NATURAL RESOURCES ASSESSMENT, INC.

General Biological Assessment
Reservoir 6 and Almond Street Waterline Replacement
Alternatives A and B
Cucamonga Valley Water District
Rancho Cucamonga, California

Prepared for:

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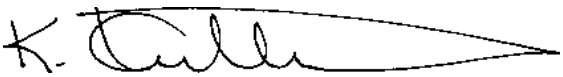
CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this jurisdictional delineation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Karen Kirtland

NATURAL RESOURCES ASSESSMENT, INC.

December 19, 2024

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1.0 Introduction

Lilburn Corporation contracted Natural Resources Assessment, Inc. (NRAI) on behalf of Cucamonga Valley Water District (CVWD) to prepare a general biological assessment for the proposed upgrade of existing waterlines in Rancho Cucamonga, San Bernardino County.

The biological assessment was required as part of the environmental documentation for the project.

2.0 Site Location and Project Description

The project alignment alternatives start just north of the eastern end of Almond Street (Figures 1 and 2). CVWD proposes to install 850 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterline to replace approximately 400 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines which are experiencing deterioration. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents.

This project will relocate the existing pipelines in an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The alignment area starts just north of the eastern end of Almond Street and extends from the western bank of Angalls Canyon to the former fire road on the west bank. It then follows the fire road south to the connection on the west bank.

The proposed project is the installation of approximately 850 linear feet of two (2) new 16-inch cement mortar-lined and coated waterline to replace approximately 400 linear feet of existing 14-inch and 16-inch waterlines.

3.0 Methods

3.1 Data Review

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. Information sources reviewed included:

- Information provided by the City of Rancho Cucamonga for the project site.
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- Calflora, a website for information on plant species.
- CNPS Inventory for information on plant species
- Information, Planning, and Conservation System (IPAC) data.
- Biogeographic Information & Observation System (BIOS) data.

- USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters".
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey to identify hydric soils on site.

NRAI used the information to focus our field survey efforts. Please see Section 6.0 for a complete listing of documents reviewed.

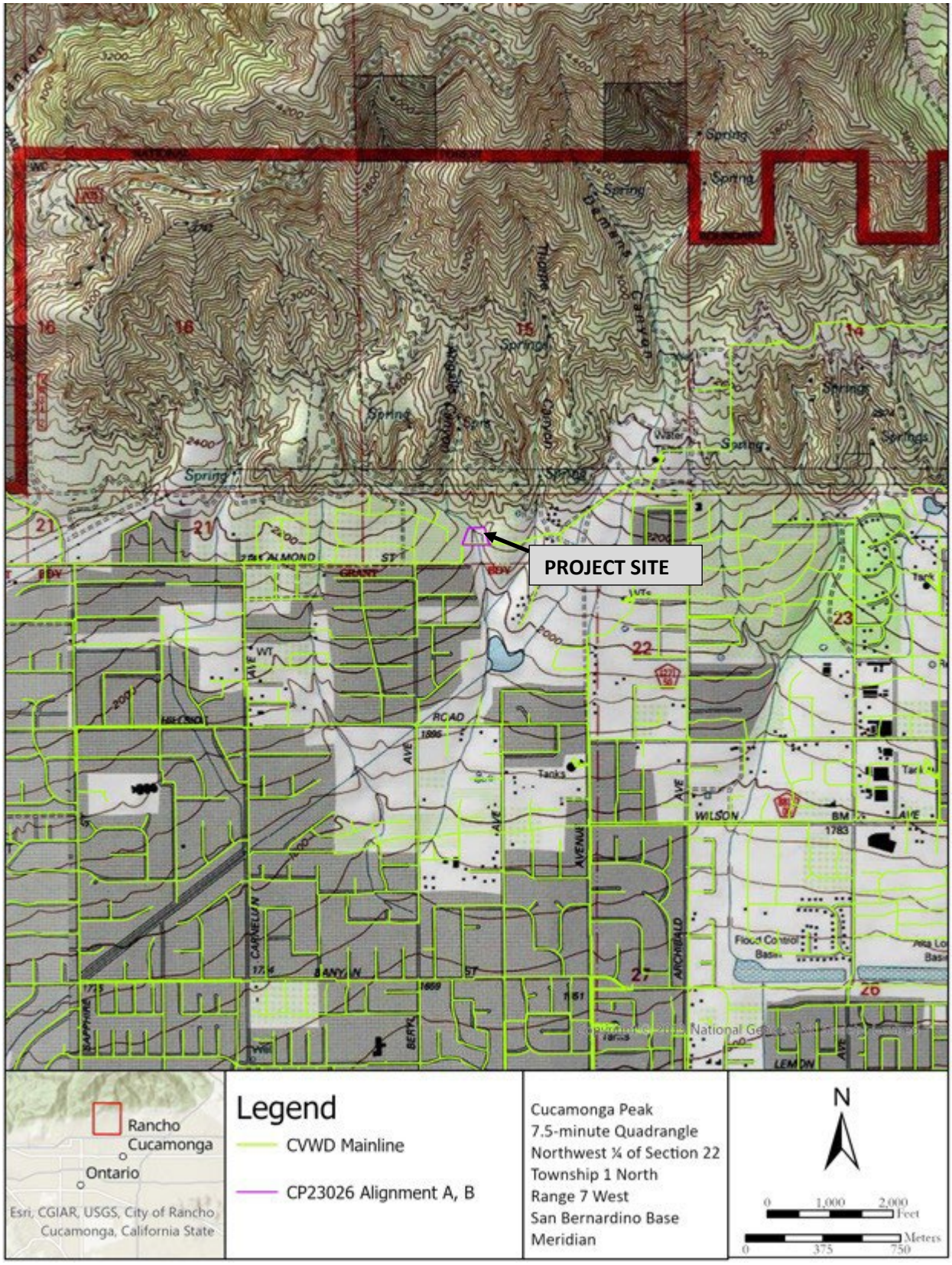

Figure 1. Project Location and Vicinity.

Figure 2. Project Aerial and Layout.

3.2 Field Surveys and Site Assessment

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo (subconsultant to NRAI) attended a field meeting with the Cucamonga Valley Water District (CVWD) and city representatives on 19 March 2024 to discuss the project and conduct a brief evaluation of the overall area of Angalls Canyon. We walked the roads around the project area and noted the general habitats and site conditions. We used this evaluation to focus our research on the potential sensitive biological resources in the general vicinity of the project.

We conducted a full biological field assessment, including field surveys of the two proposed alignments on 2 May 2024. Ms. Kirtland and Mr. Montijo evaluated the surrounding habitats, making notes on the general and sensitive biological resources present and taking representative photographs (Appendix A).

3.3 Weather, Topography and Soils

The weather at the start of the March 19, 2024 survey was fifty degrees Fahrenheit in the morning. The sky was thinly overcast, with three mile per hour (mph). At the end of the survey temperatures were sixty degrees Fahrenheit, the skies were thinly overcast, and winds were three mph.

The topography of the project site is a steep-sided canyon, with a mostly flat bottom eroded by stream action into small, braided streams. The area of the canyon occupied by the existing pipeline runs due south (Figure 1). The elevations along the north boundary ranges from approximately 2120 feet (646 meters) above mean sea level (msl) at the top of slope to 2080 feet (634 meters) msl on the bottom of the canyon. The elevations along the south boundary range from 2100 feet (640 meters) msl at the top of slope to 2070 feet (631 meters) msl on the canyon bottom (Figure 1).

There are four soils within the project site boundaries (Figure 3). The NRCS classifies soils as hydric or non-hydric, as well as classifying the hydrological potential as one of four distinct Hydrologic Soil Groups (HGS) or a mix of two of those groups (Appendix B).

The Cieneba-Rock Outcrop complex (Cr) is found on 30 to 50 percent slopes. The Cieneba component typically occurs on mountain slopes and hillslopes, while the Rock Outcrop typically occurs on ridges and mountain slopes. The parent material is residuum that has weathered from granite. Cieneba-Rock complex is classified as a non-hydric soil that is somewhat excessively drained. It is placed in HGS D. It is non-saline and never floods or ponds.

Hanford coarse sandy loam (HaD) is found on nine to fifteen percent slopes. It typically occurs on alluvial fans and is formed from alluvial derived from granite. Hanford coarse sandy loam is a well-drained soil that is non-saline to very slightly saline. It is placed in HGS A and is considered a non-hydric soil. This soil never floods or ponds.

Psamments, Fluvents, and Frequently Flooded Soils (Ps) are somewhat excessively drained soils. These soils are found along drainage ways. Psamments are somewhat excessively drained while no such

classification exists for Fluvents and Frequently Flooded Soils. Flooding of both soil types is frequent, while ponding never occurs. Both soils are in HGS A. Psamments are non-hydric soils, while Fluvents are hydric soils. Frequently Flooded Soils are not given a hydric rating or are in one of the HGS group.

Ramona sandy loam (RmD) occurs on nine to fifteen percent slopes. This soil is an alluvium derived from granite and occurs on alluvial fans and terraces. It is a well-drained soil that does not flood or pond. It is non-hydric and is in the HGS C group.

3.4 Vegetation

There are five vegetation types within the general area of the two alignments (Figure 4). Annual grassland (disturbed) is on the top of the western slope. Coastal sage occurs on the steeper slopes and bottom of Angalls Canyon. Oak riparian woodland on the upper banks of the Angalls Canyon stream.

Landscape tree and shrubs as well as an herbaceous ground cover occur on the western slope of the alignment area.

3.4.1 Annual Grassland

Annual grassland (disturbed) on the project site is a mix of weedy non-native and native species. Common non-native species observed were Italian thistle (*Carduus pycnocephalus*), star-thistle (*Centaurea melitensis*), garden rocket (*Eruca vesicaria*), castor bean (*Ricinus communis*) and red-stemmed filaree (*Erodium cicutarium*). Common native species included small-flowered fiddleneck (*Amsinckia menziesii*), caterpillar phacelia (*Phacelia cicutaria*) and sand pygmy weed (*Crassula connata*).

The annual grassland formed a dense cover in open flat areas. This community occurs predominately on the top of the western bank.

3.4.2 Coastal Sage Scrub

Coastal sage scrub on the project site is a mix of shrub species such as laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Annual plant species in this habitat include common Pacific pea (*Lathyrus vestitus*), Johnson's honeysuckle (*Lonicera subspicata*) and morning glory (*Calystegia macrostegia*).

This community occurs on the steeper sides of the western and eastern slopes of the canyon.

3.4.3 Oak Riparian Woodland

Oak riparian woodland occurs in separate stands along the slopes and bottom of Angall Canyon. Coast live oak (*Quercus agrifolia*) is the only oak species found in this community. Other woody species include toyon (*Heteromeles arbutifolia*), honeysuckle (*Lonicera subspicata*) and southern bush monkeyflower (*Diplacus longiflorus*).

Herbaceous species in this community include poison oak (*Toxicodendron diversilobum*), horehound (*Marrubium vulgare*) and California mugwort (*Artemisia douglasiana*), branching phacelia, strigose lotus (*Acmispon strigosus*), and chilicothe (*Marah macrocarpa*).

Figure 3. Project Soils.

