

Appendix D

Biological Resources Technical Report

Technical Report for the
**SMUD Cordova Park Underground Cable
Replacement Project – Biological Resources**



Prepared for:



April 1, 2022

Technical Report for the

SMUD Cordova Park Underground Cable Replacement Project – Biological Resources



Prepared for:

SMUD
6201 S Street, Mail Stop B209
Sacramento, CA 95817

Contact:

Rob Ferrera
Environmental Management Specialist
916.769.8241
Rob.Ferrera@smud.org

Prepared by:

Ascent Environmental, Inc.
455 Capitol Mall, Suite 300
Sacramento, CA 95814

Contact:

Carlos Alvarado
Wildlife Biologist
916.325.4800

TABLE OF CONTENTS

Section	Page
1 INTRODUCTION.....	1
2 PROJECT DESCRIPTION.....	1
3 SURVEY METHODS.....	2
4 KEY REGULATORY ISSUES.....	5
4.1 Federal Endangered Species Act	6
4.2 Clean water act.....	6
4.3 migratory bird treaty act.....	6
4.4 California Endangered Species Act	6
4.5 California Native Plant Protection Act.....	7
4.6 Porter-Cologne Water Quality Control Act.....	7
4.7 California Fish and Game Code Section 1602—Streambed Alteration.....	7
4.8 California Fish and Game Code.....	7
4.9 California Environmental Quality Act.....	8
4.10 Central valley protection board.....	8
4.11 Sacramento county american River parkway plan 2008.....	8
4.12 american river Parkway – natural resources management plan (in preparation)	9
4.13 Rancho Cordova Municipal code.....	9
4.14 Sacramento County Code of Ordinances.....	10
5 RESULTS.....	10
5.1 Land Cover Types.....	10
5.2 Common Wildlife Species.....	14
5.3 Special Status Species.....	16
5.4 Federal and State Protected Aquatic Resources	21
5.5 Sensitive Natural Communities.....	21
5.6 Critical Habitat.....	22
5.7 Essential Fish Habitat.....	22
5.8 Protected Trees	22
6 CONCLUSIONS AND RECOMMENDATIONS.....	23
6.1 Special-Status Wildlife Species	23
6.2 Riparian, Sensitive Natural communities, and Wetlands	24
6.3 Wildlife Movement Corridors.....	25
6.4 Sacramento County Code of OrdinanceS and City of Rancho Cordova Municipal Code	25
6.5 Consistency with Habitat Conservation Plans	26
6.6 County of Sacramento American River Parkway Plan and American River Parkway Natural Resources Management Plan.....	26
7 REFERENCES.....	27
APPENDICES	
Appendix A Database Query Results	
Appendix B Special-Status Species Tables	
Appendix C Photographs	

Figures

Figure 1 Project Location 3

Figure 2 Survey Area..... 4

Figure 3 Landcover..... 11

Figure 4 Annual Grassland, that was recently mowed, and Oak Woodland Landcover in the Study Area12

Figure 5 Annual grassland landcover recently mowed within the Study Area.....13

Figure 6 Fremont cottonwood forest at the edge of mine tailings within the Study Area.....13

Figure 7 Nest Location.....19

Figure 8 Active White-tailed Hawk Nest in the Vicinity of the Project Site observed in 2021.....20

Tables

Table 1 Wildlife Observed in the Study Area During Site Surveys on May 25 and 26, 202115

Table 2 Special Status Animal Species Known to Occur in the Region and their Potential for Occurrence on the Project Site.....18

LIST OF ABBREVIATIONS

CDFW	California Department of Fish and Wildlife
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
NPPA	Native Plant Protection Act
SMUD	Sacramento Municipal Utility District
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

This page intentionally left blank.

1 INTRODUCTION

This report presents the results of a biological resources technical assessment for Sacramento Municipal Utility District (SMUD) Cordova Park Underground Cable Replacement Project. The project is located within Hagan Community Park and the American River Parkway in Rancho Cordova, Sacramento County, California (Figure 1).

2 PROJECT DESCRIPTION

The project involves the installation of approximately 0.6 miles of new underground 12kV electrical lines (cable) and approximately 2.12 miles of new underground 69kV cable to replace existing underground 12kV and 69kV cable buried directly in the ground (direct-buried) that was installed in the 1970s. The new 12kV cable also would be direct-buried while the new 69kV cable would be installed in conduits housed in concrete-encased duct banks to provide pathways and adequate spacing. The proposed project also involves installation of up to 13 new utility vaults along the 69kV alignment to allow access for electric cable pulling, splicing and maintenance.

The existing direct-buried 12kV cable begins at SMUD's Cordova Park Substation and extends approximately 0.6 miles east, where it connects to existing riser poles.

The existing direct-buried 69kV cable begins on the northwest side of Coloma Road, approximately 200 feet southeast of Sierra Madre Court, and extends north across the eastern property lines of Mills Middle School, Cordova High School and Hagen Park until it enters SMUD's Cordova Park Substation located near the intersection of Ambassador Drive and Trails Court (approximately 0.45 miles). From SMUD's substation, the existing 69kV cable extends east beneath a dirt path for approximately 0.70 miles when it turns north and cuts across the American River Parkway towards the American River for approximately 0.75 miles. Note that the total existing 69kV alignment is approximately 1.9 miles and the proposed 69kV alignment is approximately 2.12 miles. The extra mileage is due to deviating from the existing route to align with Rossmoor Drive.

Since installation of the existing 12kV and 69kV cable in the 1970s, native trees have established within the existing alignment along the Parkway. SMUD has coordinated with Sacramento County to install the new conduit outside of the existing alignment to avoid potential impacts to these trees and other biological resources within the American River Parkway and to facilitate easier access for future maintenance.

Accordingly, SMUD proposes to direct-bury the new 12kV cable beneath the pavement, sidewalks, or curbs and gutters of Ambassador Drive. The proposed 69kV alignment would deviate from the existing alignment by continuing east until it heads north at Rossmoor Drive. While the exact location of the 69kV alignment along Rossmoor Drive is not yet known and would be determined once existing utilities beneath the pavement are identified, the 69kV alignment would generally be within Rossmoor Drive or the fuel break immediately west of the pavement. The 69kV alignment would continue along Rossmoor Drive as it intersects with the American River Parkway bike trail and continue beyond the edge of pavement at the end of Rossmoor Drive. The 69kV alignment would connect to existing riser poles located between the boundaries of Rossmoor Drive and the edge of the American River. Within the American River Parkway, the existing direct-buried 69kV cable would be abandoned in place.

The project would include up to 13 utility vaults to be installed at various points along the 69kV alignment. The proposed utility vaults would consist of pre-cast concrete, measuring 8 feet x 14 feet x 8 feet inside, requiring an excavation area of approximately 15 feet x 20 feet x 15 feet, and would generally be spaced evenly throughout the alignment to allow for cable pulling, splicing and maintenance.

3 SURVEY METHODS

Biological resources were evaluated by an Ascent biologist during a reconnaissance survey conducted on May 25 - 26, and December 7, 2021. The study area consists of a 165-foot buffer of the project footprint (Figure 2). The potential for nesting raptors was assessed within a 0.25-mile buffer of the project footprint (Figure 2).

The 165-foot survey buffer of the project footprint was established based on U.S. Fish and Wildlife Service (USFWS) guidelines (USFWS 2017), which recommend this distance to survey for elderberry shrubs that could provide suitable habitat for valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

Information on sensitive biological resources previously recorded near the study area was collected through a search of the California Natural Diversity Database (CNDDDB) and other existing documentation pertaining to biological resources in the region as listed below.

- ▶ CNDDDB record search within the Rio Linda, Citrus Heights, Folsom, Roseville, Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, and Sloughhouse U.S. Geological Service 7.5-minute quadrangles (CNDDDB 2021);
- ▶ eBird database search within Hagan Community Park and Rossmoor Bar Area (eBird 2021);
- ▶ California Native Plant Society (CNPS), Rare Plant Program database search of the Rio Linda, Citrus Heights, Folsom, Roseville, Sacramento East, Carmichael, Buffalo Creek, Florin, Elk Grove, and Sloughhouse U.S. Geological Service 7.5-minute quadrangles (CNPS 2021); and
- ▶ U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation project planning tool (USFWS 2021a).

Lists of special-status plant and wildlife species were compiled from these queries and are presented in Appendix B. The tables include common and scientific names, legal status, habitat requirements, and a brief assessment of the likelihood that the species could occur in the study area.

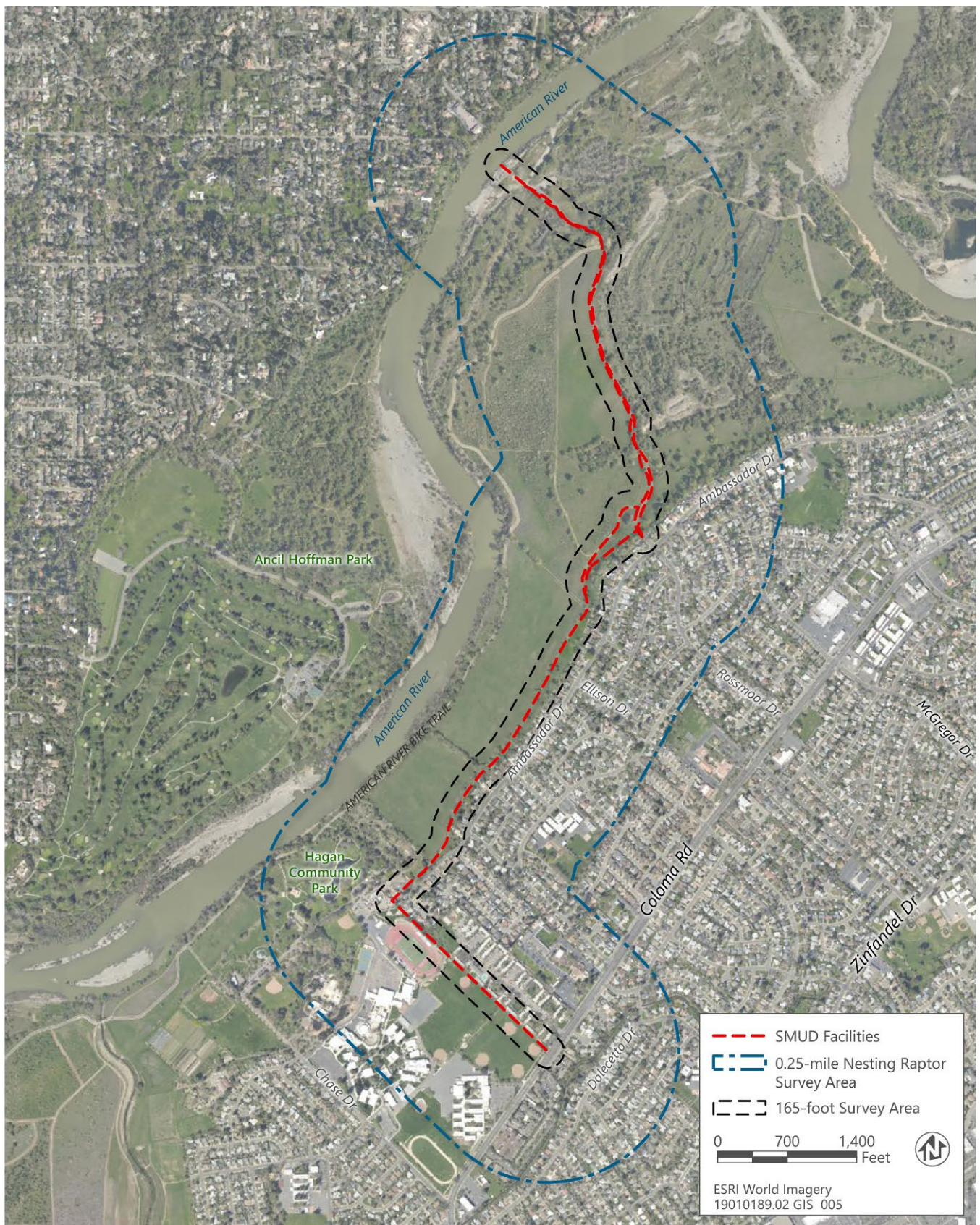
The CNDDDB is a statewide database, managed by the California Department of Fish and Wildlife (CDFW) that is continually updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDDB is the most current and reliable tool available for tracking occurrences of special-status species, it contains only those records that have been reported to CDFW. Therefore, it is possible that a rare plant or animal could be present on the property but not documented in the CNDDDB.

