, Nevin's barberry, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California satintail, salt spring checkerbloom, and San Bernardino aster) identified in the literature review and database searches have a high potential to occur on the Project site. Additionally, two special-status plant species (Jaeger's milk-vetch and mesa horkelia) have a moderate potential to occur, and one plant species (Sonoran maiden fern) has a low potential to occur. However, special-status plant species potential was limited to the four areas of the alignment that occur in undeveloped or partially developed

areas north and south of Oak Glen Road. If present, direct impacts to one or all these species could occur in the form of direct take (mortality) during grading or construction when the Project is constructed. However, these species are of relative low levels of sensitivity and the site is not expected to support large numbers of either species. Impacts to special-status plant species could be considered significant under CEQA; however, implementation of mitigation measure BIO-1 will reduce impacts to a level that is less than significant.

The literature review and database searches identified 49 special-status wildlife species that occur in the vicinity of the Project site. Of those 49 species, one species, northwestern San Diego pocket mouse, was determined to have a high potential to occur within the California buckwheat scrub and nonnative grassland habitats on the Project site. If present, this CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. However, due to the lack of high-quality habitat within the impact area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, this species is only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to northwestern San Diego pocket mouse would not be considered significant and additional surveys and mitigation are not necessary.

A total of eight species were determined to have moderate potential to occur on the Project site: California glossy snake, coast horned lizard, coast patch-nosed snake, loggerhead shrike, purple martin, western yellow bat, San Diego desert woodrat, and Los Angeles pocket mouse. Six of the species (California glossy snake, coast horned lizard, coast patch-nosed snake, western yellow bat, San Diego desert woodrat, and Los Angeles pocket mouse) are CDFW SSC species that could occur on the Project site. If present, these CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. However, due to the lack of high-quality habitat within the impact area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, these species are only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to coast horned lizard, coast patch-nosed snake, western yellow bat, San Diego desert woodrat and Los Angeles pocket mouse would not be considered significant and additional surveys and mitigation are not necessary.

The remaining two species with moderate potential to occur include two CDFW SSC bird species (loggerhead shrike and purple martin). Marginally suitable nesting and foraging habitat for these species is present within and adjacent to the Project Site. If present, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. Impacts to loggerhead shrike and purple martin could be considered significant under CEQA; however, implementation of Mitigation Measure BIO-2 will reduce impacts to a level that is less than significant.

A total of 10 species were determined to have low potential to occur on the Project site: western spadefoot, red-diamond rattlesnake, burrowing owl, golden eagle, Swainson's hawk, white-tailed kite,

coastal California gnatcatcher, yellow warbler, pallid bat, and American badger. Four of the species (western spadefoot, red-diamond rattlesnake, pallid bat, and American badger) are CDFW SSC species that could, but are unlikely to occur on the Project Site. If present, these CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. However, due to the lack of high-quality habitat within the impact area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, these species are only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to western spadefoot, red-diamond rattlesnake, pallid bat, and American badger would not be considered significant and additional surveys and mitigation are not necessary.

The remaining six species with low potential to occur include two CDFW SSC bird species (burrowing owl and yellow warbler), two CDFW fully protected species (golden eagle and white-tailed kite), and two state-listed (threatened) species (Swainson's hawk and coastal California gnatcatcher). Marginally suitable low-quality nesting and foraging habitat for these special-status bird species is present within and adjacent to the Project site. However, due to the lack of high-quality habitat within the impact area, the site's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, these species are not likely to occur. If present, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project site. Impacts to these species could be considered significant under CEQA; however, implementation of Mitigation Measures BIO-2, BIO-3, and BIO-4 will reduce impacts to a level that is less than significant.

Large shrubs and trees and some of the grassland habitat on the Project site could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code. If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect nesting birds and other birds protected by the MBTA and their nests through the removal of habitat on the Project site, and indirectly through increased noise, vibrations, and increased human activity. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measures BIO-3 and BIO-4.

5.2 Sensitive Natural Communities

The vegetation communities and land cover types on the Project site included nonnative grassland, California buckwheat scrub, and disturbed/developed areas. None of these vegetation communities or land cover types are considered sensitive natural communities. Therefore, no impacts to sensitive natural communities are anticipated to result from the development of this Project.

5.3 State and Federally Protected Wetlands and Waters of the United States

Oak Glen Creek occurs within and adjacent to the Project alignment and could be considered an aquatic resource jurisdictional to the USACE, CDFW, and RWQCB. The Project pipeline alignment crosses Oak Glen

Creek near the 17.2 and 18.2 booster/tank sites. It is recommended that impacts to Oak Glen Creek be avoided. Should impacts to the drainage be necessary, a formal jurisdictional delineation should be conducted to determine if it is subject to the jurisdiction of the CDFW or USACE. If jurisdictional features are identified on the Project Site, coordination with the regulatory agencies (USACE, CDFW, RWQCB) regarding regulatory permitting will be required.

5.4 Wildlife Corridors and Nursery Sites

Most of the Project Site is located within a paved road ROW and previously disturbed or developed areas. Although, portions of the Project Site likely provide wildlife movement opportunities because they consist of open and unimpeded land, the Site's value as a corridor is lessened by the fact that it borders residential developments and is moderately disturbed due to anthropogenic factors. Additionally, the disturbances from vehicles on the paved road ROW and adjacent residential and commercial developments would likely deter wildlife from moving through the area. Therefore, the Project Site would not be considered a wildlife corridor. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project Site. No impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project Site, and due to the overall small footprint of the booster and tank sites and the fact that they are unmanned and not lit with night lighting, the Project itself will not likely affect wildlife movement in the area.

6.0 RECOMMENDATIONS

The following Mitigation Measures are recommended prior to Project implementation:

BIO-1 – Special-Status Plant Survey: A special-status plant survey shall be conducted within suitable habitat on the Project Site for species determined to have a potential to occur on the Project Site. The survey shall be conducted during the appropriate blooming period for chaparral sand-verbena, Nevin's barberry, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California satintail, salt spring checkerbloom, Jaeger's milk-vetch, mesa horkelia Sonoran maiden fern, and San Bernardino aster (approximately April to June). Multiple surveys may be necessary to accommodate the different blooming periods for the target species. The surveys shall be conducted by a botanist or qualified biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If any special-status species are observed during the surveys, the location of the individual plant or population will be recorded with a GPS device and impacts to individual plants or populations should be avoided. If Project-related impacts to special-status plants on the Project site are unavoidable, consultation with CDFW and/or USFWS may be required to develop a mitigation plan or additional avoidance and minimization measures that could include seed collection, offsite mitigation, or transplantation.

BIO-2 – Preconstruction Nesting Bird Survey: If construction or other Project activities 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 to ensure that active bird nests will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project Site and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriate disturbance-limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance-limit buffer zones until the nest is deemed inactive by the qualified avian biologist through a minimum of weekly biological monitoring.

BIO-3 – Preconstruction Burrowing Owl Surveys: Two preconstruction burrowing owl survey shall be conducted prior to Project-related ground disturbance. The first survey shall be conducted between 30 to 14 days prior to initial ground disturbance (grading, grubbing, and construction) and the second survey should be conducted within 24 hours of initial ground disturbance. The surveys shall be conducted in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Typically, if burrowing owls or active burrowing owl burrows are identified on a Project Site during the survey, these features must be completely avoided during the owl breeding season (March 1 through August 31). If impacts to those features are unavoidable, then the YVWD must also develop an owl mitigation plan in consultation with CDFW. Mitigation methods may include passive relocation (conducted between September 1 and February 28) outside of the owl breeding season. If an active burrowing owl burrow is identified, and construction is to proceed, then a qualified biologist (with two or more years of owl experience) shall establish an appropriate disturbance-limit buffer around the burrow using flagging or staking. The buffer limit size can be at the biologist's discretion based on topography of the site and other conditions. Construction activities shall not occur within any buffer zones until the burrow is deemed inactive by the qualified biologist through a minimum of weekly biological monitoring.