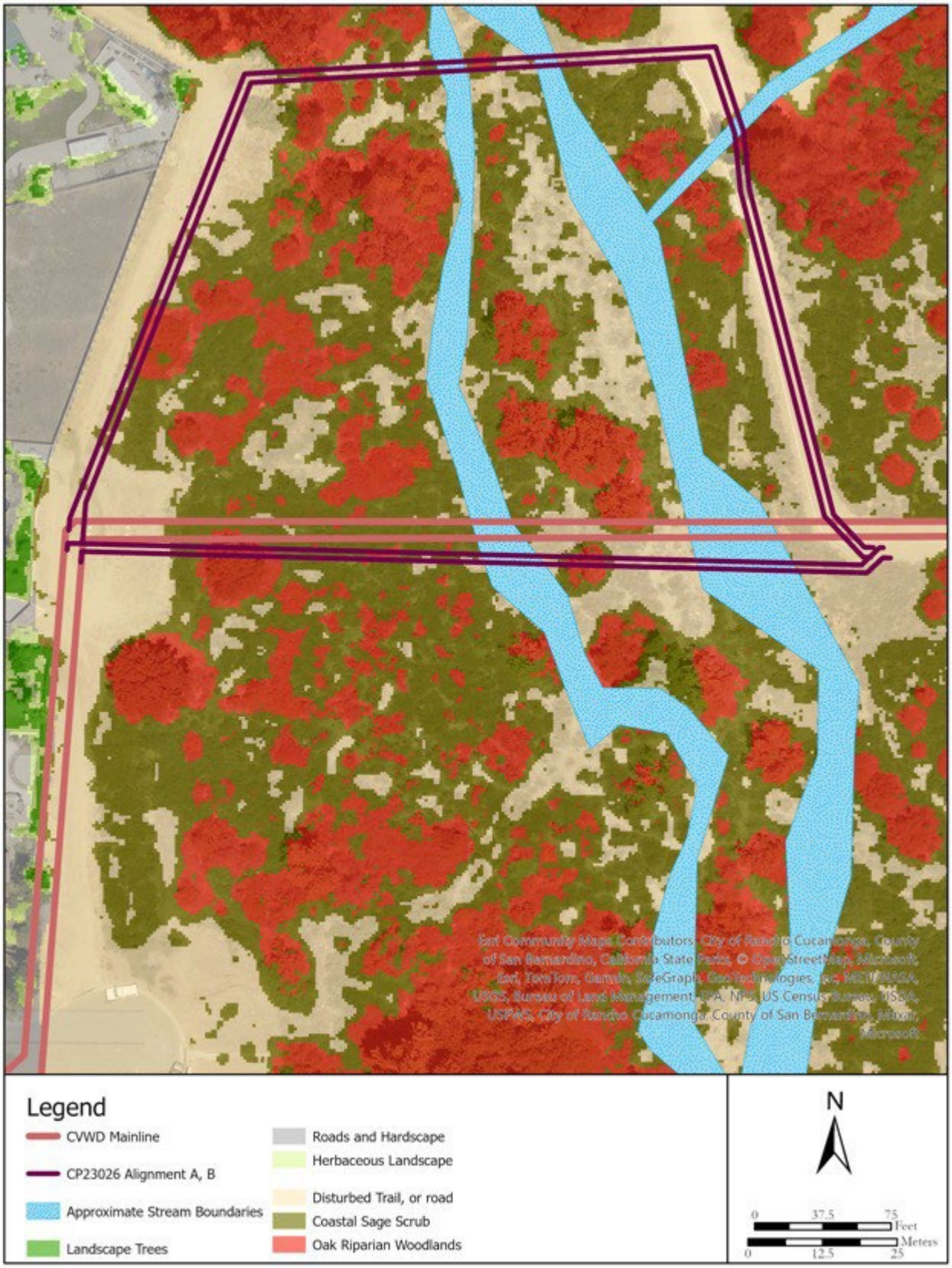

Figure 4. Vegetation Map.

There is a single row of California sycamore trees (*Platanus racemosa*) along the creek at the bottom of Angall Canyon. Plant species growing along the line of sycamores include strigose lotus, mulefat, and golden yarrow (*Eriophyllum confertiflorum*).

3.5 Wildlife

Wildlife species observed included insects, reptiles, birds, and mammals.

Butterfly species observed included mourning cloak (*Nymphalis antiopa*) and Sara orangetip (*Anthocharis sara*). One moth species, white-lined sphinx moth (*Hyles lineata*) was also seen.

Western fence lizard (*Sceloporus occidentalis*) was found in scrub habitats.

Bird species observed included mourning dove (*Zenaida macroura*) and house finch (*Haemorhous mexicanus*) in the annual grassland, landscaped, and non-native communities. California towhee (*Pipilo crissalis*), California quail (*Callipepla californica*), and California scrub jay (*Aphelocoma californica*) were observed in more open scrub habitats, while spotted towhee (*Pipilo maculatus*), blue-gray gnatcatcher (*Polioptila caerulea*) and ruby-crowned kinglet (*Regulus calendula*) were more common in denser scrub communities.

The oak riparian woodland community supported acorn woodpecker (*Melanerpes formicivorus*), Bullock's oriole (*Icterus bullockii*), plain titmouse (*Baeolophus inornatus*), wrentit (*Chamaea fasciata*) and western wood-peewee (*Contopus sordidulus*).

Red-tailed hawk (*Phainopepla nitens*) and common raven (*Cora corax*) were heard calling and flying over the project area.

Sign or sightings of mammals included California mule deer (*Odocoileus hemionus californicus*), California ground squirrel (*Spermophilus beecheyi*) and Audubon's cottontail (*Sylvilagus audubonii*).

Appendix C provides a list of wildlife species observed.

3.6 Sensitive, Protected and Listed Biological Resources

Sensitive species potentially present include those listed, or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) as reported in the CNDDB data. All sensitive species were considered as potentially present on the project site if its known geographical distribution encompassed all or part of the project area or if its distribution was near the site and its general habitat requirements were present (Appendix D).

The proposed action includes excavation for the placement of the new pipeline. Surface disturbance is minimal and limited to the sides of the canyon. No significant impacts to sensitive, protected or listed biological resources are expected to occur and no mitigation would be required.

4.0 Jurisdictional Waters

The identification of jurisdictional waters in this report is subject to final determination by the various permitting agencies.

Angalls Canyon is mapped as Riverine within the project area (Figure 5). Riverine is defined as "all wetlands and deepwater habitats contained within a channel, with two exceptions: 1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens; and 2) habitats with water containing ocean-derived salts of 0.5 ppt [parts per thousand] or greater. A channel is "'an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water (Langbein and Iseri 1960:5)'" (Federal Geographic Data Committee. 2013)[1].

4.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

In 2023, the Corps redefined two standard terms found in the regulation that set the standards for determining jurisdiction. These standards are Relatively Permanent and Significant Nexus.

"**Relatively Permanent" is a test that** provides important efficiencies and clarity for regulators and the public by readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. To meet the relatively permanent standard, the waterbodies must be relatively permanent, standing, or continuously flowing waters connected to paragraph (a)(1) waters or waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters."[2]

Waters classified as (a)(1) are: 1) Traditional navigable waters, such as oceans and major rivers; 2) Territorial seas; and) Interstate waters but not interstate wetlands.

Significant Nexus is a test that clarifies if certain waterbodies, such as tributaries and wetlands, are subject to the Clean Water Act based on their connection to and effect on larger downstream waters that Congress fundamentally sought to protect. A significant nexus exists if the waterbody (alone or in combination) significantly affects the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters."[3]

[1] https://www.fws.gov/media/classification-wetlands-and-deepwater-habitats-united-states

[2] https://www.epa.gov/system/files/documents/2022-12/Public%20Fact%20Sheet.pdf

[3] ibid

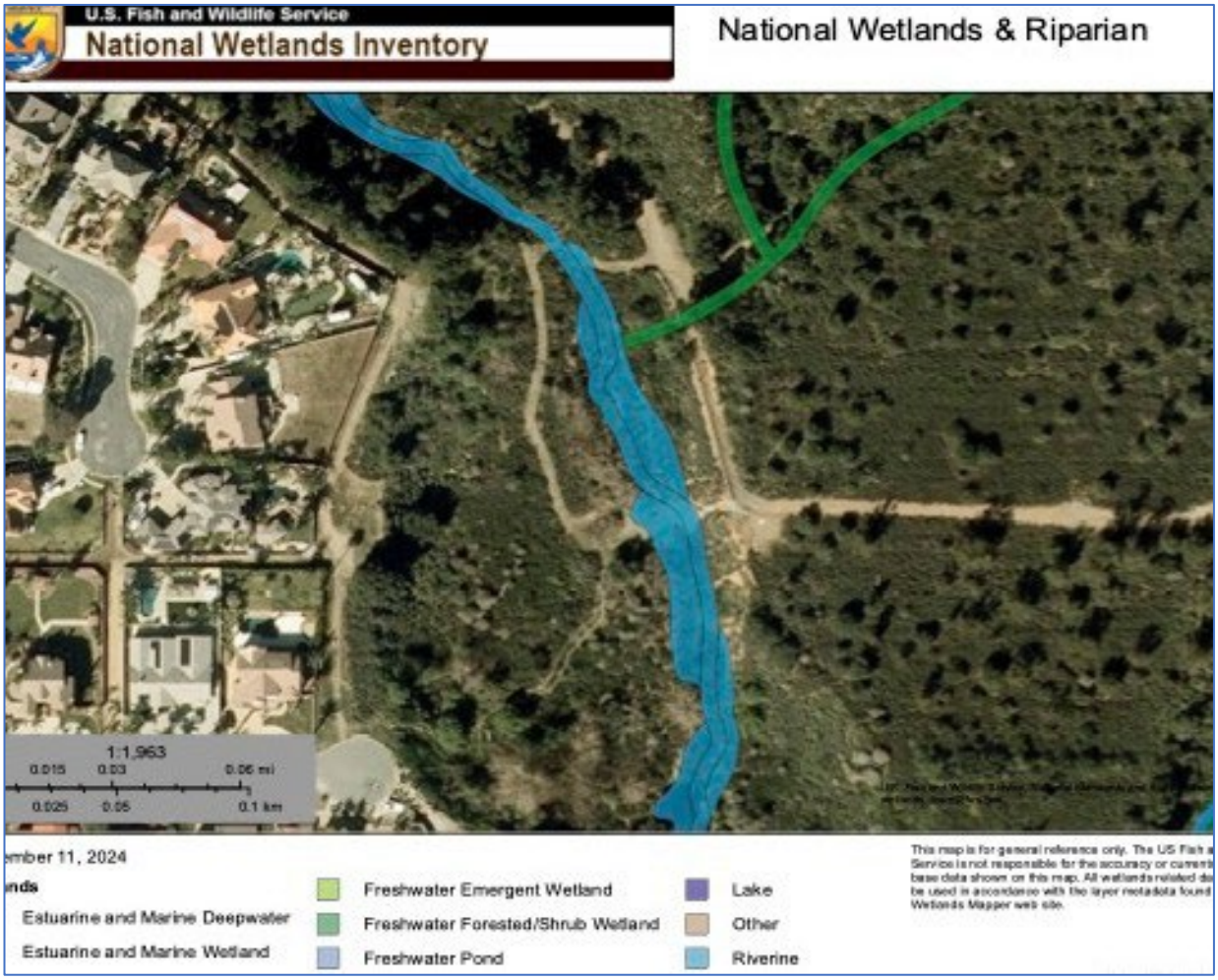

Figure 5. Wetland Inventory Designation.

Angall Canyon flows into a channel that eventually flows into Prado Basin, a section of the Santa Ana River. At the time of the survey, Angall Canyon had a continuous flow that appears to be permanent. This meets the Relatively Permanent Test. In addition to the presence of flow, Angall Canyon drains into a concrete channel that eventually connects Prado Basin, a section of the Santa Ana River an interstate water that flows to the Pacific Ocean. This meets the Significant Nexus test. Angalls Canyon drainage would be considered a jurisdictional water as of the 2023 regulations, subject to the provisions of the Clean Water Act and would require evaluation under the 4040 permit requirements.

4.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

The Act identifies beneficial uses of waters of the state that the RWQCB use to evaluate jurisdiction. These beneficial uses (BUs) include Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Groundwater Recharge (GWR), Agricultural Supply (AGR), and Non-Contact Water Recreation (REC2) (which is limited by fencing), beneficial use of "rare, threatened or endangered species habitat", Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PROC).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution. In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Angalls Canyon provides a number of Beneficial Uses as defined by the RWQCB. These include WILD, GWR, AGR and possibly MUN. Angalls Canyon would fall under the jurisdiction of the RWQCB.

4.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

The CDFW further defines a stream as: "A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation." Title 14, Section 1.72. Stream (Includes Creeks and Rivers).

The wildlife values of Angalls Canyon are high for species in the area and moderate for migratory species. Surface water and riparian habitat are present. Based on our field observations the CDFW may claim jurisdiction over this drainage.

Jurisdictional Findings

The proposed action is underground drilling for the placement of the two new pipes. Surface disturbance is expected to be minimal, temporary and limited to the sides of the canyon. No significant impacts to jurisdictional waters are expected. No mitigation should be required for impacts to protected waters in addition to Storm Water Prevention and Pollution Program requirements.

5.0 Raptors, Migratory Birds, and Habitat

At the time of the survey, the project area had nesting habitat for ground-, shrub-, and tree-nesting species. A breeding bird survey following the recommended guidelines of the MBTA is required to determine if nesting is occurring in this area.

1. If the start of construction[4] occurs between February 1 and August 31, then a qualified biologist shall conduct a breeding bird survey no more than three days prior to the start of construction to determine if nesting is occurring
2. If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.
3. If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

6.0 Offsite and Temporary Impacts

The construction plans for this project have not been prepared. As we understand it, there are no offsite areas that will be used in the construction of the pipeline.

No temporary impacts are expected since all construction is expected to be confined to occur within the grading area.

[4] "Construction" includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

7.0 References

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Appendix A Site Photos

Photo 1. Overview of the project area, looking east. View of oak woodlands on the sides of the canyon.

Photo 2. North-south alignment of the project, looking north.

Photo 3. Looking west along the northern pipeline alignment from the canyon bottom.

Photo 4. Northern pipeline alignment. Bottom of the canyon looking east.

Photo 5. Northern pipeline alignment. Bottomo of canyon looking west.

Photo 6 Southern pipeline alignment. Looking east down canyon slope.

Photo 7. East side of the canyon at point where southern pipeline will connect to existing line.