Sensitive biological resources are protected and/or regulated by federal, state, and/or local laws and policies. Sensitive biological resources include special-status species and sensitive natural communities.



Source: Data received from SMUD in 2021

Figure 1 Project Location



Source: Data received from SMUD in 2021

Figure 2 Survey Area

Special-status species are plants and animals in the following categories:

- ▶ listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing;
- ▶ listed or candidates for listing by the State of California as threatened or endangered under CESA;
- ▶ listed as rare under the California Native Plant Protection Act;
- ▶ listed as Fully Protected under the California Fish and Game Code;
- ▶ identified by CDFW as species of special concern;
- ▶ taxa considered by CDFW to be “rare, threatened, or endangered in California” and assigned a California Rare Plant Rank (CRPR). The CDFW system includes six rarity and endangerment ranks for categorizing plant species of concern, which are summarized as follows:
 - CRPR 1A - Plants presumed to be extinct in California;
 - CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere;
 - CRPR 2A - Plants that are presumed extirpated in California, but more common elsewhere;
 - CRPR 2B - Plants that are rare threatened, or endangered in California, more common elsewhere.
 - CRPR 3 - Plants about which more information is needed (a review list); and
 - CRPR 4 - Plants of limited distribution (a watch list).

All plants with a CRPR are considered “special plants” by CDFW. The term “special plants” is a broad term used by CDFW to refer to all of the plant taxa inventoried in CDFW’s CNDDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A, 1B, 2A, and 2B may qualify as endangered, rare, or threatened species within the definition of CEQA Guidelines Section 15380. CDFW recommends that potential impacts to CRPR 1 and 2 species be evaluated in CEQA documents. In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened pursuant to CEQA Guidelines Section 15380. However, these species may be evaluated by the lead agency on a case-by-case basis.

- ▶ considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G); or
- ▶ otherwise meets the definition of rare or endangered under CEQA §15380 (b) and (d).

Sensitive natural communities are of limited distribution statewide or within a county or region that provide important habitat value to native species. Most types of wetlands and riparian communities are considered sensitive natural communities because of their limited distribution in California. In addition, sensitive natural communities include habitats that are subject to U.S. Army Corps of Engineers (USACE) jurisdiction under Section 404 of CWA, Section 1602 of the California Fish and Game Code, and the state’s Porter-Cologne Water Quality Control Act, which protects waters of the state. Sensitive natural communities have high potential to support special-status plant and animal species. Sensitive natural communities can also provide other important ecological functions, such as enhancing flood and erosion control and maintaining water quality.

4 KEY REGULATORY ISSUES

Biological resources in California are protected and/or regulated by a variety of federal and state laws and policies. Key regulatory issues that may be applicable to the project are discussed below.

4.1 FEDERAL ENDANGERED SPECIES ACT

Pursuant to ESA, USFWS has authority over projects that may affect the continued existence of federally listed (threatened or endangered) species. Section 9 of ESA prohibits any person from "taking" an endangered or threatened fish or wildlife species or removing, damaging, or destroying a listed plant species on federal land or where the taking of the plant is prohibited by state law. Take is defined under ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation where it results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

Section 10 of the ESA applies if a non-federal agency is the lead agency for an action that results in incidental take and no other federal agencies are involved in permitting the action. Section 7 applies if a federal discretionary action is required (e.g., a federal agency must issue a permit), in which case the involved federal agency is required to consult with USFWS if the action may affect federally listed species.

4.2 CLEAN WATER ACT

Section 404 of the Clean Water Act (CWA) requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land or changing the bottom elevation of any portion of a water of the United States. Waters of the United States include navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Many surface waters and wetlands in California meet the criteria for waters of the United States.

In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate regional water quality control board (RWQCB) indicating that the action would uphold State water quality standards.

4.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations, Section 10.13. The list includes nearly all birds native to the United States.

4.4 CALIFORNIA ENDANGERED SPECIES ACT

Pursuant to CESA, a permit from CDFW is required for projects that could "take" a species state listed as threatened or endangered. Section 2080 of CESA prohibits take of state listed species. Under CESA, take is defined as any activity that would directly or indirectly kill an individual of a species. The definition does not include "harm" or "harass" as in the federal act. As a result, the threshold for take under CESA is higher than under ESA (i.e., habitat modification is not necessarily considered take under CESA). The take of state-listed species incidental to otherwise lawful activities requires a permit, pursuant to Section 2081(b) of CESA. The state has the authority to issue an incidental take permit under Section 2081 of the California Fish and Game Code or to coordinate with USFWS during the federal process, so the federal permit also would cover state-listed species.

4.5 CALIFORNIA NATIVE PLANT PROTECTION ACT

In addition to CESA, the California Native Plant Protection Act (NPPA; California Fish and Game Code Section 1900 et seq.) provides protection to endangered and “rare” plant species, subspecies, and varieties of wild native plants in California. The NPPA was enacted in 1977 and allows the California Fish and Game Commission to designate plants as rare or endangered. Sixty-four species, subspecies, and varieties of plants are protected as rare under the NPPA. The act prohibits take of endangered or rare native plants but includes exceptions for agricultural and nursery operations; for emergencies; and, after proper notification of CDFW, for vegetation removal from canals, roads, and other building sites, changes in land use, and other situations. When CESA was enacted in 1984, it expanded on the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, three listing categories for plants are used in California: rare, threatened, and endangered.

4.6 PORTER-COLOGNE WATER QUALITY CONTROL ACT

Each of the nine RWQCBs in California must prepare and periodically update water quality control plans (basin plans) pursuant to the Porter-Cologne Water Quality Control Act. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Under the Porter-Cologne Act, features containing surface water are often classified as waters of the state. Projects that affect waters of the state must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification under Section 401 of the CWA.

4.7 California Fish and Game Code Section 1602—Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- ▶ substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- ▶ deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation (California Code of Regulations Title 14, Section 1.72). CDFW regulatory authority within altered or artificial waterways is based on the value of those waterways to fish and wildlife.

4.8 CALIFORNIA FISH AND GAME CODE

Protection of fully protected species is described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. CDFW has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species.

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, and falcons), including their nests or eggs.

4.9 CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA applies to projects proposed to be undertaken or requiring approval by state and local governmental agencies. "Projects" are public agency actions with potential to have an impact on the physical environment. Once an activity is determined to be a "project" under CEQA, the lead agency must decide whether it is categorically or statutorily exempt. If it is not exempt, the lead agency must assess the potential for significant environmental effects to occur as a result of the project. For this analysis, thresholds of significance related to biological resources, as described below, are used to determine if a significant impact may occur. The significance criteria are based on applicable parts of Appendix G of the State CEQA Guidelines.

The project would have a significant impact on biological resources if it would:

- ▶ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- ▶ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- ▶ have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- ▶ interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- ▶ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- ▶ conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan.

4.10 CENTRAL Valley Protection Board

Portions of the project are within the designated floodway of the American River. Under CCR Title 23, Division 1 (Title 23), an encroachment permit from the Central Valley Flood Protection Board (CVFPB) may be needed for work within a designated floodway.

4.11 SACRAMENTO County American River Parkway Plan 2008

The American River Parkway Plan is the guiding management document for the Parkway. The plan guides land use decisions, including those related to recreation and other human uses. According to the Parkway Plan Concept, the American River Parkway is a unique regional facility which shall be managed to: a) preserve naturalistic open space and protect environmental quality within the urban environment, and b) contribute to the provision of recreational opportunities in the Sacramento area.

The Parkway Plan Goals are:

- ▶ To provide, protect, and enhance for public use a continuous open space greenbelt along the American River extending from the Sacramento River to Folsom Dam.
- ▶ To provide appropriate access and facilities so that present and future generations can enjoy the amenities and resources of the Parkway.
- ▶ To preserve, protect, interpret, and improve the natural, archaeological, historical, and recreational resources of the Parkway, including an adequate flow of high-quality water, anadromous and resident fishes, migratory and resident wildlife, and diverse natural vegetation.
- ▶ To mitigate adverse effects of activities and facilities adjacent to the Parkway.
- ▶ To provide public safety and protection within and adjacent to the Parkway.

4.12 AMERICAN RIVER PARKWAY - NATURAL RESOURCES MANAGEMENT PLAN (IN PREPARATION)

The Natural Resources Management Plan (NRMP) is a guide for implementation of a multifaceted natural resource management program for the Parkway. It integrates ecological resource management and conservation with cultural resources protection, recreational use and impacts, and other human uses in the Parkway. The NRMP informs the management, conservation, and rehabilitation of Parkway land and natural resources, and helps to ensure compliance with environmental laws and regulations. Utilizing an adaptive management approach, the effectiveness of natural resource management efforts in the Parkway will be reevaluated and the NRMP will be updated periodically.

The purpose of the NRMP is to establish resource management guidelines to minimize the impact of human uses on the Parkway and the environment. The NRMP includes goals and objectives designed to maintain natural communities located within the Parkway and identifies projects for implementation to accomplish goals and objectives. The NRMP takes an integrative approach to planning for ecological resources, cultural resources, and human use. However, it is important to note that the emphasis of the NRMP is to manage human uses in a manner that minimizes impacts to natural and cultural resources while maintaining recreational access. Sacramento County plans to adopt it in October 2022.

4.13 RANCHO CORDOVA MUNICIPAL CODE

Although the project is geographically within the City of Rancho Cordova, regulations from other jurisdictions may apply in certain areas. City of Rancho Cordova Municipal Code regulations would be applicable for those areas of the project that are within Mills Middle School, Cordova High School, Hagen Community Park, and Ambassador Drive.

Chapter 19.04 - Protection of Public Trees

Chapter 19.04 of the City of Rancho Cordova Municipal Code (Protection of Public Trees) establishes regulations pertaining to the planting, maintenance, protection, and preservation of all public trees growing on public property. A public tree is defined as a tree or shrub whose trunk is planted in a street, planting easement, public premises, public sidewalk, median, traffic island, or any other right-of-way owned or controlled by the city through an easement, license, fee title, or other permissive grant of use and maintained by the city. A public tree permit shall be required before any person shall plant, transplant, move, separate, trim, prune, cut above or below the ground, disrupt, alter, or do surgery upon any public tree.

Chapter 19.12 - Preservation and Protection of Private Trees

The City of Rancho Cordova Municipal Code Chapter 19.12 Preservation and Protection of Private Trees establishes regulations for the protection, removal, and preservation of landmark trees and protected trees within the city. A landmark tree is defined as any trees designated by council through resolution as a vital and historical part of the city's landscape such that the trees need to be designated as landmarks for protection and preservation. Protected trees are defined as:

1. Native oak – *Quercus lobata*, valley oak; *Quercus wislizenii*, interior live oak; *Quercus douglasii*, blue oak; or *Quercus morehus*, oracle oak – having a trunk diameter of at least six inches or greater; or
2. Any tree species other than a native oak having a trunk diameter of at least 12 inches or greater on nonresidential property; or
3. Any tree species other than a native oak having a trunk diameter of at least 24 inches or greater on residential property; or
4. Any tree planted as a requirement tree for site development, tree permit condition, landscape plan removal replacement, or other designated condition by the public works director or planning director.
5. "Protected tree" does not include any trees for sale within the city sold by a nursery.

Section 19.12.040 states that “no person shall trench, grade or fill within the dripline of any protected tree, or damage, kill or remove any protected tree, or perform a major trimming of any protected tree without an approved tree permit. It shall be the responsibility of the owner or lessee/tenant of the property on which the protected tree is located and the person performing tree work to have the approved tree permit and/or a copy of the conditions of permit approval at the work site.”