BIO-4 – Biological Monitoring: A qualified biologist shall be present to monitor all initial ground-disturbing and vegetation clearing performed within areas that contain suitable habitat for special-status plant and wildlife species. During each monitoring day, the biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to minimize impacts on special-status species with potential to occur. The monitor will be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring shall take place until the Project Site has been completely cleared of any vegetation. If an active nest is identified, the biological monitor shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed no longer active by the biologist. If special-status wildlife species are detected during biological monitoring activities, then consultation with the USFWS and/or CDFW shall be conducted, and a mitigation plan shall be developed to avoid and offset impacts to these species. Mitigation measures may consist of work restrictions or additional biological monitoring activities after ground-disturbing activities are complete.

6.1 Additional Recommendations

Aquatic Resources Delineation (ARD): One aquatic drainage feature (Oak Glen Creek) was identified within the Project site. A formal aquatic resources delineation is recommended to delineate potential Waters of the U.S. and map limits of CDFW jurisdiction. The ARD shall be conducted based on the guidelines presented in the USACE *1987 Wetlands Delineation Manual* as well as the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, September 2008. The delineation shall also comply with the standards required by CDFW and the RWQCB.

If there are any planned Project-related impacts to jurisdictional streams, regulatory permitting will likely be required in advance for these impacts, including submittal and processing of a Pre-Construction Notification with the USACE, a Notification of Lake or Streambed Alteration with the CDFW, and a Section 401 Water Quality Certification with the RWQCB. The preparation and processing of these permits usually costs between \$8,000 and \$20,000, depending on the extent and acreage of the impacts, and the processing time runs from four months to six months. If compensatory mitigation is required during permit processing, that adds an expense for finding and setting aside lands for mitigation.

The following Best Management Practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to special-status species that have potential to occur on the property:

- Confine all work activities to a predetermined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of a Project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from the construction or Project site.
- Use of rodenticides and herbicides on the Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the USEPA, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to predatory wildlife.

7.0 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: Chelsie Brown
Chelsie Brown
Staff Biologist
ECORP Consulting, Inc.

DATE: 10/21/2022

Under the direction of:

SIGNED: Phillip Wasz
Phillip Wasz
Senior Biologist
ECORP Consulting, Inc.

DATE: 10/21/2022

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LIST OF APPENDICES

Appendix A – Representative Site Photographs

Appendix B – Plant Species Observed

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Appendix D – Potential for Occurrence of Sensitive Plant Species

Appendix E – Potential for Occurrence of Sensitive Wildlife Species

APPENDIX A

Representative Site Photographs



Photo 1. Proposed 14.1 booster location at existing YVWD water facility with developed land cover, facing southeast.



Photo 2. Existing YVWD water facility at the proposed location of 14.1 booster site; facing east.



Photo 3. Project site with developed land cover along western end of the alignment on Oak Glen Road between Cherry Croft Drive and Pendleton Road, facing southwest.



Photo 4. Proposed location of the 16.2 booster/tank site, adjacent to an existing YVWD water facility with disturbed land cover, facing south.



Photo 5. Nonnative grassland and fire break present at the proposed 16.2 booster/tank site, facing north.



Photo 6. California buckwheat scrub vegetation community present at proposed location of 17.2 booster/tank site, south of Oak Glen Road, photo facing northeast.



Photo 7. Project site along the public ROW (Oak Glen Road) with evidence of recent mudslide at the time of survey; photo taken northeast of Chagall Road, facing southwest.



Photo 8. California buckwheat scrub and evidence of recent mudslide present at location of proposed 18.2 booster/tank, facing south.



Photo 9. Representative photo of the 20.1 tank site, facing south.



Photo 10. Representative photo of the 20.1 tank site, facing north.

APPENDIX B

Plant Species Observed

SCIENTIFIC NAME	COMMON NAME
<i>Ambrosia</i> sp.	Ragweed
<i>Amsinckia menziesii</i>	Menzies' fiddleneck
<i>Avena fatua</i> *	Wild oat
<i>Baccharis salicifolia</i>	Mulefat
<i>Brassica nigra</i> *	Black mustard
<i>Bromus diandrus</i> *	Brome grass
<i>Bromus tectorum</i> *	Cheatgrass
<i>Centaurea melitensis</i> *	Tocalote
<i>Croton setiger</i>	Turkey mullein
<i>Cucurbita palmata</i>	Coyote gourd
<i>Datura wrightii</i>	Jimson weed
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Eriogonum gracile</i>	Slender buckwheat
<i>Erodium cicutarium</i> *	Coastal heron's bill
<i>Hirschfeldia incana</i> *	Short-podded mustard
<i>Nicotiana glauca</i> *	Tree tobacco
<i>Phacelia</i> sp.	Phacelia
<i>Platanus racemosa</i>	Western sycamore
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Salsola tragus</i> *	Russian thistle
<i>Sambucus nigra</i> ssp. <i>cerulea</i>	Blue elderberry
<i>Schismus barbatus</i> *	Mediterranean grass
<i>Trichostema lanceolatum</i>	Vinegarweed

*Nonnative species

APPENDIX C

Wildlife Species Observed

SCIENTIFIC NAME	COMMON NAME
AVES	BIRDS
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	Common raven
<i>Haemorhous mexicanus</i>	House finch
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<i>Melospiza crissalis</i>	California towhee
<i>Sturnus vulgaris</i>	European starling
MAMMALIA	MAMMALS
<i>Canis latrans</i>	Coyote
<i>Thomomys bottae</i>	Botta's pocket gopher
<i>Odocoileus hemionus</i>	Mule deer
<i>Otospermophilus beecheyi</i>	California ground squirrel

