

Biological Resources Assessment

Verizon Wallace Telecommunications Project Calaveras County, California

November 2024
Revised: January 2025

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SUMMARY

The proposed project is situated 6.81 miles southwest of the census designated place of Valley Springs and 15.81 miles east of the City of Lodi in unincorporated Calaveras County, California. The proposed tower project site is located 0.26 miles north of Southworth Road (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning was contracted by the project proponent to perform this Biological Resources Assessment for the proposed project.

Four (4) vegetation communities were observed within the study area and include the following: 1. *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance, 2. *Quercus douglasii* - *Quercus wislizeni* Woodland Alliance, 3. *Salix lasiolepis* Shrubland Alliance, and 4. Ruderal-disturbed. As part of this Biological Resources Assessment the potential for occurrence of special-status plant species and special-status wildlife species was evaluated.

Best Construction Practices and Avoidance and Minimization Measures as well as Standard Construction Conditions to prevent take of individuals discussed above are included in this report.

List of Acronyms and Abbreviations

BMP	Best Management Practices
BRA	Biological Resources Assessment
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife (formerly CDFG)
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSC	California Species of Concern
DBH	Diameter breast height
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
USACE	US Army Corps of Engineers
UTM	Universal Trans Mercator
WHR	Wildlife Habitat Relationships

1.0 INTRODUCTION

The purpose of this Biological Resources Assessment is to provide technical information and to review the proposed project study area, situated 6.81 miles southwest of the census designated place of Valley Springs and 15.81 miles east of the City of Lodi in unincorporated Calaveras County, California. The proposed tower project site is located 0.26 miles north of Southworth Road (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning prepared this Biological Resources Assessment (BRA) to provide sufficient detail to determine the potential effects of the proposed project on federally- and state-listed wildlife and plant species. This BRA was conducted to determine the potential for special-status vegetation communities, plant and animal species to occur within the project study area, and to identify the limitations to potential development of the project. The BRA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S. C 1536(c)) and also provides information required for an Initial Study/Mitigated Negative Declaration as part of the California Environmental Quality Act (CEQA) review for the project. The document presents technical information upon which later decisions regarding project affects are developed.

The project area is located in Section 35 of the Wallace 7.5- minute topographic quadrangle. The project site is located within Township 04N and Range 09W. Surrounding land uses consist of agricultural, recreational, rural residences, and open space.

1.1 Project Description

A review of zoning drawings indicated that the proposed action would include:

- Construction of a 30-foot by 30-foot (900 square feet, or 0.02 acres of new disturbance) level pad area. The pad area would be covered with gravel on portions not used for equipment installation. The tower site would occur within undisturbed non-native annual grassland habitat;
- Installation of a 130-foot-tall mono-oak cell tower on pad area;
- Installation of telecommunications equipment and other related equipment on the cell tower and within various areas of the gravel pad;
- Installation of 8-foot-tall chain link fence around the telecommunications site;
- Construction of 126 feet of new access road from an existing access road south of the cell tower site to the proposed tower site. The road would be 15 feet in width with a hammerhead turnaround area south of the tower site. Total disturbance for the new access road would total 6,615 square feet, or 0.15 acres, and would occur within non-native annual grassland habitat.

- Installation of 1,430 feet (0.27 miles) of underground plastic conduit between the tower site and Southworth Road to the south of the tower site via boring. Fiber-optic cable will be installed in the plastic conduit after installation. The utility right-of-way for disturbance will be 12 feet wide. Six (6) 17-inch by 30-inch vault boxes will be installed along the right of way. Approximately 1,058 linear feet of the conduit/cable would be installed in an existing graveled access road and wouldn't result in impacts to habitat. Approximately 372 linear feet would be installed in the new access road to the tower site, and impacts are included under the discussion above; and
- Installation of 610 feet (0.12 miles) of underground power cable between the cell tower and an existing power line northeast of the tower site. A new 45-foot-tall power pole will be installed at the electric connection point. The utility right-of-way for disturbance will be 10 feet wide. These project components will be installed within non-native annual grassland habitat, and ground disturbance will total 6,500 square feet, or 0.15 acres.

The proposed project would impact a maximum of approximately 14,015 square feet, or 0.32 acres of non-native annual grassland habitat, with the remaining impacts occurring in an existing graveled access road with some limited ruderal disturbed vegetation.

Staging Areas and Fueling

Storage areas for contractor equipment and materials will be determined prior to project construction activities. The project proponent, with the assistance of a biologist, will review the local project area and locate staging areas that are in previously disturbed areas that will not have potential to affect wildlife habitat or species. All staging areas must be approved by Calaveras County prior to use. The proposed tower site will also be used as a staging area. In addition, to prevent contamination of fuel and other project materials into adjacent habitat areas, the following best management measures will be implemented:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into adjacent habitat areas, including waters of the State and U.S.,
- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location,
- Wash sites must be located in upland locations to ensure wash water does not flow into stream channels or wetlands.
- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.
- Oil absorbent and spill containment materials shall be located on site when mechanical

equipment is in operation within 100 feet of a waterway. If a spill occurs, no additional work shall occur until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW and Calaveras County are contacted and have evaluated the impacts of the spill.

Construction Scheduling

The estimated time period for construction is 90 working days for the entire project. Work will begin as soon as all regulatory clearances and permits are obtained.

Operations and Maintenance

The facilities would be constructed to current construction-industry standards and codes.

Construction Best Management Practices

Construction BMPs will be incorporated in the construction of the project and include, but are not limited to, the following:

- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.
- Surveys for identified special-status species shall be conducted by qualified biologists at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action other than the Best Management Practices identified above are required. If individuals are found, including nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individual species.
- Due to the potential for special-status species to occur, move through, or into the project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or tubing four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.
- Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Act, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

2.0 STUDY METHODOLOGY

This Biological Resources Assessment used the best available scientific and commercial data to evaluate the potential effects to biological resources from the proposed project. Literature review, aerial imagery and field surveys informed the descriptions of the vegetation communities, identification of present and past occurrences of special-status species in the vicinity of the proposed project, and the assessment of habitats for special-status animal species.

2.1 Literature Search

Information on special-status plant and animal species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the Wallace and Valley Springs SW U.S. Geologic Service 7.5-minute topographic quadrangles. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) quadrangle species lists (USFWS 2024)
- USFWS list of special-status animals for Calaveras County (IPAC) (USFWS 2024)
- California Natural Diversity Database records (CNDDDB) (CNDDDB 2024)
- California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW 2024)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2024)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2024)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)

The USFWS electronic list of Endangered and Threatened Species was queried electronically (www.fws.gov/sacramento/es_spp_lists-overview.htm). The CalFish IMAPS Viewer (www.calfish.org/DataandMaps/CalFishGeographicData), developed by CDFW Biogeographic Branch for analysis of fisheries, was also reviewed.

The CDFW BIOS website and the *California Essential Habitat Connectivity Project: A strategy for conserving a connected California* (Spencer et al. 2010) were reviewed for wildlife movement information. The CDFW BIOS website and the CNDDDB were review for documented nursery sites. Other sources of information regarding reported occurrences include locations previously reported to the U.C Berkeley Museum of Vertebrate Zoology and the California Academy of Sciences.

2.2 Field Surveys

Cord Hute, Senior Biologist, and Caleb Hute, Staff Biologist, conducted botanical and biological surveys of the project site and buffer area on November 23 and 29, 2024. Mr. Hute analyzed on-site and buffer area habitats for suitability for special-status plant and animal species during these surveys.

A reconnaissance-level biological survey of the project site was conducted. Habitat types

encountered during the surveys were characterized primarily by dominant and subdominant plant species, and wildlife use was described based on known and anticipated occurrences. Species were recorded as present if they were observed, if species' vocalizations were heard, or if diagnostic field signs were found (i.e., scat, tracks, pellets). Surveys were conducted on the project site and in an area approximately 200 feet wide around the project site (hereafter referred to as the project buffer area).

Special-status wildlife species, in particular, were surveyed for to determine the presence or absence of such species or their habitat.

The survey was conducted to identify the following:

- Suitability of habitat(s) to support sensitive wildlife species;
- Presence of wildlife species and their habitats;
- Potential of the site to contain sensitive habitats, including vernal pools, natural wetlands, etc.;
- Potential of the site to support sensitive small mammal species;
- Potential of the site to support sensitive avian species (e.g., migratory birds, raptors, waterfowl, etc.);
- Habitat condition, quality and vegetation associations; and
- On-site, adjacent and surrounding land uses.