4.14 SACRAMENTO COUNTY CODE OF ORDINANCES

Sacramento County ordinances would be applicable for the portions of the project that are within the American River Parkway area.

Chapter 19.04

Chapter 19.04 of the Sacramento County Code of Ordinances provides for the protection, preservation, and regulation of trees on public property within Sacramento County. This includes all trees planted or maintained by the County on an easement, planting easement, street, County park, or public premises. A permit shall be required to plant, transplant, move, separate, trim, prune, cut above or below ground, disrupt, alter, or take any other action upon any tree located on public premises.

Chapter 19.12

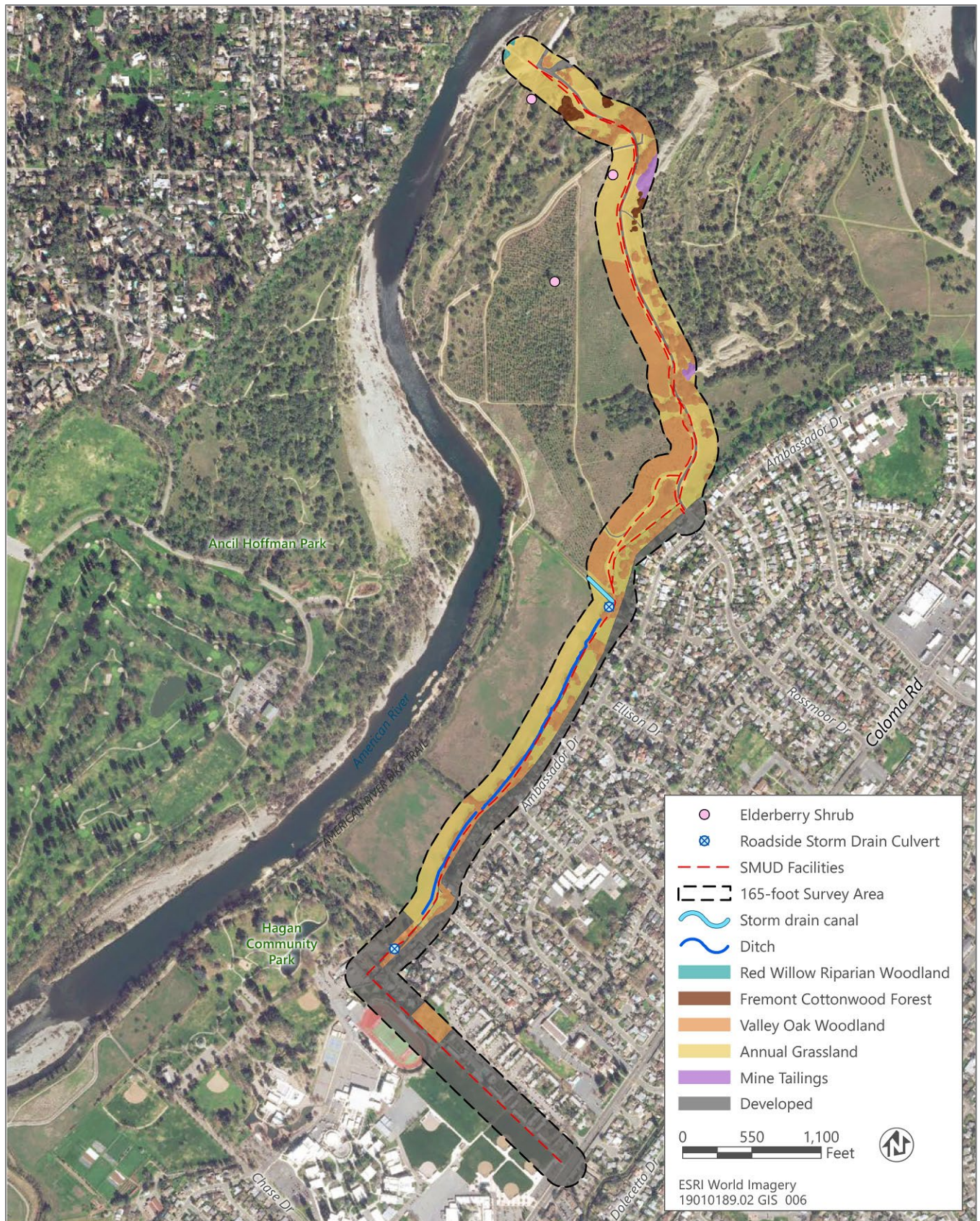
The Sacramento County Tree Preservation and Protection Ordinance (Chapter 19.12 of the Sacramento County Code of Ordinances) provides for the protection of native oak trees, including valley oak (*Quercus lobata*), interior live oak (*Q. wislizeni*), blue oak (*Q. douglasii*), and oracle oak (*Q. morehus*). Protected trees include any living native oak tree having at least one trunk of six inches or more diameter at standard height (DSH), or a multi-trunked native oak tree having an aggregate DSH of 10 inches. Chapter 19.12 states that no person shall trench, grade, or fill within the dripline of any native oak tree; or destroy, kill, or remove any native oak tree, on any property, public or private, without a tree permit.

5 RESULTS

5.1 LAND COVER TYPES

The project footprint for the 69kV alignment falls within a small portion of Mills Middle School, Cordova High School, and Hagan Community Park and the rest of the project footprint within the American River Parkway – Rossmoor Bar Area. The portion of the 12kV alignment starts within Cordova Park and would follow Ambassador Drive. Land cover types observed within the survey area include developed, valley oak woodland, annual grassland, Fremont cottonwood forest, mine tailings, and red willow riparian woodland (Figure 3). Each land cover type is described in more detail below. Vegetation types and descriptions in follow *A Manual of California Vegetation* (Sawyer et al. 2009 or current version; most current natural community data available at <http://vegetation.cnps.org/>), which is the current standard for vegetation classification in California.

The 69kV alignment on the south end falls within Mills Middle School, Cordova High School sport fields, then follows a utility right-of-way, until it reaches SMUD’s Cordova Park Substation at Hagan Community Park. It then follows an existing access road/trail until it reaches Rossmoor Drive, where the 69kV alignment turns and heads north towards the American River. The 69kV alignment stays along Rossmoor Drive until its termination near the American River, where the 69kV alignment connects to existing riser poles located between the boundaries of Rossmoor Drive and the American River. Along Rossmoor Drive, the 69kV circuit would be installed beneath existing pavement or within an existing fuel break adjacent to the pavement. Land use surrounding the survey area includes Mills Middle School, Cordova High School and Hagan Park to the west, American River Parkway to the north and northeast, and private residences to the south and east.



Source: Data received from SMUD in 2021

Figure 3 Landcover

5.1.1 Valley Oak Woodland Savannah

Oak woodland habitat within the study area is dominated by valley oak (*Quercus lobata*), blue oak (*Quercus douglassii*), and interior live oak (*Quercus wislizeni*). Due to the proximity of residences, fruit and non-native trees are also present and include almond (*Prunus* sp.), apricot (*Prunus armeniaca*), plum (*Prunus americana*), orange (*Citrus* sp.), mulberry (*Morus* sp.), sweetgum (*Liquidambar* sp.), and silver maple (*Acer saccharinum*). The understory is comprised of annual grasses, including ripgut brome (*Bromus diandrus*), wild oats (*Avena fatua*), rye grass (*Festuca perennis*), Bermuda grass (*Cynodon dactylon*) and Dallis grass (*Paspalum dilatatum*). Additional plants observed within the understory include, blue plumbago (*Plumbago auriculata*), flat top sedge (*Cyperus* sp.), California grape (*Vitis californica*), fig (*Ficus carica*). Due to the proximity of residential homes, there are some ornamental plants also present within the survey area including Chinese privet (*Ligustrum* sp.), bottlebrush (*Callistemon* sp.), aloe (*Aloe* sp.), prickly pear cactus (*Opuntia* sp.), calla lily (*Zantedeschia* sp.), and bear's breeches (*Acanthus mollis*). Figure 4 shows a representative photograph of valley oak woodland landcover with an understory of annual grassland that was recently mowed.



Figure 4 Annual Grassland, that was recently mowed, and Oak Woodland Landcover in the Study Area

5.1.2 Annual Grassland

Annual grassland habitat is dominated by nonnative grasses, including those mentioned as occurring in the understory of oak woodland habitat. Other plant species observed include yellow starthistle (*Centaurea solstitialis*), hairy vetch (*Vicia villosa*), clover (*Trifolium* sp.), bedstraw (*Galium* sp.), crane's bill geranium (*Geranium molle*), California burclover (*Medicago polymorpha*), and wild radish (*Raphanus raphanistrum*). Figure 5 shows a representative photograph of annual grassland landcover that was recently mowed.



Figure 5 Annual grassland landcover recently mowed within the Study Area

5.1.3 Fremont Cottonwood Forest

This land cover type is located within the American River Parkway area in proximity to mine tailing deposits. Observed species include Fremont cottonwood (*Populus fremontii*), blue oak, black walnut (*Juglans hindsii x regia*), willow (*Salix* sp.) with an understory Himalayan blackberry (*Rubus armeniacus*), coyote brush (*Baccharis* sp.), poison oak (*Toxicodendrum diversilobum*), and annual grasses. Figure 6 shows a representative photograph of this forest type.



Figure 6 Fremont cottonwood forest at the edge of mine tailings within the Study Area

5.1.4 Red Willow Riparian

This land cover type was observed at the edge of the American River. It is composed of young red willow (*Salix lasiolepis*) shrubs.

5.1.5 Mine Tailings

The mine tailing deposits are remnants of the gold mining operations. Vegetation quantity varies depending on depth of the mine tailings, some have trees growing within the mine tailings and some are bare or with very little vegetation. Figure 6 partly shows the mine tailing deposits with vegetation taking over.

5.1.6 Developed

The developed land cover type includes suburban single-family residential lots, residential streets, and landscaped areas. Landscaped areas support ornamental vegetation such as tall fescue (*Festuca* sp.), Kentucky bluegrass (*Poa pratensis*), Bermuda grass (*Cynodon dactylon*), mallow (*Malva parviflora*), Chinese privet, bottlebrush, aloe, prickly pear cactus, Chinese pistache (*Pistacia chinensis*), Italian cypress (*Cupressus* spp.), tree-of-heaven (*Ailanthus altissima*), Algerian ivy (*Hedera canariensis*).

5.1.7 Aquatic Resources

An abandoned irrigation ditch is located within the survey area north of Ambassador Drive. This irrigation ditch was previously used to irrigate the adjacent field when it was in agricultural production. However, this ditch is no longer in use. The irrigation ditch does not connect to the American River.

A concrete lined drainage canal is located a few feet east of where the drainage ditch ends. This canal is approximately 5 feet wide and may receive roadside runoff from Ambassador Drive; however, at the time of the surveys the canal was dry and showed no evidence of recent flows. The canal does not appear to be maintained, as it is overgrown with ruderal, upland plant species throughout its extent. The canal does not connect to the American River.

There is a culvert that daylights just east of the substation and north of the trail/access road. This culvert originates from a roadside storm drain along Ambassador Drive and it also receives runoff from adjacent residences. There is no watercourse associated with this culvert and it does not connect to the American River.

The American River is approximately 200 feet north of where the 69kV alignment connects to an existing riser pole. Based on CVFPB Best Available Maps, a portion of the 69kV alignment is within the FEMA Flood Zone AE (Area subject to 1% annual chance flood; Based Flood Elevations determined) (CVFPB 2022).

No other aquatic features were observed during the surveys. Outside of the American River, the USFWS National Wetlands Inventory does not show other aquatic resources within the survey area (USFWS 2022b).

5.2 COMMON WILDLIFE SPECIES

The study area contains suitable habitat for many common wildlife species, and many of these species were observed during the May 25 and 26, 2021 surveys. All wildlife observed within the project site are listed in Table 1. Several woodpeckers and tree swallows were observed nesting in cavities in tree limbs adjacent to the project footprint (Figure 6).

