

## **6.0 BIOLOGICAL RESOURCES**

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### **6.1 INTRODUCTION**

This chapter describes the existing biological resources within Pacific Gas and Electric Company's Windsor Substation Project area and evaluates the potential impacts to habitats and species associated with project construction and operation. All impacts to botanical resources, wildlife, and aquatic features will be avoided or less than significant with incorporation of the proposed avoidance and protection measures described in Section 6.6 Avoidance and Protection Measures.

### **6.2 REGULATORY BACKGROUND**

#### **6.2.1 Federal Regulations**

##### ***6.2.1.1 Federal Endangered Species Act***

The federal Endangered Species Act (FESA) protects plants and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of FESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations (CFR) 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code (USC) 1538). Under Section 7 of FESA, federal agencies are required to consult with USFWS if their actions, including permit approvals or funding, could adversely affect an endangered plant or wildlife species or its critical habitat. Through consultation and the issuance of a biological opinion, USFWS may issue an incidental take statement allowing take of the species that is incidental to another authorized activity, provided the action will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits to private parties, provided a habitat conservation plan is developed.

##### ***6.2.1.2 Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects That May Affect California Tiger Salamander and Three Plant Species on the Santa Rosa Plain, California***

The Santa Rosa Plains Conservation Strategy (see Section 6.2.2.4) is the biological framework for which the *Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects That May Affect California Tiger Salamander and Three Plant Species on the Santa Rosa Plain, CA* (programmatic biological opinion) is based. The programmatic biological opinion is issued to the U.S. Army Corps of Engineers (USACE) for permits, enforcement actions, or mitigation banks that are under their jurisdiction. Projects appended to this programmatic biological opinion must meet the permit qualifications and, thus have "relatively small effects" on the species, in order to obtain individual take authorizations. The programmatic biological opinion expedites the process for project approval provided all information submitted by the project applicant is correct. The USFWS appended the Evans/Drew Industrial Subdivision

Project to this programmatic biological opinion on May 21, 2008. The Evans/Drew Industrial Subdivision Project included the 3.2-acre parcel PG&E acquired from Evans/Drew in 2009 for construction of the project.

#### 6.2.1.2.1 Appendage to the Programmatic Biological Opinion (Dated May 21, 2008)

The appendage to the programmatic biological opinion (appendage) states:

“...the Service has determined that the proposed action is not likely to affect the endangered Sonoma County Distinct Population Segment of the [California tiger salamander] CTS because the proposed substation site is located outside of the known range of this animal. This document also does not include the endangered many-flower navarettia since this plant is only known to occur in a few locations on the Santa Rosa Plain. The proposed action area is not located within any areas designated or proposed as critical habitat for any federally-listed species; therefore no designated or proposed critical habitat will be adversely modified or destroyed.”

The appendage goes on to list proposed conservation measures to minimize adverse effects due to the loss of habitat for the other three listed plants covered in the programmatic biological opinion: Burke’s goldfields (*Lasthenia burkei*), Sonoma sunshine (*Blennosperma bakeri*), and Sebastopol meadowfoam (*Limnanthes vinculans*).

#### **6.2.1.3 Migratory Bird Treaty Act**

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

#### **6.2.1.4 Federal Clean Water Act**

The purpose of the Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “waters of the United States” without a permit from the USACE. The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3 7b). The U.S. Environmental Protection Agency also

has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of an existing Nationwide Permit.

## **6.2.2 State/Regional Regulations**

### ***6.2.2.1 California Endangered Species Act***

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called candidates by the State). Section 2080 of the CDFG Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CDFG Code as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Section 2081 of the CDFG Code allows CDFG to issue incidental take permits to otherwise lawful development projects, provided the take is minimized and fully mitigated and does not jeopardize the continued existence of the species. Section 2053 of the CDFG Code requires state lead agencies to consult with the CDFG to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

### ***6.2.2.2 Fully Protected Species***

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

### ***6.2.2.3 Native Plant Protection Act***

Regarding listed rare and endangered plant species, CESA defers to the California Native Plant Protection Act (NPPA) of 1977 (CDFG Code Sections 1900-1913), which prohibits importing of rare and endangered plants into California, and the taking and selling of rare and endangered plants. CESA includes an additional listing category for threatened plants that are not protected under NPPA. In this case, plants listed as rare or endangered under the NPPA are not protected under CESA, but can be protected under California Environmental Quality Act (CEQA). In addition, plants that are not state-listed, but meet the standards for listing, are also protected under CEQA (Guidelines, Section 15380). In practice, this is generally interpreted to mean that all species on lists 1B and 2 of the California Native Plant Society (CNPS) Inventory potentially qualify for protection under CEQA, and some species on lists 3 and 4 of the CNPS Inventory may qualify for protection under CEQA. List 3 includes plants for which more information is needed on taxonomy or distribution. Some of these are rare enough to qualify for protection

under CEQA. List 4 includes plants of limited distribution that may qualify for protection if their abundance and distribution characteristics are found to meet the standards for listing.

#### **6.2.2.4 Santa Rosa Plains Conservation Strategy**

The USFWS Santa Rosa Plain Conservation Strategy (Conservation Strategy) is a conservation program put in place to mitigate potential adverse effects on listed species due to future development on the Santa Rosa Plain. The program will contribute to the recovery of the Sonoma County distinct population segment of the CTS, Burke's goldfield, Sonoma sunshine, Sebastopol meadowfoam, and the many-flowered navarretia (listed plants), and to the conservation of their sensitive habitat. The Conservation Strategy identifies eight conservation areas for CTS and listed plants, one CTS and listed plant preserve system, and one listed plant conservation area.