Synthesis utilized the guidance of Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2024). Plant surveys were conducted using demographic survey techniques/guidelines including conducting floristically based surveys, identifying to species level for all plants encountered, and identifying to the level necessary to detect sensitive plants, if present. When possible, the surveys were conducted within the correct phenological time to detect targeted sensitive plant species. The identity of plant species not currently blooming were determined, where feasible, by other characteristics or features of the plants structure. Botanical field surveys were conducted in a manner which maximized the likelihood of locating special status plants and sensitive natural communities that were present. Botanical field surveys were floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. Surveys were limited to habitats known to support special status plants. During field surveys, the entire project site and a 200-foot buffer area around the project site were surveyed on 30 foot transects through the entire survey area. Botanical field surveys were conducted at the times of year when plants will be both evident and identifiable (during flowering or fruiting). See Section 5 for survey results and impacts discussion.

Synthesis utilizes GIS Pro, a mobile software program, to collect field data on plant and animal species identified during surveys. The program is installed on an Apple iPad. Aerial topographic maps and satellite photographic images are loaded into the GIS Pro program on the iPad in order to provide as accurate location data as possible during the documentation of individual plant species populations. In addition, the iPads operate on an internal GIS locator independent of cellular service data coverage, which ensures the most accurate location possible during remote field work. When a special-status plant species or population was observed, the surveying biologist creates a population polygon (or

area) in GIS Pro. The polygon is drawn corresponding to the location and shape and size of boundaries of the population. The date the species is observed, the biologist's name, and species name are recorded in the polygon record. Data on the estimated number of individual plants observed in each population may also be collected. A CNDDDB field survey form is completed for each special-status species or population identified. In the case of the proposed project, no sensitive wildlife species were observed during surveys.

2.3 Impact Assessment Methodology

The on-site vegetation communities, present and past occurrence locations of federally and state listed species and federal and state species of concern within close proximity of the proposed project area, and habitats for special-status plant and animal species were examined. Based on the current site conditions, the potential for occurrence on the site for special-status biological resources was evaluated and the project description was used to determine any potential direct or indirect effects.

The determination of whether the proposed project may result in adverse impacts to federally-listed special-status species was based on guidelines established by the USFWS under Section 7(a) of the Federal Endangered Species Act (FESA), under which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, "each federal agency shall...insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species." Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

The determination of whether the proposed project may result in adverse impacts to State special-status species was based on CEQA, the CDFW and the CNPS guidelines for special status plants and animals.

Potential impacts from the project to habitats not occupied by species but for which habitats occurred was also evaluated.

3.0 ENVIRONMENTAL BASELINE

The project area is located within the South Coast Bioregion, a bioregion encompassing terrestrial and marine resources from Point Conception on the north to the border with Mexico. It extends from the outer edge of the continental shelf to the base of the Transverse and Peninsular Ranges. These sections comprise off-coast islands, narrow mountain ranges and broad fault blocks, as well as alluvial lowlands and coastal terraces. Elevation ranges from sea level to 3,500 meters. Aquatic resources include subtidal and intertidal marine and deep water habitats. This region is affected by an enormous human population and its continued growth. In 1990, over 16 million people (56% of the State's population) lived in the region, mostly along the coast. The populations of many coastal cities have grown at rates ranging from of 20-50% over the last decade. The human population overlays a region of high natural biodiversity, which includes many unique natural community types. Coastal wetlands, vernal pools, riparian woodlands, grasslands, and coastal sage scrub all have been reduced to a small fraction of their former landcover, and remaining communities typically are fragmented and/or degraded. As a result, this region has the largest number of endangered and threatened species and species of special concern in the contiguous 48 states. Most of these species are associated with the habitats listed above. Climate in the bioregion is Mediterranean with dry summers and rainy winters. Average rainfall in the area is 25 inches/year.

3.1 Wetlands and Waters of the U.S. and State

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards have been developed as a method of defining wetlands through consideration of three criteria: hydrology, soils, and vegetation (USACE 1987).

The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Jurisdiction of the Corps is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into “waters” of the United States without a permit, including certain wetlands and unvegetated “other waters of the U.S.” The Corps also has jurisdiction over navigable waters, including tidally influenced ones below Mean High Water, under Section 10 of the Rivers and Harbors Act. Jurisdictional authority of the CDFG is established under Section 1602 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code states that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Game Commission will “strongly discourage development in or conversion of wetlands... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage.” Jurisdictional authority of the RWQCB is established pursuant to Section 401 of the

Clean Water Act, which typically requires a water quality certification when an individual or nationwide permit is issued by the Corps. The RWQCB also has jurisdiction over “waters of the State” under the Porter-Cologne Water Quality Control Act.

In addition to the definition and classification procedures developed by federal agencies, some California resource and regulatory agencies have developed their own wetland definition and classification procedures. Although these State agency procedures are generally based on the USFWS and USACE definition and classification procedure described above, they do differ in specific details.

Numerous State agencies regulate, manage, or otherwise control natural resources within California through a wide variety of general and specific laws and directives, which are carried out by resource departments, commissions, and boards.

The Keene–Nejedly California Wetlands Preservation Act (1976) is the only State legislation besides the Coastal Act to define wetlands. The act states there "is a need for an affirmative and sustained public policy and program directed at their [wetlands] preservation, restoration, and enhancement, in order that such wetlands shall continue in perpetuity". The act provided for acquisition of ten important wetlands, using funds from several sources, and was intended to support preparation of a statewide wetlands plan. However, acquisition funds were not allocated in 1976.

The State Regional Water Quality Control Boards primary role is to enforce the federal Clean Water Act, and in doing so, assert regulatory authority over development activities affecting the water quality of navigable water and wetlands. Under Section 401(a)(1) of the Clean Water Act: Any applicant for a Federal license or permit to conduct any activity...which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State...that any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of this Act.

In turn, California Code of Regulations Section 3831(k) defines the State certification required under Section 401 as:

'Water Quality Certification' means a certification that there is a reasonable assurance that an activity which may result in a discharge to navigable waters of the United States will not violate water quality standards, where the activity requires a federal license or permit.

In practice, the regional boards have applied their authority over water quality standards to all waters of the State, including wetlands. Discharge to wetlands and riparian wetlands may violate water quality objectives (e.g., turbidity, temperature, or salinity); impair beneficial uses (e.g., groundwater recharge, recreation, wildlife habitat, fish migration, and shellfish harvesting); and conflict with the anti-degradation policy.

The California Department of Fish and Wildlife has Statewide resource responsibilities and authority that directly and indirectly influence projects and activities in coastal zone wetlands. In addition to being responsible for the maintenance and protection of California's fish and wildlife,

the CDFW has authorities under California's Public Resources Code, and the federal Fish and Wildlife Coordination Act to regulate or comment on activities in wetland and riparian areas. The CDFW also assumes primary responsibility for implementation of the California State Endangered Species Act, and the Streambed Alteration Agreement (Fish and Game Code Sections 1601–1603). This agreement is one of the State's few direct legal instruments for the protection of streams, rivers, and lakes. The CDFW also comments directly to the USACE concerning fish and wildlife aspects of Section 10 and Section 404 permits. CDFW's official position regarding the protection of wetlands is that development projects should not result in a net loss of either wetland acreage or wetland habitat value.

A delineation of wetlands and watercourses within the project study area was conducted by a Synthesis Planning wetland ecologist during the site visit. Synthesis Planning identified aquatic habitat (stream channel with wetland vegetation and ponded water) crossing under the existing access road to the proposed tower site.

Verizon will implement the following general construction measures to ensure no disturbance or impacts occur to aquatic habitat areas in the project buffer area:

- To avoid debris contamination into drainages, wetlands, and other sensitive habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.
- Environmental awareness training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of wetland habitat, streams, and other waters, and legislative protection shall explain concerns.
- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

3.2 Vegetation Communities and Wildlife Habitat

Wildlife habitat classifications for this report is based on the California Department of Fish and Game's Wildlife Habitat Relationships (WHR) System (CDFG 1988) which places an emphasis on dominant vegetation, vegetation diversity and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment, and includes such features as type, size, and diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species, creation of openings, and a reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying

combinations of plant species providing different resources for use by wildlife. As a result, wildlife habitats are often classified on a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under one type of wildlife habitat.

The following is a discussion of existing vegetation communities found within the proposed project site and buffer area. Four (4) vegetation community types were observed within the study area. Where appropriate vegetation community types are described using The Manual of California Vegetation Online Website (CNPS 2024). Vegetation types observed were: 1. *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance, 2. *Quercus douglasii* - *Quercus wislizeni* Woodland Alliance, 3. *Salix lasiolepis* Shrubland Alliance, and 4. Ruderal-disturbed . For a list of plant species observed in these vegetative communities during biological surveys, please refer to Appendix B.

1. ***Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance** was observed within the proposed tower pad, proposed access road, and portions of the proposed utility (electric and fiber-optic) route between the tower site and existing utilities, as well as large areas of the project buffer area. Common species found in this community were composed of introduced grasses and broadleaf weedy species, which quickly re-colonize disturbed areas.