Table 1 Wildlife Observed in the Study Area During Site Surveys on May 25 and 26, 2021

Common Name	Scientific Name
Birds	
Cooper's hawk	<i>Accipiter cooperii</i>
White-throated swift	<i>Aeronautes saxatalis</i>
Mallard	<i>Anas platyrhynchos</i>
Great egret	<i>Ardea alba</i>
Great blue heron	<i>Ardea herodias</i>
Black-chinned hummingbird	<i>Archilochus alexandri</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Cedar waxwing	<i>Bombycilla cedrorum</i>
Canada goose	<i>Branta canadensis</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Red shouldered hawk ¹	<i>Buteo lineatus</i>
California quail	<i>Callipepla californica</i>
Anna's hummingbird	<i>Calypte anna</i>
Turkey vulture	<i>Cathartes aura</i>
Killdeer	<i>Charadrius vociferus</i>
Northern flicker	<i>Colaptes auratus</i>
Rock pigeon	<i>Columba livia</i>
American crow	<i>Corvus brachyrhynchos</i>
Downy woodpecker	<i>Dryobates pubescens</i>
White-tailed kite ¹	<i>Elanus leucurus</i>
American kestrel	<i>Falco sparverius</i>
American coot	<i>Fulica americana</i>
House finch	<i>Haemorhous mexicanus</i>
Bald eagle (flyover)	<i>Haliaeetus leucocephalus</i>
Dark-eyed junco	<i>Junco hyemalis</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Belted kingfisher	<i>Megasceryle alcyon</i>
Acorn woodpecker ¹	<i>Melanerpes formicivorus</i>
Wild turkey	<i>Meleagris gallopavo</i>
Song sparrow	<i>Melospiza melodia</i>
California towhee ¹	<i>Melospiza crissalis</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>
House sparrow	<i>Passer domesticus</i>
Peafowl	<i>Pavo cristatus</i>
Cliff swallow	<i>Petrochelidon pyrrhonota</i>
Double-crested cormorant	<i>Phalacrocorax auritus</i>

Common Name	Scientific Name
Yellow-billed magpie ¹	<i>Pica nuttalli</i>
Nuttall's woodpecker	<i>Picoides nuttallii</i>
Spotted towhee	<i>Pipilo maculatus</i>
American bushtit	<i>Psaltriparus minimus</i>
Ruby-crowned kinglet	<i>Regulus calendula</i>
Black phoebe	<i>Sayornis nigricans</i>
Yellow-rumped warbler	<i>Setophaga coronata</i>
Western bluebird	<i>Sialia mexicana</i>
White-breasted nuthatch	<i>Sitta carolinensis</i>
Lesser goldfinch	<i>Spinus psaltria</i>
Western meadowlark	<i>Sturnella neglecta</i>
European starling	<i>Sturnus vulgaris</i>
Tree swallow	<i>Tachycineta bicolor</i>
Violet-green swallow	<i>Tachycineta thalassina</i>
Bewick's wren	<i>Thryomanes bewickii</i>
House wren	<i>Troglodytes aedon</i>
American robin	<i>Turdus migratorius</i>
Western kingbird	<i>Tyrannus verticalis</i>
Mourning dove	<i>Zenaida macroura</i>
Reptiles and Amphibians	
Northern Pacific rattlesnake (skin)	<i>Crotalus oreganus</i>
Gopher snake (skin)	<i>Pituophis catenifer</i>
Sierran treefrog	<i>Pseudacris sierra</i>
Western fence lizard	<i>Sceloporus occidentalis</i>
Marsupial	
Virginia opossum	<i>Didelphis virginiana</i>
Mammals	
Coyote (scat)	<i>Canis latrans</i>
Feral cat	<i>Felis catus</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Mule deer	<i>Odocoileus hemionus</i>
Raccoon (scat and prints)	<i>Procyon lotor</i>
Western gray squirrel	<i>Sciurus griseus</i>

¹. Nesting

Source: Compiled by Ascent Environmental 2021

5.3 SPECIAL STATUS SPECIES

Special-status species are defined as species that are legally protected or that are otherwise considered sensitive by federal, State, or local resource agencies. Special-status species are species, subspecies, or varieties in one or more of the following categories, regardless of their legal or protection status:

- ▶ species listed or proposed for listing as threatened or endangered under ESA or candidates for possible future listing;
- ▶ species listed or candidates for listing by the State of California as threatened or endangered under CESA;
- ▶ species listed as rare under the California Native Plant Protection Act;
- ▶ species listed as Fully Protected under the California Fish and Game Code;
- ▶ species identified by CDFW as species of special concern;
- ▶ plants considered by CNPS and CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). Species on these lists may meet the CEQA definition of rare or endangered. They are summarized as follows:
 - CRPR 1A - Plants presumed to be extinct in California;
 - CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere;
 - CRPR 2A - Plants that are presumed extirpated in California, but more common elsewhere;
 - CRPR 2B - Plants that are rare threatened, or endangered in California, more common elsewhere.
- ▶ species considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA Section 15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G); or
- ▶ species that otherwise meet the definition of rare or endangered under CEQA Section 15380(b) and (d).

Preliminary lists of special-status plant and animal species known or with potential to occur in the survey area were developed based on a review of the CNDDDB, CNPS, and USFWS IPaC databases. The data review preliminarily identified 14 special-status plant species and 27 special-status wildlife species with the potential to occur within the vicinity of the survey area (CNDDDB 2021, CNPS 2021, USFWS 2022a).

5.3.1 Special-Status Plant Species

None of the 14 special-status plant species identified during the review of existing data are expected to occur based on lack of suitable habitat (i.e., vernal pools, wetland, marsh habitat) (Appendix A and Appendix B – Table 1).

5.3.2 Special Status Wildlife Species

Of the 27 special-status wildlife species identified during the review of existing data (Appendix B – Table 2), it was determined that three species could occur within or in proximity of the project site, valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), white-tailed kite (*Elanus leucurus*), and Swainson's hawk (*Buteo swainsoni*) (Table 2). A white-tailed kite active nest was identified within the 0.25-mile survey buffer (Figures 7 and 8) during reconnaissance surveys for the project in 2021.

Table 2 Special Status Animal Species Known to Occur in the Region and their Potential for Occurrence on the Project Site

Species	Listing Status ¹		Habitat	Potential for Occurrence ²
	Federal	State		
Invertebrates				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	--	Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	May occur: One elderberry shrub with stems greater than 1-inch in diameter was found within the survey area. This elderberry is located 300 feet southwest of the intersection of Rossmoor Drive and the bike trail.
Birds				
White-tailed kite <i>Elanus leucurus</i>	--	FP	Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Present: A pair of white-tailed kites was observed nesting towards the northeast edge of the 0.25-mile nesting raptor survey buffer.
Swainson's hawk <i>Buteo swainsoni</i>	--	ST	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	May Occur: The project site is within the breeding range of the species. Surveys within 0.25 miles of the project site did not result in observations of nesting Swainson's hawks but this species is regularly observed in the area.

Note: CNDDDB = California Natural Diversity Database

¹ Legal Status Definitions

Federal:

FE Endangered (legally protected)
 FT Threatened (legally protected)
 FC Candidate

State:

FP Fully protected (legally protected)
 SSC Species of special concern (no formal protection other than CEQA consideration)
 SE Endangered (legally protected)
 ST Threatened (legally protected)
 SC Candidate

² Potential for Occurrence Definitions

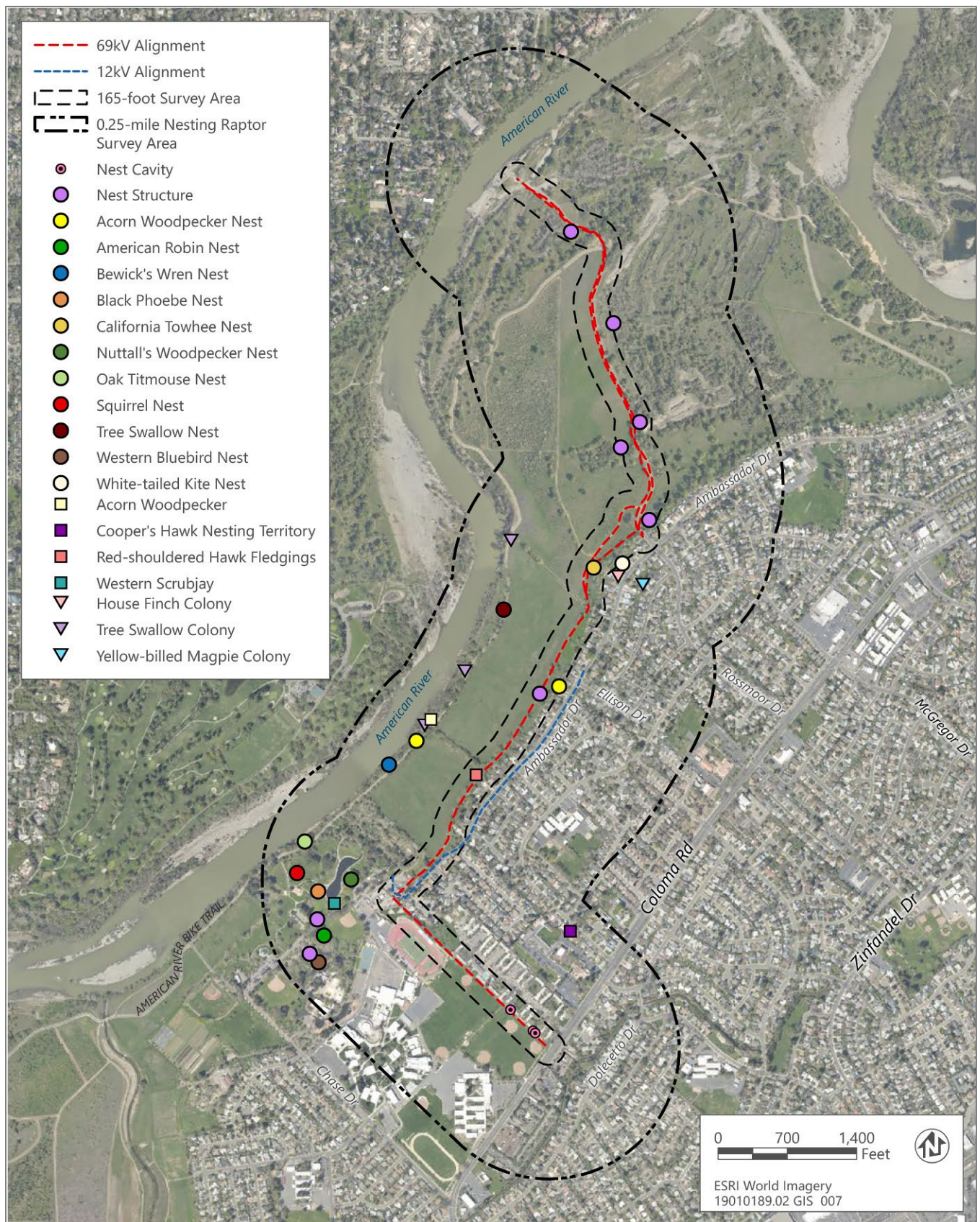
Not expected to occur: Species is unlikely to be present in the study area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the study area; however, there are little to no other indicators that the species might be present.

Likely to occur: The species, or evidence of its presence, was observed in the study area during reconnaissance surveys, or was reported by others.

Present: Species observed within the study area.

Source: CNDDDB 2021; eBird 2021



Source: Data received from SMUD in 2021

Figure 7 Nest Location



Figure 8 Active White-tailed Hawk Nest in the Vicinity of the Project Site observed in 2021.