The proposed substation site and the western section of the distribution line alignment located south of Mitchell Lane are within the study area boundary of the Conservation Strategy but are not within a conservation area. The maps in the USFWS Conservation Strategy (dated in 2005) show the proposed substation site and the western section of the distribution line alignment to be within the *potential* CTS range. However, as cited above, in 2008 the USFWS determined in the agency's site-specific appendage to the programmatic biological opinion for the Conservation Strategy, that the proposed substation site and western section of the distribution line alignment are not within the *known* CTS range. An area directly northwest of the proposed substation site and an area directly south of the wetland restoration site (which is directly south of the proposed substation site) are designated as existing mitigation sites for development activities that adversely affect listed species and wetlands. The areas north of Mitchell Lane and further eastward along the distribution line alignment are already developed and out of the range of the CTS.

### **6.2.3 Local Regulations/Policies/Plans**

Although PG&E is not subject to local land-use regulations, the following overview of local regulations relating to biological resources is provided for CEQA Analysis.

#### **6.2.3.1 Town of Windsor General Plan**

The *Town of Windsor General Plan* lists and describes many policies to protect and conserve oak woodlands, riparian communities, open water, grasslands, seasonal wetlands, and vernal pools. Policy D.1 is designed to "protect unique and sensitive biotic features such as rare and endangered plants, dense oak woodlands, and vernal pools, and encourage sensitive design in these areas." Policy D.1.6 focuses on tree preservation and states that the Town of Windsor should encourage the preservation of oak woodlands and significant stands of oaks and heritage trees, and encourages replacement of trees should removal be necessary. Policy D.1.1 states that "if sensitive resources are identified on the project site, proposals to protect them shall conform with applicable state and federal regulations regarding their protection and may include avoidance of the resource, installing vegetative buffers, providing setbacks, clustering development onto less sensitive areas, preparing restoration plans, and offsite mitigation."

### **6.2.3.2 Tree Preservation and Protection Ordinance**

Chapter 27.36 of the Town of Windsor’s Zoning Ordinance, the Tree Preservation and Protection Ordinance (the Ordinance), regulates protection, preservation, maintenance, and removal of protected trees. The intent of the Ordinance is to avoid a reduction in tree canopy cover by requiring replacement trees for all protected trees that are approved for removal. Protected trees under the Ordinance include:

- trees with a diameter at breast height (dbh) of six inches or more of the species Black Oak (*Quercus kelloggii*), Blue Oak (*Quercus douglasii*), Coast Live Oak (*Quercus agrifolia*), Interior Live Oak (*Quercus wislizenii*), Oracle Oak (*Quercus morehus*), Oregon Oak (*Quercus garryana*), Valley Oak (*Quercus lobata*), Chase Oak (*Quercus x chaseii*), and trees with a dbh of 12 inches or more of the species California buckeye (*Aesculus, californica*).and California Bay (*Umbellularia, California*);
- heritage or landmark trees as identified by Council resolution;
- significant groves or stands of trees<sup>1</sup>;
- mature trees located on a parcel of one acre or more<sup>2</sup>; and
- any tree required, to be planted or preserved, as environmental mitigation for a discretionary permit.

Section 27.36.061, Tree Mitigation, is an amendment to the Ordinance. The amendment will “generally replace a smaller quantity of larger trees by replanting a larger quantity of smaller trees, with the goal of restoring the original canopy area and volume after ten years.” The amendment also states that to obtain a tree removal permit, an arborist report is required for all development projects with protected trees. The arborist will make recommendations on the removal as well as on the mitigation to offset the loss of the tree(s).

## **6.3 METHODOLOGY**

### **6.3.1 Overview**

Two preliminary biological site assessments were conducted in September 2005 and April 2007 by PG&E for the substation project site. A habitat-based assessment for the CTS and special-status plants was conducted for the project by ICF Jones & Stokes in June 2008. Habitat on the site was assessed to determine the potential suitability to support rare plants and CTS. Aquatic and upland habitats within 1.24 miles of the site were also assessed for CTS. The assessments

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<sup>1</sup> On projects where Planning Commission or Town Council approval is not required, determination of significance will be at the direction of the Planning Director.

<sup>2</sup> Smaller trees may also be protected under special circumstances. On projects where Planning Commission or Town Council approval is not required, special circumstances will be determined at the direction of the Planning Director.

included walking the site or visually inspecting it from access roads and the railroad right-of-way (ROW) that borders the site on the west.

At the time of the September 2005 and 2007 assessments and the ICF Jones & Stokes assessment, the current 3.2-acre proposed substation site was part of a larger site<sup>3</sup> that was under consideration. The initial larger site encompassed the following water features and riparian corridor: the created wetland site located directly south of the current proposed substation site, the seasonal wetlands located within the Conde Lane Mitigation Site, the wetland mitigation site northwest of the proposed substation site, the wetlands located on the parcel east of the proposed substation site, an intermittent stream that travels from Mitchell Lane south into the wetland restoration site, and the riparian corridor along Pool Creek.

A habitat assessment for special-status wildlife species was conducted in February 2009 by TRC Solutions, Inc (TRC). The purpose of this assessment was to determine if any sensitive wildlife species were likely to be found within, or utilize, the 3.2 acre proposed substation site and the adjacent Fulton No. 1 60 kilovolt (kV) power line ROW (from pole no. 3/13 to 3/8).