Grasslands support a variety of mammals, birds, and reptiles, and provide foraging habitat for raptors. Many species use the grassland for only part of their habitat requirements, foraging in the grassland and seeking cover in surrounding tree and scrub cover. Grassland cover provides foraging, nesting, and denning opportunities for resident species such as western fence lizard (*Sceloporus occidentalis*), northern alligator lizard (*Elgaria coerulea*), gopher snake (*Pituophis melanoleucus*), western meadowlark (*Sturnella neglecta*), goldfinch (*Carduelis tristis*), ring-necked pheasant (*Phasianus colchicus*), red-winged blackbird (*Agelaius phoeniceus*), California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), pocket gophers (*Thomomys* spp.), black-tailed jackrabbit (*Lepus californicus*), and occasionally black-tailed deer (*Odocoileus hemionus columbianus*).

The rodent, bird, and reptile populations offer foraging opportunities for avian predators such as the northern harrier hawk (*Circus cyaneus*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), golden eagle (*Aquila chrysaetos*), barn owl (*Tito alba*), and great horned owl (*Bubo virginianus*). Mammalian predators which utilize grasslands include gray fox (*Urocyon cinereoargenteus*) and long-tailed weasel (*Mustela frenata*).

2. ***Quercus douglasii* - *Quercus wislizeni* Woodland Alliance** was observed within the buffer area of proposed tower pad, proposed access road, and portions of the proposed utility (electric and fiber-optic) route between the tower site and existing utilities. This alliance consists of oak woodlands with open park-like stands in the emergent overstory. Dominant oaks include *Quercus douglasii* and/or *Quercus wislizeni*. Other species present may include *Aesculus californica*, *Arctostaphylos* spp., *Ceanothus cuneatus*, *Cercis canadensis* var. *texensis*, *Frangula californica*, *Juniperus californica*, *Ribes quercetorum*, and/or *Pinus coulteri* (central and southern Coast Ranges). This alliance is primarily found in the valley margins and foothills of the Sierra Nevada and Coast Ranges of California from approximately 360-3,600 feet) in elevation on rolling plains

or dry slopes. Over a century of anthropogenic changes (especially cutting of oak) have altered the density and distribution of woody vegetation.

3. *Salix lasiolepis* Shrubland Alliance was observed in a stream channel crossing under the existing access road to the proposed tower site. This community was also observed in a ponded section of the stream channel to the east of the existing access road. *Salix lasiolepis* is dominant or co-dominant in the tall shrub or low tree canopy with *Acer macrophyllum*, *Baccharis pilularis*, *Baccharis salicifolia*, *Cephalanthus occidentalis*, *Cornus sericea*, *Morella californica*, *Platanus racemosa*, *Populus fremontii*, *Populus trichocara*, *Salix* spp. and *Sambucus nigra*. As a shrubland, emergent trees may be present at low cover.

4. Ruderal-disturbed vegetation was observed within the existing access road and portions of the proposed access road, tower site, and utilities route. This vegetation type is comprised mostly of non-native weedy herbaceous forb plants.

4.0 SPECIAL-STATUS SPECIES AND THEIR HABITATS

4.1 Regulatory Requirements

4.1.1 Federal Endangered Species Act (FESA)

To determine whether the proposed project may result in adverse effects to federally listed species, the criteria used was based on guidelines established by the USFW under Section 7(a) of the FESA, in which a project that may have an adverse effect on listed biological resources must be assessed. FESA (16 U.S. Code [USC 1531–1544) provides for the conservation of species that are Endangered or Threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend.

Section 7 requires federal agencies to consult with USFWS or NMFS, or both, before performing any action (including actions such as funding a program or issuing a permit) that may affect listed species or designated Critical Habitat. The section 7 consultations are designed to assist Federal agencies in fulfilling their duty to ensure federal actions "do not jeopardize" the continued existence of a species or destroy or adversely modify Critical Habitat.

The USFWS defines temporary and permanent effects as areas denuded, manipulated, or otherwise modified from their pre-project conditions, thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction, staging, storage, lay down, vehicle access, parking, etc. According to the USFWS, temporary effects are limited to one construction season and, at a minimum, are fully restored to baseline habitat values or better within one year following initial disturbance. Permanent effects are not temporally limited and include all effects not fulfilling the criteria for temporary effects.

4.1.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 Code of Federal Regulations [CFR] 21, 50 CFR 10). Most actions that result in taking of, or the permanent or temporary possession of, a protected species constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under the MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). USFWS is responsible for overseeing compliance with the MBTA.

4.1.3 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA (FGC §§ 2050–2116) is administered by CDFW. The CESA prohibits the "taking" of listed species except as otherwise provided in state law. The

CESA includes FGC Sections 2050–2116, and policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The CESA requires mitigation measures or alternatives to a proposed project to address impacts to any State listed endangered, threatened or candidate species, or if a project would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy. Section 86 of the FGC defines take as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Unlike the ESA, CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species. Section 2081 of the FGC expressly allows CDFW to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity.
- The impacts of the authorized take are minimized and fully mitigated.
- Issuance of the permit will not jeopardize the continued existence of the species.
- The permit is consistent with any regulations adopted in accordance with §§ 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area).
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that if a person obtains an incidental take permit under specified provisions of the ESA for species also listed under the CESA, no further authorization is necessary under CESA if the federal permit satisfies all the requirements of CESA and the person follows specified steps (FGC § 2080.1).

4.1.4 California Fish and Game Code

The California Constitution establishes the California Fish and Game Commission (Commission) (CA Constitution Article 4, § 20). The California Fish and Game Code (FGC) delegates the power to the Commission to regulate the taking or possession of birds, mammals, fish, amphibian and reptiles (FGC § 200). The Commission has adopted regulations setting forth the manner and method of the take of certain fish and wildlife in the California Code of Regulations, Title 14.

4.1.5 California Fish and Game Code- Species Protection

The FGC establishes CDFW (FGC § 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (FGC § 711.7(a)). All licenses, permits, tag reservations and other entitlements for the take of fish and game authorized by FGC are prepared and issued by CDFW (FGC § 1050 (a)).

Provisions of the FGC provide special protection to certain enumerated species such as:

- § 3503 protects eggs and nests of all birds.
- § 3503.5 protects birds of prey and their nests.
- § 3511 lists fully protected birds.

- § 3513 protects all birds covered under the federal Migratory Bird Treaty Act.
- § 3800 defines nongame birds.
- § 4150 defines nongame mammals.
- § 4700 lists fully protected mammals.
- § 5050 lists fully protected amphibians and reptiles.
- § 5515 lists fully protected fish species.

4.1.6 Calaveras County

Calaveras County General Plan

The Calaveras County General Plan (Calaveras County 2016) is currently being updated. The Conservation and Open Space Element of the current draft of the County General Plan contains several goals related to the protection and conservation of biological resources as listed below.

Goal V-1: Preserve and enhance the County's significant wildlife and botanical habitats.

Goal V-2: Protect streams, rivers and lakes from excessive sedimentation due to development and grading.

Goal V-3: Protect and preserve riparian habitat along streams and rivers in the County.

Calaveras County Voluntary Oak Woodland Management Plan

The Calaveras County Voluntary Oak Woodland Management Plan (Calaveras County 2007) provides a set of voluntary oak protection guidelines for oak woodlands throughout the County. It contains two goals related to the protection and conservation of oak woodlands as listed below.

- Support and encourage voluntary, long-term private stewardship and conservation of Calaveras' oak woodlands.
- Encourage local land use planning that is consistent with the preservation of oak woodlands, particularly special oak woodlands habitat.

4.2 Special-Status Species Reviewed

For the purposes of this Biological Resources Assessment, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Species of Concern (CSC) and those species that fall under the jurisdiction of the USFWS such as the Migratory Bird Treaty Act (MBTA) and the CDFW, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the project sites and buffer areas, and (2) were known to occur within the general vicinity of the proposed project sites.