Potential for Occurrence of Sensitive Plant Species

Scientific Name Common Name	Status		Bloom Period & Elevation (feet)	Habitat Requirements	Potential for Occurrence
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand-verbena	Fed: Ca: CRPR:	none none 1B.1	(Jan) Mar-Sept 245-5250	Occurs in chaparral, coastal scrub, and desert dune habitats. Often found in sandy soil.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas with California buckwheat scrub vegetation community. One recent record (Occ # 69) from 2009 occurs approximately 3 miles away.
<i>Berberis nevini</i> Nevin's barberry	Fed: Ca: CRPR:	END END 1B.1	(Feb) Mar-Jun 230-2705	Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland in sandy or gravelly soils.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. One recent record (Occ # 4) occurs approximately 3 miles away from the Project site in 2009.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Fed: Ca: CRPR:	none none 1B.1	Apr-Jun 900-4005	Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitat. Often found in sandy or rocky openings. Generally associated with larger alluvial plains.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas with the California buckwheat scrub. Twenty-two (22) recent records have been recorded within 5 miles of the Project site with the most recent ones (Occ # 5, 138, & 151) being from 2018 located approximately 4 miles away (Occ # 5 & 138) and 2 miles away (Occ # 151).
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> white-bracted spineflower	Fed: Ca: CRPR:	none none 1B.2	Apr-Jun 985-3935	Occurs in sandy or gravelly soils on alluvial fans in coastal scrub habitats, and in Mojavean desert scrub and pinyon and juniper woodland habitats.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. Twelve recent records occur approximately within 5 miles of the Project site with the most recent ones being from 2018 (Occ # 57 & 60) and the closest occurring less than 1 mile from the Project site (Occ # 34).
<i>Deinandra mohavensis</i> Mojave tarplant	Fed: Ca: CRPR:	none END 1B.3	(Jan-May) Jun-Oct 2100-5250	Occurs in chaparral, coastal scrub, and riparian scrub. Most commonly found in riparian areas or in ephemeral grassy areas. Often found in mesic soils.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. There are two recent records (Occ # 8 & 78) approximately 4.5 and 4 miles away respectively from 2003 & 2012.
<i>Imperata brevifolia</i> California satintail	Fed: Ca: CRPR:	none none 2B.1	Sep-May 0-3985	Occurs in chaparral, coastal scrub, Mojavean desert scrub, alkaline meadows and seeps, and riparian scrub habitats in mesic soils.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. One recent record (Occ # 1040) from 2010 occurs within 5 miles, located approximately 3 miles southeast of the Project site.
<i>Sidalcea neomexicana</i> salt spring checkerbloom	Fed: Ca: CRPR:	none none 2B.2	Mar-Jun 50-5020	Occurs in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Often found in alkaline and mesic soils.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. One recent record (Occ # 23) from 2011 occurs within 5 miles, located less than 1 miles southeast of the Project site.
<i>Symphotrichum defoliatum</i> San Bernardino aster	Fed: Ca: CRPR:	none none 1B.2	Jul-Nov 5-6695	Occurs in meadows and seeps, marshes, and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and vernal mesic valley and foothill grassland. Often found in disturbed areas and near ditches, streams, and springs.	High Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas of California buckwheat scrub vegetation community. Specifically, one of these California buckwheat scrub areas has a small stream, Oak Glen Creek, running through it that could offer marginally suitable habitat. There are two recent records (Occ # 29 & 105) approximately 3 and 2 miles away respectively from 2010.
<i>Astragalus pachypus</i> var. <i>jaegeri</i> Jaeger's milk-vetch	Fed: Ca: CRPR:	none none 1B.1	Dec-Jun 1200-3200	Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Often found in sandy or rocky soils.	Moderate Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas with the California buckwheat scrub. No recent records of the species occur within 5 miles, however, 5 historical records occur within 5 miles with the most recent ones being from 1990 (Occ # 3 & 18) approximately 4 miles away.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	Fed: Ca: CRPR:	none none 1B.1	Feb-Jul (Sep) 230-2660	Occurs in cismontane woodland, coastal scrub, and maritime chaparral in sandy or gravelly soils.	Moderate Potential to Occur: Suitable coastal scrub habitat is present on the Project site in the areas with the California buckwheat scrub. One historic record (Occ # 1) from 1921 occurs approximately 3 miles from the Project site.
<i>Pelazoneuron puberulum</i> var. <i>sonorensis</i> Sonoran maiden fern	Fed: Ca: CRPR:	none none 2B.2	Jan-Sep 165-2000	Occurs in meadows, seeps, and stream habitats.	Low Potential to Occur: A small stream, Oak Glen Creek, runs through the Project site that could offer marginally suitable habitat. The Project site is outside of this species' elevation range which reduces the potential for the species to be present. One record (Occ # 13) was recorded approximately 4 miles southeast of the Project in 2009.
<i>Acanthoscyphus parishii</i> var. <i>cienegensis</i> Cienega Seca oxytheca	Fed: Ca: CRPR:	none none 1B.3	(May)Jun-Sep 6905-8040	Occurs in Joshua tree "woodland", pinyon and juniper woodland, and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Allium howellii</i> var. <i>clokeyi</i> Mt. Pinos onion	Fed: Ca: CRPR:	END none 1B.1	Apr-Jun 4265-6070	Occurs in Great Basin scrub, along the edges of meadows and seeps, and in pinyon and juniper woodland.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Allium marvinii</i> Yucaipa onion	Fed: Ca: CRPR:	none none 1B.2	Apr-May 2495-3495	Occurs in chaparral. Often found in openings on clay soils.	Presumed Absent: Although multiple recent records have been documented within 5 miles of the Project site, no suitable chaparral habitat or clay soils are present on the Project site.
<i>Antennaria marginata</i> white-margined everlasting	Fed: Ca: CRPR:	none none 2B.3	May-Aug 6955-11000	Occurs in lower montane coniferous forest and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Arenaria lanuginosa</i> var. <i>saxosa</i> rock sandwort	Fed: Ca: CRPR:	none none 2B.3	Jul-Aug 4775-8530	Occurs in subalpine and upper montane coniferous forest. Often found in mesic, sandy soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.

Scientific Name Common Name	Status		Bloom Period & Elevation (feet)	Habitat Requirements	Potential for Occurrence
<i>Arenaria paludicola</i> marsh sandwort	Fed: Ca: CRPR:	END END 1B.1	May-Aug 10-560	Occurs in freshwater or brackish marshes and swamps in sandy openings. Known only from two natural occurrences in Black Lake Canyon and at Oso Flaco Lake.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	Fed: Ca: CRPR:	none none 1B.1	May-Oct 195-2790	Occurs in meadows and seeps and playas. Often found along lake margins in alkaline soils.	Presumed Absent: No suitable meadow and seep, playa, or lake habitat was present on the Project site. Only occurrence (Occ # 16) was observed within 5 miles but was recorded over 100 years ago.
<i>Astragalus lentiginosus</i> var. <i>coachellae</i> Coachella Valley milk-vetch	Fed: Ca: CRPR:	END none 1B.2	Feb-May 130-2150	Occurs in desert dunes and sandy areas of Sonoran desert scrub.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Astragalus lentiginosus</i> var. <i>sierrae</i> Big Bear Valley milk-vetch	Fed: Ca: CRPR:	none none 1B.2	Apr-Aug 5905-8530	Occurs in Mojavean desert scrub, meadows and seeps, pinyon and juniper woodland, and upper montane coniferous forest. Often found in gravelly or rocky soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Astragalus leucolobus</i> Big Bear Valley woollypod	Fed: Ca: CRPR:	none none 1B.2	May-Jul 3610-9465	Occurs in upper and lower montane coniferous forest, pebble (pavement) plain, and pinyon and juniper woodland. Often found in rocky soils.	Presumed Absent: Although 19 recent records of the species occur within 5 miles of the Project site, no suitable habitat was present on the Project site. Occurs in upper and lower montane coniferous forest, pebble plain, and pinyon and juniper woodland in rocky soils. No rocky soils occur on site.
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crowscale	Fed: Ca: CRPR:	END none 1B.1	Apr-Aug 455-1640	Occurs in playas, valley and foothill grasslands, and vernal pools in alkaline soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	Fed: Ca: CRPR:	none none 1B.2	Apr-Oct 35-655	Occurs in coastal bluff scrub and coastal scrub in alkaline soils.	Presumed Absent: The Project site does not occur within the elevation requirements of the species and the recent record (Occ # 33) that is within 5 miles of the Project site contains notes stating that the identification is uncertain.
<i>Boechea dispar</i> pinyon rockcress	Fed: Ca: CRPR:	none none 2B.3	Mar-June 3939-8335	Occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Often found in granitic, gravelly soils.	Presumed Absent: Although one record (Occ # 29) occurs within 5 miles of the Project site, the Project site lacks Mojavean desert scrub, Joshua tree woodland, and pinyon and juniper woodland habitat. In addition, the soil is not suitable.
<i>Boechea parishii</i> Parish's rockcress	Fed: Ca: CRPR:	none none 1B.2	Apr-May 5805-9810	Occurs in pebble (pavement) plain, pinyon and juniper woodland, and upper montane coniferous forest. Often found in rocky soils or soils containing quartzite on clay. Sometimes found in carbonate soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Boechea peirsonii</i> San Bernardino rockcress	Fed: Ca: CRPR:	none none 1B.2	Mar-Aug 8860-10500	Occurs in subalpine coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Botrychium crenulatum</i> scalloped moonwort	Fed: Ca: CRPR:	none none 2B.2	Jun-Sep 4160-10,760	Occurs in bogs, fens, meadows, seeps, marshes, freshwater swamps, and upper and lower montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Bouteloua trifida</i> three-awned grama	Fed: Ca: CRPR:	none none 2B.3	(Apr) May-Sep 2295-6560	Occurs in carbonate, rocky soils of Mojavean desert scrub.	Presumed Absent: No suitable Mojavean desert scrub habitat was present on the Project site and there are no records within 5 miles.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa-lily	Fed: Ca: CRPR:	none none 1B.2	Apr-Jul 2330-7840	Occurs in mesic soils in chaparral, lower montane coniferous forest, and meadow and seep habitats.	Presumed Absent: Although there are 5 recent records of the species within 5 miles of the Project site, the Project is missing chaparral, coniferous forest, and meadow and seep habitat.
<i>Calyptidium pygmaeum</i> pygmy pussypaws	Fed: Ca: CRPR:	none none 1B.2	Jun-Aug 6495-10,205	Occurs in subalpine coniferous forest and upper montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Carex occidentalis</i> western sedge	Fed: Ca: CRPR:	none none 2B.3	Jun-Aug 5395-10,285	Occurs in meadows, seeps, and in lower montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Castilleja cinerea</i> ash-gray paintbrush	Fed: Ca: CRPR:	THR none 1B.2	Jun-Aug 5905-9710	Occurs in Mojavean desert scrub, meadows and seeps, pebble (pavement) plain, pinyon and juniper woodland habitats and clay openings in upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Castilleja lasiorhyncha</i> San Bernardino Mountains owl's-clover	Fed: Ca: CRPR:	none none 1B.2	May-Aug 4265-7840	Occurs in mesic soils in chaparral, meadows and seeps, pebble (pavement) plains, riparian woodlands, and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Centromadia pungens</i> ssp. <i>Laevis</i> smooth tarplant	Fed: Ca: CRPR:	none none 1B.1	Apr-Sep 0-2100	Occurs in chenopod scrub, meadows and seeps, playas, riparian woodlands, and valley and foothill grassland habitats. Often found in alkaline soil.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	Fed: Ca: CRPR:	END END 1B.2	May-Oct (Nov) 0-100	Occurs in coastal dunes and in coastal salt marshes and swamps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	Fed: Ca: CRPR:	none none 2B.2	Jul-Oct 50-920	Occurs in freshwater marshes and swamps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Dodecahema leptoceras</i> slender-horned spineflower	Fed: Ca: CRPR:	END END 1B.1	Apr-Jun 655-2495	Occurs in chaparral, cismontane woodland, and alluvial fan coastal scrub in sandy soils. Generally only located in large alluvial systems.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.