On April 21, 2009 and June 25, 2009, botanical surveys were conducted by TRC to identify any special-status plants (rare, threatened, and endangered plants) and plant (vegetation) communities at the proposed substation site.

On July 1, 2009, TRC conducted a biological survey of the distribution line alignment associated with the proposed substation site to determine the presence or absence of sensitive wildlife, plants, and habitat.

On July 27, 2009, TRC conducted a hydrologic reconnaissance to further investigate the hydrology of the proposed substation site.

Protocol level surveys were not conducted for federally or state listed wildlife species because of the unlikely or low potential for these species to occur in the project area. A general survey for special-status wildlife species will be conducted again immediately prior to construction.

## **6.3.2 Survey Methods**

### **6.3.2.1 Habitat Types**

Habitat types within the project area<sup>4</sup> were identified during the preliminary biological site assessments and the habitat assessments. Habitat types within the project area were evaluated for their potential to host special-status species and were based on Holland (1986).

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<sup>3</sup> The larger site encompassed 46.6 acres and extended all the way north to Mitchell Road, east to Conde Lane, adjacent to the railroad tracks to the west, and south beyond Pool Creek.

<sup>4</sup> The project area is defined as the proposed substation site, the existing Fulton No. 1 60 kV power line ROW from pole no. 3/8 to 3/13, the existing distribution line alignment and corresponding reconductoring work, aquatic areas in and near the proposed substation site and distribution line alignment.

### **6.3.2.2 *Special-Status Plant Species***

As part of the pre-field investigation for the special-status plant species habitat assessment, ICF Jones & Stokes conducted records searches of the California Natural Diversity Database (CNDDDB) and the CNPS' online *Inventory of Rare & Endangered Plants* to identify special-status plant species with the potential to occur within the larger 46.6-acre site. Seventy-two special-status plant species were identified as having the potential to occur on the larger site. The elevation of the site (i.e., 90–110 feet above mean sea level) falls outside the known elevation range for 46 of the 72 species. Therefore, the habitat based assessment focused on the likelihood of the remaining 26 special-status plant species to occur on the initial larger site.

ICF Jones & Stokes walked meandering transects throughout the site, recorded plant species observed, and documented the existing conditions with photographs. ICF Jones & Stokes also mapped the locations of 25 wetland features (including the nine created wetlands) that represent potential habitat for nine of the 15 special-status species using a handheld Global Positioning System (GPS) Trimble receiver.

TRC conducted botanical surveys at the proposed substation site during the blooming period of all plants listed in Table 6-1: *Special-Status Plants With Potential to Occur in the Project Area*. Additional non-sensitive plants not captured in the ICF Jones & Stokes assessment were also documented. TRC also conducted a biological survey in July 2009 along the distribution line alignment in which areas were looked at for sensitive plants.

### **6.3.2.3 *Special-Status Wildlife Species***

Prior to conducting the wildlife habitat assessment, TRC performed database searches on the California Natural Diversity Database (CNDDDB) and the California Wildlife Habitat Relationships (CWHR) database to identify special-status species with the potential to occur within the project area. Species listed in the CNDDDB were analyzed for the potential to occur if they were identified within a 5-mile radius of the project vicinity. A CWHR species list was generated by inputting the project location at the county level, and the available habitats and available elements that exist in, and around, the project area. A USFWS species list of all federal endangered and threatened species that may be affected by the proposed project was obtained from the Sacramento Fish and Wildlife office. The list covered species in Sonoma County and in the Healdsburg USGS 7.5-Minute Quadrangle. Various other biological reports written for the Mitchell Lane/Shiloh Road/Conde Lane Assessment District Project for the Town of Windsor were also reviewed and referenced.

All wildlife species identified by these sources were analyzed to determine if their range or habitat requirements coincided with that of the general vicinity of the project area. These species are described in Table 6-2: *Special-Status Wildlife Species With Potential to Occur in the Project Area*, and TRC's *Special-Status Wildlife Species With No Potential to Occur in the Project Area*.

The February 2009 habitat assessment was conducted on foot during a rainy and cloudy day (approximately 58 degrees (°) Fahrenheit (F)). Digital cameras were used to take photos of the habitats and features. All trees in the project vicinity were looked at to see if they would be suitable for nesting or contained any remnants of old nests.

The July 2009 biological survey was also conducted on foot. Digital cameras were used to take photos of the habitat along the distribution line alignment. Close inspections were made of areas that appeared to have potential for supporting sensitive wildlife and habitat in the general project vicinity.

#### 6.3.2.3.1 California tiger salamander

Prior to the habitat assessment, ICF Jones & Stokes reviewed information from the USFWS and the CDFG to determine if the initial larger site was within the range of CTS. In addition, ICF Jones & Stokes conducted a search of the CNDDDB for records of observations of CTS within 5 miles of the initial larger site.

During the habitat assessment, ICF Jones & Stokes walked meandering transects throughout the initial larger site and evaluated its potential to provide suitable aquatic breeding and upland habitat for CTS. ICF Jones & Stokes took notes on the general conditions of the site, including topography, plant communities, types of water bodies on the site, the presence of mammal burrows, land use of the site and adjacent properties, and potential barriers to salamander movement. Upon completion of the assessment at the site, ICF Jones & Stokes visited potential aquatic habitats within 1.24 miles of the site that were accessible by vehicle. The type of aquatic habitat, vegetation present, surface area, and depth of each feature were recorded if they could be determined.