VALLEY ELDERBERRY LONGHORN BEETLE

Valley elderberry longhorn beetle is federally listed as threatened. This species is endemic to the Central Valley of California and is only found in association with its host plant, elderberry (*Sambucus* spp.). The beetle spends most of its life in the larval stage, living within the stems of an elderberry plant, and feeding on pith. Frequently, the only exterior evidence of the elderberry's use by the beetle is an exit hole created by the larva just before the pupal stage. The life cycle takes one or two years to complete. Adult emergence is from late March through June, about the same time the elderberry produces flowers.

The nearest known occurrences of valley elderberry longhorn beetle include two occurrences along the banks of the American River Parkway. One occurrence includes Goethe Park (now known as River Bend Park) to the Rossmoor Bar boat ramp. This occurrence is one of the earliest known population locations of valley elderberry longhorn beetle dating back to 1976, and last reported as present in 2013. The second occurrence is along the American River east of El Manto Drive in the vicinity of Sacramento Bar. This occurrence location also dates back to 1976 and was last reported as present in 2006.

One elderberry shrub was observed within the survey area. This shrub is located in the American River Parkway within annual grassland habitat and is approximately 300 feet southwest of the intersection of Rossmoor Drive and the bike trail (see Figure 3.4-1). This elderberry is approximately 95 feet from the edge of the fire break or 135 feet from the west lane of Rossmoor Drive. Two additional elderberry shrubs were observed outside of the survey area.

SWAINSON'S HAWK

Swainson's hawk is state listed as threatened. Swainson's hawks typically are found in California only during the breeding season (March–September) and generally begin to arrive in the Central Valley in March. Nesting territories

are usually established by April, with incubation and rearing of young occurring through June. Most Swainson's hawk leave the Central Valley by late August to mid-September to migrate to South America. Nesting pairs frequently return to the same nest site for multiple years. Sacramento, Yolo, Solano, and San Joaquin Counties support the largest concentration of nesting Swainson's hawks in California.

The nearest known nesting occurrence of Swainson's hawk is approximately 0.72 miles north of the study area (CNDDDB 2021). Swainson's hawk has been observed flying over Rossmoor Bar Area on several occasions, included as recently as April 18, 2021 (eBird 2021). The study area and vicinity contain suitable nesting trees and also contains suitable grassland foraging habitat for this species.

WHITE-TAILED KITE

White-tailed kite is a CDFW fully protected species. The nearest active white-tailed kite nesting occurrence is in the backyard of a private residence near the northeast edge of the 0.25-mile nesting raptor survey buffer. The study area and vicinity contain suitable nesting trees and suitable adjacent foraging grassland habitat. This species is known to nest frequently in the project area and adjacent trees (CNDDDB 2021). The occupied nest observed during the May 25-26, 2021 visit could also be used by white-tailed kite during future nesting seasons.

5.4 FEDERAL AND STATE PROTECTED AQUATIC RESOURCES

A formal delineation of aquatic resources was not conducted for the survey area; however, based on the reconnaissance-level survey, potentially jurisdictional aquatic resources exist within and adjacent to the survey area. Potentially jurisdictional aquatic resources include riparian and riverine (i.e., the American River) habitats. The expected work area closest to potentially jurisdictional resources associated with the American River would be within Rossmoor Drive and within a dirt/cobble access road. The base of the power pole where work activities would end is approximately 125 feet from the nearest red willow riparian habitat and approximately 200 feet from the wet portion of the American River. Based on the Central Valley Flood Protection Board, a portion of the survey area is within the designated floodway of the American River.

The abandoned irrigation ditch and canal are man-made drainage features that do not connect to the American River. Therefore, these features would not be regulated as waters of the U.S. under the CWA. These features may be regulated as waters of the State under the Porter-Cologne Water Quality Control Act.

No other aquatic features were observed during the surveys. Outside of the American River, the USFWS National Wetlands Inventory does not show other aquatic resources within the survey area (USFWS 2022b).

5.5 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are those native plant communities defined by CDFW as having limited distribution statewide or within a county or region and that are often vulnerable to environmental effects of projects (CDFW 2022). These communities may or may not contain special-status plants or their habitat (CDFW 2022). CDFW designates sensitive natural communities based on their State rarity and threat ranking using NatureServe's Heritage Methodology. Natural communities with rarity ranks of S1 to S3 (where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable) are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents (CDFW 2022). Many riparian plant communities qualify as sensitive natural communities based on the plant associations therein. In addition, riparian habitats are protected under Section 1602 of California Fish and Game Code and wetlands are protected under the CWA and Porter-Cologne Water Quality Protection Act.

Sensitive natural communities are generally identified at the alliance level of vegetation classification hierarchy using the Manual of California Vegetation (Sawyer et al. 2009; CNPS 2022). The following sensitive natural communities are present in the survey area: red willow riparian woodland, valley oak woodland (S3) and Fremont cottonwood forest

(S3). Vegetation alliances with a State rarity ranking of S3 are considered sensitive natural communities under CEQA. Refer to descriptions of these sensitive natural communities under "Land Cover," above.

5.6 CRITICAL HABITAT

The Federal Endangered Species Act requires that USFWS and National Marine Fisheries Service (NMFS) designate critical habitat for species listed as federally endangered or threatened. Critical habitat includes areas identified under Section 4 of ESA and is described in Code of Federal Regulations Title 50 Parts 17 and 226. Federally designated critical habitat consists of geographic areas that contain physical or biological features essential to the conservation of a federally listed threatened or endangered species and which may require special management considerations or protection. Critical habitat may include areas that are not currently occupied by the species but that are essential for the conservation of the species. A critical habitat designation only applies to activities performed by federal agencies or that involve a federal permit, license, or funding, and that are likely to destroy or adversely affect the area of critical habitat.

A review of GIS-based habitat data for USFWS *Critical Habitat for Threatened and Endangered Species* (USFWS 2022c) shows that the survey area is not located within designated critical habitat for any listed species. However, critical habitat for the following species is found within close proximity to the survey area:

- ▶ Valley Elderberry Longhorn Beetle
- ▶ Central Valley Spring-run Chinook Salmon Evolutionary Significant Unit (ESU)
- ▶ California Central Valley Steelhead Distinct Population Segment (DPS)

USFWS designated critical habitat for the valley elderberry longhorn beetle on September 15, 1980. The American River Parkway Zone include two separate areas. One includes the American River Parkway south bank from approximately El Manto River Access south along El Manto Drive to Ambassador Drive and its extension east to approximately to Sunriver Park. The other area includes Goethe Park (now River Bend Park), and that portion of the American River Parkway northeast of Goethe Park, west of the Jedediah Smith Memorial Bicycle Trail, and north to a line extended eastward from Palm Drive. The survey area is approximately 0.11 mile south and 0.38 mile west of the two areas designated as critical habitat.

5.7 ESSENTIAL FISH HABITAT

The lower American River is designated by NMFS as critical habitat for steelhead California Central Valley DPS from the confluence of the Sacramento River to Nimbus Dam, and for chinook salmon – Central Valley spring-run ESU from the confluence of the Sacramento River to Watt Avenue Bridge. The nearest project work area is approximately 200 feet from the wetted portion of the American River.

5.8 PROTECTED TREES

During the survey, one property owner stated that County personnel had recently mowed or disked the grass in the survey area, while doing so, some of the underground line flag markers were removed, however, some of the markers indicate that the line occurs within the dripline of some of the oaks and existing trees. Some of these trees would likely fall within the protection of Sacramento County or the City of Rancho Cordova Tree Ordinance and a permit from Sacramento County or the City of Rancho Cordova to work under the canopy or remove the trees will likely be required.

6 CONCLUSIONS AND RECOMMENDATIONS

Sensitive biological resources that could occur in the study area include three special-status wildlife species (valley elderberry longhorn beetle, Swainson's hawk and white-tailed kite) and trees protected by Sacramento County or City of Rancho Cordova Tree Preservation Ordinance. Based on direct observation and the potential for habitats that could support special-status wildlife species, the following measures are suggested to avoid or minimize impacts on sensitive biological resources. Other biological resources typically included in CEQA analysis are also discussed below.

6.1 SPECIAL-STATUS WILDLIFE SPECIES

6.1.1 Valley Elderberry Longhorn Beetle and Habitat

Valley elderberry longhorn beetle is listed as threatened under the federal ESA. This species is dependent upon elderberry shrubs for egg-laying and development. Only one elderberry was found within the survey area. Although there is designated critical habitat for this species in the vicinity, the designated habitat does not occur within the survey area. The USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (Framework) (USFWS 2017) details a protocol for determining occupancy of valley elderberry longhorn beetle. Based on this protocol, any elderberry shrub within the study area is assumed to be occupied by valley elderberry longhorn beetle because of its close proximity to occupied riparian habitat. Construction activities could occur as close as 100 feet to this elderberry shrub. Direct effects to this elderberry (i.e., cutting) would be avoided but indirect effects from construction activities (i.e., dust deposition, accidental trampling or crushing by construction personnel or equipment, etc.) could occur. The following measures would avoid disturbance to and protect valley elderberry longhorn beetle and its habitat.

- ▶ The elderberry shrub and a 20-foot buffer from the dripline of the shrub shall be fenced or flagged as close to the edge of construction as feasible and avoided during construction activities.
- ▶ A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging elderberry shrubs, and the possible penalties for non-compliance.
- ▶ As much as feasible, all activities that could occur within 165 feet of an elderberry shrub (but outside of the 20-foot no disturbance buffer), shall be conducted outside of the flight season of the valley elderberry longhorn beetle (the flight season typically occurs between March-July).
- ▶ Project activities such as truck traffic or other use of machinery, shall not create excessive dust on the project site, such that the growth or vigor of elderberry shrubs could be adversely affected. Establishing and enforcing a 15 miles per hour speed-limit for off-road usage and watering non-paved access roads shall be implemented as needed to minimize excessive dust.
- ▶ A qualified biologist (i.e., a biologist that holds a wildlife biology, botany, ecology, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about State and federal laws regarding the protection of special-status species, and 6) have experience with CDFW's CNDDDB and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of biologists.) shall monitor the work area within 165 feet of the elderberry shrub at project-appropriate intervals to ensure the avoidance and minimization measures listed above are implemented.

6.1.2 Swainson's Hawk, White-tailed Kite, and Other Nesting Raptors

Construction activities, such as grading, operation of loud equipment, or tree trimming or removal may disturb nesting raptors and interfere with their normal nesting behavior. If the disturbance is severe, adults could abandon nest sites, resulting in the mortality of eggs or young. The following measures would protect active nests from project-related disturbances that could lead to nest abandonment.

- ▶ For project activities, including tree removal, that begin between February 1 and September 15, a qualified biologist will conduct preconstruction surveys for Swainson's hawk, white-tailed kite, and other nesting raptors to identify active nests on and within 0.25 mile of the project footprint for Swainson's hawk and on or within 500 feet for other raptors. The survey for Swainson's hawks will be conducted before the beginning of any construction activities between March 1 and September 15, following the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000).
- ▶ If active nests are found, a qualified biologist will establish appropriate buffers around the active nest sites identified during preconstruction raptor surveys such that project-related activities are unlikely to result in nest abandonment or disruption of normal nesting activities. No project activity will commence within the buffer areas until a qualified biologist has determined, the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. CDFW guidelines recommend implementation of 0.25-mile buffer for Swainson's hawk and white-tailed kite and 500-feet for other raptors, but the size of the buffer may be adjusted if a qualified biologist, in consultation with CDFW, determine that such an adjustment would not be likely to adversely affect the nest. Monitoring of the nest by a qualified biologist during and after construction activities will be required if the activity has potential to adversely affect the nest.

6.1.3 Other Native Nesting Birds

Construction activities may disturb other native, nesting birds protected under California Fish and Game Code Section 3503 and interfere with their normal nesting behavior. If the disturbance is severe, adults may abandon nest sites, resulting in the mortality of eggs or young. The following measure would minimize the potential for loss of active native bird nests.