Scientific Name Common Name	Status		Bloom Period & Elevation (feet)	Habitat Requirements	Potential for Occurrence
<i>Dudleya abramsii</i> ssp. <i>Affinis</i> San Bernardino Mountains dudleya	Fed: Ca: CRPR:	none none 1B.2	Apr-Jul 4100-8530	Occurs in pebble (pavement) plain, pinyon and juniper woodland, and upper montane coniferous forest habitats. Often found in granitic, quartzite, or carbonate soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Eremogone ursina</i> Big Bear Valley sandwort	Fed: Ca: CRPR:	THR none 1B.2	May-Aug 5905-9515	Occurs in meadows, seeps, pebble (pavement) plain, and pinyon and juniper woodland. Often found in mesic, rocky soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	Fed: Ca: CRPR:	END END 1B.1	Apr-Sep 300-2000	Occurs in chaparral and alluvial fan coastal scrub in sandy or gravelly soils. Generally only located in large alluvial systems.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Eriogonum evanidum</i> vanishing wild buckwheat	Fed: Ca: CRPR:	none none 1B.1	Jul-Oct 3610-7300	Occurs in chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland habitats, sometimes in gravelly or sandy soils.	Presumed Absent: Although one historic record (Occ # 6) from 1931 was recorded within 5 miles of the Project site, suitable habitat in the form of chaparral, woodland, and coniferous forest were not present on the Project site.
<i>Eriogonum kennedyi</i> var. <i>alpigenum</i> southern alpine buckwheat	Fed: Ca: CRPR:	none none 1B.3	Jul-Sep 8530-11,485	Occurs in alpine boulder and rock field or subalpine coniferous forest habitats in granitic and gravelly soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Eriogonum kennedyi</i> var. <i>austromontanum</i> southern mountain buckwheat	Fed: Ca: CRPR:	THR none 1B.2	Jun-Sep 5805-9480	Occurs in gravelly soils of lower montane coniferous forest and in pebble (pavement) plain habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Eriogonum microthecum</i> var. <i>lacus-ursi</i> Bear Lake buckwheat	Fed: Ca: CRPR:	none none 1B.1	Jul-Aug 6560-6890	Occurs in Great Basin scrub and lower montane coniferous forest. Often found in clay outcrops.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Erythranthe exigua</i> San Bernardino Mountains monkeyflower	Fed: Ca: CRPR:	none none 1B.2	May-Jul 5905-7595	Occurs in meadows, seeps, pebble (pavement) plain, and upper montane coniferous forest. Often found in mesic, clay soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Erythranthe purpurea</i> little purple monkeyflower	Fed: Ca: CRPR:	none none 1B.2	May-Jun 6235-7545	Occurs in meadows, seeps, pebble (pavement) plain, and upper montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Gentiana fremontii</i> Fremont's gentian	Fed: Ca: CRPR:	none none 2B.3	Jun-Aug 7875-8860	Occurs in meadows and seeps and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Gilia leptantha</i> ssp. <i>leptantha</i> San Bernardino gilia	Fed: Ca: CRPR:	none none 1B.3	Jun-Aug 4920-8400	Occurs in gravelly, sandy soils of lower montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Heuchera parishii</i> Parish's alumroot	Fed: Ca: CRPR:	none none 1B.3	Jun-Aug 4920-12470	Occurs in rocky, sometimes carbonate soils in alpine boulder and rock fields, lower montane coniferous forests, subalpine coniferous forests, and upper montane coniferous forests.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Horkelia wilderae</i> Barton Flats horkelia	Fed: Ca: CRPR:	none none 1B.1	May-Sep 5495-9595	Occurs along the edges of chaparral, and in upper and lower montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Hulsea vestita</i> ssp. <i>pygmaea</i> pygmy hulsea	Fed: Ca: CRPR:	none none 1B.1	Jun-Oct 9300-12795	Occurs in alpine boulder and rock field and subalpine coniferous forest habitats in granitic and gravelly soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Ivesia argyrocoma</i> var. <i>argyrocoma</i> silver-haired ivesia	Fed: Ca: CRPR:	none none 1B.2	Jun-Aug 4800-9710	Occurs in alkaline meadows and seeps, pebble (pavement) plains, and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	Fed: Ca: CRPR:	none none 1B.1	Feb-Jun 5-4005	Occurs in coastal salt marshes and swamps, playas, and vernal pools.	Presumed Absent: Although multiple recent records occur within 5 miles of the Project site, no suitable marsh, swamp, playa, or vernal pool habitat is present on the Project site.
<i>Lewisia brachycalyx</i> short-sepaled lewisia	Fed: Ca: CRPR:	none none 2B.2	(Feb) Apr-Jun (Jul) 4495-7545	Occurs in lower montane coniferous forest and in meadows and seeps. Often found in mesic soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Lilium parryi</i> lemon lily	Fed: Ca: CRPR:	none none 1B.2	Jul-Aug 4005-9005	Occurs in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest. Often found in mesic soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Linanthus killipii</i> Baldwin Lake linanthus	Fed: Ca: CRPR:	none none 1B.2	May-Jul 5580-7875	Occurs in Joshua tree "woodland", meadows and seeps, pebble (pavement) plain, and pinyon and juniper woodland habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Malaxis monophyllos</i> var. <i>brachypoda</i> white bog adder's-mouth	Fed: Ca: CRPR:	none none 2B.1	Jun-Aug 7220-9000	Occurs in bogs and fens, meadows and seeps, and upper montane coniferous forest habitats in mesic areas.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Mentzelia tricuspis</i> spiny-hair blazing star	Fed: Ca: CRPR:	none none 2B.1	Mar-May 490-4200	Occurs in Mojavean desert scrub. Often found in sandy, gravelly soils along slopes and in washes.	Presumed Absent: Although one record of the species occurs in 1886, over 100 years ago, no suitable desert scrub habitat was present on the Project site.
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	Fed: Ca: CRPR:	none none 1B.3	Jun-Oct 2395-7200	Occurs in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland habitats.	Presumed Absent: Although 2 recent records (Occ # 31 and 33) were documented within 5 miles of the Project site, the site lacks suitable broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, or valley and foothill grassland habitat.
<i>Nama stenocarpa</i> mud nama	Fed: Ca: CRPR:	none none 2B.2	Jan-Jul 15-1640	Occurs in lake margins, riverbanks, marshes, and swamps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Navarretia peninsularis</i> Baja navarretia	Fed: Ca: CRPR:	none none 1B.2	(May) Jun-Aug 4920-7545	Occurs in meadows and seeps, lower montane coniferous forest, pinyon and juniper woodland, and in openings of chaparral.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.