#### **6.3.2.4 *Water Features***

TRC examined the hydrology at the proposed substation site and along the distribution line alignment to assess how stormwater discharges from the site and alignment might affect the nearby aquatic habitats. Water features and hydrology are further discussed in Chapter 10: Hydrology and Water Quality.

**Table 6-1: Special-Status Plants With the Potential to Occur in the Project Area**

<b>Species Common Name <i>Scientific Name</i></b>	<b>Listing Status<sup>1</sup></b>	<b>Habitat Requirements/Geographic Distribution/Floristic Province</b>	<b>Blooming Period</b>	<b>Potential to Occur within Project Area</b>
Sonoma sunshine <i>Blechnosperma bakeri</i>	FE, SE, 1B.1	Endemic to Sonoma County. Occurs in wet areas in valley and foothill grassland, vernal pools; 10–110 meters.	Mar–May	Moderate; potential habitat present in grassland. Nearest occurrence is < 3.5 miles away.
Bristly sedge <i>Carex comosa</i>	2.1	Inner North Coast Ranges, High Cascade Ranges, Great Valley, northern Central Coast, San Francisco Bay area, Modoc Plateau; Washington and elsewhere Coastal prairie, marshes and swamps at lake margins, valley and foothill grassland; below 625 meters.	May–Sep	Low; potential habitat present in grassland but no occurrences within 10 miles.
Fragrant fritillary <i>Fritillaria liliacea</i>	1B.2	Coast Ranges from Sonoma to Monterey Counties Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland, often on serpentine soils; 3–401 meters.	Feb–Apr	Moderate; potential habitat present in grasslands and nearest occurrence is 6.5 miles away.
Hayfield tarplant <i>Hemizonia congesta ssp. leucocephala</i>	3	North Coast Ranges, San Francisco Bay. Coastal scrub, valley and foothill grassland, sometimes along roadsides; 25–455 meters.	Apr–Oct	Moderate; potential habitat present in grasslands and nearest occurrence is 5.0 miles away.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	Habitat Requirements/Geographic Distribution/Floristic Province	Blooming Period	Potential to Occur within Project Area
Wooly-headed lessingia <i>Lessingia hololeuca</i>	3	North Coast Ranges, southern Sacramento Valley, northern San Francisco Bay. Broadleaved upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland on clay or serpentine soils; 15–305 meters.	Jun–Oct	Moderate; potential habitat present in grasslands and occurs within 10 miles of proposed substation site.
Marsh microseris <i>Microseris paludosa</i>	1B.2	Central Coast, San Francisco Bay, Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland; 5–300 meters.	Apr–Jun (uncommonly July)	Moderate; potential habitat in grasslands and nearest occurrence is 3.5 miles away.
Baker’s navarretia <i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	1B.1	Inner North Coast Ranges, western Sacramento Valley. Wet areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools; 5–1,740 meters.	Apr–Jul	Moderate; potential habitat in grasslands at the proposed substation site and distribution line alignment. Nearest occurrence is < 0.5 miles away.
Two-fork clover <i>Trifolium amoenum</i>	FE, 1B.1	Historically known from North Coast Ranges, San Francisco Bay area; currently known from occurrences in Marin and Sonoma (*?) Counties. Coastal bluff scrub, valley and foothill grassland, sometimes on serpentine; 5-415 meters.	Apr-Jun	Moderate; potential habitat occurs in grasslands and nearest occurrence is < 5.5 miles away.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	Habitat Requirements/Geographic Distribution/Floristic Province	Blooming Period	Potential to Occur within Project Area
Saline clover <i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	1B.2	Central Coast, Sacramento Valley Marshes and swamps, wet, alkaline areas in valley and foothill grassland, vernal pools; below 300 meters.	Apr-Jun	Low; marginal habitat present in the grasslands in the proposed substation site and distribution line alignment. Nearest occurrence is ~8.0 miles away.

**Notes:** \* = known populations believed extirpated from that County  
? = population location within County uncertain

<sup>1</sup> Listing Status

**U.S. Fish and Wildlife Service**

FE                      Endangered

**California Department of Fish and Game**

SE                      Endangered

**California Native Plant Society**

- 1B                      Plants are rare, threatened, or endangered in California and elsewhere
- 2                        Plants are rare, threatened, or endangered in California but more common elsewhere
- 3                        Plants about which more information is needed to determine their status
- 0.1                     Plants that are seriously endangered in California
- 0.2                     Plants that are fairly endangered in California