Photo 8. Southern drainage alignment, looking east to terminus.

Appendix B Hydrological Soil Classification System

Hydrologic Soil Group	Description
Hydrologic Soil Group A	The soils have a high infiltration rate even when thoroughly wetted. They chiefly consist of deep, well drained to excessively drained sands or gravels. They have a high rate of water transmission. (Low runoff potential).
Hydrologic Soil Group B	The soils have a moderate infiltration rate when thoroughly wetted. They chiefly are moderately deep to deep, moderately well drained to well drained soils that have moderately fine to moderately coarse textures. They have a moderate rate of water transmission.
Hydrologic Soil Group C	The soils have a slow infiltration rate when thoroughly wetted. They chiefly have a layer that impedes downward movement of water or have moderately fine to fine texture. They have a slow rate of water transmission.
Hydrologic Soil Group D	The soils have a very slow infiltration rate when thoroughly wetted. They chiefly consist of clay soils that have a high swelling potential, soils that have a permanent highwater table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. They have a very slow rate of water transmission. (High runoff potential).
Dual Hydrologic Soil Group	Dual hydrologic groups, A/D, B/D, and C/D, are given for certain wet soils that can be adequately drained. The first letter applies to the drained condition, the second to the undrained. Only soils that are rated D in their natural condition are assigned to dual classes. Soils may be assigned to dual groups if drainage is feasible and practical.

Appendix C Plants and Animal Species Observed

PLANT SPECIES OBSERVED

Survey dates: March 19 and May 2,.2024. Asterisk (*) indicates species not native to California.

++ denotes CNPS List species

Latin Name	Common Name
Lycophytes	**Fern Allies**
Selaginellaceae	**Spike Moss Family**
Selaginella bigelovii Underw.	Bigelow's Club Moss
Polypodiopsida (class)	**Ferns**
Polypodiaceae	**Chain Fern Family**
Polypodium californicum Kauff	California Polypody
Pteridaceae	**Maidenhair Fern Family**
Pellaea andromedifolia (Kaulf.) Fée	Coffee Fern
Eudicots	**Flowering Plants**
Anacardiaceae	**Sumac Family**
Malosma laurina (Nutt.) Nutt. ex Abrams	Laurel Sumac
Toxicodendron diversilobum (Torr. & A. Gray) Greene	Poison Oak
Asteraceae	**Sunflower Family**
Anthemis cotula L.	Mayweed
Artemisia californica Less.	California Sagebrush
Artemisia douglasiana Besser	California Mugwort
Baccharis salicifolia (Ruiz & Pav.) Pers. ssp. *salicifolia*	Mulefat
Carduus pycnocephalus L.*	Italian Thistle
Centaurea melitensis L.*	Tocalote, Star Thistle
Eriophyllum confertiflorum (DC. A. Gray)	Golden Yarrow
Lepidospartum squamatum (A. Gray) A. Gray	Scalebroom
Pseudognaphalium biolettii Anderb.	Two-color Rabbit Tobacco
Pseudognaphalium californicum (DC.) Anderb.	Ladies'Tobacco
Silybum marianum (L.) Gaertn.*	Milk Thistle
Sonchus asper (L.) Hill*	Spiny Sowthistle
Boraginaceae	**Borage Family**
Amsinckia menziesii (Lehm.) A. Nelson & J. F. Macbr. var. *menziesii*	Small Flowered Fiddleneck
Cryptantha intermedia (A. Gray) Greene	Common Cryptantha
Cryptantha muricata (Hook. & Arn.) A. Nelson & J. F. Macbr.	Prickly Cryptantha
Phacelia cicutaria Greene	Caterpillar Phacelia
Brassicaceae	**Mustard Family**
Eruca vesicaria (L.) Cav. ssp. *sativa* (Mill.) Thell.*	Garden Rocket
Hirschfeldia incana (L.) Lagr. -Fossat*	Short-pod Mustard
Raphanus sativus L. *	Jointed Charlock, Wild Radish
Cactaceae	**Cactus Family**
Opuntia littoralis (Engelm.) Cockerell	Coastal Pricklypear

Latin Name	Common Name
Crassulaceae	**Stonecrop Family**
Crassula connata (Ruiz & Pav.) A. Berger	Sand Pygmy Weed
Caprifoliaceae	**Honeysuckle Family**
Lonicera subspicata var. *denudata*	Johnston's Honeysuckle
Convulvulaceae	**Morning Glory Family**
Calystegia macrostegia (Greene) Brummitt ssp. *arida*	Southern California Morning Glory
Cucurbitaceae	**Cucumber Family**
Marah macrocarpa (Greene) Greene	Chilicothe
Euphorbiaceae	**Euphorb Family**
Ricinus communis L. *	Castor Bean
Fabaceae	**Legume Family**
Acmispon glaber (Vogel) Brouillet var. *brevialatus* (Ottley) Brouillet	Short-winged Deerweed
Acmispon strigosus (Nutt.) Brouillet	Strigose lotus
Lathyrus vestitus Nutt.	Common Pacific Pea
Melilotus indicus (L.) All.*	Indian Clover
Vicia villosa Roth ssp. *villosa**	Hairy Vetch
Fagaceae	**Beech Family**
Quercus agrifolia Nee *agrifolia*	Coast Live Oak
Geraniaceae	**Geranium Family**
Erodium botrys (Cav.) Bertol. *	Big Heronbill
Erodium cicutarium L.*	Red-stemmed Filaree
Lamiaceae	**Mint Family**
Marrubium vulgare L.*	Horehound
Salvia apiana Jeps.	White Sage
Salvia mellifera Greene	Black Sage
Malvaceae	**Mallow Family**
Malva parviflora L.	Cheeseweed
Myrtaceae	**Myrtle Family**
Eucalyptus camaldulensis Dehnh.*	Blue Gum
Oleaceae	**Olive Family**
Olea europea L. *	European Olive
Onagraceae	**Four O'clock Family**
Epilobium ciliatum Raf. ssp. *ciliatum*	Fringed Willowherb
Eulobus californicus Torr. & A. Gray	California Primrose
Papaveraceae	**Poppy Family**
Eschscholzia californica Cham.	California Poppy
Plantaginaceae	**Plantain Family**
Keckiella cordifolia (Benth.) Straw	Heart-leaved Penstemon
Penstemon spectabilis Thurb. ex A. Gray var. *subviscosus* (D. D. Keck) McMinn	Showy Penstemon
Phrymaceae	**Lopseed Family**
Diplacus longiflorus Nutt.	Southern Bush Monkeyflower

Latin Name	Common Name
Platanaceae	**Sycamore Family**
Platanus racemosa Nutt.	California Sycamore
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum Benth. var. *foliolosum* (Nutt.) S. Stokes ex Abrams	California Buckwheat
Rumex crispus L.*	Curly Dock
Rhamnaceae	**Buckthorn Family**
Frangula californica (Eschsch.) A. Gray ssp. *californica*	California Coffeeberry
Ceanothus crassifolius Torr.	Hoary Leaved Ceanothus
Ceanothus leucodermis Greene	Chaparral Whitethorn
Ceanothus megacarpus Nutt.	Big Pod Ceanothus
Rosaceae	**Rose Family**
Heteromeles arbutifolia (Lindley) Roemer	Toyon
Rubiaceae	**Coffee Family**
Galium aparine L.	Common Bedstraw
Scrophulariaceae	**Figwort Family**
Myoporum laetum G. Forst. *	Ngaio Tree
Solanaceae	**Nightshade Family**
Datura wrightii Regel	Jimsonweed
Nicotiana glauca Graham*	Tree Tobacco
Solanum laciniatum Aiton *	Kangaroo Apple
Tamaricaceae	**Tamarix Family**
Tamarix ramosissima Ledeb.	Tamarisk
Viburnaceae (Adoxaceae)	**Viburnum or Moschatel Family**
Sambucus mexicana C. Presl ex DC.	Blue Elderberry

Monocots	Grasses And Allies
Arecaceae	**Palm Family**
Washingtonia robusta H. Wendl. *	Mexican Fan Palm
Agavaceae	**Agave Family**
Agave americana L.	Century Plant
Hesperoyucca whipplei (Torr.) Trel.	Chaparral Yucca
Cyperaceae	**Sedge Family**
Cyperus involucratus Rottb. *	Umbrella Plant
Poaceae	**Grass Family**
Avena barbata Pott. Ex Link*	Slender Oats
Avena fatua L.	Wild Oats
Bromus diandrus Roth*	Ripgut Brome
Bromus hordeaceus L.*	Soft Chess
Bromus rubens L. *	Red Brome
Hordeum murinum L.*	Foxtail Barley
Elymus condensatus J. Pressl.	Giant Rye
Melica imperfecta Trin.	West Coast Melic

Latin Name	Common Name
Muhlenbergia rigens (Benth.) Hitchc.	Deergrass
Stipa miliacea (L.) Hoover var. *miliacea* *	Smilo Grass
Themidaceae	**Brodiaea Family**
Dipterostemon capitatum (Benth.) Rydb.	Blue Dicks

Taxonomy and nomenclature follow Hickman 2012 for plants, Hall 1981and Stebbins 1966 for animals.

Alphabetical List of Plants and Alignment Occurrence

Scientific Name	Family	Alignment
Acmispon glaber	Fabaceae	A
Acmispon glaber	Fabaceae	B
Agave americana	Agavaceae	A
Amsinckia menziesii	Boraginaceae	A
Anthemis cotula	Asteraceae	A
Artemisia californica	Asteraceae	A
Artemisia douglasiana	Asteraceae	A
Artemisia douglasiana	Asteraceae	B
Avena barbata	Poaceae	B
Avena fatua	Poaceae	A
Baccharis salicifolia ssp. salicifolia	Asteraceae	A
Bromus diandrus	Poaceae	A
Bromus hordeaceus	Poaceae	A
Bromus rubens	Poaceae	A
Calystegia macrostegia ssp. arida	Convulvulaceae	A
Carduus pycnocephalus	Italian Thistle	A
Ceanothus crassifolius	Rhamnaceae	B
Ceanothus leucodermis	Rhamnaceae	A
Ceanothus megacarpus	Rhamnaceae	B
Centaurea melitensis	Asteraceae	A
Centaurea melitensis	Asteraceae	B
Corethrogyne filaginifolia	Asteraceae	A
Crassula connata	Crassulaceae	A
Cryptantha intermedia	Boraginaceae	B
Cryptantha muricata	Boraginaceae	B
Diplacus longifolius	Phrymaceae	B
Dipterostemon capitatum	Themidaceae	A
Elymus condensatus	Poaceae	A
Eriogonum fasciculatum	Polygonaceae	A
Eriogonum fasciculatum	Polygonaceae	B
Eriophyllum confertiflorum	Asteraceae	A
Erodium botrys	Geraniaceae	A

Scientific Name	Family	Alignment
Erodium cicutarium	Geraniaceae	A
Eruca versicaria	Brassicaceae	A
Eucalyptus camaldulensis	Myrtaceae	A
Frangula crocea	Rhamnaceae	B
Galium aparine	Rubiaceae	A
Helianthus annuus	Asteraceae	A
Hesperoyucca whipplei	Agavaceae	A
Heteromeles arbutifolia	Rosaceae	A
Heterotheca grandiflora	Asteraceae	A
Hirschfeldia incana	Brassicaceae	A
Hirschfeldia incana	Brassicaceae	B
Hordeum marinum	Poaceae	A
Keckiella cordifolia	Plantaginaceae	A
Lactuca serriola	Asteraceae	A
Lepidospartum squamatum	Asteraceae	A
Lonicera subspicata	Caprifoliaceae	A
Lonicera subspicata	Caprifoliaceae	B
Malosma laurina	Anacardiaceae	A
Malva parviflora	Malvaceae	A
Marah macrocarpa	Cucurbitaceae	A
Marrubium vulgare	Lamiaceae	A
Melica imperfecta	Poaceae	A
Melilotus indica	Fabaceae	A
Muhlenbergia rigens	Poaceae	A
Nicotiana glauca	Solanaceae	A
Nicotiana glauca	Solanaceae	B
Opuntia littoralis	Cactaceae	A
Pellaea andromedifolia	Pteridaceae	B
Penstemon spectabilis	Plantaginaceae	B
Phacelia cicutaria	Boraginaceae	A
Phacelia cicutaria	Boraginaceae	B
Platanus racemosa	Platanaceae	A
Polypodium californicum	Polypodiaceae	B
Pseudognaphalium biolettii	Asteraceae	A
Pseudognaphalium californicum	Asteraceae	A
Quercus agrifolia	Fagaceae	A
Quercus agrifolia	Fagaceae	B
Raphanus sativus	Brassicaceae	A
Salvia apiana	Lamiaceae	A
Salvia mellifera	Lamiaceae	A

Scientific Name	Family	Alignment
Salvia mellifera	Lamiaceae	B
Sambucus mexicana	Viburnaceae	A
Selaginella bigelovii	Selaginellaceae	A
Senecio vulgaris	Asteraceae	A
Silybum marianum	Asteraceae	A
Silybum marianum	Asteraceae	B
Sonchus oleraceus	Asteraceae	A
Stipa miliacea var. *miliacea*	Poaceae	A
Tamarix ramosissima	Tamaricaceae	A
Toxicodendron diversilobum	Anacardiaceae	A
Vicia villosa ssp. *villosa*	Fabaceae	A
Washingtonia robusta	Arecaceae	A

WILDLIFE SPECIES OBSERVED

Survey dates: March 19 and May 2, 2024. Asterisk (*) indicates species not native to California.