Scientific Name Common Name	Status		Bloom Period & Elevation (feet)	Habitat Requirements	Potential for Occurrence
<i>Oreonana vestita</i> woolly mountain-parsley	Fed: Ca: CRPR:	none none 1B.3	Mar-Sep 5300-11485	Occurs in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest habitats, sometimes in gravelly or talus soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Oxytropis oreophila</i> var. <i>oreophila</i> rock-loving oxytrope	Fed: Ca: CRPR:	none none 2B.3	Jun-Sep 11,155-12,470	Occurs in alpine boulder and rock fields and in subalpine coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Packera bernardina</i> San Bernardino ragwort	Fed: Ca: CRPR:	none none 1B.2	May-Jul 5905-7545	Occurs in mesic, sometimes alkaline soils, in meadows and seeps, pebble (pavement) plains, and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Parnassia cirrata</i> var. <i>cirrata</i> San Bernardino grass-of-Parnassus	Fed: Ca: CRPR:	none none 1B.3	Aug-Sep 4100-8005	Occurs in upper and lower montane coniferous forest and in meadows and seeps. Often found in mesic, sometimes calcareous soils along streambanks.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Perideridia parishii</i> ssp. <i>parishii</i> Parish's yampah	Fed: Ca: CRPR:	none none 2B.2	Jun-Aug 4805-9845	Occurs in lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Petalonyx linearis</i> narrow-leaf sandpaper-plant	Fed: Ca: CRPR:	none none 2B.3	(Jan-Feb) Mar-May (Jun-Dec) -80-3660	Occurs in Mojavean and Sonoran desert scrub. Often found in sandy or rocky canyons.	Presumed Absent: Although one historic record (Occ # 26) occurs within 5 miles of the Project site from 1879, no suitable desert scrub habitat was present on the Project site.
<i>Phlox dolichantha</i> Big Bear Valley phlox	Fed: Ca: CRPR:	none none 1B.2	May-Jul 6005-9745	Occurs in pebble (pavement) plain and in openings of upper montane coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Physaria kingii</i> ssp. <i>bernardina</i> San Bernardino Mountains bladderpod	Fed: Ca: CRPR:	END none 1B.1	May-Jun 6070-8860	Occurs in lower montane and subalpine coniferous forest and in pinyon and juniper woodland habitats. Often found in carbonate soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Poa atropurpurea</i> San Bernardino blue grass	Fed: Ca: CRPR:	END none 1B.2	(Apr) May-Jul (Aug) 4460-8055	Occurs in mesic soils of meadows and seeps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Pseudorontium cyathiferum</i> Deep Canyon snapdragon	Fed: Ca: CRPR:	none none 2B.3	Feb-Apr 0-2625	Occurs in rocky soils of Sonoran desert scrub.	Presumed Absent: No suitable desert scrub habitat was present on the Project site and there are no records within 5 miles.
<i>Pyrocoma uniflora</i> var. <i>gossypina</i> Bear Valley pyrocoma	Fed: Ca: CRPR:	none none 1B.2	Jul-Sep 5250-7545	Occurs in meadows and seeps and in pebble (pavement) plain habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Saltugilia latimeri</i> Latimer's woodland-gilia	Fed: Ca: CRPR:	none none 1B.2	Mar-Jun 1310-6235	Occurs in chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats. Usually found in rocky or sandy soil, often granitic and sometimes in washes.	Presumed Absent: The Project site lacks chaparral, desert scrub, and woodland habitat and no records occur within 5 miles of the Project site.
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i> Parish's checkerbloom	Fed: Ca: CRPR:	none none 1B.2	(May) Jun-Aug 3280-8200	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats.	Presumed Absent: Although 2 recent records (Occ # 22 & 23) of the species occur within 5 miles of the Project site, no suitable chaparral, cismontane woodland, or lower montane coniferous forest habitat was present on the Project site.
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i> Bear Valley checkerbloom	Fed: Ca: CRPR:	none none 1B.2	May-Aug 4905-8810	Occurs in riparian woodlands, meadows and seeps, and upper and lower montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Sidalcea pedata</i> bird-foot checkerbloom	Fed: Ca: CRPR:	END END 1B.1	May-Aug 5250-8205	Occurs in mesic meadows and seeps and pebble (pavement) plain habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Silene krantzii</i> Krantz's catchfly	Fed: Ca: CRPR:	none none 1B.2	Apr-Sep 10615-11515	Occurs in alpine dwarf scrub, usually in gravelly or sandy soils and sometimes in rocky soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Sisyrinchium longipes</i> timberland blue-eyed grass	Fed: Ca: CRPR:	none none 2B.2	Jun-Aug 2297-3478	Occurs in meadows and seeps in mesic conditions.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Sphenopholis obtusata</i> prairie wedge grass	Fed: Ca: CRPR:	none none 2B.2	Apr-Jul 985-6560	Occurs in cismontane woodland and meadow and seep habitat in mesic conditions.	Presumed Absent: Although one historical record (Occ # 2) from 1947 was documented within 5 miles of the Project site, no suitable woodland and meadow/seep habitat was present on the Project site.
<i>Streptanthus campestris</i> southern jewelflower	Fed: Ca: CRPR:	none none 1B.3	(Apr) May-Jul 2955-7545	Occurs in rocky soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats.	Presumed Absent: Two recent records (Occ # 65 & 66) occur within 5 miles of the Project site, no suitable chaparral, lower montane coniferous forest, or pinyon and juniper woodland habitat was present on the Project site.
<i>Streptanthus juneae</i> June's jewelflower	Fed: Ca: CRPR:	none none 1B.2	Jun-Aug 7070-7775	Occurs in openings of montane chaparral and lower montane coniferous forest habitats.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Taraxacum californicum</i> California dandelion	Fed: Ca: CRPR:	END none 1B.1	May-Aug 5315-9185	Occurs in mesic soils of meadows and seeps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Thelypodium stenopetalum</i> slender-petaled thelypodium	Fed: Ca: CRPR:	END END 1B.1	May-Sep 5250-8250	Occurs in mesic, alkaline soils of meadows and seeps.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	Fed: Ca: CRPR:	none none 2B.1	May-Sep 15-1425	Occurs in meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Often found in alkaline soils.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.

Scientific Name	Status		Bloom Period & Elevation (feet)	Habitat Requirements	Potential for Occurrence
Viola pinetorum ssp. grisea grey-leaved violet	Fed: Ca: CRPR:	none none 1B.2	Apr-Jul 4920-11,155	Occurs in meadows and seeps and in upper montane and subalpine coniferous forest.	Presumed Absent: The Project site is outside of this species' elevation range and no suitable habitat was observed within the Project site.
Federal Designations: (Federal Endangered Species Act, USFWS) END: federally listed, endangered THR: federally listed, threatened		State designations: (California Endangered Species Act, CDFG) END: state-listed, endangered THR: state-listed, threatened CAN: Candidate for state listing FP: Fully Protected Species SSC: Species of Special Concern		CRPR Ranking 1A: Presumed extinct 1B: Rare, threatened, or endangered in California and elsewhere 2B: Rare, threatened, or endangered in California, but more common elsewhere 3: Review list of plants requiring more study 4: Plants of limited distribution watch list CRPR Threat Code 0.1: Seriously threatened in California 0.2: Fairly threatened in California 0.3: Not very threatened in California	
Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI) Yucaipa, Forest Falls, Harrison Mountain, Keller Peak, Big Bear Lake, Moonridge, San Geronio Mountain, Cabazon, Beaumont, El Casco, Sunnymead, and Redlands 7.5-minute quads.					