**Table 6-2: Special-Status Wildlife Species With Potential to Occur in the Project Area**

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
<i>Invertebrates</i>			
Blennosperma vernal pool andrenid bee <i>Andrena blennospermatis</i>	G2, S2	Uses upland areas near vernal pools for nesting. Uses flowers around vernal pools for foraging. In 1969 it had been recorded from a limited area of the inner Coast Ranges (Contra Costa, Lake, Sonoma, and Yolo Counties), but known distribution has expanded to include Tehama, Solano, San Joaquin, Sacramento, El Dorado, and Placer Counties.	Moderate; Suitable upland habitat exists in grasslands for nesting. Closest CNDDDB record is 5 miles southeast.
<i>Amphibians/Reptiles</i>			
Northwestern pond turtle <i>Actinemys marmorata marmorata</i>	SSC	Found in freshwater ponds, marshes, rivers, streams, and irrigation ditches. Requires exposed rocks and logs for basking. Range is throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries.	Low; suitable aquatic habitat exists within and along Pool Creek, however nearby wetlands only provide marginal habitat for foraging and basking; and the habitat surrounding the poles located near the distribution line is not suitable, therefore, there is a low potential that the turtle would travel into the project area to nest and aestivate.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
California tiger salamander, Sonoma County population <i>Ambystoma californiense</i>	FE, SSC, SCE	Breeds in seasonal ponds and pools. Spends most of the year in rodent burrows or other subterranean refuges in grassland and oak savanna habitats. During breeding migrations, individuals are sometimes found under surface objects such as rocks and logs. Postmetamorphic juveniles retreat to small-mammal burrows after spending a few hours or days in mud cracks near water or tunnels constructed in soft soil. Aquatic larvae seek cover in turbid water, clumps of vegetation, and other submerged debris. Species breeds in vernal pools and other temporary rainwater ponds including cattle ponds following relatively warm rains in November to February and on submerged debris in shallow water. In the Coastal region, populations are scattered from Sonoma County in the northern San Francisco Bay Area to Santa Barbara County (up to elevations of 1067 meters), and in the Central Valley and Sierra Nevada foothills from Yolo to Kern counties (610 meters). The Sonoma population appears to have been geographically isolated from the remainder of the California tiger salamander population by distance, mountains and major waterway barriers for more than 700,000 years.	Unlikely; project area is located on the northern edge of the species' range in Sonoma County. Closest occurrence is 3.75 miles. USFWS stated in their appendage that the proposed substation site is located out of the known range of the CTS.
California red-legged frog <i>Rana aurora draytonii</i>	FT, SSC	Occurs in lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Breeds January to July (peaks in February). Requires 11 to 20 weeks of permanent water for larval development. Females attach eggs to vegetation 2 to 6 inches below the surface. Requires access to aestivation habitat. Individuals have been found considerable distances from breeding sites on rainy nights. California red-legged frogs have been documented in 46 counties in California, but now remain in only 238 streams or drainages in 31 counties. Historically, occurred throughout Sonoma County; now only	Unlikely; Occurrence in Sonoma County is unclear. CNDDDB record shows nearest occurrence is over 10 miles southeast of the proposed substation site and distribution line alignment, and nearby seasonal

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		known in three creeks in Sonoma County (Upper Sonoma Creek, Petaluma Creek-Sonoma Creek).	wetlands are not suitable for breeding habitat (too shallow, do not contain dense vegetation, and aren't anticipated to hold water long enough); no record of sightings in Pool Creek to date.
Foothill yellow-legged frog <i>Rana boylei</i>	SSC	Found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Highly aquatic; spends most or all of life in or near streams, though some have been documented underground and beneath surface objects more than 50 m from water. In California, historically distributed throughout the foothill portions of most drainages from the Oregon border to the San Gabriel. Elevation range in California extends from near sea level to 1940 meters.	Low; could utilize Pool Creek for breeding however only marginal habitat exists at the proposed substation site and low habitat value exists along the distribution line alignment for dispersal habitat.
Western spadefoot toad <i>Spea hammondi</i>	SSC	Occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats. Grasslands with shallow temporary pools are optimal habitats. Most of the year is spent in underground burrows up to 36 inches deep, which they construct themselves. Some individuals also use mammal burrows. Recently metamorphosed juveniles seek refuge in the immediate vicinities of breeding ponds for up to several days after transformation. Breeding and egg laying occur almost exclusively	Unlikely; proposed substation site and distribution line alignment appear to be out of the current range of the toad.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		in shallow, temporary pools formed by heavy winter rains. Ranges throughout the Central Valley and adjacent foothills. In the Coast Ranges it is found from Point Conception, Santa Barbara Co., south to the Mexican border. Elevations of occurrence extend from near sea level to 1363 meters in the southern Sierra foothills.	
<b>Birds</b>			
Cooper's hawk <i>Accipter cooperii</i>	SSC	Hunts in broken woodland and habitat edges; catches prey in air, on ground, and in vegetation. Seldom found in areas without dense tree stands or patchy woodland habitat. Nests in crotches of deciduous trees and in the main crotch, horizontal branches of conifers. Usually nests in second-growth conifer stands, or in deciduous riparian areas, usually near streams.	Moderate; marginal nesting habitat present. Annual grasslands and nearby wetlands could be used for hunting.
Tri-colored blackbird <i>Agelaius tricolor</i>	SSC	Frequents fresh emergent wetlands. Nest may be located up to 4 miles from foraging areas. Seeks cover in emergent wetland vegetation, especially cattails and tules; also in trees and shrubs. Roosts in large flocks in emergent wetland or in trees. Usually nests in dense cattails or tules; also nests in thickets of willow, blackberry, wild rose, and tall herbs. Nest usually located a few ft over, or near, fresh water; also may be hidden on ground among low vegetation. Resident to California.	Low; oak trees along borders of the proposed substation site provide marginal habitat for roosting. May use nearby wetlands for foraging.
Grasshopper sparrow <i>Ammodramus savannarum</i>	SSC	Frequents dense, dry or well-drained grassland, especially native grassland with a mix of grasses and forbs for foraging and nesting. Uses scattered shrubs for singing perches. Thick cover of grasses and forbs is essential for concealment.	Low; habitat in the grassland for breeding and nesting.
Golden eagle <i>Aquila chrysaetos</i>	SSC, FP	Uses rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Nests on cliffs of all heights and in large trees in open areas. Rugged, open habitats with canyons and	Low; no suitable nesting habitat present, could prey in annual grassland.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		escarpments used most frequently for nesting. Needs open terrain for hunting; grasslands, deserts, savannahs, and early successional stages of forest and shrub habitats.	
Short-eared owl <i>Asio flammeus</i>	SSC	Suitable habitats may include salt- and freshwater marshes, irrigated alfalfa or grain fields, and ungrazed grasslands and old pastures. Tule marsh or tall grassland with cover 30-50 centimeters in height can support nesting pairs. Breeding is most regular in northeastern California and in Suisun Marsh, irregular on the southern coast. A fledged young was picked up injured at Annadel State Park, Sonoma County in 1995.	Low; no suitable nesting habitat present. Annual grasslands in project area have been disturbed.
Long-eared owl <i>Asio otus</i>	SSC	Breeds from valley foothill hardwood up to ponderosa pine habitats. Species roosts and nests in riparian or other thickets with small, densely canopied trees. Old crow, magpie, hawk, heron, and squirrel nests in a variety of trees with dense canopy are used. Nest usually 10 to 50 feet above ground, rarely on ground or in tree or snag cavity. Breeding was confirmed at the Russian River near Windsor.	Low; could potentially use the oak woodlands and riparian area near Pool Creek for nesting and roosting sites, and the grasslands for hunting.
Burrowing owl <i>Athene cunicularia</i>	SSC	Frequents open grasslands and shrublands with perches and burrows. Usually nests in old burrows of ground squirrels, or other small mammals. May dig own burrow in soft soil. Pipes, culverts, and nest boxes may be used where burrows are scarce.	Low; presumed extirpated as a breeding species in Sonoma county, but could utilize grassland; many small rodent burrows are within the project area.
Vaux's swift <i>Chaetura vauxi</i>	SSC	Nest in cavities in a variety of trees. Most California nests have been in burned-out and hollow Redwood snags or stumps. Will nest	Low; no suitable nesting habitat