Latin Name	Common Name
Class Insecta - Insects	
Nymphalidae	**Brush-footed Butterflies**
Nymphalis antiopa	Mourning Cloak
Pieridae	**Brush-footed Butterflies**
Anthocharis sara	Sara Orangetip
Sphingidae	**Sphinx Moths**
Hyles lineata	White-lined Sphinx Moth
Class Reptilia - Reptiles	
Phrynosomatidae	**Spiny Lizards**
Sceloporus occidentalis	Western Fence Lizard
Class Aves - Birds	
Accipitridae	**Hawks**
Accipiter cooperii	Cooper's Hawk
Buteo jamaicensis	Red-tailed Hawk
Aegithalidae	**Bushtits**
Psaltriparus minimus	Bushtit
Columbidae	**Doves and Pigeons**
Zenaida macroura	Mourning Dove
Corvidae	**Crows, Jays, and Ravens**
Aphelocoma californica	California Scrub-jay
Corvus corax	Common Raven
Emberizidae	**New World Sparrows**
Artemisiospiza belli	Bell's Sparrow
Melospiza melodia	Song Sparrow
Melozone crissalis	California Towhee
Pipilo maculatus	Spotted Towhee
Fringilidae	**Finches**
Haemorhous mexicanus	House Finch
Spinus psaltria	Lesser Goldfinch
Icteridae	**Blackbirds**
Icterus bullockii	Bullock's Oriole
Mimidae	**Mimic Thrushes**
Mimus polyglottos	Northern Mockingbird
Odontophoridae	**New World Quails**
Callipepla californica	California Quail
Paridae	**Tits and Chickadees**
Baeolophus inornatus	Plain Titmouse
Parulidae	**New World Warblers**

Latin Name	Common Name
Oreothlypis celata	Orange-crowned Warbler
Setophaga petechia	Yellow Warbler
Picidae	**Woodpeckers**
Colaptes auratus	Northern Flicker
Melanerpes formicivorus	Acorn Woodpecker
Picoides nuttallii	Nuttall's Woodpecker
Polioptilidae	**Gnatcatchers**
Polioptila caerulea	Blue-gray Gnatcatcher
Ptilogonatidae	**Silky Flycatchers**
Phainopepla nitens	Phainopepla
Regulidae	**Kinglets**
Regulus calendula	Ruby-crowned Kinglet
Sylviidae	**Typical Warblers**
Chamaea fasciata	Wrentit
Trochilidae	**Hummingbirds**
Calypte anna	Anna's Hummingbird
Selasphorus sp.	Unknown Selasphorus Hummingbird
Troglodytidae	**Wrens**
Thryomanes bewickii	Bewick's Wren
Troglodytes aedon	House Wren
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	Black Phoebe
Contopus sordidulus	Western Wood-pewee
Class Mammalia - Mammals	
Canidae	**Dogs and Coyotes**
Canis latrans	Coyote
Cervidae	**Deer, Elk**
Odocoileus hemionus californicus	California Mule Deer
Leporidae	**Wrens**
Sylvilagus audubonii	Desert Cottontail
Sciuridae	**Squirrels**
Spermophilus beecheyi	California Ground Squirrel

Appendix D Sensitive Resources Table

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Plants				
San Gabriel manzanita *Arctostaphylos glandulosa* ssp. *gabrielensis*	Shrub. Granitic soils. Chaparral. Sierra Madre, San Bernardino and San Gabriel mountains. 950 - 2000 meters (3120 - 6600 feet).	March flowering period	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site has suitable habitat and soils; below recorded elevation.
Singlewhorl burrobrush *Ambrosia monogyra*	Perennial shrub. Sandy soils Washes, dry riverbed. Below 500 meters (1650 feet). Southern California and east of the Sierras to Arizona, New Mexico, Nevada and Texas. Also in Baja California Sonora, Mexico.	August - November flowering period	FESA: ND CESA: ND CNPS: 2B.2	None. Site lacks dry washes and dry riverbeds; above recorded elevation.
Marsh sandwort *Arenaria paludicola*	Perennial herb. Boggy meadows, swamps and freshwater marshes. Below 300 meters (985 feet). San Bernardino, Los Angeles, coastal counties. Mexico. In San Bernardino mostly along Santa Ana River.	May - Aug flowering period	FESA: END CESA: END CNPS: 1B.1	None. Site lacks freshwater marshes, swamps and meadows.
Mojave milkweed *Asclepias nyctaginifolia*	Perennial herb. Sandy soils. Arroyos, dry slopes. 1000 - 1700 meters (3280 - 5600 feet). Mojave Desert.	May - June	FESA: ND CESA: ND CNPS: 2B.1	None. Site does not contain suitable habitat and is west of the recorded range (with the exception of one historical record in the coastal area).
San Antonio milk-vetch *Astragalus lentiginosus* var. *antonius*	Perennial herb. Yellow pine forest, red fir forest, lodgepole forest. 1400 - 2600 meters (4600 - 8530 feet). San Gabriel Mountains.	April - July	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site does not contain suitable habitat and is below the recorded elevation.
Big Bear Valley woolly pod *Astragalus leucolobus*	Perennial herb. Dry rocky areas, openings in sandy woods and stony shores, pebble plains. 1450 - 2900 meters (4760 - 9500 feet). Tehachapi and San Jacinto mtns, Transverse Ranges.	May - July flowering period	FESA: C2* BLM: BLMS CESA: ND CNPS: 1B.2	None. Site lacks suitable habitat.
Coulter's saltbush *Atriplex coulteri*	Perennial herb. Alkaline or clay soils. Dunes, open sites, coastal areas. Coastal strand, coastal sage scrub and valley grasslands communities. Below 500 meters (1640 feet).	March - Oct flowering period	FESA: ND CESA: ND CNPS: 1B.2	None. Site lacks suitable soils and land features (dunes, open sites).