Federally and State-Listed Plant Species. Review of the USFWS (USFWS 2024), the CNPS (CNPS 2024), and the CNDDB (CNDDB 2024) revealed that 11 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present for two (2) of these 11 plant species within the project site and buffer area. Botanical surveys were conducted on November 23 and 29, 2024.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
<i>Birds</i>					
Tricolored blackbird	<i>Agelaius tricolor</i>	-	CT	The species is found throughout the Central Valley, in the San Francisco Bay Area, along the California coast, and in portions of the desert regions with scattered northern populations in Oregon and Washington state. Inhabits wetland areas and agricultural fields. Species is highly social, and forms large colonies.	Potentially present. Potential foraging habitat was observed throughout the proposed project site and buffer area. Potential nesting habitat was observed in wetland/aquatic habitat found adjacent to the existing access road to the proposed tower site. No individuals of this species or potential nest sites were observed during biological surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Swainson’s hawk	<i>Buteo swainsoni</i>	-	CT	Inhabits grassland, shrubland, and agricultural areas where it has open areas to forage for its small prey and where roost sites are available. In breeding season, also requires nesting trees, usually trees bordering agricultural fields, in wetland borders, and on abandoned farms. Forages by soaring over open areas and by searching from perches.	Potentially present. Potential foraging and nesting habitat was observed throughout the proposed project area. No individuals of this species or active/inactive nest sites were observed during biological surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Prairie falcon	<i>Falco mexicanus</i>	-	Watch List	Prairie Falcons breed in open country throughout the West wherever they can find bluffs and cliffs to nest on, including in alpine habitat to about 11,000 feet. Breeding habitats include grasslands, shrub steppe desert, areas of mixed shrubs and grasslands, or alpine tundra that supports abundant ground squirrel or pika populations. Breeding birds sometimes forage in agricultural fields. The majority of Prairie Falcons spend the winter in the Great Plains and Great Basin, in habitat that supports horned larks and western meadowlarks that make up much of their wintertime diet. This includes grasslands, sage scrub, dry-farmed wheat fields, irrigated cropland, and cattle feedlots, where the falcons also prey on	Potentially present. Potential foraging habitat was observed throughout the proposed project site and buffer area. However, no potential nesting habitat was observed in the project site and buffer area. No individuals of this species or potential nest sites were observed during biological surveys. This species has been documented within the general vicinity of the proposed project site and buffer area (CDFW 2024) (see Figure 3).

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
<i>Amphibians and Reptiles</i>					
California tiger salamander - central California DPS	<i>Ambystoma californiense</i> Population 1	FT	CT	Primarily inhabit non-native grassland providing underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	Potentially Present. Potential upland aestivation habitat suitable for this species was observed within the proposed project site and buffer area. However, no potential aestivation burrows were observed within areas proposed for construction. No aquatic breeding habitat for this species was observed within the proposed project site. However, aquatic breeding and foraging habitat for this species was observed adjacent to the east side of the existing access road to the proposed tower site within an aquatic resource. No sign of this species was observed during biological surveys. This species has been documented approximately 0.87 miles southeast of the proposed project site according to CNDDDB (CDFW 2024) (see Figure 3). This sighting dates from 1974.
Western pond turtle	<i>Emys marmorata</i>	Proposed Threatened	CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Require basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	Potentially Present. Potential upland nesting habitat suitable for this species was observed within the proposed project site and buffer area. Aquatic breeding and feeding habitat for this species was observed adjacent to the east side of the existing access road to the proposed tower site within an aquatic resource. No sign of this species was observed during biological surveys. This species has not been documented within the general vicinity of the proposed project site according to CNDDDB (CDFW 2024) (see Figure 3).
Western spadefoot toad	<i>Spea hammondi</i>	Proposed Threatened	-	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. vernal pools are essential for breeding and egg-laying.	No potential. No habitat (vernal pools) suitable for use by this species was observed within the proposed project area during biological surveys. Therefore, it is unlikely this species could occur within the proposed project area or buffer area.

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Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Fish					
Hardhead	<i>Mylopharodon conocephalus</i>	-	CSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Found in clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Not found where exotic centrarchids predominate.	No potential. No habitat suitable for use by this species was observed within the proposed project area during biological surveys. Therefore, it is unlikely this species could occur within the proposed project area or buffer area.
Steelhead - Central Valley DPS	<i>Oncorhynchus mykiss irideus pop. 11</i>	FT	-	After maturing for 1 to 3 years in the ocean, adult steelhead typically begin their spawning migration into the Sacramento and San Joaquin Delta System in fall and winter. Adult steelhead enter the mainstream Sacramento River in July, peak in abundance in the fall, and continue migrating through February and March. Juvenile steelhead will remain in fresh water and continue to rear for 1 to 3 years before migrating to the ocean in November through May to mature. Smolt typically migrate to the ocean during March through June.	No potential. No habitat suitable for use by this species was observed within the proposed project area during biological surveys. Therefore, it is unlikely this species could occur within the proposed project area or buffer area.
Insects					
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	-	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 swales, earth slumps, or basalt-flow depression pools.	No Potential. No suitable habitat was observed within the proposed project area. This species is not expected to occur within the proposed project area.
Monarch - California overwintering population	<i>Danaus plexippus pop. 1</i>	Candidate	-	Closed-cone coniferous forest. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT	-	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for stressed elderberry shrubs.	No Potential. No suitable habitat was observed within the proposed project area. This species is not expected to occur within the proposed project area.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	FE	-	Inhabit vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands.	No Potential. No suitable habitat was observed within the proposed project area. This species is not expected to occur within the proposed project area.

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
<i>Plants</i>					
Henderson's bent grass	<i>Agrostis hendersonii</i>	-	List 3.2	Valley and foothill grasslands in vernal pools. Found in moist places. Elevational range: 65 to 1,030 meters. Blooming period: April through June.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Ione manzanita	<i>Arctostaphylos myrtifolia</i>	FT	List 1B.2	Found in chaparral and cismontane woodland on Ione clay. Elevational range: 90 to 560 meters. Blooming period: November through March.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area. Project site does not contain the Ione Clay soil type.
Valley brodiaea	<i>Brodiaea rosea ssp. vallicola</i>	-	List 4.2	Vernal pools in valley and foothill grasslands. Elevational range: 70 to 305 meters. Blooming period: April to May.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Hoover's calycadenia	<i>Calycadenia hooveri</i>	-	List 1B.3	Cismontane woodland and valley and foothill grasslands. Found on exposed, rocky, barren soil. Blooms July to September. Elevation range: 60-260 m.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Spicate calycadenia	<i>Calycadenia spicata</i>	-	List 1B.3	Cismontane woodland and valley and foothill grasslands. Found on dry, adobe, clay, gravelly, rocky, disturbed areas, openings, and roadsides. Blooms May to September. Elevation range: 40-1,400 m.	Potentially present. Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2024) (see Figure 3).
Tuolumne button-celery	<i>Eryngium pinnatisectum</i>	-	List 1B.2	Vernal pools on cismontane woodland, and lower montane coniferous forest. Found on volcanic soils and mesic sites. Elevational range: 65 to 915 meters. Blooming period: May through August.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Parry's horkelia	<i>Horkelia parryi</i>	-	List 1B.2	Chaparral and cismontane woodland. Found in openings. Only known from the Ione Formation. Elevational range: 85 to 1,115 meters. Blooming period: April through September.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area. Project site does not contain the Ione Clay soil type.
Ahart's dwarf rush	<i>Juncus leiospermus var. ahartii</i>	-	List 1B.2	Valley and foothill grassland. Restricted to the edges of vernal pools. Elevational range: 30 - 100 meters. Blooming period: March through May.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.

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Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Legenere	<i>Legenere limosa</i>	-	List 1B.1	Vernal pools. Elevational range: 1 – 1,005 meters. Blooming period: April through June.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Pincushion navarretia	<i>Navarretia myersii</i> <i>ssp. myersii</i>	-	List 1B.1	Found in vernal pools on clay soils. Elevational range: 45 to 100 meters. Blooming period: April through May.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Patterson’s navarretia	<i>Navarretia paradoxiclara</i>	-	List 1B.3	Meadows and seeps with serpentinite and openings. Elevational range: 150 – 435 meters. Blooming period: May through June.	None. No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Environmentally Sensitive Habitat Areas					
Ione Chaparral (not present)					

Status Codes:

Federal

FE = Federally listed as Endangered
FT = Federally listed as Threatened
FC = Federal Candidate species

State

CE = California listed as Endangered
CT = California listed as Threatened
CR = California listed as Rare
CFP = California Fully Protected
CSC = Species of Special Concern
WL = CDFW Watch List
FP = Fully Protected

California Rare Plant Rank (formerly known as CNPS Lists)

California Rare Plant Rank 1A = Plants presumed extinct in California
California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere
California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere
California Rare Plant Rank 3 = Plants about which we need more information; a review list
California Rare Plant Rank 4 = Plants of limited distribution; a watch list.
California Rare Plant Rank Rarity Status of .1 = Seriously endangered in California
California Rare Plant Rank Rarity Status of .2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2024); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2024); and USFWS Online Endangered Species Database (USFWS 2024).

Botanical surveys were not conducted within the blooming period of these two (2) special-status plant species identified as potentially occurring within the project site and buffer area. Survey findings for the two (2) targeted special-status plant species were negative. We cannot say with certainty if the remaining two (2) plant species (Hoover's calycadenia and spicate calycadenia) are present in the project site or buffer area without further botanical surveys during the blooming period of the species.