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		in chimneys or other man-made structures. Forage in a variety of habitats, but especially over water. Records indicate breeding in Sonoma County.	available but could use the grasslands for foraging.
Northern harrier <i>Circus cyaneus</i>	SSC	Mostly found in flat, or hummocky, open areas of tall, dense grasses, moist or dry shrubs, and edges for nesting, cover, and feeding; seldom found in wooded areas. Nests on ground in shrubby vegetation, usually at marsh edge. Mostly nests in emergent wetland or along rivers or lakes, but may nest in grasslands, grain fields, or on sagebrush flats several miles from water.	Moderate; suitable nesting and foraging habitat present in the grassland.
Yellow warbler <i>Dendroica petechia brewsteri</i>	SSC	Frequents open to medium-density woodlands and forests with a heavy brush understory in breeding season. In migration, found in a variety of sparse to dense woodland and forest habitats. In summer usually found in riparian deciduous habitats: cottonwoods, willows, alders, and other small trees and shrubs typical of low, open-canopy riparian woodland. Currently occupy much of their former breeding range, except in the Central Valley.	Moderate; suitable habitat exists in oak woodland and they could forage in the annual grassland.
White tailed-kite <i>Elanus leucurus</i>	FP	Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands. Nest placed near top of dense oak, willow, or other tree stand; usually 20 to 100 feet above ground. Nests located near open foraging area.	Moderate; could utilize oak woodland and hunt for prey in annual grassland.
California horned lark <i>Eremophila alpestris actia</i>	SSC	Utilizes a wide variety of open habitats where trees and shrubs are sparse, including grasslands with low grass height. Builds cup-shaped, grass-lined nests on the ground. Found in grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline.	Moderate; could utilize grasslands in the project area for foraging, cover and nesting.
American Peregrine falcon <i>Falco peregrinus</i>	DL, SE, FP	Known nesting sites occur along the Santa Barbara coast, Sierra Nevada, and in other mountains in northern California. In winter, found inland throughout the Central Valley, and occasionally on the	Low; less-than-marginal habitat exists for breeding.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		Channel Islands. Breeds mostly in woodland, forest, and coastal habitats. Requires protected cliffs and ledges for cover. Usually breeds and feeds near water; may hunt over water.	May hunt in nearby wetlands.
San Francisco common yellowthroat <i>Geothlypis trichas sinuosa</i>	SSC	Utilizes woody swamps, brackish marshes and freshwater marshes for breeding. Occupies ecotones between moist and upland habitats. Nests near the ground in grasses, herbaceous vegetation, cattails, tules and some shrubs. Breeding range is in the vicinity of the San Francisco Bay and includes southern Sonoma County.	Low; no suitable nesting habitat available but could use grassland to forage.
Yellow-breasted chat <i>Icteria virens</i>	SSC	Nests in riparian habitats, usually on the borders of streams, creeks, sloughs, and rivers. Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. The nest is usually 2 to 8 ft above ground in dense shrubs along a stream or river. Known to breed in Sonoma County, confirmed nesting in Annadel State Park.	Moderate; could use riparian habitat near Pool Creek for nesting and the annual grassland for foraging.
Loggerhead shrike <i>Lanius ludovicianus</i>	SSC	Inhabits open woodlands, farmland, pastures, annual grasslands, and salt marsh with elevated perches. Utilizes tall shrubs or trees (also use fences and power lines) for hunting perches. Present year round throughout most of the state.	Moderate; suitable nesting, perching, and foraging habitat exists on existing structures and trees.
Bryant's savannah sparrow <i>Passerculus sandwichensis alaudinus</i>	SSC	Occupies low tidally influenced habitats, adjacent rural areas, moist grasslands within and just above the fog belt, and sometimes drier grasslands. In moist upland grasslands, it occurs where herbaceous vegetation is relatively short, with no or little woody plant cover. A moist swale or drainage is often present but not necessary. Nests in dense cover on the ground in grass clumps or under matted grasses or weeds. Perches may be elevated clumps of grass or herbaceous vegetation, scattered low shrubs and trees, or a large variety of human-made structures, such as fences, posts, pipes and machinery. Restricted to a narrow coastal strip from Humboldt Bay south to the	Low; habitat in annual grassland and around the project area is marginal for breeding and nesting.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		Morro Bay area.	
Purple martin <i>Progne subis</i>	SSC	Utilize tree cavities, bridges, utility poles, lava tubes for nesting. Prey on aerial insects near large wetlands and other water bodies, and at upper slopes and ridges. Occur in forest and woodland areas at low to intermediate elevations throughout much of the state. Have been reported in Sonoma County.	Moderate; could use nearby wetlands for foraging, and utility poles and oak woodlands for perching/nesting.
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	SSC	Breeds in marshes with tall emergent vegetation in open areas over deep water. Nest in low vegetation. Small numbers winter, mainly in the southern Central Valley and the Imperial and Colorado River valleys.	Low; no habitat exists for breeding or nesting. Historically used Sonoma County as a breeding site.
<b><i>Mammals</i></b>			
Pallid bat <i>Antrozous pallidus</i>	SSC	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Night roosts may be in more open sites, such as porches and open buildings. Few hibernation sites are known, but probably uses rock crevices.	Moderate; marginal suitable roosting habitat present, may use wetlands for foraging.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	SSC	Prefers mesic habitats. Gleans from brush or trees or feeds along habitat edges. Requires caves, mines, tunnels, buildings, or other human-made structures for roosting. May use separate sites for night, day, hibernation, or maternity roosts. Individuals may move within the hibernaculum to find suitable temperatures.	Moderate; marginal suitable roosting habitat present, may use wetlands for foraging.
Western red bat <i>Lasiurus blossevillii</i>	SSC	Prefers edges or habitat mosaics that have trees for roosting and open areas for foraging. Roosts primarily in trees, less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas. Preferred roost sites are protected from above, open below, and located above dark ground-cover. Such	Moderate; suitable roosting habitat present.