Potential for Occurrence of Sensitive Wildlife Species

Scientific Name Common Name	Status		Habitat Requirements	Potential for Occurrence
Invertebrates				
<i>Danaus plexippus</i> pop. 1 Monarch butterfly overwintering population	Fed: CA:	CAN none	Habitat consists of milkweed and flowering plants. Overwintering occurs in California along the Pacific Ocean in roosting sites consisting of eucalyptus, Monterey pines, and Monterey cypress trees.	Presumed Absent: Preferred food sources of milkweed and flowering plants were not observed on the Project site during the biological survey, but marginally suitable foraging habitat is present within the areas consisting of California buckwheat scrub. However, no suitable eucalyptus, monterey pine, or monterey cypress trees for roosting sites were identified within the Project site. No records are documented in CNDDB for the species.
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	Fed: CA:	END none	Chaparral and coastal sage scrublands in Riverside and San Diego counties.	Presumed Absent: The Project site is outside of this species' range.
Fishes				
<i>Catostomus santaanae</i> Santa Ana sucker	Fed: CA:	THR none	Pools and runs of creeks and small to medium rivers with cool, shallow, clear, and unpolluted water.	Presumed Absent: Although one historic record (Occ # 18) occurs within 5 miles of the Project site, no suitable habitat for this species is present on the Project site. Oak Glen Creek runs through the Project site, but it does not run consistently throughout the year which would make it unlikely for the species to be present.
<i>Oncorhynchus mykiss irideus</i> pop. 10 steelhead - southern California DPS	Fed: CA:	END none	Typically occurs in slow water streams or rivers.	Presumed Absent: Although one historic record (Occ # 18) occurs within 5 miles of the Project site, no suitable habitat for this species is present on the Project site. Although Oak Glen Creek runs through the Project site, it is not consistently slow moving.
<i>Rhinichthys osculus</i> ssp. 8 Santa Ana speckled dace	Fed: CA:	none SSC	Permanent flowing creeks and streams with shallow gravel and cobble riffles.	Presumed Absent: No permanently flowing creeks are present on the Project site. Three historic records (Occ # 6, 9, and 14) occur within Mill, City, and Plunge Creeks, within 5 miles but are over 20 years old.
Amphibians				
<i>Rana draytonii</i> California red-legged frog	Fed: CA:	THR SSC	Occurs in aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh & swamp, riparian forest, riparian scrub, riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Requires 11-20 weeks of permanent water for larval development. Often found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	Presumed Absent: Although one historic record (Occ # 96) occurs within 5 miles of the Project site, there are no semi-permanent water sources within or adjacent to the Project site suitable for the species' larval development offering suitable habitat.
<i>Rana muscosa</i> southern mountain yellow-legged frog	Fed: CA:	END END	Ponds, streams, lakes, and isolated pools in southern Sierra Nevada Mountains and rocky streams within narrow canyons and the chaparral belt in Southern California mountains.	Presumed Absent: Although there are two recent records (Occ # 16 and 177) within 5 miles and a stream habitat occurs within the Project site, the creek does not occur in a narrow canyon habitat or in a chaparral belt in the Southern California mountains.
<i>Spea hammondi</i> western spadefoot	Fed: CA:	none SSC	Open areas with sandy soils in a wide range of habitats including lowlands to foothills, coastal sage scrub, chaparral, mixed woodlands, sandy washes, river floodplains, alluvial fans, playas, and grasslands. Vernal pools are essential for breeding and egg-laying. The species is almost completely terrestrial, entering water only to breed.	Low Potential to Occur: Marginally suitable grassland and coastal scrub habitats are present on the Project site. Although grassland and coastal scrub habitats occur on the Project site, open areas present on the Project site occur in areas where firebreaks and evidence of recent discing are present. Recently disced areas do not allow pooling to occur which is essential for the species to breed. Twenty-three recent records of this species are documented within 5 miles of the Project site with the most closest being approximately 1 mile southeast in 2019 (Occ # 464).
Reptiles				
<i>Anniella stebbinsi</i> southern California legless lizard	Fed: CA:	none SSC	Coastal sand dunes, and variety of interior habitats including sandy washes and alluvial fans. Occurs in moist warm loose soil with plant cover and sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, and stream terraces with sycamores, cottonwoods, or oaks. Sometimes found in suburban gardens.	Presumed Absent: Although 15 recent records have been documented within 5 miles of the Project site, the site lacks dunes, stream terraces, chaparral, woodlands, and desert scrub habitats typically required of the species.
<i>Arizona elegans occidentalis</i> California glossy snake	Fed: CA:	none SSC	Most common in desert habitats but also found in arid scrub, rocky washes, grasslands, low elevation coastal scrub, valley-foothill hardwood, and chaparral. Prefers washes and sandy areas with patchy brush and rocks. Perennial plants necessary in habitat for food source.	Moderate Potential to Occur: Limited suitable grassland habitat is present on the Project site. Six recent records occur within 5 miles of the Project site.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	Fed: CA:	none SSC	Arid habitats including chaparral, woodlands, and dry riparian areas.	Presumed Absent: Although thirteen recent records of this species have been recorded within 5 miles of the Project site, the dry riparian areas observed during the biological survey are located off site from the Project, and the Project site lacks suitable chaparral and woodland habitat.
<i>Charina umbratica</i> southern rubber boa	Fed: CA:	none THR	Under rocks, woody debris, or in crevices in conifer or conifer-mixed semi-open forests and woodlands, patchy chaparral/shrublands, and meadows.	Presumed Absent: Although numerous recent records of the species have been documented within 5 miles of the Project site, no suitable conifer forest or woodland habitat is present on the Project site.