4.3 Special-Status Wildlife Species

The following is a discussion of species having potential to occur on site and/or are species that are prominent in today's regulatory environment. This document does not address impacts to species that may occur in the region but for which no habitat occurs on site. Species-specific information described below is primarily from USFWS 2024 and CDFW 2024, unless otherwise noted.

Tricolored Blackbird - Tricolored blackbirds look very much like the abundant and widespread red-winged blackbird (*Agelaius phoeniceus*), to which they are closely related. The plumage of adult male tricolored blackbird is glossy black and may sometimes show an iridescent blue-green sheen in bright sunlight. Adult females are brown dorsally and have brown streaks on their breasts that merge into a dark brown belly, unlike the belly of female red-winged blackbirds which is streaked. Females may or may not have a brightly-colored epaulet. Juveniles are similar to females but paler. After-hatch year (1 year old) males are dark brown, not black, and have orange, not red, epaulets. Adult male epaulets are typically scarlet red, unlike the epaulet of the male red-wing blackbird which is orange-red. The band below the epaulet is bright white, not yellow or buffy as in the red-winged blackbird. Breeding males average 65-68 grams and breeding females average 40-45 grams. Total body length is 18-24 cm.

The bills of both sexes are long, narrow, round, and pointed. Both sexes have narrow, pointed wings, giving the bird a flight profile that has more pointed wings than does the red-winged blackbird. Flight is typically undulating, with powered down-strokes followed by upward glides. Foraging birds fly out from and return to the breeding colony head-to-tail, "follow the leader", and form long flightlines that may persist and allow the birds to be seen at relatively great distances. Foraging flocks appear to roll across the landscape as birds in the rear of foraging flocks fly up to the front. Foraging flocks may consist of hundreds or, in rare cases, even thousands of birds and be seen from some distance.

This species was formerly abundant both in coastal California, where it was considered the most abundant bird from Los Angeles to San Diego in the mid-19th Century, and in the Central Valley of California through interior southern California to northern Baja California (Grinnell 1915. Since 1980, breeding has occurred in 46 California counties, although the species has essentially been extirpated as a breeder in coastal locations and persists in very small numbers (12,000 in 2017) at widely scattered sites in southern California. Gaps also occur in the breeding distribution in the Central Valley. Small colonies of tens of individuals persist in northern Baja California, a single colony of fewer than 30 individuals breeds in western Nevada, formerly up to 2,000 birds breed at several scattered sites in Oregon, and since 1998 a few tens of birds have bred in a few locations near Walla Walla, Washington.

This species is a resident in Washington, Oregon and Baja California, absent in Nevada. It may also occur in small numbers along coastal regions and portions of northern California outside of the Central Valley. Wintering populations concentrate in the Sacramento-San Joaquin Delta and formerly along the central coast in Monterey, Marin, and Sonoma counties, where they occur in multispecies flocks with other blackbirds, brown-headed cowbirds, and European starlings. Wintering tricolors are associated with open rangeland in the Sacramento-San Joaquin Delta and with dairies along the central California Coast. From mid-October to February flocks to 25,000 frequented dairies on the outer Point Reyes Peninsula in Marin County, but few birds (< 1,000) have been seen during winter there since 2012.

Often described as nonterritorial, but both males and females maintain breeding territories held for the duration of a single nesting effort. Territories include only nesting space, not foraging areas, and range in size from less than one to several square meters, with most territories between 2 and 6 square meters. In some instances, especially in especially high nest densities, tricolor territories may be vertically stacked. Males may arrive on the breeding sites 1-3 days before the females, typically in mid-to-late March in southern California and the San Joaquin Valley although the onset of breeding has occurred as early as late February since 2014 and has been shown to be advancing. The tricolor typically nests twice, and the second breeding attempt often occurs in a different, more northerly location for Central Valley breeders, although when breeding conditions permit, second breeding attempts may occur in the same or immediately adjacent locations. Comparable movements have not been reported in southern California, where the species is believed to be resident.

Tricolored blackbirds, like other blackbird species, are fundamentally granivores; however, tricolors consume a wide variety of plant and animal foods, and respond opportunistically to the most abundant, readily available food resource. In the San Joaquin Valley, most tricolors feed on stored grains associated with dairies, with additional animal foods taken from both aquatic and terrestrial habitats up to 9 km from the colony. Birds may forage over a wide area, but females forming eggs and adults feeding nestlings typically concentrate foraging efforts on small, highly productive habitats, including shrublands (often excellent sources of caterpillars), pasturelands (many types of insects, but especially grasshoppers during grasshopper "breakout" years), wetlands (aquatic insect larvae), and rice paddies (aquatic insect larvae).

Potential foraging habitat for this species was observed throughout the project site and buffer area. No potential nesting habitat was observed in the project site or buffer area (there was a lack of nesting substrate in aquatic resource areas). No individuals of this species were observed during biological surveys in the project area. This species has not been documented within the vicinity of the proposed project area (CDFW 2024) (see Figure 3).

Swainson's Hawk - Swainson's hawks typically nest in scattered trees within grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands). Nests are typically at the edges of narrow bands of riparian vegetation, in isolated oak woodland, and in lone trees, roadside trees, or farmyard trees, as well as in adjacent residential areas. Historically and in existing native habitat, Swainson's hawk forage in open stands of grass-dominated vegetation, sparse shrublands, and small, open woodlands. In many parts of range today, the species has

adapted well to foraging in agricultural areas (especially in alfalfa) but cannot forage in most perennial crops or in annual crops that grow higher than native grasses, where prey are more difficult to find. Swainson's hawks also forage in areas with cultivation activities that expose prey (e.g., flood irrigation, primarily in alfalfa fields; burning; and disking) (CDFW 2024).

Swainson's hawks are known to forage within a 10-mile radius of nest sites, suggesting that the presence of suitable foraging habitat within the vicinity of nesting habitat is essential to their reproductive success. Main foods taken on breeding grounds are vertebrates (mammals, birds, and reptiles) (CDFW 2024).

Suitable nesting and foraging habitat was observed throughout the proposed project area. Potential nesting trees were observed in scattered areas throughout the general project area. No individuals of this species or active/inactive nest sites were observed during our biological surveys. Swainson's hawk has not been recorded within the project area (CDFW 2024) (see Figure 3).

Prairie Falcon - The prairie falcon is grayish to sandy brown above and creamy white with more or less dark brown spots or streaks below. The head has a brown cap and a white line above the dark brown eye. A narrow "moustache" like streak extends down and back from the corner of the mouth. The hooked beak and sharp talons are typical of birds of prey. The tail is rufous brown with very fine dark barring. A leading characteristic of prairie falcons are the dark brown feathers on the underside of the wings close to the body but not along the leading edge of the pointed wings. When perching, the wingtips are a couple inches short of the tail. The males are about 15 inches long with a wingspan of 37 inches and the females are a little bigger with an average length of 17 inches and a 41 inch wingspan.

Prairie falcons primarily prey on small birds and mammals especially ground squirrels as well as reptiles and insects. Horned larks and meadowlarks are their favorites among songbirds. They often hunt by flying fast and low hoping to surprise prey, catching the birds in flight or flushing them from hiding. They cruise at around 45 miles per hour. They will also search for prey from a perch and then pursue that prey with the low level flight and grasping the prey in midair, rather than knocking them down in dives like peregrine falcons typically do although they can and will occasionally dive. The adults have few enemies, but may fall prey to great horned owls. The young can be taken from the nesting sites by coyotes, badgers, bobcats, eagles and owls.

Their habitat of choice is open country with hills and plains, canyons and mountains, shrub steppes, and grasslands, alpine tundra, prairie, and high desert. Their range is primarily the mountain west barely extending into the Dakotas, south to Mexico and west to California, except not in the Central Valley of California, nor along the foggy coasts of Oregon and Washington. They extend into Canada and what little migration they do is a bit further north up into Canada.

One essential requirement of their habitat is a suitable cliff for a nesting site. Mating usually starts at two (2) years of age and their courtship consists of the male performing fast flying swoops and other aerial acrobatics to try to impress the female with his ability to hunt and catch prey. The clutch size is usually three (3) to six (6) pinkish eggs with brown, reddish-brown and purplish spots. Incubation becomes more intense after all the eggs are laid which evens out the hatching times. The female does most of the incubating and brooding and the male brings in most of the

food. The young hatch after about a month and once they are two (2) weeks old the female will have to hunt for prey as well. The young fledge when they are five (5) to six (6) weeks old. They remain for a short while before dispersing and becoming totally independent.