- ▶ A qualified biologist will conduct a preconstruction nesting bird survey no more than two weeks before the start of construction for activities occurring during the breeding season (February 1 to August 31) within 50 feet of project-related ground disturbance or tree trimming or removal. Surveys for common nesting birds adjacent to the access routes is not required except if trees would be trimmed or removed during the breeding season because use of the access routes is not expected to disturb common nesting birds. If active native bird nests are found, a qualified biologist will establish a non-disturbance buffer until the nest is no longer active. The buffer will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the species' sensitivity to disturbance, and the intensity/type of potential disturbance.

6.2 RIPARIAN, SENSITIVE NATURAL COMMUNITIES, AND WETLANDS

Although riparian and wetlands habitat (i.e., the American River) habitats were found within the study area there would be no effect on these resources. The expected work area would be within Rossmoor Drive and within previously disturbed dirt/cobble access road. The base of the power pole where work activities would end is approximately 125 feet from the nearest red willow shrub.

Oak woodland is considered a sensitive natural community. Removal of oak woodland is a potentially significant impact. However, more detailed project plans (e.g., how many trees would be removed, trimmed, or avoided; area of

soil disturbance within the dripline of trees) are required to evaluate short- and long-term effects to the oak woodland in the study area to determine if the project would result in a substantial adverse effect on oak woodlands.

6.3 WILDLIFE MOVEMENT CORRIDORS

The project is not expected to substantially interfere with wildlife movement corridors. Although the American River Parkway is an important wildlife movement area, the construction activities would be temporary and not result in any new, substantially different, permanent structures that would interfere with wildlife movement in the area.

6.4 SACRAMENTO COUNTY CODE OF ORDINANCES AND CITY OF RANCHO CORDOVA MUNICIPAL CODE

Tree removal within the study area may require compliance with the City of Rancho Cordova Tree Ordinance and/or Sacramento County Code of Ordinances depending on location. Project construction activities could result in the removal of trees that qualify as protected trees. Depending on the final alignment with the survey area, it is possible that construction activities could directly or indirectly impact up to 240 trees protected under City and/or County ordinances. The following measure would avoid potential conflicts with these provisions.

Prior to site disturbance, SMUD shall provide to the City of Rancho Cordova and Sacramento County a plan for all tree work. A Certified Arborist shall approve all work plans prior to submittal to the City of Rancho Cordova and Sacramento County. Tree planting will comply with the City of Rancho Cordova's and Sacramento County's landscaping requirements.

For those trees that will be preserved on site during project construction, the following guidelines are recommended to ensure the long-term survival and stability of the trees.

- ▶ **Educate Workers:** Educate all workers on site about tree protection guidelines and requirements prior to construction.
- ▶ **Establish a Tree Protection Zone:** Establish a tree protection zone (TPZ) around any tree or group of trees designated for retention. The TPZ should at minimum be equal to 1.5 times the radius of the dripline. The TPZ may be adjusted on a case-by-case basis after consultation with a Certified Arborist.
- ▶ **Install Fencing and Signage:** Install fencing around the TPZ of all trees or groups of trees designated for retention. The fencing should remain in place for the duration of construction activities. Post appropriate signage to help convey the importance of the TPZ to workers.
- ▶ **Prohibit Construction Activities within the TPZ:** Prohibit construction-related activities, including grading, trenching, construction, demolition, or other work, within the TPZ. No heavy equipment or machinery should be operated within the TPZ. No construction materials, equipment, machinery, or other supplies should be stored within the TPZ. Vehicle and foot traffic should not be permitted within the TPZ. No wires or signs should be attached to any trees designated for retention.
- ▶ **Prune Selected Trees:** Prune selected trees to provide necessary clearance during construction and to remove any defective limbs or other tree parts that may pose a failure risk. All pruning should be completed by a Certified Arborist or Tree Worker and adhere to the Tree Pruning Guidelines of the International Society of Arboriculture.
- ▶ **Monitor Trees and TPZs:** Monitor the integrity of the TPZs and the health of the trees designated for retention regularly throughout the construction process. A Certified Arborist should monitor the health and condition of the protected trees and, if necessary, recommend additional mitigations and appropriate actions. This could include the monitoring of trees adjacent to project facilities to determine if construction activities (including the removal of nearby trees) would affect protected trees in the future.

- ▶ **Treat Impacted Trees:** Provide supplemental irrigation and other care, such as mulch and fertilizer, as deemed necessary by a Certified Arborist, to any trees impacted by construction. Treatment of any injuries should be performed by a Certified Arborist.

6.5 CONSISTENCY WITH HABITAT CONSERVATION PLANS

The study area is not within the planning area for the South Sacramento Habitat Conservation Plan or other approved conservation plan. Therefore, the project would not conflict with any conservation plan.

6.6 COUNTY OF SACRAMENTO AMERICAN RIVER PARKWAY PLAN AND AMERICAN RIVER PARKWAY NATURAL RESOURCES MANAGEMENT PLAN

Portions of the project alignments are within the American River Parkway and are subject to the provision of the County of Sacramento American River Parkway Plan.

The American River Parkway NRMP is still in preparation. Because the American River Parkway – NRMP is still under development and has not yet been finalized or adopted, it is uncertain whether the proposed project would conflict with the goals or policies outlined within the forthcoming NRMP. However, given that the proposed project will be constructed underground primarily within access road/trail, paved roads, or fire break within the parkway and will not result in total conversion of natural habitats, it would not conflict with the NRMP as currently drafted.

Similarly, the American River Parkway Management Plan allows for the development of facilities within the Parkway. Under Policy 3.1 “any development of facilities within the Parkway, including but not limited to building, roads, turfed areas, trails, bridges, tunnels, pipelines, *overhead electrical lines* [emphasis added], levees and parking areas, shall be designated and located such that any impact upon native vegetation is minimized and appropriate mitigation measures are incorporated into the project.”

Since SMUD is proposing a project that minimizes vegetation trimming and removal, has adopted a less damaging alternative that uses either an existing paved road and/or a fire break, and provides mitigation measures consistent with the policies within the American River Parkway Management Plan, it does not conflict with the goals and policies of the American River Parkway Management Plan.

7 REFERENCES

- California Natural Diversity Database. 2021. Rarefind 5. Commercial Version dated October 30, 2016. An online subscription database application for the use of the California department of fish and Wildlife's natural diversity database. California Natural Heritage Division, California Department of Fish and Wildlife, Sacramento, CA. Accessed May 24, 2021.
- California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org>. Accessed May 24, 2021.
- . 2022. A Manual of California Vegetation, Online Edition. <http://www.cnps.org/cnps/vegetation>. Accessed April 11, 2022.
- Central Valley Flood Protection Board. 2021. Best Available Maps (BAM) – Floodway Map Link Online Viewer. <https://gis.bam.water.ca.gov/bam/> Accessed June 26, 2021.
- eBird. 2021. eBird: An online database of bird distribution and abundance [web application]. *eBird*, Ithaca, New York. Available: <http://www.ebird.org>. Accessed May 2021.
- Swainson's Hawk Technical Advisory Committee. 2000 (May). Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline>. Accessed May 25, 2021.
- U.S. Fish and Wildlife Service. 2022a. Information for Planning and Conservation. Available online at: <http://ecos.fws.gov/ipac/>. Accessed March 31, 2022.
- . 2022b. National Wetlands Inventory Wetlands Mapper Online Viewer. Accessed April 4, 2022.

This page intentionally left blank.

Appendix A

Database Query Results

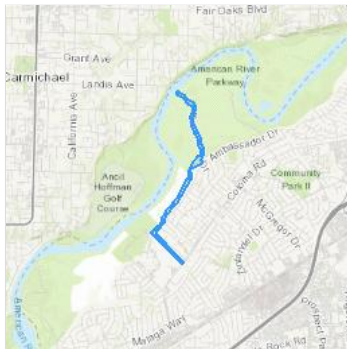
IPaC resource list

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

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

Location

Sacramento County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Endangered species

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

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

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

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

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

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

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

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
------	--------

Delta Smelt <i>Hypomesus transpacificus</i>	Threatened
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/321	

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i>	Candidate
Wherever found	
No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i>	Threatened
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/7850	

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i>	Endangered
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8246	
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i>	Threatened
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/498	
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i>	Endangered
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/2246	

Flowering Plants

NAME	STATUS
Sacramento Orcutt Grass <i>Orcuttia viscida</i>	Endangered
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5507	
Slender Orcutt Grass <i>Orcuttia tenuis</i>	Threatened
Wherever found	
There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1063	

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

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

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

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch <i>Carduelis lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Long-eared Owl <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631	Breeds Mar 1 to Jul 15

Nuttall's Woodpecker <i>Picoides nuttallii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Tricolored Blackbird <i>Agelaius tricolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Wrentit <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie <i>Pica nuttalli</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

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

Breeding Season (■)

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

Survey Effort (|)

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

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

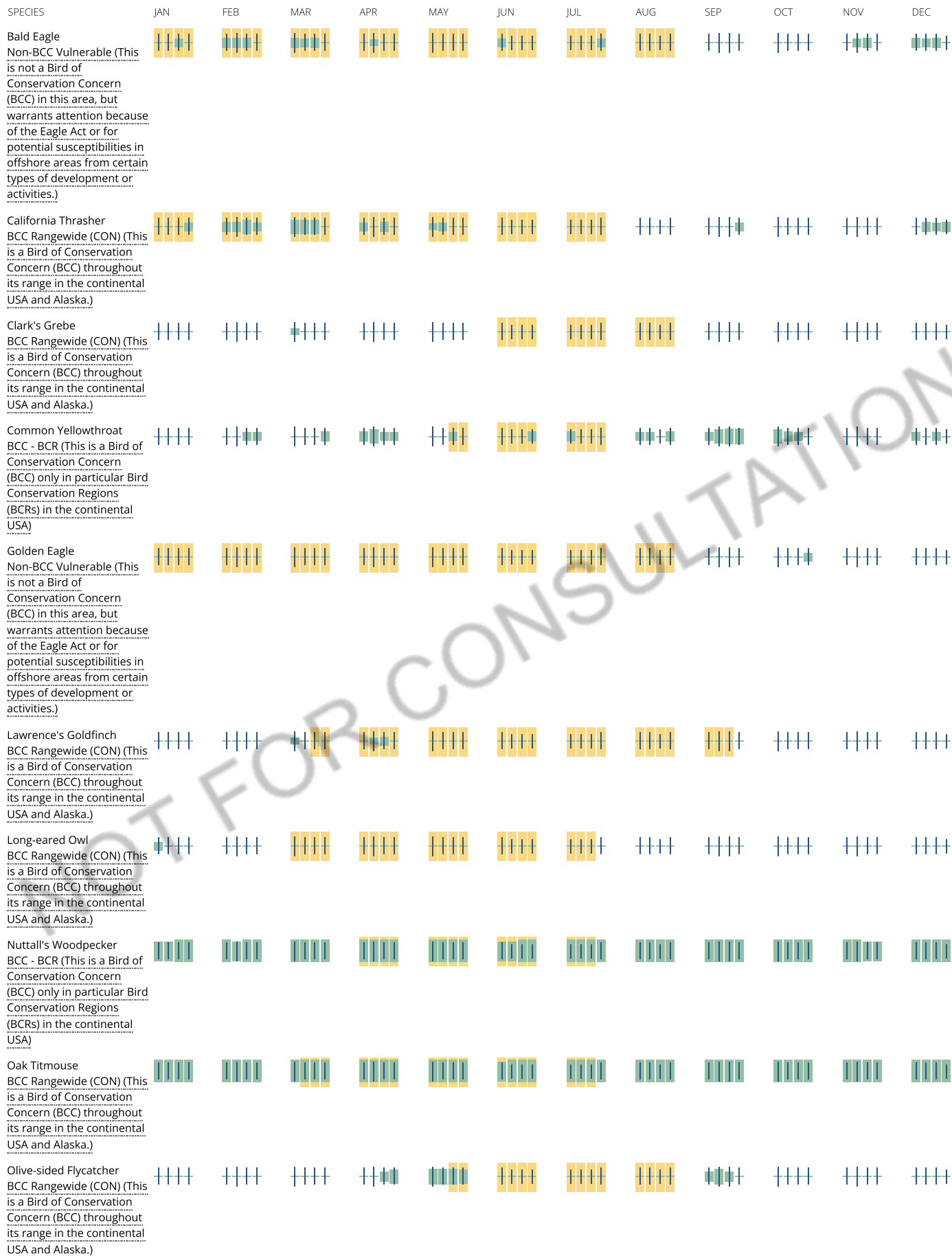
No Data (—)