<i>Crotalus ruber</i> red-diamond rattlesnake	Fed: CA:	none SSC	Found in coastal chaparral, arid scrub, rocky grassland, oak and pine woodlands, desert mountain slopes and rocky desert flats. Diet consists of birds, lizards, and small mammals including ground squirrels, wood rats, and rabbits.	Low Potential to Occur: Chaparral habitat is present nearby, adjacent to the Project site, and suitable foraging habitat is present on the Project site. California ground squirrel burrows were observed in the areas with California buckwheat scrub, and birds and lizards are likely to occur on the Project site. There are three recent records of the species within 5 miles of the Project site.
<i>Emys marmorata</i> western pond turtle	Fed: CA:	none SSC	Occurs in aquatic, artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Needs basking sites (logs, rocks, and exposed banks) and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Presumed Absent: Although one record (Occ # 1286) occurs within 5 miles of the Project site from 2016, no suitable habitat for this species is present on the Project site. Oak Glen Creek runs through the Project site, but it does not run consistently throughout the year which would make it unlikely for the species to be present.
<i>Phrynosoma blainvillii</i> coast horned lizard	Fed: CA:	none SSC	Occurs in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, and valley & foothill grassland habitats. Requires open areas for sunning, bushes to provide cover, and loose soil for burial. Diet consists mainly of ants and also small invertebrates. Most commonly found in lowlands along sandy washes with scattered low bushes.	Moderate Potential to Occur: Suitable habitat occurs within the California buckwheat scrub community present at two reservoir locations on the Project site and ants, a main food source for coast horned lizard, were observed during the biological survey. In addition, five recent records occur within 5 miles of the Project site.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	Fed: CA:	none SSC	Coastal scrub and semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites. Diet consists mostly of lizards, along with small mammals.	Moderate Potential to Occur: Two of the reservoir locations on the Project site contain suitable brushy areas and small mammal burrows observed indicated that a suitable prey base with burrows for refuge habitat was present. Two records (Occ # 23 and 24) occur within 5 miles from 2016 and 2014.
<i>Thamnophis hammondi</i> two-striped gartersnake	Fed: CA:	none SSC	Occur along aquatic habitats such as pools and creeks usually near chaparral, rocky areas, brushland, oak woodland, and conifer forests. Found in coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Hunts in water.	Presumed Absent: Sufficient water sources are not present on or adjacent to the Project site suitable for foraging. Oak Glen Creek runs through the Project site, but it does not run consistently throughout the year which would make it unlikely for the species to be present. Three recent records of the species occur within 5 miles of the Project site.
Birds				
<i>Agelaius tricolor</i> tricolored blackbird (nesting colony)	Fed: CA:	none THR/SSC	Occurs in freshwater marsh, swamp, and wetland habitats. Largely endemic to California. Highly colonial species, most numerous in Central Valley & vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony. Forages in open habitat such as cultivated fields and pastures.	Presumed Absent: Although three recent records occur within 5 miles of the Project site, no freshwater marshes for nesting are present offering suitable habitat for the species.
<i>Athene cunicularia</i> burrowing owl (burrow & some wintering sites)	Fed: CA:	none SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation that allows for high visibility for protection. Occurs in coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley & foothill grassland habitats. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Also found in vacant lots and airports.	Low Potential to occur: Although California ground squirrel burrows were observed in the undeveloped portions of the Project site, and the Project site contained annual grassland and scrublands, the density and height of the vegetation in these areas greatly reduces the suitability of the habitat for the species. Six recent records were identified within 5 miles.
<i>Aquila chrysaetos</i> golden eagle (nesting & wintering)	Fed: CA:	none FP	Occurs in broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinon & juniper woodlands, upper montane coniferous forest, and valley & foothill grassland habitats. Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees such as eucalyptus or oak in open areas.	Low Potential to occur: No forest, woodland, prairie, or valley and foothill grassland habitat occurs on the Project site. There is one historic record (Occ # 302) from 1980 within 5 miles of the Project site. Nesting activities are not expected on this site because no cliff-walled canyons are located on the Project site. However, it is possible that the golden eagle could use the site for foraging and a stopover during migration.
<i>Buteo swainsoni</i> Swainson's hawk (nesting)	Fed: CA:	none THR	Occurs in Great Basin grassland, riparian forest, riparian woodland, and valley & foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Nests in solitary bush or tree, or in small groves. Requires adjacent suitable foraging areas such as grasslands or alfalfa/grain fields supporting rodent populations.	Low Potential to Occur: Although marginally suitable nesting and foraging habitat is present in the trees within the Project site, the urban nature of the Project site could deter the species from occupying the area. One historic record (Occ # 122) occurs less than 1 mile away but is over 100 years old.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo (nesting)	Fed: CA:	THR END	Occurs in riparian forest habitat. Nests along the broad (≥ 5 hectares) patches of multi-layered riparian woodland, often dominated by willows and cottonwoods of lower floodbottoms of larger river systems.	Presumed Absent: No suitable habitat was present on the Project Site. Typically occurs in riparian forest habitat. Although patchy riparian vegetation was observed adjacent to the Project site along Oak Glen Creek, the Project site lacks large river systems suitable for the species. One historic record (Occ # 79) was identified within 5 miles of the Project site, however, the occurrence is greater than 20 years old and the habitat at the location is much different.
<i>Cypseloides niger</i> black swift (nesting)	Fed: CA:	none SSC	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Often breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Presumed Absent: Although one historic record (Occ # 5) occurs within 5 miles from 1986, no suitable mountain habitat is present on the Project site. There are also no cliffs or waterfalls present to provide breeding habitat.

<i>Elanus leucurus</i> white-tailed kite (nesting)	Fed: CA:	none FP	Open habitat in lowlands including savanna, open woodlands, marshes, and agricultural fields. Nests in trees, riparian scrub areas, oak woodlands, and other similar habitats.	Low Potential to Occur: Although three occurrences (Occ # 147, 166, & 167) from 2006 and 2016 are within 5 miles, no marshes or riparian scrub are present and limited suitable foraging and nesting habitat is present on the Project site.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher (nesting)	Fed: CA:	END END	Occurs in riparian woodland habitat in Southern California. Nests in densest areas of riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes and reservoirs. Nests are often in nonnative tamarisk (<i>Tamarisk</i> spp.) and native willow (<i>Salix</i> spp.), typically in vegetation stands of 4-7 m in height.	Presumed Absent: Although three recent records of the species occurs within 5 miles, no suitable habitat was present on the Project Site. Patchy riparian vegetation was observed adjacent to the Project site along Oak Glen Creek, however, the species typically nests in dense riparian communities. USFWS-designated critical habitat occurs approximately 0.02 miles south of the Project site so there is a chance that the species could pass by on their path to suitable habitat but the species is not expected to nest on the site.
<i>Haliaeetus leucocephalus</i> bald eagle (nesting & wintering)	Fed: CA:	DL END/FP	Breeding habitat most commonly includes areas close to coastal areas, bays, rivers, lakes, reservoirs, or other bodies of water that reflect the general availability of primary food sources including fish, waterfowl, or seabirds. Nests in tall trees or on cliffs or pinnacles near open water.	Presumed Absent: Although one recent record (Occ # 354) from 2006 occurs within 5 miles of the Project site, no suitable nesting habitat or bodies of water are present on the Project site.
<i>Icteria virens</i> yellow-breasted chat	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Nests in low, dense riparian, consisting of willow, blackberry, wild grape along streams or at the edges of ponds or swamps. Forages and nests within 10 ft of ground.	Presumed Absent: Although one recent record (Occ # 116) from 2016 occurs within 5 miles of the Project site, no suitable dense riparian habitat was present on the Project Site.
<i>Lanius ludovicianus</i> loggerhead shrike (nesting)	Fed: CA:	none SSC	Occurs in broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinon & juniper woodlands, riparian woodland, chaparral, and Sonoran desert scrub habitats. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Moderate Potential to occur: The Project site contains limited nesting habitat in the dense shrubs of the California buckwheat scrub community. Some perches suitable for hunting are also present on the Project site. Two recent records of the species occur within 5 miles of the Project site.
<i>Poliottila californica californica</i> coastal California gnatcatcher	Fed: CA:	THR SSC	Dry coastal slopes, washes, and mesas with areas of low vegetation and coastal sage scrub including California sagebrush, California buckwheat, salvia, and prickly pear cactus. Moves about actively in shrubs and low trees to forage. Generally found at elevations below 3,000 ft.	Low Potential to Occur: Marginally suitable California buckwheat scrub habitat is present on the Project site. The Project site's elevation (2,785 feet to 3,775 feet amsl) is located near the upper range of the species' most common elevation range. In addition, the literature review revealed five recent occurrences of this species within 5 miles of the Project site with the closest one located approximately 2 miles away (Occ # 916).
<i>Progne subis</i> purple martin (nesting)	Fed: CA:	none SSC	Woodlands, broadleaved upland forest, and lower montane coniferous forest, particularly low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly and also in human-made structures. Nest often located in tall, isolated tree/snag.	Moderate Potential to Occur: Suitable nesting habitat in woodpecker cavities, trees, and possible human-made structures within the developed areas are present along the existing ROW portion of the Project site. Two historic records have been documented within 5 miles, both of which are over 100 years old.
<i>Setophaga petechia</i> yellow warbler (nesting)	Fed: CA:	none SSC	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Diet consists primarily of insects.	Low Potential to Occur: Patchy riparian vegetation was observed outside of the Project site, adjacent to Oak Glen Road along Oak Glen Creek. This vegetation could offer marginal habitat for nesting and foraging. There are three recent records of the species within 5 miles of the Project site with the closest approximately 2 miles away (Occ # 112).
<i>Vireo bellii pusillus</i> least Bell's vireo (nesting)	Fed: CA:	END END	Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Summer resident of Southern California in low riparian vegetation in the vicinity of water or in dry river bottoms, below 2,000 ft msl. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mulefat, and mesquite.	Presumed Absent: The Project site's elevation (2,785 feet to 3,775 feet amsl) is located above the species' common elevation range. Although eleven recent records of the species occur within 5 miles and patchy riparian vegetation was observed adjacent to Oak Glen Road, the Project site lacks suitable riparian forest, riparian scrub, and riparian woodland habitats for the species to nest.
Mammals				
<i>Antrozous pallidus</i> pallid bat	Fed: CA:	none SSC	Occurs in chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley & foothill grassland habitats. Most commonly found in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Frequently roost in live trees and snags that have holes and cavities or crevices formed by exfoliating bark. Very sensitive to disturbance of roosting sites.	Low Potential to Occur: Although suitable trees occur along the existing public ROW portion of the Project site that the species could use for roosting, the species is very sensitive to disturbance of their roosting sites and therefore, due to the presence of constant disturbance, it would be unlikely for them to use the trees adjacent to the roadway as roosts. Suitable foraging habitat is present in the areas with California buckwheat scrub. One recent record (Occ # 437) occurs approximately 3 miles west of the Project site in 2011, and two historic records have been documented within 5 miles.
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	Fed: CA:	none SSC	Chaparral, coastal scrub, and desert grasslands in San Diego County along the U.S.-Mexico border.	Presumed Absent: One historic record (Occ # 8), observed in 1995, has been identified within 5 miles of the Project site. However, the site is outside of San Diego County and does not contain suitable chaparral, coastal scrub, or desert grassland habitat.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	Fed: CA:	none SSC	Sandy herbaceous areas, usually in association with rocks or coarse gravel in southwestern California. Primarily occurs in arid coastal and desert borders. Typical habitats include sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	High Potential to Occur: Suitable annual grassland and coastal scrub habitat occurs on the Project site in the locations of reservoir/booster facilities 16.2, 17.2, and 18.2. Nine recent records of the species have been documented within 5 miles with the closest record (Occ # 103) being approximately 2 miles away in 2016.