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Nevin's barberry *Berberis nevinii*	Shrub. Sandy and gravelly soils. Washes in coastal sage scrub and chaparral. Below 650 meters (2150 feet). Southwestern California coast inland to San Bernardino and Riverside counties.	Year round	FESA: END CESA: END CNPS: 1B.1	None. Species was not observed.
Upswept moonwort *Botrychium ascendens*	Rhizomatous fern. Leaf deciduous. Moist meadows, open woodland near streams or seeps. Yellow pine forest. 1500 - 3200 meters (4900 - 10,500 feet). Cascades, Sierra Nevada, east of Sierra Nevada. Historical locations in San Gabriel, San Bernardino mtns.	July - August	FESA: ND USFS: S CESA: ND CNPS: 2B.3	None. Suitable habitat does not exist on site.
Scalloped moonwort *Botrychium crenulatum*	Rhizomatous fern. Leaf deciduous. Meadows, freshwater- marsh bogs and fens. Yellow pine forest. 1500--3600 meters, 4900 - 11,820 feet. Inner coastal ranges, eastern California mtns, San Bernardino and San Gabriel mtns.	June - September	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Suitable habitat does not exist on site.
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	Perennial herb. Shaded foothill canyons in chaparral. Below 1000 meters, 3280 feet. Western Transverse Ranges from near the coast to the San Bernardino Mountains.	March - June	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Was not observed during the surveys.
Palmer's mariposa lily *Calochortus palmeri* var. *palmeri*	Perennial bulbiferous herb Meadows and moist places in early spring. 710 - 2390 meters, 2330 - 7840 feet. Chaparral and yellow pine forest. San Bernardino Mts. to Tehachapi Mts. East San Luis Obispo.	April - July	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. No suitable moist or mesic habitats.
Plummer's mariposa lily *Calochortus plummerae*	Perennial bulbiferous herb. Dry, rocky areas (granitic, rocky substrate) in foothill woodland, valley grassland, coastal sage scrub, chaparral, yellow pine forest. 100 - 1700 meters, 330 - 5580 feet. Coastal ranges from Ventura east to Transverse and Peninsular ranges.	May - July	FESA: ND USFS: S CESA: ND CNPS: 4.2	None. Species not observed.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Lucky morning-glory *Calystegia felix*	Annual herb. Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. 30 - 215 meters, 100 - 705 feet. San Bernardino Valley, Chino and Chino Hills.	March - September	FESA: ND CESA: ND CNPS: 1B.1	None. Suitable marshland, wetland habitat is not present. Species not observed.
Pygmy poppy *Canbya candida*	Annual herb. Granitic, gravelly and sandy soils. Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.600 - 1460 meters, 1970 - 4790 feet. Western Mojave, southeastern slopes Sierra Nevada.	March - June	FESA: ND USFS: S CESA: ND CNPS: 4.2	None. Site does not support habitats preferred by this species.
Western sedge *Carex occidentalis*	Perennial rhizomatous herb. Meadows and seeps in lower montane coniferous forest. 1645 - 3135 meters, 5395 - 10,285 feet. San Gabriel, San Bernardino and San Jacinto mountains.	June - August	FESA: ND CESA: ND CNPS:2B.3	None. Site does not support habitats preferred by this species.
Salt marsh bird's beak *Chloropyron maritimum* ssp. *maritimum*	Annual herb (hemiparasitic). Salt marsh, dunes, coastal areas below 10 meters, 100 feet elevation. Southern California coast. Streams and rivers inland with saline soils.	May-Oct (Nov)	FESA: END BLM: S CESA: END CNPS:1B.2	None. Site does not support saline soils or marshes.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Annual herb. Found occasionally in opening occasionally rocky or sandy soils. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 275 - 1220 meters, 900 - 4005 feet. Scattered locations Lancaster - Ventura, west Riverside Co.	April - June	FESA: ND USFS: S BLM: S CESA: ND CNPS:1B.1	Unlikely. Site supports openings in canyon bottom; but preferred plant communities limited.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	Annual herb. Sometimes on gravelly, sandy soils. Coastal scrub (alluvial fans) Mojavean desert scrub, pinyon and juniper woodland. 300 - 1200 meters, 985 - 3935 feet. Lower slopes of mountains from western Mojave south to San Jacinto Range.	April - June	FESA: ND USFS: S BLM: S CESA: ND CNPS:1B.2	None. Site does not support suitable habitat.
California saw-grass *Cladium californicum*	Perennial rhizomatous herb. Meadows and seeps, marshes and swamps (alkaline, freshwater), 60 - 1600 meters, 195 - 5250 feet. Mtns. east of Salton Sea, ranges east of the Sierra Mtns, southern coastal ranges and Transverse Ranges.	Jun - September	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. No suitable mesic habitats are present.
Peirson's spring beauty *Claytonia peirsonii* ssp. *peirsonii*	Perennial herb. Granitic and metamorphic soils on scree and talus. Subalpine coniferous forest, upper montane coniferous forest. 1510 - 2745 meters, 4955 - 9005 feet. San Gabriel Mtns.	(Mar)May-Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable soil conditions.
Slender-horned spineflower *Dodecahema leptoceras*	Annual. Alluvial fans and river systems. Chaparral, cismontane woodland, coastal scrub. 200 - 760 meters, 655 - 2495 feet. Tehachapi Range south to scattered locations San Bernardino and Riverside cos.	Apr - Jun	FESA: END CESA: END CNPS: 1B.1	None. Site does not support alluvial fan communities.
Many-stemmed dudleya *Dudleya multicaulis*	Perennial herb. Often on clay. Chaparral, coastal scrub, valley and foothill grassland. 15 - 790 meters, 50 - 2590 feet. Coastal, Transverse and Peninsular ranges.	April - July	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site has chaparral, but no open clay soil areas.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Perennial herb. Chaparral, coastal scrub (alluvial fans). Sometimes sandy or gravelly soils 91 - 610 meters, 300 - 2000 feet. Lytle Creek, Cajon Creek and Santa Ana River systems from Transverse Range to Santa Ana Mtns.	Apr - Sep	FESA: END CESA: END CNPS: 1B.1	None. Species was not observed.
Johnson's buckwheat *Eriogonum microthecum* var. *johnstonii*	Perennial deciduous shrub. Rocky areas, subalpine coniferous forest, upper montane coniferous forest. 1829 - 2926 meters, 6000 - 9600 feet. San Gabriel and San Bernardino mtns.	Jul - Sep	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site does not support suitable habitat, below recorded elevation.
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Perennial rhizomatous herb. Marshes and swamps (freshwater, coastal saltwater). 10 - 1525 meters, 35 - 5005 feet. Los Angeles river basin (upper), Orange County (upper tidal), Desert slope San Gabriel Mtns. (Telegraph Peak map), Lytle, Cajon, Santa Ana River watersheds	Aug - Oct	FESA: ND USFS: S CESA: ND CNPS: 1A	None. No suitable marsh or swamp habitat on site.
Parish's alumroot *Heuchera parishii*	Perennial rhizomatous herb. Rocky, sometimes carbonate soils. Alpine boulder and rock fields, lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. 1500 - 3800 meters, 4920 - 12470 feet. Desert slopes San Bernardino mtns.	June - Aug	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. No suitable rocky or carbonate substrates present. General habitat is not present.
Mesa horkelia *Horkelia cuneata* var. *puberula*	Perennial herb. Sandy or gravelly soils. Coastal scrub, cismontane woodland, chaparral. 70 - 810 meters, 230 - 2660 feet. Central to southern coastal ranges, extending into San Bernardino, Riverside cos.	Feb-Jul (Sep)	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.1	May Occur. Potentially present along creek bottom.
Knotted juncus *Juncus nodosus*	Perennial rhizomatous herb. Meadows and seeps (mesic), marshes and swamps (lake margins). 30 - 1980 meters, 100 - 6495 feet. Eastern desert ranges into Nevada. One population approximate location San Gabriel Mtns.	Jul -Sep	FESA: ND CESA: ND CNPS: 2B.3	None. The project area does not support meadows, seeps, marshes or swamps.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Annual herb. Chaparral, coastal sage scrub. 1 - 885 meters, 5 - 2905 feet. South Coast Ranges, Channel Islands. One population Sierra Nevada.	Jan - Jul	FESA: ND CESA: ND CNPS: 4.3	May Occur. Not observed during the survey.
Short-sepaled lewisia *Lewisia brachycalyx*	Perennial herb. Mesic habitats. Meadows and seeps, lower montane coniferous forest. 370 - 2300 meters, 4495 - 7545 feet. San Gabriel, San Bernardino Mtns., Peninsular Range east of San Diego.	(Feb) Apr - Jun (Jul)	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. No meadows or seeps present.
Lemon lily *Lilium parryi*	Perennial bulbiferous herb. Mesic habitats. Lower and upper montane coniferous forest, meadows and seeps, riparian forest. 1220 - 2745 meters. 4005 - 9005 feet. Scattered locations, Transverse and Peninsular ranges.	Jul - Aug	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. No suitable meadows and seeps; below documented elevation.
San Gabriel linanthus *Linanthus concinnus*	Annual herb. Openings in rocky soils. Chaparral, lower and upper montane coniferous forests. 1520 - 2800 meters, 4985 - 9185 feet. San Gabriel Mountains.	Apr - Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable rocky habitats.
Peirson's lupine *Lupinus peirsonii*	Perennial herb. Gravelly, rocky soils, Joshua tree woodlands, pinyon and juniper woodland, lower and upper montane coniferous forests.1000 - 2500 meters, 3280 - 8205 feet. San Gabriel Mountains.	Apr - Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2 IUCN: NT	None. Site lacks suitable soils and is located outside of known habitats.
Parish's desert-thorn *Lycium parishii*	Perennial shrub. Sandy to rocky slopes and canyons Coastal sage scrub, creosote bush scrub. 135 - 1000 meters, 445 - 3280 feet. Cajon and Lytle wash areas. San Bernardino Valley and montane areas around the Coachella and Imperial Valley areas.	March - April	FESA: ND CESA: ND CNPS: 2B.3	None. Site lacks suitable habitat.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Parish's bush mallow *Malacothamnus parishii*	Perennial deciduous shrub. Coastal sage scrub and chaparral. 305 - 455 meters, 1000 - 1495 feet. San Gabriel Mountains.	June - July	FESA: ND CESA: ND CNPS: 1A	None. Site has suitable scrub habitat, site higher than recorded elevation.
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	Perennial rhizomatous herb. Steep scree or talus slopes between breccia, drainages. Alluvial Terraces, Scree, slopes, talus, washes. Chaparral, lower montane coniferous forest. 1350 - 1750 meters, 4430 - 5740 feet. San Gabriel Mountains.	July - Sept	FESA: ND USFS: S CESA: ND CNPS: 1B.1	None. Site lacks microhabitats of step scree or talus slopes.
Hall's monardella *Monardella macrantha* ssp. *hallii*	Perennial rhizomatous herb. Broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. 730 - 2195 meters, 2395 - 7200 feet. San Gabriel, San Bernardino and Santa Ana mountains, Peninsular Range south of Temecula.	Jun - Oct.	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.3	None. Site lacks habitats preferred by this species.
Pringle's monardella *Monardella pringlei*	Annual herb. Sandy soils within coastal sage scrub. 300 - 400 meters, 984 -1310 feet. Known from only two locations in Colton. Not been rediscovered during subsequent surveys.	May - June	FESA: ND CESA: ND CNPS: 1A	None, Site lacks suitable habitat.
California muhly *Muhlenbergia californica*	Perennial rhizomatous herb. Mesic soils, seeps and streambanks. Chaparral, coastal sage scrub, lower montane coniferous forest, meadows and seeps. 100 - 2000 meters, 330 - 6560 feet. Transverse Ranges from Los Angeles through to Little San Bernardino Mountains	June - Sept	FESA: ND CESA: ND CNPS: 4.3	May Occur. Suitable habitat exists in the bottom of the canyon.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Aparejo grass *Muhlenbergia utilis*	Perennial rhizomatous herb. Some on serpentine or alkaline soils. Chaparral, cismontane woodland, coastal scrub, meadows and seeps. marshes and swamps. 25 - 2325 meters, 80 - 7630 feet. Scattered locations southern Coastal Ranges, San Gabriel Mtns, Sierra Nevada, White and Inyo mtns.	March - October	FESA: ND CESA: ND CNPS: 2B.2	May Occur. Species may be present along the bottom of the canyon.
Prostrate vernal pool navarretia *Navarretia prostrata*	Annual herb. Mesic soils. Coastal scrub, meadows and seeps, valley and foothill grassland with alkaline soils vernal pools. Central Coastal Range, Peninsular Ranges from Los Angeles to Baja CA.	April - July	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable mesic soils and habitats preferred by this species.
Robbin's nemaclaudus *Nemacladus secundiflorus* var. *robbinsii*	Annual herb. Openings in chaparral, valley and foothill grassland. 350 - 1000 meters, 1150 - 5680 feet. Scattered localities. Coastal Ranges, Tehachapi and San Gabriel ranges.	April - Jun	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. No suitable habitat is present.
Short-joint beavertail *Opuntia basilaris* var. *brachyclada*	Perennial stem. Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 425 - 1800 meters, 1395 - 5905 feet. Tehachapi Range, Peninsular Ranges.	Apr-Jun (Aug)	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable habitat. Species not observed.
Woolly mountain-parsley *Oreonana vestita*	Perennial herb. Lower and upper montane coniferous forest, subalpine coniferous forest. Gravelly soils and talus slopes (sometimes). 1615 - 3500 meters, 5300 - 11485 feet. Southern Sierra Transverse Ranges.	March - Sep	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.3	None. Site does not support habitat types preferred by this specie.
Rock Creek broomrape *Aphyllum valida* ssp. *valida* (syn.*Orobanche valida* ssp. *valida*)	Parasitic perennial herb. Granitic soils. Chaparral, pinyon and juniper woodland. 1030 - 2000 meters, 3380 - 6560 feet. Tehachapi Mountains, Transverse Ranges.	May - Sep	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable soils and habitats.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Rock-loving oxytrope *Oxytropis oreophila* var. *oreophila*	Perennial herb. Sometimes gravelly or rocky soils. Alpine boulder and rock field, subalpine coniferous forest. 3400 - 3800 meters, 11155 - 12470 feet. Transverse Ranges.	Jun - Sep	FESA: ND USFS: S CESA: ND CNPS: 2B.3	None. Site lacks suitable soils and habitat. Below known elevation range.
San Bernardino grass-of-parnassus *Parnassia cirrata* var. *cirrata*	Perennial herb. Mesic sites, streambanks. Lower and upper montane coniferous forest, meadows and seeps. 1250 - 2440 meters, 4100 - 8005 feet. San Gabriel and San Bernardino mountains. Maybe Mexico.	Aug - Sep	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site lacks suitable mesic habitat. Below known elevation range.
Brand's star phacelia *Phacelia stellaris*	Annual herb. Coastal dunes, coastal scrub. 1 - 400 meters, 5 - 1310 feet. Western Transverse Range.	Mar - Jun	FESA: ND CESA: ND CNPS: 1B.1	None. Site lacks coastal habitats and similar inland habitats.
White cudweed *Pseudognaphalium leucocephalum*	Biennial or short-lived perennial herb. Coastal sage scrub and chaparral. Below 500 meters (1,650 feet). Southern coastal ranges and slopes. Ventura to San Diego ranges (excluding San Jacinto Mtns), San Bernardino and San Gabriel Mtns.	August - November flowering period	FESA: ND CESA: ND CNPS: 2B.2	Unlikely. Site has suitable scrub habitat, higher than recorded elevation.
Sanford's arrowroot *Sagittaria sanfordii*	Perennial rhizomatous herb (emergent). Marshes and swamps (shallow freshwater). 0 - 650 meters, 0 -2135 feet. Historically Coastal Ranges and Central Valley, Transverse Ranges. Extirpated from southern California and mostly extirpated from Central Valley.	May -Oct (Nov)	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks marshes and swamps. Reported as extirpated from southern California.
Black-bog rush *Schoenus nigricans*	Perennial herb. Marshes and swamps (often alkaline). 150 - 2000 meters, 490 - 6560 feet. Scattered locations. Mountain areas east of Death Valley and Fort Irwin. Cajon pass area.	Aug - Sep	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Site lacks marshes and swamps.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Chaparral ragwort *Senecio aphanactis*	Annual herb. Sometimes alkaline soils. Chaparral, cismontane woodland, coastal scrub. 15 - 800 meters, 50 - 2625 feet. Coastal and Transverse Ranges.	Jan - Apr (May)	FESA: ND CESA: ND CNPS: 2B.2	May Occur. Not observed during survey.
Salt spring checkerbloom *Sidalcea neomexicana*	Perennial herb. Alkaline, mesic conditions. Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas. 15 - 1530 meters, 50 - 5020 feet. Southern Coastal, Transverse, Peninsular ranges into the western Mojave around Joshua Tree National Park.	Mar - Jun	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Mesic conditions limited to active streambed; no alkaline soils.
Prairie wedge grass *Sphenopholis obtusata*	Perennial herb. Mesic conditions. Cismontane woodland, meadows and seeps. 300 - 2000 meters, 985 - 6560 feet. Scattered. Eastern side of Northern Coastal Ranges, Sierra Range, San Gabriel and San Bernardino Mtns, Peninsular Ranges.	April - Jul	FESA: ND CESA: ND CNPS: 2B.2	None. Mesic conditions limited to active streambed.
Laguna Mountains jewelflower *Streptanthus bernardinus*	Perennial herb. Open slopes, chaparral, lower montane coniferous forest. 670 -2500 meters, 2200 - 8205 feet. Transverse Ranges including San Jacinto. Little San Bernardino Mtns., Laguna Mtns. and mountains around San Diego.	May - Aug	FESA: ND CESA: ND CNPS: 4.3	None. Site lacks open slopes preferred by this species.
San Bernardino aster *Symphyotrichum defoliatum*	Perennial rhizomatous herb. Freshwater wetlands and wetlands in coastal sage scrub, oak woodland. Below 2050 meters (6725 feet). Southern coastal ranges and slopes. Ventura to San Diego ranges, San Bernardino and San Gabriel Mtns.	July - November	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable wetlands, freshwater marsh communities.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Greata's aster *Symphyotrichum greatae*	Perennial rhizomatous herb. Mesic conditions. Chaparral, broad-leafed upland forest, cismontane woodlands, lower montane coniferous forest, and riparian woodland. 300 - 2010 meters, 985 - 6595 feet. Tehachapi Mtn area, San Gabriel and San Bernardino mtns.	Jun - Oct	FESA: ND BLM: S CESA: ND CNPS: 1B.3	None. Site lacks mesic conditions outside of perennial flow of the creek.
Rigid fringepod *Thysanocarpus rigidus*	Annual herb. Dry, rocky slopes. Pinyon and juniper woodland. 600 - 2200 meters, 1970 - 7220 feet. Scattered. Eastern mountains near Ivanpah, San Gabriel Mtns., Santa Rosa Mtns.	Feb - May	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Project does not support suitable habitat.
Grey-leaved violet *Viola pinetorum* ssp. *grisea*	Perennial herb. Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest. 1500 -3400 meters, 4920-11155 feet. Sierra, Tehachapi, San Gabriel, San Bernardino mtns.	April - Jul	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks meadows and seeps. Below known elevation.
Fishes				
Santa Ana sucker *Catostomus santaanae*	Streams with perennial flows, suitable water quality and substrate to support breeding, feeding and sheltering. Life history stages require a variety of coarse substrate types, such as gravel, cobble, or mixtures of gravel or cobble with sand, and a variety of riverine features, like shallow riffles and deeper runs and pools.	Year round	FESA: THR CESA: ND AFS: TH IUCN: VU	None. Stream habitat does not provide required variety of habitats.
Arroyo chub *Gila orcuttii*	Slow-moving streams with bottoms of sand or mud, Also with gravel, cobbles, and boulders, usually at depths greater than 40 centimeters (15.75 inches). Native streams: Malibu Creek, Santa Clara, San Luis Rey, and Santa Margarita drainages.	Year round	FESA: ND USFS: S CESA: ND AFS: VU Native populations	None. Stream lacks suitable depth.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Santa Ana speckled dace *Rhinichthys osculus* ssp. 3	Genetically distinct unnamed subspecies of nominate speckled dace. Mainly perennial streams with water temperatures <20˚C (68˚F). Riffles, runs and pools in low-gradient streams, sand to boulder substrates in slow water, various So Cal streams.	Year round	FESA: ND USFS: S CESA: ND AFS: TH	Unlikely. Creek is very shallow and swift.
Mohave tui chub *Siphateles bicolor mohavensis*	Formerly found in the deep pools and slough-like areas of the Mojave River, this species now only occurs in highly modified refuge sites in San Bernardino County.	Year round	FESA: END CESA:END AFS: EN	None. Closest populations extirpated; pools and slough-like habitat absent from site.
Amphibians				
Arroyo toad *Anaxyrus californicus*	Narrow and shallow washes and arroyos with open water; sand or gravel beds for breeding; pools with sparse overstory vegetation. Clay, sandy or gravel soils in shallow pools for juveniles. Bordering upland habitats are low-elevation hills with scattered vegetation, sandy, fine gravel, and pliable soils accompanied by rocks of various sizes. Dispersal and winter habitat can extend up to 1 kilometer (0.6 miles) from streambed. Coastal ranges, Transverse and Peninsular Ranges.	Jan - Jul (southern CA)	FESA: END IUCN: EN CESA: ND	Unlikely. Creek bottom has sandy and gravelly soils, but adjacent slopes are steep-sided and are densely vegetated.
San Gabriel Mountains slender salamander *Batrachoseps gabrieli*	Extensive rock talus cover on forested slopes, often near a stream. Lives under large rocks, logs and bark. California endemic known from at least 13 locations. Streams from San Gabriel Canyon, eastern San Gabriel Mountains to Kimbark and Waterman Canyon, extreme western San Bernardino Mountains. 850 - 2800 meters, 2800 - 7800 feet.	Nov - April. Active on rainy or wet nights with moderate temperatures.	FESA: ND IUCN: DD USFS: S CESA: ND	None. Site lacks suitable rock cover.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Foothill yellow-legged frog *Rana boylii*	Breeding stream habitat shallow, rocky and at least partially exposed to direct sunlight. Foothill and mountain streams from the Pacific Coast to the western slopes of the Sierra Nevada and Cascades mountains. Known from western San Gabriel Mtns. Up to approximately 1,524 meters, 5000 feet. Oregon to California.	Year round Mostly active during daylight.	FESA: ND IUCN: NT USFS: S BLM: S CESA: END	None. Site outside of the known range.
California red-legged frog *Rana draytoni*	Near ponds in humid forests, woodlands, grasslands, coastal scrub. Streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. For breeding, permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation in dry periods. Coastal ranges.	Year round	FESA: THR CESA: ND CDFW: SSC	None. Site outside of the known range. The nearest occurrences are near the Santa Rosa Plateau and within the Upper Las Virgenes Canyon Open Space Preserve in the Simi Hills in eastern Ventura.
Southern mountain yellow-legged frog *Rana muscosa*	Habitats in southern California are rocky streams in narrow canyons and in the chaparral belt. Historically, in streams that range from rocky, steep drainages to those with a gentle gradient, marshy margins, and sod banks. Large clear pools up to three feet deep are best habitat. Absent from most of historical range. Southern population. Santa Barbara coast east to Transverse Ranges; San Jacinto Mtns.	Mostly active during daylight in warm temperatures. Overwinters underwater up to nine months.	FESA: END IUCN: EN USFS: S CESA: END	None. Population locations well document, Not known from this canyon.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Spadefoot toad *Spea hammondii*	Open areas with sandy or gravelly soils. Mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools without bullfrogs, fish, or crayfish are necessary for breeding. Endemic to California and northern Baja California. Ranges from near Redding south throughout the Central Valley and its associated foothills, South Coast Ranges, coastal southern California south of the Transverse Range and west of the Peninsular range, into northwest Baja California.	Nocturnal Mostly stays buried underground in earth-filled burrows. Active for short period each year to breed and lay eggs in rain pools, typically between October to May, depending on rainfall. Occasionally emerges during rains at other times of the year. Burrows are probably away from the dried breeding pols.	FESA: ND BLM: S CESA: ND CDFW: SSC IUCN: NT	None. Canyon lacks suitable rain pools.
Coast Range newt *Taricha torosa*	Wet forests, oak forests, chaparral, and rolling grasslands. In southern California it occurs in drier chaparral, oak woodland, and grasslands. Endemic to California. Coast and coast range mountains Mendocino County to San Diego County. Disjunct population in southern Sierra Nevada from northern Kern County at Breckenridge Mountain north to a zone of hybridization with the Sierra Newt along the Kaweah River in Tulare County.	Terrestrial, diurnal. Undercover during temperature extremes.	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat present.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Reptiles				
Silvery legless llzard *Anniella stebbinsi*	Moist warm loose soil in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and stabilized dunes often suitable habitat. Often found under rocks, boards, driftwood, and logs and leaf litter under bushes and trees. Southern California south of Transverse Ranges to northern Baja California, Mexico.	Year round Mostly underground	FESA: ND USFS: S CESA: ND CDFW: SSC	May Occur. Suitable habitat on site.
Southwestern pond turtle *Actinemys pallida*	Ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, Woodland, forest, and grassland. prefers pools to shallower areas in streams. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Woodland, forest, and grassland.	Year round. Hibernates underwater or burrowing into moist soils in winter. Estivates by burrowing into moist soil during hot, dry summer days.	FESA: PT BLM: S USFS: S CESA: ND CDFW: SSC IUCN: VU	None. Suitable streams and other water habitats suitable for this species are not present.
California glossy snake *Arizona elegans occidentalis*	Arid scrub, rocky washes, grasslands, chaparral. Microhabitats of open areas with loose soil for burrowing, Sea level to 2200 meters (7218 feet). Coastal and Peninsular ranges from near San Francisco into Baja California.	Late Feb - Nov depending on weather. Most active May. Less active summer. Under rocks or burrows during the day.	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat on canyon slopes.
San Diego tiger whiptail (coastal whiptail) *Aspidoscelis tigris stejnegeri*	Chaparral, woodland, riparian areas. Primarily in hot, dry open areas with sparse foliage. Ventura south to Baja California, west of Peninsular Ranges, south of Transverse Ranges. Sea level - 2130 meters (7000 feet) for species. Subspecies slightly variable.	Diurnal	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat present on site.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Southern rubber boa *Charina umbratica*	Variety of moist woodlands, coniferous forests, chaparral. and wet meadows. Usually near streams. Sea level to 1,524 - 24338 meters (5000 - 8000 feet). Prefers old large logs, rock piles as hibernacula, as well as dense leaf litter. High soil moisture seems important, although has been found on dry slopes. San Bernardino, San Jacinto Mountains and Mount Pinos.	April - October Evening, or heavily overcast days with high humidity and 60 - 70 degrees. Hibernates Nov - Mar	FESA: ND USFS: S CESA: THR CDFW: SSC IUCN: VU	None. Site lacks high humidity habitats. Outside of known range.
San Diego (coast) horned lizard *Phrynosoma blainvillii*	Open areas of sandy soil with low vegetation. Valleys, foothills and semiarid mountains. Grasslands, coniferous forests, woodlands, and chaparral. Commonly found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants. Coastal areas from NW to Baja to San Francisco Bay. Inland CA from Shasta Reservoir and Kern Plateau east and south to southern California. West of Sierras and deserts.	Year round. Diurnal activity during warm and moderate weather.	FESA: ND BLM: S CESA: ND IUCN: LC	May Occur. Canyon bottom may support habitat for this species.
Two-striped garter snake *Thamnophis hammondii*	Generally found near water sources - pools, creeks, cattle tanks, and others, often in rocky areas. Oak woodland, willow, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland. Sea level to 2130 meters (6988 feet). Monterey County south along western slopes of south Coast Ranges, Transverse and Peninsular ranges into northern Baja California.	Diurnal, primarily aquatic. Also active at night dusk during hot weather in some areas. Can be active most of the year depending on weather conditions. Has been found from January to November.	FESA: ND CESA: ND USFS: S BLM: S IUCN: LC	May Occur. Suitable aquatic habitats occur on site.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Birds				
Tricolored blackbird *Agelaius tricolor*	Historic habitat wetlands with cattails, bulrushes, willows. Habitat loss results in nesting in agricultural fields, patches of Himalayan blackberry near stock ponds and irrigated pastures in the foothills of the Sierra Nevada, California. Foraging in cultivated fields, feedlots associated with dairy farms, and wetlands. Mostly Central Valley, and suitable habitats in Coastal, Peninsular, Transverse ranges	Year round	*FESA: ND* *USFWS: BCC* *BLM: S* *CESA: THR* *IUCN: EN* *NABCI: RWL*	None. No suitable wetland or agricultural habitat.
California rufous-crowned sparrow *Aimophila ruficeps canescens*	Dry, open hillsides with grasses, rocks, and scattered shrubs. Open areas of coastal sagebrush, open chaparral, scrub oaks, pinyon pine, and other woody plants. Sea level up to about 3,048 meters (10,000 feet) (in Mexico). Mainly coastal California, Sierras and White - Inyo mountain ranges.	Year round	FESA: ND CESA: ND	May Occur. Suitable habitat on canyon hillsides.
Sharp-shinned hawk *Accipiter striatus*	Nests in woodland, coniferous deciduous forest. Winter visitor and migrant to coastal Southern California. Forages over a variety of habitats.	Fall & winter; scarce in summers	FESA: ND USFWS: BCC CESA: ND	Occurs. Observed during the survey. .
Cooper's hawk *Accipiter cooperi*	Woodland and semi-open habitats, riparian groves and mountain canyons. Uncommon permanent resident in coastal, mountains, and deserts of Southern California. Transients are fairly common on coast in fall.	Year-round	FESA: ND USFWS: BCC CESA: ND	May Occur. Site provides suitable foraging or nesting habitats.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Golden eagle *Aquila chrysaetos*	Open areas. Grasslands, brushlands, deserts, oak savannas, open coniferous forests and montane valleys. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California, except non-breeding populations in Central Valley and Imperial Desert.	Year round Most of California	FESA: ND USFWS: BCC CESA: ND BLM: S CDF: S IUCN: LC	None. Project location is in a well-wooded canyon and no suitable nesting areas.
Bell's sage sparrow *Artemisiospiza belli belli*	[Nominate species habitat description] Coastal sagebrush, chaparral, open, scrubby habitats. In the mountains of southern California, they also occur in big sagebrush (*Artemisia tridentata*). Mojave Desert, low scrub big sagebrush, saltbush, bitterbrush, shadscale, creosote bush. Throughout so. California and coastal ranges further north.	Year round California	FESA: ND USFWS: BCC CESA: ND	May Occur. Scrub habitats on slope provide suitable habitat.
Long-eared owl *Asio otus*	Roost and nest in dense vegetation. Forage in open grasslands, shrublands, open coniferous or deciduous woodlands. Sea level to above 1981 meters (6500 feet). Nests are found in coniferous or deciduous forests near open meadows.	Year round California, except eastern deserts.	FESA: ND CESA: ND IUCN: LC	None. Site woodlands do not provide dense cover
Burrowing owl *Athene cunicularia*	Open, treeless areas with low, sparse vegetation, gently sloping terrain. Grasslands, deserts, steppe environment, golf courses, pastures, agricultural fields, airport medians, road embankments, cemeteries and urban vacant lots. Often associated with high densities of burrowing mammals such as prairie dogs, ground squirrels, and tortoises. Western US, Florida and Caribbean.	Year round California	FESA: ND USFWS: BCC BLM: S CESA: ND IUCN: LC	None. Site does not provide open, treeless habitat areas.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Oak %tmouse *Baeolophus inornatus*	Warm, open, dry oak or oak-pine woodlands. Will use scrub oaks or other brush as long as woodlands are nearby. Restricted range from southwest Oregon to northwest Baja California. One population in the Cape District of south Baja California. In a few areas they use habitats without oaks.	Breeding season; some limited areas year-round	FESA: ND USFWS: BCC CESA: ND	Occurs. There are clusters of oak trees on the adjacent slopes suitable for this species.
Swainson's hawk *Buteo swainsoni*	Open habitats for foraging. Historically native prairie and grassland habitat. Now found in hay and alfalfa fields, pastures, grain crops, and row crops, or perched atop adjacent fence posts and overhead sprinkler systems. Scattered stands of trees near agricultural fields and grasslands for nesting sites. Breeding season eastern California to Plains area; migration to South America.	Nesting season Early spring - late summer	FESA: ND USFWS: BCC BLM: S CESA: THR IUCN: LC	None. Suitable open habitats are absent.
Wrentit *Chamaea fasciata*	Coastal scrub and chaparral along the coast. Away from the coast dense shrublands with coyote bush, manzanita, California lilac, and blackberry thickets in foothills and desert regions of California. Oak woodlands and mixed hardwood and evergreen forests in northwestern California and northwestern Oregon. Sometimes suburban yards and parks if there is plenty of dense shrubbery to hide in.	Year round.	FESA: ND USFWS: BCC CESA: ND	Occurs. Suitable chaparral habitat is present.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Yellow-billed cuckoo *Coccyzus americanus occidentalis*	[Nominate species habitat] Wooded habitat with dense cover and water nearby. Woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. Rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed. Subspecies along Colorado River; formerly along major rivers in California,	Fall and Spring migration	FESA: THR USFWS: BCC BLM: S CESA: END IUCN: LC NABCI: RWL	None. Suitable dense cover woodlands are not present.
Olive-sided flycatcher *Contopus cooperi*	Boreal forest and western coniferous forests. Sea level TO 3048 meters 10,000 feet). some parts of the Rockies in forests of spruce, fir, Douglas-fir, hemlock, western redcedar, and tamarack or larch. Southern California and northern Baja California, they inhabit mostly pine forest.	Breeding n. California, Migratory s. California.	FESA: ND USFWS: BCC CESA: ND	None. Site does not support pine forest nesting habitat.
Black swift *Cypseloides niger*	Nest on cliff ledges behind or near waterfalls and sea caves. Forage over forests and open areas in California found from sea level to 2286 meters (7500 feet).	Mostly migration; nests in coastal sea cliffs, Sierras, Cascades in California.	FESA: ND USFWS: BCC CESA: ND IUCN: LC NABCI: YWL	None. No suitable nest sites. May be observed foraging in air over project site.
White-headed woodpecker *Dryobates albolarvatus gravirostris*	Pine forests in mountains, western North America. Especially old-growth ponderosa pine and sugar pine with partly open canopies, limited understory, and an abundant pine seed crop. Often found in recently burned forests. Dead trees needed for nesting. Canada, Pacific NW and Idaho to mountains of southern California.	Year round	FESA: ND USFWS: BCC in certain regions CESA: ND	None. No suitable pine forest habitats.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Nuttall's woodpecker *Dryobates nuttallii*	Oak woodlands. Less common riparian woodlands. Also wooded suburban areas and woodlands near streams, especially farther south in their range where oak trees are scarcer. 274 - 167 6meters, 900 - 5500 feet elevation.	Year round	FESA: ND USFWS: BCC in some regions CESA: ND	Occurs. Suitable oak woodland habitat is present.
Southwestern willow flycatcher *Empidonax traillii extimus*	Willow riparian or other shrubs near standing or running water. Breeds and nests in willow riparian forest. Rare and local in southern California.	May - Sept.	FESA: END CESA: END NABCI: RWL	None. Riparian woodland habitat does not exist on site.
Cassin's finch *Haemorhous cassinii*	Coniferous forest types over a broad elevational range. Often found in mature forests of lodgepole and ponderosa pine. Winter range is similar to breeding habitat but with the bulk of populations at somewhat lower elevations. North American western interior mountains, central British Columbia to northern New Mexico and Arizona. Mostly between 3,000 and 10,000 feet of elevation.	Non-breeding season southern California mountains; year-round in Sierra Nevada Range	FESA: ND USFWS: BCC CESA: ND	None. Site does not contain suitable habitat.
Bullock's oriole *Icterus bullockii*	Riparian and open woodlands, urban parks. Large trees are spaced well apart or isolated groups. Nest in sycamores, cottonwoods, willows, deciduous oaks, madrones, and large mesquite trees. Live oaks, pecans, orchard trees, salt cedar and occasionally conifers. Similar open woodland habitats during migration and winter, also pine, pine-oak, and fir forests.	Breeding California	FESA: ND USFWS: BCC in some regions CESA: ND IUCN: YWL	Occurs. Suitable habitat present.