Potential foraging habitat was observed throughout the proposed project site and buffer area. However, no potential nesting habitat was observed in the project site and buffer area. No individuals of this species or potential nest sites were observed during biological surveys. This species has been documented within the general vicinity of the proposed project site and buffer area (CDFW 2024) (see Figure 3).

California Tiger Salamander (CTS) - The CTS is restricted to grasslands and low-elevation foothill regions in California (generally under 1,500 feet) where it uses seasonal aquatic habitats for breeding. The salamanders breed in natural ephemeral pools, or ponds that mimic ephemeral pools (stock ponds that go dry), and occupy substantial areas surrounding the breeding pool as adults. CTS spend most of their time in the grasslands surrounding breeding pools. They survive hot, dry summers by estivating (going through a dormant period) in refugia (such as burrows created by ground squirrels and other mammals and deep cracks or holes in the ground) where the soil atmosphere remains near the water saturation point. During wet periods, the salamanders may emerge from refugia and feed in the surrounding grasslands or disperse to breeding locations.

Adult CTS are known to travel up to 1.3 miles from breeding sites and sites within 1.3 miles of known breeding sites are considered to be CTS habitat unless there are significant barriers to movement (USFWS 2017a). The proposed project site is located approximately 528 feet northwest of potential breeding habitat (a stock pond).

Potential upland aestivation habitat suitable for this species was observed within the proposed project site and buffer area. However, no potential aestivation burrows were observed within areas proposed for construction. No aquatic breeding habitat for this species was observed within the proposed project site. However, aquatic breeding and foraging habitat for this species was observed adjacent to the east side of the existing access road to the proposed tower site within an aquatic resource. No sign of this species was observed during biological surveys. This species has been documented approximately 0.87 miles southeast of the proposed project site according to CNDDDB (CDFW 2024) (see Figure 3). This sighting dates from 1974. The proposed project site is not located within any mapped critical habitat for this species as designated by USFWS.

Western Pond Turtle - The western pond turtle is a California species of special concern. It is the only native aquatic (freshwater) turtle found in California. Western pond turtles are found in freshwater habitats throughout most of the state (west of the Sierra Nevada crest) up to elevations of about 4,700 feet. They require some slow or slack water aquatic habitat, and are uncommon in high-flow streams. Western pond turtle presence seems to be associated with the presence of basking sites and hatchlings require shallow water habitat with dense algal vegetation in which to forage. Western pond turtles leave aquatic sites to reproduce, aestivate and overwinter, and so upland habitat is an important life history component for the species. Western pond turtles are known to travel up to 100 meters upland from their aquatic habitat in search of a nesting location. These turtles require an upland oviposition site in clay or sandy soils in the vicinity of the aquatic site and may overwinter on land or may remain active in water during the winter season depending

on factors poorly understood at this time.

Potential upland nesting habitat suitable for this species was observed within the proposed project site and buffer area. Aquatic breeding and feeding habitat for this species was observed adjacent to the east side of the existing access road to the proposed tower site within an aquatic resource. No sign of this species was observed during biological surveys. This species has not been documented within the general vicinity of the proposed project site according to CNDDDB (CDFW 2024) (see Figure 3).

Bat Species – Synthesis conducted a bat species and habitat assessment of the proposed project site and buffer during our field survey. The project site and buffer area provide potential foraging habitat for bat species, and bat species may forage intermittently within the project site and buffer area at any time. However, based on the results of our survey and assessment, no potential roosting or maternity sites (hollow trees, buildings, or rock caves) were identified within the project site and buffer area. Therefore, bat species are not expected to roost or have maternity sites within the proposed project site or buffer area. Additionally, no rock outcroppings or buildings are present, nor are any trees proposed for removal during the proposed project. Therefore, it is our professional opinion that no impacts will occur to individual bats or potential roosting and maternity sites, and these species are not discussed further in this document.

4.4 Critical Habitat

No Federally-designated critical habitat was identified within the proposed project site or buffer area (USFWS 2024).

4.5 Special Status Natural Communities

Aquatic habitat (stream channel with wetland vegetation and ponded water) was observed crossing under the existing access road to the proposed tower site.

5.0 IMPACTS ANALYSIS AND STANDARD CONSTRUCTION CONDITIONS

This section summarizes the potential biological impacts from implementation of the proposed project. The analysis of these effects is based on a reconnaissance-level biological survey of the project site and buffer area, a review of existing databases and literature, and personal professional experience with biological resources of the region. Potential effects to federally- and state-listed special-status animal species may occur from the proposed project. Mitigation measures for these biological impacts are provided below. A synopsis of the species potentially affected is presented in Table 2, and is followed by mitigation measures to avoid “take” of individuals.

Table 2: Special Status Animal Species Potentially Affected by the Proposed Project

Species	Status (Federal/State)	Habitat Present/Absent	Avoidance Yes/No
Tricolored blackbird	/CT	Present	Yes
Swainson’s hawk	-/CT	Present	Yes
California tiger salamander	FT/CT	Present	Yes
Western pond turtle	Proposed T/CSC	Present	Yes

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile, and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual, foraging, and nesting migratory birds, raptor species, tricolored blackbird, and Swainson’s hawk should they become established within the proposed project site or buffer area prior to project implementation. Impacts to these species could occur through crushing or destruction by construction equipment during implementation of project activities. Actively nesting birds could also be affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the abandonment of active nest sites. Impacts to these species would be considered significant. In the event that nesting birds become established in the

proposed project site or buffer area, the following Standard Construction Conditions measures will be implemented.

If ground disturbing activities occur during the breeding season of these avian species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for additional avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

In the case of Swainson's hawk, pre-construction surveys for nesting Swainson's hawks within 0.5 miles of the work areas will be conducted for construction activities between March 1 and September 15. The surveys shall incorporate methodologies from CDFW's 1994 *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California* and the Swainson's Hawk Technical Advisory Committee (SHTAC) survey guidelines. If active nests are found, a qualified biologist should determine the need (if any) for temporal restrictions on construction.

Potential Impacts to California Tiger Salamanders from Project Activities

The California tiger salamander (CTS) requires two (2) primary habitat components: aquatic breeding sites and upland terrestrial aestivation or refuge sites. This species inhabits valley and foothill grasslands and the grassy understory of open woodlands, usually within one (1) mile of water. Breeding occurs mainly December-February, after rains fill pools and ponds. In summer, CTS aestivate or refuge in small mammal burrows, leaf litter, or other moist sites within 1.6 miles of a water body. The species disperses through a variety of habitat including valley grasslands, chaparral, sage scrub, and oak woodlands.

The CNDDDB shows two records of this species within two (2) miles of the project site. Occurrence No. 467, documented in 2000 approximately two (2) miles northeast of the action area describes two (2) adults observed in a rainwater pool and one (1) adult in a culvert. This occurrence is presumed extant. Occurrence No. 1107, documented in 2010 approximately one (1) mile southeast of the project site describes one (1) adult and one (1) metamorph photographed from a local residence. Habitat consists of blue/live oak woodland with abundant rodent burrows. This occurrence is presumed extant.

The action area primarily consists of disturbed lands (i.e., equestrian/cattle grazed) and single-family homes, barns, solar array, equestrian arena, gravel drives, and includes natural communities including ponds, seasonal streams, and oak woodlands. Sparse ground cover observed included remnants of wild oat (*Avena fatua*) and pockets of turkey mullein (*Croton setiger*). The proposed lease area and power routes consists of extensively grazed lands containing only turkey mullein and oak branch piles. The proposed project site is also used for storage of miscellaneous items including large water containers, catamaran sailboat, and other miscellaneous ranch equipment. The surrounding tree canopy consists of blue oak (*Quercus douglasii*) and interior live oak (*Quercus wislizeni*). The fiber route will extend south to the property entrance along Southward Road and will be installed via directional bore. This route will extend under the seasonal stream.

The pond community largely consists of common purslane (*Portulaca oleracea*) and duckweed (*Lemna gibba*). The pond is bordered along the northern edge with Fremont cottonwood (*Populus fremontii*) and arroyo willow (*Salix lasiolepis*). Several dozen pacific tree frogs and several American bullfrogs (*Lithobates catesbeianus*) were observed within the pond shallows. Sparse ground squirrel burrows were observed within the project area, but not within areas proposed for ground disturbance. Other upland refugia included oak branch piles, water containers, and other miscellaneous equipment stored on the ground. At the time of the survey, soils were dry and cracked at the surface. Surface cracks appeared shallow extending down 4 - 6 inches below the soil surface and would not provide suitable upland refuge for CRLF. No burrows or soil cracks were observed within the proposed lease area or utilities routes.

The freshwater pond provides suitable amphibious breeding habitat. However, the abundance of the bull frogs would likely reduce the potential success of CTS breeding. The pond could also provide refuge for dispersing adult CTS.