Species Common Name <i>Scientific Name</i>	Listing Status <sup>1</sup>	General Habitat Description	Potential to Occur within Project Area
		sites minimize water loss. Roosts may be from 0.6-13 meters above ground level. Females and young may roost in higher sites than males.	
American badger <i>Taxidea taxus</i>	SSC	Occurs in herbaceous, shrub, and open stages of most habitats with dry, friable soils. Badgers dig burrows in friable soil for cover and frequently reuse old burrows, although some may dig a new den each night, especially in summer.	Low; no large burrows were noticed at the time of the assessments, and the annual grassland area is likely too small of an area for the badger to inhabit.

<sup>1</sup> Listing Status:

**U.S. Fish and Wildlife Service**

FE Endangered  
 FT Threatened  
 DL De-listed

**California Department of Fish and Game**

FP California Fully Protected species: May not be taken or possessed without a permit from the California Fish and Game Commission  
 SSC California Special Species of Concern: Vulnerable to extinction in California due to declining population levels, limited range, or other threats  
 SCE State candidate listing for Endangered  
 ST State-listed as Threatened  
 SE State-listed as Endangered  
 G,N,S The conservation status of a species or community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = Global, N = National, and S = Subnational). The numbers have the following meaning: 1 = critically imperiled, 2 = imperiled, 3 = vulnerable to extirpation or extinction, 4 = apparently secure, 5 = demonstrably widespread, abundant, and secure

## 6.4 EXISTING CONDITIONS

The proposed substation site is located on land that has been graded following the removal of buildings associated with a horse boarding and training facility in 2006. Annual grassland vegetation is starting to grow at the site and could provide habitat for special-status species. The proposed substation site is bordered by Mitchell Lane to the north, an existing mitigation bank/preserve to the northwest, a vacant graded parcel to the east, a wetland restoration area immediately south, and Conde Lane Mitigation Site and oak woodland/annual grassland habitat and Pool Creek located further south. These areas also provide suitable habitat for special-status species. A railroad ROW and low-density housing development are located to the west. Valley oak trees border the proposed substation site on the north and west sides, and provide suitable nesting habitat for avian species and roosting sites for bats. The existing Fulton No. 1 60 kV power line is located along the west side of the NWPRR tracks adjacent to a low-density housing development area. One pole from the existing power line will be replaced (pole no. 3/11) to loop into the proposed substation; it will be located 20 feet north of the existing pole in ornamental vegetation. The portion of the power line that will be looped into the proposed substation will span over the row of valley oak trees located along the railroad tracks. Five existing wood distribution poles will be replaced along Mitchell Lane with approximately 1,000 feet of underground cable placed in a conduit. In addition, approximately 3,230 feet of underground distribution line will be installed along Mitchell Lane and Hembree Lane. The distribution line reconductoring work will require reconductoring of approximately 4,500 feet of existing overhead distribution line and replacement of 18 wooden poles along Mitchell Lane, across Highway 101, and along Hembree Lane. An underground circuit (Circuit 1) will extend underground west from the substation on the south side of Mitchell Lane to the western curb cut, then turn northwest into the west-bound travel lane of Mitchell Lane, cross under the railroad by jack and bore construction technique, and finally turn southwest back across Mitchell Lane to rise up on the existing pole on the west side of the railroad tracks. Circuit 2 will extend underground east in the public utility easement (PUE) on the south side of Mitchell Lane approximately 450 feet, bore under Mitchell Lane to the north side approximately 100 feet, and rise up on an overhead pole (one of the 18 existing poles that will be replaced). The overhead line will continue east along the north side of Mitchell Lane until it crosses Conde Lane and north across Highway 101. After crossing Highway 101, Circuit 2 will continue southeast on replaced poles along the west side of Hembree Lane until it crosses Victory Lane, and then will extend south underground for approximately 1,200 feet to intercept the existing main feeder line that crosses Highway 101 on Shiloh Road.