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Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California black rail *Laterallus jamaicensis coturniculus*	[Nominate species habitat] Variety of wet meadows, marsh edges (including along creeks and rivers), around farm ponds, and hayfields with standing water. Migrating birds and wintering birds select habitats with the same characteristics as breeding habitats. Southern California forages along Colorado River.	Year round	FESA: ND USFWS: BCC BLM: S CESA: THR IUCN: NT NABCI: RWL	None. No marsh habitat is present.
Western screech-owl *Megascops kennicottii cardonensis*	Forested habitats, especially in bands of deciduous trees along canyons and other drainages. Common trees include cottonwood, aspen, alder, water birch, oak, and bigleaf maple. Also in suburbs, parks, deserts, coastal areas, and in mountains up to about 1828 meters, 6000 feet.	Year round	FESA: ND USFWS: BCC in some regions CESA: ND	May Occur. Suitable tree habitat exists on site.
California gnatcatcher *Polioptila californica californica*	Coastal sage scrub, desert scrub, coastal dune scrub. In California they are dominated by California sagebrush. Generally, below 487 meters (1600 feet), sometimes occur at higher elevation at inland scrub sites. Cismontane southern California and Baja California in low-lying foothills and valleys.	Year-round	FESA: THR CESA: ND NABCI: YWL	None. Site lacks suitable foraging or nesting coastal scrub habitats.
Allen's hummingbird *Selasphorus sasin*	Open areas in and around coastal forest, scrub, and chaparral. Western coast US. Eucalyptus, redwood, and Douglas-fir in US. Mexican wintering grounds include oak-pine forest, edges, and scrubby clearings with abundant flowers. Sea level - 348 meters, 1000 feet. Western coast breeding, moving through interior CA in migration. US - Mexico	Breeding season coastal, Most migrate through interior CA.	FESA: ND CESA: ND CDFW: BCC	May Occur. Suitable habitat for migration exists in and around the project site. An unknown *Selasphorus* hummingbird was observed during the survey but was not positively identified.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Yellow warbler *Setophaga petechia*	Breeding season in thickets and other disturbed or regrowing habitats, particularly along streams and wetlands. In the west, often found among willows. In the west found at sea level to about 2743 meters (9000 feet). On their wintering grounds Yellow Warblers live in mangrove forests, dry scrub, marshes, and forests, typically in lowlands but occasionally up to 2590 meters (8500 feet).	Breeding season coastal and inland California. Migrates through deserts. Nonbreeding Colorado River	FESA: ND USFWS: BCC CESA: ND	Occurs. The site has thickets and similar habitats.
Lawrence's goldfinch *Spinus lawrencei*	Breeds in open oak woodlands and scattered meadows, weedy fields and other brushy habitat near areas with some water; riparian habitats Nonbreeding habitat coastal scrub, pinyon pine–juniper woodlands, thickets, desert arroyos, cultivated fields, orchards, gardens, and parks.	Year-round Mar to Sep breeding period	FESA: ND USFWS: BCC CESA: ND	Likely. This site has some brushy areas along the stream.
Black-chinned sparrow *Spizella atrogularis*	Breeding season in arid brushlands on rugged mountain slopes from sea level to almost 2700 meters, 8,858 feet. Winter resident populations occupy habitat similar to but downslope from breeding areas. Other populations inhabit desert grasslands. California, Southwest US and Baja California. Winter in Baja California and Mexico.	Spring, summer and fall in US Winter in Mexico.	FESA: ND USFWS: BCC CESA: ND	None. Site does not contain arid brushlands or rugged mountain slopes.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California spotted owl *Strix occidentalis occidentalis*	Prefer older forests with structural characteristics necessary for nesting, roosting, and foraging. Sierra Nevada populations prefer mid-elevation ponderosa pine, mixed conifer, white fir, and mixed-evergreen forests. Lower numbers are found the lower elevation oak woodlands of the western foothills. Central coast and southern California populations occur in riparian /hardwood forests and woodlands, live oak/big cone fir forests, and redwood/California laurel forests. Nests are typically found in areas of high canopy cover, a high number of large trees, and downed trees. Sierra Nevada, Coastal, Transverse, and Peninsular mountain ranges, and Sierra San Pedro Martir in Baja California.	Year round	FESA: PE* CESA: ND *Transverse and Peninsular populations; Sierra Nevada populations: PT	None. Suitable older dense forests are not present.
California Thrasher *Toxostoma redivivum*	Chaparral. Smaller numbers nest in sagebrush habitats. Underbrush with copious leaf litter required Mojave Desert, breed in a mixture of scrub oak, Joshua tree, California juniper and juniper scrub. California and a small part of Baja California	Year round	FESA: ND USFWS: BCC CESA: ND	May occur. The scrub habitat on site is likely occupied by this species.
Least Bell's vireo *Vireo bellii pusillus*	Riparian forests and willow thickets. Breeds and nests only in southwestern California; winters in Baja California.	Apr - Sept Breeding	FESA: END CESA: END IUCN: NT NABCI: YWL	None. Suitable mix of willow and thickets not present.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Mammals				
Pallid bat *Antrozous pallidus*	Variable habitat. Prefer rocky outcrops in dry to semi-arid areas. Oak and pine forested areas, open farmland. Roosting sites: caves, rock crevices, mines, hollow trees, and buildings. Semi-dark day roosts. Dark night roosts. Both near water. Western Canada - Central Mexico.	Year-round Oct - Feb breeding period	FESA: ND USFS: S BLM: S CESA: ND IUCN: LC WBWG: H	None. Suitable habitat and roosting sites are not present.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Wide variety of habitats including chaparral and grasslands to scrub forests and deserts. Low growing vegetation or rocky outcroppings, sandy soil for digging burrows. Sea level to 1400 meters (4593 feet).San Bernardino, Riverside and San Diego counties south to Baja California.	Year round Nocturnal	FESA: ND CESA: ND	None. Site habitats and soils are not suitable.
Pallid pocket mouse *Chaetodipus fallax pallidus*	Rocky/gravelly areas usually with a yucca overstory. Desert scrub at higher elevations near or in the pine-juniper belt. Gravelly or sandy soil substrates. San Diego to Baja California.	Year round Nocturnal	FESA: ND CESA: ND	None. Site habitats and soils are not suitable.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Primary and secondary alluvial fan scrub habitats, with sandy soils deposited by fluvial (water) rather than aeolian (wind) processes. The preferred substrate appears to be sandy and sandy loam soils and very little herbaceous ground cover. In isolated populations along the Santa Ana and San Jacinto drainage systems.	Year round Nocturnal	FESA: END CESA: CE	None. Suitable alluvial habitat is not present.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Western mastiff bat *Eumops perotis californicus*	Variety of habitats, Dry desert washes, flood plains, chaparral oak woodland and ponderosa pine belt, grassland and agricultural areas. High roosts >3 meters (10 feet). Needs roosts of significant rock features offering crevices and other suitable openings. Southern California to the Southwest, Mexico and South America. In California, it is most common in broad open areas.	Year round Nocturnal	FESA: ND BLM: S CESA: ND WBWG: H	None. Site lacks roosting habitat.
Hoary bat *Lasiurus cinereus*	Prefers woodland, mainly coniferous forests but hunts over open areas or lakes. Winter in Canada and most of US, summers in Southwest and South America. Generally roosts in trees.	Winter Nocturnal	FESA: ND CESA: ND iUCN: LC WBWG: M	Unlikely. No coniferous forests or similar habitat within the project boundaries.
Western yellow bat *Lasiurus xanthinus*	Dense riparian woodlands Dry thorny environments in the southwestern US, dry tropical to semi-wet tropical forests. Commonly prefer tall trees near water for roosts. Southwestern US, Baja and Mexico.	Year round Nocturnal	FESA: ND CESA: ND IUCN: LC WBWG: H	None. No suitably dense forests are present on site.
Black-tailed jackrabbit. *Lepus californicus bennettii*	[Nominate species habitat] Desert scrubland, prairies, farmlands, dunes. Arid regions and areas of short grass rangeland. Sea level to 3800 meters (12,470 feet). Cover includes, sagebrush-creosote bush, mesquite-snakeweed and juniper-big sagebrush, agricultural fields. Southwest US. *L.c. bennettti* occurs west of the Transverse and Peninsular Ranges.	Year round	FESA: ND CESA: ND CDFW: SSC	May Occur. Site is surrounded by suitable habitat, although human presence probably reduces activity in the canyon.
South coast marsh mole *Microtus californicus stephensi*	[Nominate species habitat] Grasslands, coastal marshlands to dry upland and savannah habitats. *M.c. stephensi* is confined to coastal marsh habitats. Coastal regions west of the deserts from Oregon to Baja.	Year round	FESA: ND CESA: ND CDFW: SSC	None. Habitat for subspecies is not present.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Lodgepole chipmunk *Neotamias speciosus speciosus*	Subalpine mixed conifer forests of lodgepole pine, red fir, and Jeffery pine. White fir, Douglas fir, ponderosa pine, sugar pine, incense cedar, and California black oak woodlands. 1500 - 3,300 meters (4920 -10,657 feet). Eastern Sierra Nevada, San Bernardino, San Jacinto, and San Gabriel mountains.	Year round Hibernate winters	FESA: ND CESA: ND CDFW: SSC	None. Site does not provide suitable habitat.
San Diego desert woodrat *Neotoma lepida intermedia*	Chaparral, coastal sage scrub, alluvial fan scrub, desert scrub and juniper woodland scrub. Uses rock and vegetation/debris piles for burrows. Southern California Mojave, Colorado and Great Basin deserts.	Year round	FESA: ND CESA: ND CDFW: SSC	May Occur. Canyon bottom provides rock and vegetation piles suitable for burrows.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Dry, semiarid desert areas. Roosting sites in rocky outcrops, buildings, and crevices in cliffs and small caves; near water sources. Sea level to 2250 meters (7381 feet). Southwestern US and Mexico.	Year round	FESA: ND CESA: ND IUCN: LC WBWG: M	None. No suitable roosting habitat is present. May forage over site.
Big-free tailed bat *Nyctinomops macrotis*	Rocky and rugged arid habitats Deserts (Including dune habitats) chaparral, forest, scrub forest. Suburban areas. Also found roosting in buildings and terrestrial plants such as ponderosa pines, *Douglas* firs and desert shrubs. Usually below 1798 meters (5900 feet). Southwestern North America into northern and central Mexico, and throughout South America.	Spring and fall breeding season Migratory	FESA: ND CESA: ND IUCN: LC WBWG: MH	None. No suitable rocky or rugged habitat is present.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Desert bighorn sheep *Ovis canadensis nelsoni*	Restricted to east-facing, lower elevation slopes of the Peninsular Ranges (in California), typically below 1402 meters (4600 feet). Need steep topography for lambing, rearing and escaping predators. Peninsular Ranges in Southern California, from the San Jacinto and Santa Rosa mountains, and south to the United States-Mexico border.	Year round. Elevational changes due to seasonal conditions.	FESA: ND USFS: S BLM: S CESA: ND	None. Project is on the west slopes of the Transverse Ranges.
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	[Nominate species habitat]. Arid and semiarid habitats with grasses, sagebrush and other scrubby vegetation. Rocky to sandy soils. Coastal sage scrub, alluvial fan scrub and desert scrub. *P.l. brevinasus* occurs from interior Los Angeles county east and south to western San Bernardino and Riverside counties, interior San Diego county.	Year round Nocturnal. Does not truly hibernate or aestivate but does occasionally go into torpor in response to weather and food availability.	FESA: ND CESA: ND CDFW: SSC	None. Site does not support suitable habitats.
American badger *Taxidea taxus*	Most abundant in drier, open stages of most shrub, forest and herbaceous habitats. Friable soils for digging, food for foraging and uncultivated ground.	Year round. More active spring and summer	FESA ND CESA: ND CDFW: SSC IUCN: LC	May Occur. Suitable cover and soils in the canyon.
Mollusks				
Western ridge mussel *Gonidea angulata*	More common in streams than lakes. Prefer constant water flow and well-oxygenated stable substrates in areas of low gradient. In silt, clay, and sand to boulders substrates. Rarely in continuously turbid waters. British Columbia east to Idaho and south to Nevada and California.	Year round	FESA: ND CESAEND	None. No suitable streams. Species of concern because of retraction in historical range. Petitioned for listing as endangered in 2020