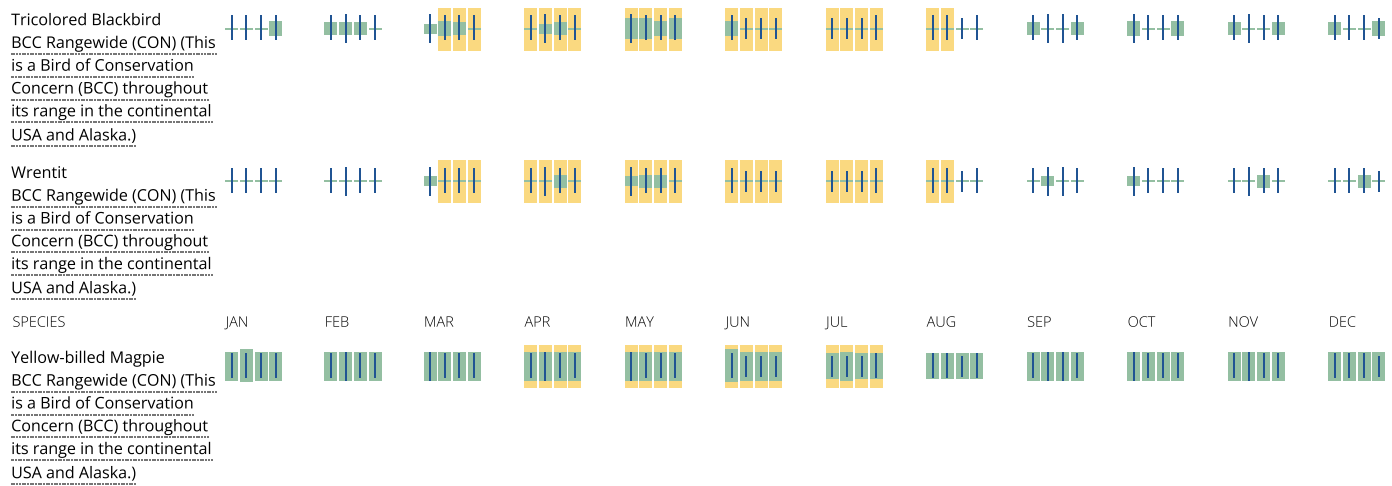
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

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

■ probability of presence ■ breeding season | survey effort — no data





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

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

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

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

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

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

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

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

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

Data limitations

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

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

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

Data exclusions

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

Data precautions

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

NOT FOR CONSULTATION



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: BIOS selection

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
<i>Andrena subapasta</i> An andrenid bee	IIHYM35210	None	None	G1G2	S1S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesoovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Clarkia biloba ssp. brandegeae</i> Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Cuscuta obtusiflora var. glandulosa</i> Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S3	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Dumontia oregonensis</i> hairy water flea	ICBRA23010	None	None	G1G3	S1	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elderberry Savanna</i> Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fritillaria agrestis</i> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S1S2	
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<i>Great Valley Valley Oak Riparian Forest</i> Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
<i>Hibiscus lasiocarpus var. occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Juncus leiospermus var. ahartii</i> Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
<i>Lasthenia chrysantha</i> alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
<i>Navarretia myersii ssp. myersii</i> pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Orcuttia tenuis slender Orcutt grass	PMPOA4G050	Threatened	Endangered	G2	S2	1B.1
Orcuttia viscida Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Phalacrocorax auritus double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Progne subis purple martin	ABPAU01010	None	None	G5	S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Spea hammondi western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 59



*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 [here](#).

Plant List

13 matches found. [Click on scientific name for details](#)

Search Criteria
California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3812164, 3812163, 3812162, 3812154, 3812153, 3812152, 3812144 3812143 and 3812142;

[Modify Search Criteria](#)
[Export to Excel](#)
[Modify Columns](#)
[Modify Sort](#)
[Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2
Hibiscus lasiocarpus var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2	S3	G5T3
Juglans hindsii	Northern California black walnut	Juglandaceae	perennial deciduous tree	Apr-May	1B.1	S1	G1
Juncus leiospermus var. ahartii	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	1B.2	S1	G2T1
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
Lepidium latipes var. heckardii	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	1B.2	S1	G4T1
Navarretia myersii ssp. myersii	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	1B.1	S2	G2T2
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	May-Sep(Oct)	1B.1	S2	G2
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	1B.1	S1	G1
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	1B.2	S3	G3
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 24 May 2021].

Search the Inventory

[Simple Search](#)
[Advanced Search](#)
[Glossary](#)

Information

[About the Inventory](#)
[About the Rare Plant Program](#)
[CNPS Home Page](#)
[About CNPS](#)
[Join CNPS](#)

Contributors

[The California Database](#)
[The California Lichen Society](#)
[California Natural Diversity Database](#)
[The Jepson Flora Project](#)
[The Consortium of California Herbaria](#)
[CalPhotos](#)

Questions and Comments

rareplants@cnps.org

Appendix B

Special-Status Species Tables

Appendix B

Special-Status Species

Special-Status Plants Known to Occur in the Project Region and their Potential to Occur in the Survey Area

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Survey Area ²
Peruvian dodder <i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	--	--	2B.2	Wetland. Marshes and swamps (freshwater). Freshwater marsh. 49–919 feet in elevation. Blooms July–October.	Not expected to occur: The survey area does not support wetland, freshwater marshes, and swamp habitat suitable for this species.
Dwarf downingia <i>Downingia pusilla</i>	--	--	2B.2	Wetland. Valley and foothill grassland (mesic sites), vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 3–1608 feet in elevation. Blooms March–May.	Not expected to occur: The survey area does not support vernal pool or mesic habitat suitable for this species.
Boggs Lake hedge-hyssop <i>Griatiola heterosepala</i>	--	SE	1B.2	Wetland. Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 33–7792 feet in elevation. Blooms April–August.	Not expected to occur: The survey area does not support wetland habitat suitable for this species.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--	--	1B.2	Wetland. Marshes and swamps (freshwater). Moist, freshwater-soaked river banks and low peat islands in sloughs; can also occur on riprap and levees. In California, known from the delta watershed. 0–509 feet in elevation. Blooms June–September.	Not expected to occur: The survey area does not support wetland, freshwater marsh, and swamp habitat suitable for this species. This species was not observed along the bank of the American River.
Northern California black walnut <i>Juglans hindsii</i>	--	--	1B.1	Riparian forest, riparian woodland. Few extant native stands remain; widely naturalized. Deep alluvial soil, associated with a creek or stream. 0–2100 feet in elevation. Blooms April–May.	Not expected to occur: The survey area is outside of the current known distribution of Northern California black walnut. Observed walnut trees are likely hybrids between <i>J. hindsii</i> and <i>J. major</i> .
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--	--	1B.2	Valley and foothill grassland. Restricted to the edges of vernal pools in grassland. 98–328 feet in elevation. Blooms March–May.	Not expected to occur: The survey area does not support vernal pool habitat suitable for this species.
Alkali-sink goldfields <i>Lasthenia chrysantha</i>	--	--	1B.1	Vernal pools. Alkaline. 0–656 feet in elevation. Blooms February–June.	Not expected to occur: The survey area does not support vernal pool habitat suitable for this species.
Legenere <i>Legenere limosa</i>	--	--	1B.1	Vernal pools, wetland. In beds of vernal pools. 3–2887 feet in elevation. Blooms April–June.	Not expected to occur: The survey area does not support vernal pool habitat suitable for this species.
Heckard's pepper-grass <i>Lepidium latipes</i> var. <i>heckardii</i>	--	--	1B.2	Valley and foothill grassland, vernal pools. Grassland, and sometimes vernal pool edges. Alkaline soils. 3–98 feet in elevation. Blooms March–May.	Not expected to occur: The survey area does not support vernal pool habitat suitable for this species.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	--	--	1B.1	Vernal pools, wetland. Clay soils within non-native grassland. 148–328 feet in elevation. Blooms April–May.	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT	SE	1B.1	Vernal pools, wetland. Often in gravelly substrate. 82–5758 feet in elevation. Blooms May–September (October).	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.

Name	Federal Status ¹	State Status ¹	CRPR ¹	Habitat	Potential to Occur in the Survey Area ²
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE	SE	1B.1	Vernal pools, wetland. 49–279 feet in elevation. Blooms April–July (September).	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--	--	1B.2	Wetland. Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0–2133 feet in elevation. Blooms May–October (November).	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species. Although the CNDDDB has an occurrence within the survey area (concrete lined drainage canal), this occurrence was not observed during the field surveys.
Saline clover <i>Trifolium hydrophilum</i>	--	--	1B.2	Wetland. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0–984 feet in elevation. Blooms April–June.	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.

Notes: CRPR = California Rare Plant Rank; CNDDDB = California Natural Diversity Database

^{1&2} Legal Status Definitions

Federal:

FE Endangered (legally protected)

FT Threatened (legally protected)

State:

SE Endangered (legally protected)

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)

0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

² Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present within the survey area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available within the survey area; however, there are little to no other indicators that the species might be present.

Likely to occur: All of the species life history requirements can be met by habitat present in the survey area, and populations/occurrences are known to occur in the immediate vicinity.

Sources: CNDDDB 2021; CNPS 2022.

Special-Status Wildlife Known to Occur in the Project Region and their Potential to Occur on the Survey Area

Name	Federal Status ¹	State Status ¹	Habitat	Potential to Occur in the Survey Area
Invertebrates				
Crotch bumble bee <i>Bombus crotchii</i>	None	SC	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Not expected to occur: The survey area is within the historic range of this species, and the nearest known occurrence of crotch bumble bee is approximately 5 miles south (CNDDDB 2021). Crotch bumble bee has recently undergone a decline in abundance and distribution and is no longer present across much of its historic range. In California, crotch bumble bee populations are currently largely restricted to the Central Valley and adjacent foothills (Williams et al. 2014, Xerces 2018). Although California poppy and buckwheat occur within the parkway, the project will occur mostly within turf, access road/trail, paved road and/or fire break areas where ongoing usage and weed abatement (i.e., mowing and tilling) preclude the presence of this species.
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE	--	Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	--	Valley and foothill grassland, vernal pool, wetland. Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not expected to occur: The survey area does not support vernal pool or wetland habitat suitable for this species.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	--	Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	May occur: One elderberry shrub with stems greater than 1-inch in diameter was found within the survey area. This elderberry is located 300 feet southwest of the intersection of Rossmoor Drive and the bike trail.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE	--	Valley and foothill grassland, vernal pool, wetland. Inhabits vernal pools and swales in	Not expected to occur: The survey area does not support