The CNDDDB shows two (2) records of CTS within two (2) miles of the project site. Lands adjacent to the action area would provide suitable dispersal habitat (i.e., grazed lands) with communities of

oak woodlands, riparian forest, streams, and both emergent and non-emergent ponds within 0.25 mile north, west, south, and east of action area.

Implementation of the proposed project could potentially impact individual CTS if they are present within the proposed project site during project activities, albeit there is low probability of this based on the literature review and biological surveys. No proposed activities are proposed directly within any aquatic breeding habitat. However, grading and earthmoving activities associated with work activities have the potential to crush individuals of this species should they be present within the proposed project site during project implementation during their active movement period. Direct injury or mortality of individual or small populations of these species could occur during project activities. Impacts to these species would constitute a significant impact. However, with the implementation of the measures described below, impacts would be avoided.

- A qualified biologist shall conduct pre-activity surveys to determine if CTS are absent or present in the proposed project site. If any individual CTS are discovered, consultation with the USFWS and CDFW will be required. A USFWS approved biologist with appropriate handling permit to move individual salamanders will be retained should they be present within the proposed project site during project activities.
- Any individuals found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities.
- Clearance surveys shall occur on a daily basis in the work area.
- The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- Project activities shall be limited to daylight hours, except during an emergency in order to avoid nighttime activities when frogs may be present.
- Traffic speed should be maintained at 10 miles per hour or less in the work area

Potential Impacts to Western Pond Turtle from Project Activities

Implementation of the proposed project has the potential to result in direct impacts to western pond turtles should they be present in the proposed project construction areas during project activities. No individuals of this species were observed during biological surveys in upland refuge and basking habitat or in breeding habitat found in the project buffer area, and none have been observed within the project area as indicated by our search of the CNDDDB database.

Direct impacts to individuals of these species could result from ground disturbance activities during project implementation within upland nesting and basking habitat when movement across these areas is occurring. No construction activities will occur within aquatic habitat areas. This species could be directly impacted by crushing by project equipment or vehicles. These impacts

could result in direct mortality of individuals or small populations of these species. No direct impacts are proposed to the aquatic breeding and foraging habitat of this species, so no direct impacts are anticipated.

- If an individual western pond turtle is observed during pre-construction surveys or during implementation of any phase of the proposed project, a qualified biologist will move the individual turtle out of the project work area to an area where the turtle will be safe from harm from project construction activities. If feasible, the project proponent will install exclusion fencing around the disturbance area to prevent turtles from reentering the area.

Potential Impacts to Special-Status Plant Species from Project Activities

Review of the USFWS (USFWS 2024), the CNPS (CNPS 2024), and the CNDDDB (CNDDDB 2024) revealed that 11 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present for two (2) of these 11 plant species within the project site and buffer area. Botanical surveys were conducted on November 23 and 29, 2024. These surveys were not conducted within the blooming period of the two (2) special-status plant species identified as potentially occurring within the project site and buffer area. Survey findings for the two (2) targeted special-status plant species were negative.

Because botanical surveys were conducted outside of the blooming period of the two (2) special-status plant species, it cannot be said with certainty that these species do not occur within the proposed project site or buffer area. Therefore, additional surveys will be required to determine their presence or absence.

Implementation of the proposed project could potentially result in impacts on these two (2) special-status plant species if they are located within the proposed project site during project activities. Direct impacts to these plant species could result from ground disturbance activities during project implementation. Special-status plant species could be directly impacted by crushing of plants by construction equipment. These impacts could result in direct mortality of individuals or small populations of special-status plant species.

A qualified botanist will conduct pre-construction botanical surveys to identify any populations of the remaining two (2) special-status plant species within the proposed project site that could be disturbed during project activities. These surveys shall be conducted prior to the initiation of any construction activities and coincide with the appropriate flowering period of the special-status plant species with the potential to occur in the project area. If any special-status plant species populations are identified within or adjacent to the proposed disturbance areas, the project proponent shall implement the following measures to avoid impacts to these species:

- If any population(s) of special-status plant species is identified directly adjacent to the proposed project site, a qualified biologist retained by project proponent will clearly delineate the location of the plant population, and install protective fencing between the disturbance zone and the plant population to ensure that the plant population is adequately protected.

- If a special-status plant population is identified within the proposed disturbance zone, the project proponent will consult with CDFW to determine the appropriate measures to avoid or mitigate for impacts to the species or population. The project proponent will adjust the boundaries of the disturbance zone, where feasible, to avoid impacts to the plant species/population. Where avoidance is not feasible, the project proponent will implement one or more of the following measures: (1) transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, two more plants shall be planted. Plantings shall be managed and monitored by the applicant and shall survive to 5 years after planting; (2) seed or purchase plants and place them in an area adjacent to the disturbance zone; (3) purchase credits at an approved mitigation bank at a ratio approved by CDFW and the project proponent.

General Project Measures to be Incorporated

Implementation of the following general project avoidance/minimization measures is recommended to avoid or reduce potential impacts to special-status wildlife and plant species:

1. Worker Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project area. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Acts, and measures being incorporated for the protection of these species and their habitats shall also be discussed.
2. As close to the beginning of project activities as possible, but not more than 14 days prior, a qualified biologist shall conduct a final pre-construction survey of the proposed project area and buffer to verify that no special-status wildlife species have become established in the project area or buffer. A qualified biologist shall be present immediately prior to project activities that have potential to impact sensitive species to identify and protect potentially sensitive resources.
3. Project area boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project area to restrict access of vehicles and equipment unrelated to project-related operations.
4. A project representative shall establish restrictions on project-related traffic to approved project areas, storage areas, staging and parking areas via signage. Off-road traffic outside of designated project area shall be prohibited.
5. Project-related traffic shall observe a 10-mph speed limit in the project area except on County roads and State and federal highways to avoid impacts to special-status and common wildlife species.

6. Hazardous materials, fuels, lubricants, and solvents that spill accidentally during project-related activities shall be cleaned up and removed from the project as soon as possible according to applicable federal, state and local regulations.
7. All equipment storage and parking during site development and operation shall be confined to the proposed project area or other offsite previously disturbed areas.
8. All excavated steep-walled holes or trenches in excess of three (3) feet in depth shall be provided with one or more escape ramps constructed of earth fill to prevent entrapment of endangered species or other animals. Ramps shall not be less than 45-degree angles. Trenches shall be inspected for entrapped wildlife each morning prior to onset of project activities and immediately prior to the end of each working day. Before such holes or trenches are filled, they shall be inspected thoroughly for entrapped animals. Any animals discovered shall be allowed to escape voluntarily without harassment before project activities related to the trench resume or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.
9. All food-related trash items such as wrappers, cans, bottles, or food scraps generated during project activities shall be disposed of only in closed containers and regularly removed from the proposed project area. Food items may attract wildlife species onto the proposed project area, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.
10. To prevent harassment or mortality of wildlife species via predation, or destruction of their dens or nests, no domestic pets shall be permitted on-site.

6.0 CONCLUSIONS AND DETERMINATIONS

This project will incorporate reasonable and prudent measures for avoidance and minimization, described in Section 1.0, and species-specific avoidance and minimization measures. As a result, the project is not anticipated to result in take of any of the listed species or habitats described in this biological assessment.

Provided the precautions outlined above are followed, it has been concluded by Synthesis that the proposed project would:

- Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species;
- Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and
- Not result in “take” of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal laws.