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Invertebrates				
Crotch bumblebee Bombus crotchii	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*.	May - Sept Appearance Sex- and age-dependent	FESA: ND CESA: CE IUCN: EN	None. No suitable habitat.
San Gabriel Mountains elfin butterfly *Callophrys mossii hidakupa*	Rocky outcrops, woody canyons and cliffs. British Columbia to southern California, east to Wyoming and Colorado. Larvae feed on Sedum, Sedella, Dudleya and Parvisedum species.	March - June Adult	FESA: ND USFS: S CESA: ND	May Occur. Suitable habitat occurs in the canyon.
Greenest tiger beetle *Cicindela tranquebarica viridissima*	Inhabits woodlands adjacent to the Santa Ana River basin. Usually found in open areas between trees. Nominate species habitat is wet, dry, dense, empty, or other habitat attributes. Examples include banks and mud flats of creeks dry lake beds, tidal flats, roadside ditches, packed gravelly-sandy roads near water, open ground, old fields, stubble fields, saline and alkali flats, blowouts, sand pits, prairie grasslands, forest trails and forest roads.	Year-round	FESA: ND CESA: ND	May Occur. Site is fairly far from the Santa Ana River, but there is little available information on this subspecies.
Monarch butterfly *Danaus plexippus*	Fields, roadsides, open areas, wet areas and urban gardens with milkweed and flowering plants. Milkweed is essential for egg-laying and food for caterpillars. Overwintering habitat a specific microclimate for protection and moderate temperatures. Conditions vary between populations. Monarchs west of the Rocky Mountains primarily overwinter at specific sites along the Pacific Coast, California. Eucalyptus, Monterey pines, Monterey cypress trees are roost sites.	Winter Overwinters CA	FESA: C CESA: ND	May Occur. Could be transient on site in winter and fall . Site lacks trees and plants required for roosting.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California diplectronan caddisfly *Diplectrona californica*	Cold, fast running streams. As of 2023, only two known occurrences, Claremont, Los Angeles County, Thurman Flats, San Bernardino County,	Year round Mostly underwater	FESA: ND CESA: ND	Unlikely. Stream is probably not the right temperature to support this species. Insufficient information for firm determination.
Quino checkerspot butterfly *Euphydryas editha quino*	Grasslands and open areas in coastal sage scrub. Patchy shrub or small tree landscapes with openings of several meters between large plants, or a landscape of open swales alternating with dense patches of shrubs. Areas must contain food plants (plantain and owl's clover) with low levels of non-native vegetation, open or bare soils with sparse shrub cover. Current known range is western Riverside County, northern. San Diego counties and northern Baja California.	Spring	FESA: END CESA: ND	None. Site lacks suitable habitat, food sources on or nearby the site.
White cuckoo bee *Neolarra alba*	Old field, suburban and orchard habitats, urban/edificarian, cropland and hedgerows. Host plants include Cryptantha and Lotus species. Likely nests in burrows of Perdita, a ground-nesting genus. California west of the mountains.	Unknown, subterranean	FESA: ND CESA: ND Possibly extinct.	May Occur. Insufficient information for firm determination.
San Gabriel Mountains blue butterfly *Plebejus saepiolus aureolus*	[Nominate species habitat description] Boreal western North America from central Alaska south along mountains to southern California and southwestern New Mexico; east across southern Canada and northern Great Lakes area to Maine. The last known populations of *P.s. aureolus* were in the wet meadows of the Big Pine Recreation Area in the San Gabriel mountains of southern California. This area was drained.	May - July Adult flight	FESA: ND USFS: S CESA: ND Presumed extinct	None. No wet meadow habitat is present.