Name	Federal Status ¹	State Status ¹	Habitat	Potential to Occur in the Survey Area
			the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	vernal pool or wetland habitat suitable for this species.
Fish				
Delta smelt <i>Hypomesus transpacificus</i>	FT	SE	Aquatic, estuary. Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	Not expected to occur: The survey area does not support aquatic habitat suitable for this species.
Steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i> pop. 11	FT	--	Aquatic. Sacramento/San Joaquin flowing waters. Populations in the Sacramento and San Joaquin rivers and their tributaries.	Not expected to occur: Although this species is known to occur in the American River north of Rossmore Bar Park, the project elements and construction will not occur within the wetted portion of the American River.
Chinook salmon –Central Valley fall / late fall-run ESU <i>Oncorhynchus tshawytscha</i> pop. 13		SSC	Aquatic. Sacramento/San Joaquin flowing waters. Populations spawning in the Sacramento and San Joaquin rivers and their tributaries.	Not expected to occur: Although this species is known to occur in the American River north of Rossmore Bar Park, the project elements and construction will not occur within the wetted portion of the American River.
Chinook salmon –Central Valley spring-run ESU <i>Oncorhynchus tshawytscha</i> pop. 6	FT	ST	Aquatic. Sacramento/San Joaquin flowing waters. Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults. Federal listing refers to populations spawning in Sacramento River and tributaries.	Not expected to occur: Although this species is known to occur in the American River north of Rossmore Bar Park, the project elements and construction will not occur within the wetted portion of the American River.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	--	SSC	Aquatic, estuary, freshwater marsh, Sacramento/San Joaquin flowing waters. Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	Not expected to occur: The survey area does not support aquatic habitat suitable for this species.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC	SSC	Aquatic, estuary. Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Not expected to occur: The survey area does not support aquatic habitat suitable for this species.
Amphibians				
California tiger salamander <i>Ambystoma californiense</i>	FT	ST	Cismontane woodland, meadow and seep, riparian woodland, valley and foothill grassland, vernal pool, and wetlands. Central	Not expected to occur: The survey area does not support

Name	Federal Status ¹	State Status ¹	Habitat	Potential to Occur in the Survey Area
			Valley DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	aquatic habitat suitable for this species.
California red-legged frog <i>Rana draytonii</i>	FT	SSC	Aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh & swamp, riparian forest, riparian scrub, riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not expected to occur: The survey area does not support aquatic habitat suitable for this species.
Western spadefoot <i>Spea hammondi</i>	--	SSC	Cismontane woodland, coastal scrub, valley and foothill grassland, vernal pool, and wetlands. Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not expected to occur: The survey area does not support aquatic habitat suitable for this species.
Reptiles				
Western pond turtle <i>Actinemys marmorata</i>	--	SSC	Aquatic, artificial flowing waters, Klamath/north coast flowing waters, Klamath/north coast standing waters, marsh and swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing and standing waters. A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected to occur: Although the American River is within the known dispersal range of this species, the bank slope would preclude this species from accessing the survey area.
Giant gartersnake <i>Thamnophis gigas</i>	FT	ST	Marsh and swamp, riparian scrub, wetland. Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	Not expected to occur: The survey area is outside of the current known range of this species.
Birds				
Tricolored blackbird <i>Agelaius tricolor</i>	--	ST/SSC	Freshwater marsh, marsh and swamp, swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Not expected to occur: The survey area does not support marsh habitat suitable for this species to nest.

Name	Federal Status ¹	State Status ¹	Habitat	Potential to Occur in the Survey Area
Golden eagle <i>Aquila chrysaetos</i>	GEBEPA	FP	Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forest, and valley and foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not expected to occur: The survey area does not support nesting habitat suitable for this species.
Burrowing owl <i>Athene cunicularia</i>	--	SSC	Coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not expected to occur: Although the grassland habitat provides suitable habitat for this species, human usage and presence of predatory species (i.e., feral and domestic cats, dogs, coyotes) likely preclude the presence of this species
Swainson's hawk <i>Buteo swainsoni</i>	--	ST	Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	May occur: The survey area is within the breeding range of the species. Surveys within 0.25 miles of the survey area did not result in observations of nesting Swainson's hawks but this species is regularly observed in the area.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT	SE	Riparian forest. Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not expected to occur: The survey area does not support large and dense riparian habitat suitable for this species.
White-tailed kite <i>Elanus leucurus</i>	--	FP	Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Present: A pair of white-tailed kites was observed nesting towards the northeast edge of the 0.25 mile nesting raptor survey buffer.
Bald eagle <i>Haliaeetus leucocephalus</i>	GEBEPA	SE/FP	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Not expected to occur: Although this species was observed foraging over the American River during the nesting raptor survey. No nests attributable to this species were observed within the 0.25 nesting raptor survey area.

Name	Federal Status ¹	State Status ¹	Habitat	Potential to Occur in the Survey Area
Song sparrow ("Modesto" population) <i>Melospiza melodia</i>	--	SSC	Marsh and swamp, wetlands. Emergent freshwater marshes, riparian willow thickets, riparian forests of valley oak (<i>Quercus lobata</i>), and vegetated irrigation canals and levees.	Not expected to occur: Although this species may forage within the grassland habitat, its preferred nesting habitat is not present within the survey area.
Purple martin <i>Progne subis</i>	--	SSC	Broadleaved upland forest, lower montane coniferous forest. Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.	Not expected to occur: Although this species may forage over the survey area, this species is known to nest within bridge overpasses in the Sacramento area which are not present within the survey area.
Bank swallow <i>Riparia riparia</i>	--	ST	Riparian scrub, riparian woodland. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not expected to occur: The survey area does not support vertical banks/cliff habitat suitable for this species.
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	--	SSC	Marsh and swamp, wetland. Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	Not expected to occur: The survey area does not support marsh and swamp or wetland habitat suitable for this species.
Mammals				
Pallid bat <i>Antrozous pallidus</i>	--	SSC	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Very sensitive to disturbance of hibernation roost sites, which must protect bats from high temperatures, including buildings, caves, or cracks in rocks.	Not expected to occur (Roost): Although this species may forage in the area, there is no suitable roosting habitat present and thus this species not expected to roost in the survey area.
American badger <i>Taxidea taxus</i>	--	SSC	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broadleaved upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected to occur: The survey area is isolated from potential migratory routes for this species to use. No sign of this species was observed during reconnaissance surveys.

General references: Unless otherwise noted all habitat and distribution data provided by CNDDB.

Note: CNDDB = California Natural Diversity Database

¹ Legal Status Definitions

Federal:

FE Endangered (legally protected)

FT Threatened (legally protected)

State:

SE Endangered (legally protected)

ST Threatened (legally protected)

FP Fully protected (legally protected)

SSC Species of special concern (no formal protection other than CEQA consideration)

² Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the plan area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the plan area; however, there are little to no other indicators that the species might be present.

Likely to occur: All of the species life history requirements can be met by habitat present on the site, and populations/occurrences are known to occur in the immediate vicinity.

Present. Species observed within the study area.

Source: CNDDDB 2021; USFWS 2022a

Appendix C

Photographs



Source: Ascent Environmental in 2022

Photograph 1. Start of survey area where the overhead lines are just northwest of Coloma Road looking at Coloma Road. Representative photograph of developed habitat.



Source: Ascent Environmental in 2022

Photograph 2. Representative photograph of developed habitat between residential homes and school grounds.



Source: Ascent Environmental in 2022

Photograph 3. Start of trail/access road from substation looking northeast. Representative photograph of valley oak woodland



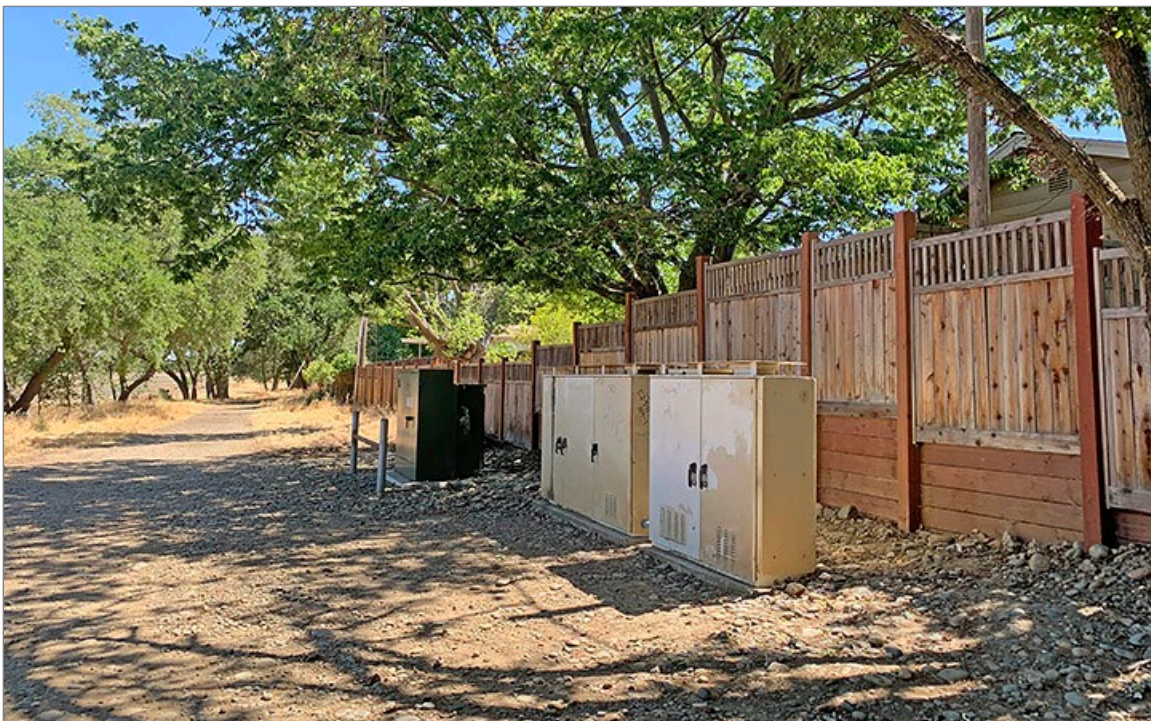
Source: Ascent Environmental in 2022

Photograph 4. Trail/access road looking southeast towards substation. Representative photograph of annual grassland with valley oak woodland in the background.



Source: Ascent Environmental in 2022

Photograph 5. Representative photograph of trees growing over the trail/access road. Photograph looking northeast.



Source: Ascent Environmental in 2022

Photograph 6. Existing electrical infrastructure. Photograph looking northeast.



Source: Ascent Environmental in 2022

Photograph 7. Representative photograph of old irrigation ditch to the north of trail/access road.



Source: Ascent Environmental in 2022

Photograph 8. Representative photograph of acorn woodpecker cavity nest found during surveys.



Source: Ascent Environmental in 2022

Photograph 9. White-tailed kite nest found during nesting raptor survey. Nest is located in pine tree in background.



Source: Ascent Environmental in 2022

Photograph 10. White-tailed kite observed during nesting raptor surveys.



Source: Ascent Environmental in 2022

Photograph 11. Nuttall's woodpecker feeding chick in nesting cavity. Observed during nesting raptor survey.



Source: Ascent Environmental in 2022

Photograph 12. Representative photograph of flagging that survived mowing.



Source: Ascent Environmental in 2022

Photograph 13. Representative photograph of fire access road alternative route before reaching Rossmoor Drive. The proposed trench would be within the fire access road.



Source: Ascent Environmental in 2022

Photograph 14. Representative photograph of pedestrian trail alternative route before reaching Rossmoor Drive. The proposed trench would be within the pedestrian trail area.



Source: Ascent Environmental in 2022

Photograph 15. Representative photograph of fire break area west of Rossmoor Drive. The proposed trench would be within the fire break area.



Source: Ascent Environmental in 2022

Photograph 16. Representative photograph of fire break area west of Rossmoor Drive near tree vegetation.



Source: Ascent Environmental in 2022

Photograph 17. Representative photograph of fire break area west of Rossmoor Drive just before reaching the bike trail. The proposed trench would be within the fire break area.



Source: Ascent Environmental in 2022

Photograph 18. Elderberry shrub at the edge of the survey area southwest of the intersection of Rossmoor Drive and bike trail.



Source: Ascent Environmental in 2022

Photograph 19. Representative photograph of Rossmoor Drive north of bike trail. The survey area is centered on Rossmoor Drive.



Source: Ascent Environmental in 2022

Photograph 20. Representative photograph of vegetation along Rossmoor Drive near the north end of survey area, photograph is looking south.



Source: Ascent Environmental in 2022

Photograph 19. Representative photograph of vegetation along Rossmoor Drive near the north end of survey area, photograph is looking north.



Source: Ascent Environmental in 2022

Photograph 20. Representative photograph of vegetation at end of Rossmoor Drive and start of dirt access area. Photograph taken from base of power pole where SMUD line would tie into.