7.0 LITERATURE CITED

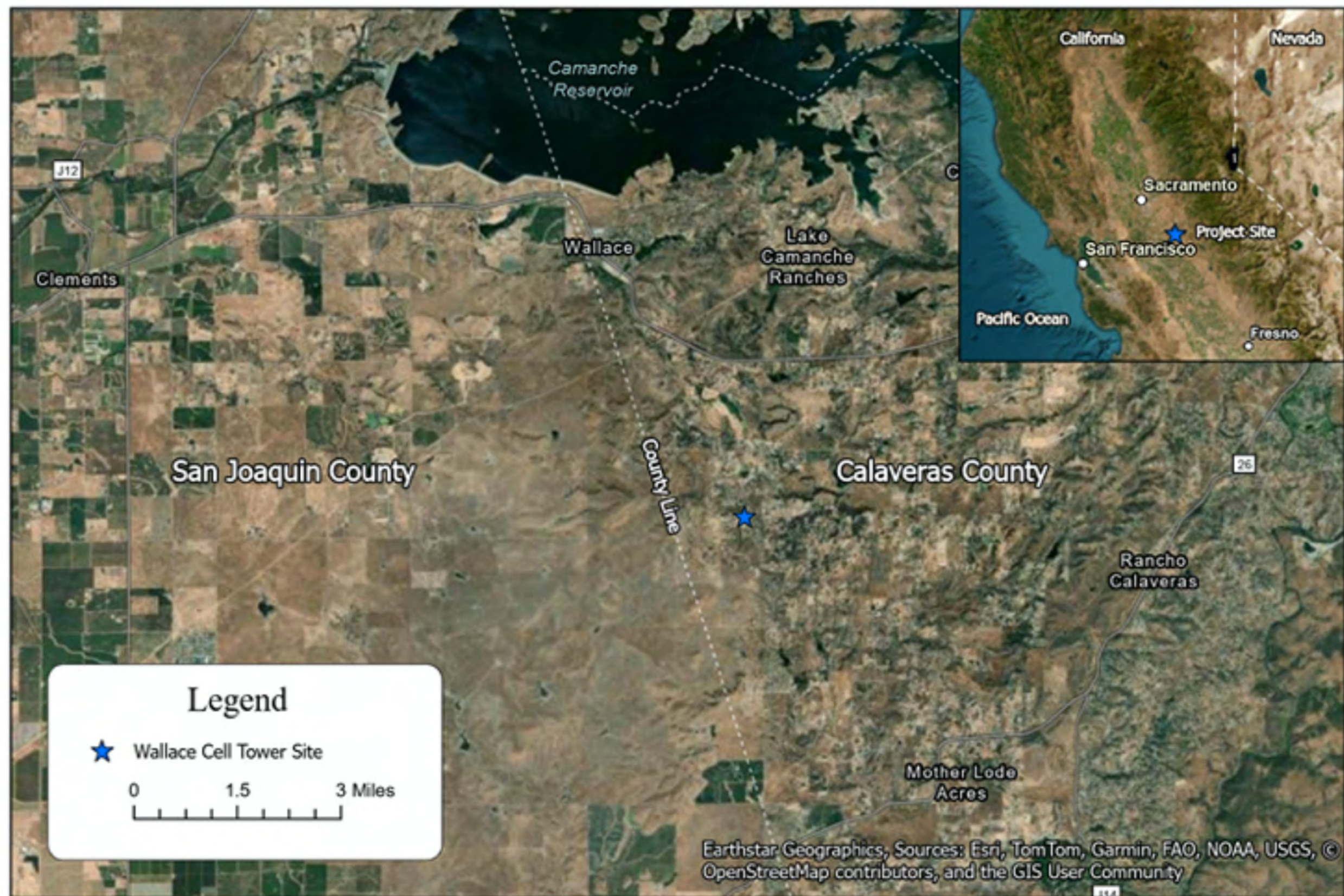
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Appendix A

Project Figures



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Project Vicinity Map

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Project Location Map

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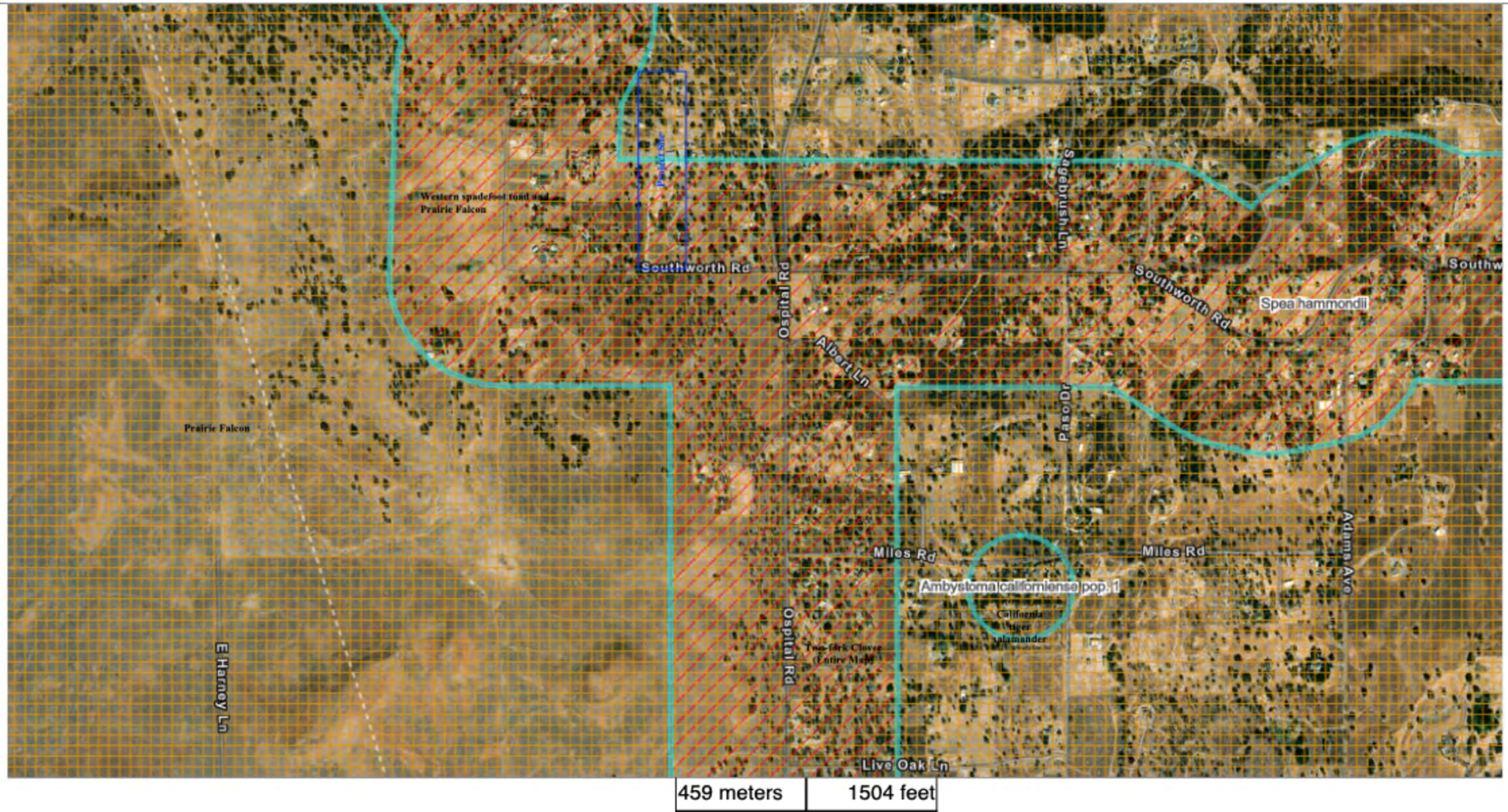


Figure 3. CNDDDB Species Occurrences in the Vicinity of the Project Site

Appendix B

List of Plant Species Observed During Biological Surveys

Common Name (Scientific Name)
California dandelion (<i>Agoseris grandiflora</i>)
Scarlett Pimpernel (<i>Anagallis arvensis</i>)
Slender wild oat (<i>Avena barbata</i>)
Wild oats (<i>Avena fatua</i>)
Black mustard (<i>Brassica nigra</i>)
California brome (<i>Bromus carinatus carinatus</i>)
Ripgut brome (<i>Bromus diandrus</i>)
Smooth brome (<i>Bromus inermis</i>)
Soft chess (<i>Bromus hordeaceus</i>)
Turkey mullein (<i>Croton setiger</i>)
Broadleaf filaree (<i>Erodium botrys</i>)
Red-stem filaree (<i>Erodium cicutarium</i>)
Fennel (<i>Foeniculum vulgare</i>)
Common mallow (<i>Malva neglecta</i> Wallr.)
Cheeseweed (<i>Malva parviflora</i>)
Bristly ox tongue (<i>Picris echioides</i>)
Dwarf plantain (<i>Plantago erecta</i>)
English plantain (<i>Plantago lanceolata</i>)
Common plantain (<i>Plantago major</i>)
Fremont cottonwood (<i>Populus fremontii</i>)
Curly dock (<i>Rumex crsipus</i>)
Blue oak (<i>Quercus douglasii</i>)
Interior live oak (<i>Quercus wislizeni</i>)
Wild radish (<i>Raphanus raphanistrum</i>)
Sheep sorrel (<i>Rumex acetosella</i>)
Arroyo willow (<i>Salix lasiolepis</i>)
Spiny sow thistle (<i>Sonchus asper</i>)
Dandelion (<i>Taraxacum officinale</i>)

Appendix C

Site Photos



Proposed tower site. View looking east.



Existing access road to proposed tower site and route of new fiber-optic cable installation. View looking south.



Stream crossing underneath the existing access road to the tower site.
View looking west from access road.



Proposed access road route to tower site and route of new fiber-optic
cable installation. View looking north.



Stream crossing underneath the existing access road to the tower site. Water ponds in the area in center of photo. View looking east from access road.