Sensitive Biological Resources

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Delhi sands flower-loving fly *Rhaphiomidas terminatus abdominalis*	Fine, sandy soils, often with wholly or partially consolidated dunes. These soil types are generally classified as the "Delhi" series (primarily Delhi fine sand). Restricted to western Riverside and San Bernardino Counties.	Above-ground emergence August and September. Not visible during the rest of the year.	FESA: ND CESA: ND	No. Suitable soils required for the preferred habitat are not present.
Sensitive Habitats and Plant Communities				
Southern California Arroyo Chub/Santa Ana Sucker Stream	Broad slow-moving streams with bottoms of sand or mud, Also with gravel, cobbles, and boulders, usually at depths greater than 40 centimeters (15.75 inches).	Year-round	Declining stream type.	Not present.
Coastal and valley freshwater marsh	Flat or rolling terrain, with depressions and low spots at or near water table. Declining due to draining and alteration for agriculture.	Year-round, although size can change with available surface water and groundwater levels.	Declining plant community	Not present.
Canyon live oak ravine forest	Steep, narrow canyons in steep mountain areas.	Year-round	Declining plant community	Not present.
Southern coast live oak riparian forest	Steep canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Present.
Southern riparian forest	Steep canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Not present.
Southern sycamore alder riparian woodland	Steep, narrow and shallow, broad canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Not present.
Riversidian alluvial fan sage scrub	Creeks, rivers, canyons and drainages in Peninsular and Transverse Ranges. Riverside, San Bernardino Counties.	Year-round	Declining plant community	Not present.

LEGEND

FESA: Federal Endangered Species Act

END	Endangered - May become extinct if trends continue
THR	Threatened - May become endangered if trends continue
PE	Proposed for listing as endangered
PT	Proposed for listing as threatened
C	Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.
ND	Not designated as a sensitive species

USFWS: U.S. Fish and Wildlife Service

BCC	Bird of Conservation Concern

BLM: Bureau of Land Management

S	Sensitive species on BLM lands

USFS: U.S. Forest Service

S	Sensitive species on US Forest lands

CESA: California Endangered Species Act

END	Endangered
THR	Threatened
CE	Candidate for endangered listing
CT	Candidate for threatened listing
CFP	California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
ND	Not designated as a sensitive species

CDFW: California Department of Fish and Wildlife

SSC	Species of Special Concern. Taxa of concern to the California Department of Fish and Wildlife with populations declining seriously or that are otherwise highly vulnerable to human development.
SA	Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.
WL	Watch list. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status

CDF: California Department of Forestry & Fire Protection

S	Sensitive species on forestry lands

CNPS: California Native Plant Society Classifications

1A	Plants presumed by CNPS to be extinct in California
1B	Plants considered by CNPS to be rare or endangered in California and elsewhere
2B	Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.
3	Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.
4	Watch list of plants of limited distribution whose status should be monitored

CNPS: Threat Codes

.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Fairly endangered in California (20-80% occurrences threatened)
.3	Not very endangered in California (<20% of occurrences threatened, or no current threats known)

Other Classifications

IUCN: International Union for the Conservation of Nature

D	Conservation Dependent. Discontinued category used prior to 2001, equivalent to Near Threatened.
CR	Critically Endangered. In a particularly and extremely critical state
DD	Data Deficient
EN	Endangered. Very high risk of extinction in the wild,
EW	Extinct in the Wild. Survives only in captivity, cultivation and/or outside native range, as presumed after exhaustive surveys
EX	Extinct. Beyond reasonable doubt that the species is no longer extant.
LC	Least Concern
NE	Not Evaluated
NT	Near Threatened. Close to being endangered in the near future.
VU	Vulnerable. High risk of unnatural (human-caused) extinction without further human intervention.
RWL	Red Watch List. Species with extremely high vulnerability due to small population, small range, high threats, and range-wide declines.
YWL	Yellow Watch List. Species that are either restricted (small range and population) or are more widespread but with troubling declines and high threats.

NABCI: North American Bird Conservation Initiative

RWL	Red Watch List. Species with restricted distributions and small, declining populations. Most face elevated threats and also are habitat specialists. Several are threatened by rapidly changing climate.
YWL	Yellow Watch List. Species with restricted ranges, highly vulnerable populations that require protection to prevent declines or reverse declines.

AFS: American Fisheries Society

EN	Endangered
TH	Threatened
VU	Vulnerable

WBWG; Western Bat Working Group

H	High Priority
MH	Medium-High Priority
M	Medium Priority
LM	Low-Medium Priority

Seed Banks - SB

BerrySB	Berry Seed Bank
CRES	San Diego Zoo CRES Native Gene Seed Bank
KewBG	Kew Royal Botanic Gardens
RSABG	Rancho Santa Ana Botanic Garden
SBBG	Santa Barbara Botanic Garden
UCBBG	UC Berkeley Botanical Garden
USDA	US Dept of Agriculture

Occurrence Probabilities

Occurs	Species or sign (evidence) of species occurs on site as least during a portion of the year or existing record for the site.
May Occur	Not observed or recorded on site, suitable habitat within known range.
Unlikely	No reported sightings within the vicinity of the project. Available habitat is not present. Not within known elevation range.
None	Focused surveys did not locate the species, or suitable habitat does not exist on site or is outside elevation range.