<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	Fed: CA:	none SSC	Occurs in desert wash, pinon & juniper woodlands, and Sonoran desert scrub habitats. Found in desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, and pinyon-juniper. Prefer sandy, herbaceous areas usually in association with rocks or coarse gravel.	Presumed Absent: Although four historic records occur within 5 miles of the Project site, no suitable desert wash, pinon & juniper woodland, or desert scrub habitat is present on the Project Site.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	Fed: CA:	END CAN/SSC	Gentle slopes of alluvial fans, on flood plains, along washes, and on adjacent upland areas with soils containing sand, loam, and gravel deposited by rivers and streams. Can also be found in sandy soils that are wind deposited. Found in alluvial sage scrub, coastal sage scrub, and chaparral vegetation.	Presumed Absent: Although multiple record records of the species occur within 5 miles of the Project site, no suitable alluvial fans or areas of suitable habitat are present for the species. The Project site is also located outside of the know areas where this species currently occurs.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	Fed: CA:	THR THR	Annual grasslands, coastal sage scrub with sparsely spaced vegetation, loose friable soils, and flat or slightly rolling terrain. Prefer open habitats with less than 50% protective cover.	Presumed Absent: Although 5 recent records occur within 5 miles, the Project site does not contain suitable annual grasslands or coastal sage scrub. The Project site is also located outside of the know areas where this species currently occurs.
<i>Eumops perotis californicus</i> western mastiff bat	Fed: CA:	none SSC	Roosts high above ground in rock and cliff crevices, shallow caves, and rarely in buildings. Occurs in arid and semiarid regions including rocky canyon habitats.	Presumed Absent: Although there have been five historic records of this species within 5 miles, no suitable rock or cliff habitat or shallow caves are present on the Project site.
<i>Glaucomys oregonensis californicus</i> San Bernardino flying squirrel	Fed: CA:	none SSC	Occurs in broadleaved upland forest and lower montane coniferous forest. Requires cavities in trees/snags for nests and cover and water nearby. Known from black oak or white fir dominated woodlands between 5200 - 8500 ft in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range.	Presumed Absent: Although there are 6 historic records of the species within 5 miles, no suitable conifer forest habitat is present on the Project site.
<i>Lasiurus xanthinus</i> western yellow bat	Fed: CA:	none SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats and human developed areas. Roosts in trees, particularly palms. Forages over water and among trees.	Moderate Potential to Occur: Suitable roosting habitat occurs adjacent to the Project site in the few palm trees and other tree species running parallel to the existing public ROW. Suitable foraging habitat is present among the trees. Six historic records of the species occur within 5 miles of the Project site.
<i>Leptonycteris yerbabuena</i> lesser long-nosed bat	Fed: CA:	DL SSC	Roosts in caves and mines. Occurs in arid regions including desert grasslands and shrub lands. Requires suitable concentration of columnar cacti and agave food sources.	Presumed Absent: No suitable desert grassland or shrub land habitat for this species is present on the Project site. No caves or mines are present for roosting and the site lacks cacti and agave food sources. One record (Occ # 1) was observed less than 1 mile from the Project site but is over 20 years old.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Fed: CA:	none SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Also found in coastal chaparral, sagebrush scrub, sandy desert, Joshua tree woodland, pinyon-juniper pine, and boulder habitats. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.	Moderate Potential to Occur: Marginally suitable coastal scrub habitat with moderate to dense canopies is present on the Project site but the site lacks rock outcrops and rocky slopes. Nine recent records of the species occur within 5 miles.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	Fed: CA:	none SSC	Roosts in crevices of outcrops and cliffs, shallow caves, and buildings. Found along rugged canyons, high cliffs, and semiarid rock outcroppings.	Presumed Absent: Although one historic record occurs within 5 miles, no suitable rugged canyon, cliff, or rock outcropping habitat is present on the Project site.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	Fed: CA:	none SSC	Low, semi-open, and open scrub habitats with flat, sandy valley floors. Habitats include coastal and mixed chaparral, coastal sage scrub, riparian scrub, low sagebrush, and grasslands with interspaced shrubs.	Presumed Absent: Although coastal scrub and grassland habitat occurs on the Project site, these communities contained dense vegetation and did not provide suitable open or semi-open habitat for this species. One historic record (Occ # 29) of this species has been identified within 5 miles of the site, however, the occurrence is from 1938 and is over 75 years old
<i>Perognathus alticolus alticolus</i> white-eared pocket mouse	Fed: CA:	none SSC	Isolated montane areas with ponderosa and Jeffery pine habitats in the San Bernardino mountains.	Presumed Absent: Although two historic records occur within 5 miles of the Project site, no suitable montane habitat is present on the Project site.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	Fed: CA:	none SSC	Lower elevation grasslands, alluvial sage scrub, and coastal sage communities in and around the Los Angeles Basin. Can be found in fine, sandy soils associated with washes or dunes. May hide under weeds and dead leaves in addition to digging burrows.	Moderate Potential to Occur: Marginally suitable grassland and scrub habitat is present on the Project site. Twenty recent records occur within 5 miles of the Project site, ranging from approximately 2-4 miles away.
<i>Taxidea taxus</i> American badger	Fed: CA:	none SSC	Low, semi-open, and open scrub habitats with flat, sandy valley floors. Habitats include coastal and mixed chaparral, coastal sage scrub, riparian scrub, low sagebrush, and grasslands with interspaced shrubs. Prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow. Young are born in underground burrows.	Low Potential to Occur: The Project site offers grassland habitat and scrub habitat in the disturbed area and areas with California buckwheat scrub vegetation community. However, these areas would not be considered to have semi-open or open scrub habitats. Four historic records have been recorded in 5 miles but they are all over 100 years old.
<i>Xerospermophilus tereticaudus chlorus</i> Palm Springs round-tailed ground squirrel	Fed: CA:	none SSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees with fine-textured, sandy soil.	Presumed Absent: Although one historic record (Occ # 6) occurs within 5 miles of the Project site from 1938, the Project site is outside of the known geographic range for this species and the site lacks desert habitat.

Federal Designations: (Federal Endangered Species Act, U.S. Fish and Wildlife Service)	State designations: (California Endangered Species Act, CDFW)
END: Federally-listed, Endangered	END: State-listed, Endangered
THR: Federally-listed, Threatened	THR: State-listed, Threatened
FC: Federal Candidate Species	CAN: Candidate for state listing
DL: Federally-delisted	SSC: Species of Special Concern
	FP: Fully Protected Species
	WL: Watch List Species

Source: California Natural Diversity Data Base (CNDDDB) Yucaipa, Forest Falls, Harrison Mountain, Keller Peak, Big Bear Lake, Moonridge, San Geronio Mountain, Cabazon, Beaumont, El Casco, Sunnymead, and Redlands
7.5-minute quads.