The existing vegetation along the segments of the alignment and the location of the future underground distribution line conduits along Mitchell Lane and Conde Lane include annual grasses located near the sidewalk within the PUE, which are similar to that found within the proposed substation site. A section of the alignment along Mitchell Lane is located less than 5 feet from an intermittent stream that runs north and south of the line; the stream flows under Mitchell Lane where the line spans it. The section of the alignment heading north along Conde Lane is located less than 100 feet away from an existing culvert and associated wetland feature on the east side of Conde Lane. Poles located within the alignment along Hembree Lane are located on the roadside curb (no sidewalk present) on the west of Hembree Lane adjacent to Highway 101, where vegetation surrounding poles was primarily ruderal with some annual

grasses and sparse oak trees. A section of the alignment along Hembree Lane spans Pool Creek. Valley oaks located near existing poles along Hembree Lane and along the northern front of the proposed substation and easterly adjacent property (along Mitchell Lane) may require trimming or removal.

#### **6.4.1 Habitat Types**

The habitat types present within the proposed substation site and the distribution line alignment are annual grassland, ruderal/disturbed, oak woodland, developed, intermittent stream and seasonal watercourse. The Fulton No. 1 60 kV power line ROW is located in developed lands. The valley oaks that border the north and west sides of the proposed substation site and are dispersed along the distribution alignment are native trees, and historically the sites and alignment were most likely part of the oak woodland habitat type. The oak woodland habitat type is discussed below.

The intermittent stream and Pool Creek are briefly described below because the distribution line alignment spans these features and they could potentially be indirectly affected.

Nearby wetland and riparian habitat are not in the footprint of the proposed substation site and distribution line alignment, but are included in the analysis of potential indirect effects.

##### **6.4.1.1 Annual Grassland**

Annual Grassland is found within the proposed substation site, distribution line alignment, and in the adjacent parcels to the east and south of the site. It is similar to Holland's (1986) Non-native Grassland, an upland type that consists of a dense-to-sparse cover of introduced annual grasses, mainly less than three feet in height. This type sometimes includes native perennial grasses, and can include a diverse assemblage of native annual forbs. Species composition of grasses and forbs can vary considerably among stands.

Annual Grassland within the project area is dominated almost completely by introduced non-native grasses and forbs, including "weedy" species. The most common grasses in these areas include: brome grasses (*Bromus* spp.), barleys (*Hordeum* spp.), oat grasses (*Avena* ssp.), and Italian ryegrass (*Lolium multiflorum*). Common forbs include: common groundsel (*Senecio vulgaris*), mayweed (*Anthemis cotula*), mustard (*Brassica* sp.), wild radish (*Raphanus raphanistrum*), various species of vetch (*Vicia* spp.), mallow (*Malva* sp.), white-stem filaree (*Erodium moschatum*), and a variety of clovers (*Trifolium* spp.). Few native plants were observed in these grassland patches. Curly dock (*Rumex crispus*), which is a facultative wetland plant, can be found irregularly dispersed within the surveyed area.

Many wildlife species utilize annual grasslands for foraging habitat and some make seek refuge in burrows located within the grasslands. Raptors, including red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), barn owl (*Tyto alba*), American kestrel (*Falco sparverius*), northern harriers (*Circus cyaneus*), and others commonly use open grassland areas for foraging purposes, while species such as western meadowlark (*Sturnella neglecta*) and burrowing owl (*Athene cunicularia*) use open grassland areas for nesting. CTS utilize burrows in grasslands for

aestivation<sup>5</sup>. Reptiles that commonly breed within grassland habitat include western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), and western rattlesnake (*Crotalus viridis*). The northwestern pond turtle (*Actinemys marmorata marmorata*) may seek out grasslands for refuge habitat. Mammals in grassland include the coyote (*Canis latrans*) and California ground squirrel (*Spermophilus beecheyi*).

#### **6.4.1.2 Ruderal/Disturbed**

This plant community is dominant along the roadsides. Ruderal vegetation is dominated by non-native weedy species in areas that have been significantly disturbed by agriculture, construction, or other land-clearing activities. The distribution line alignment is dominated by black mustard (*Brassica nigra*), filaree (*Erodium* sp.), perennial mustard (*Hirschfeldia incana*), English plantain (*Plantago lanceolata*), yellow star thistle (*Centaurea solstitialis*), and bristly ox tongue (*Picris echioides*). Wildlife commonly found in ruderal areas includes species tolerant of disturbance, such as California ground squirrel, western fence lizard and pocket gopher (*Thomomys bottae*).

#### **6.4.1.3 Oak Woodland**

Oak woodland with less dense canopy occurs where the oak woodland intergrades with annual grassland on the northern and western borders of the proposed substation site. Historically, the proposed substation site contained more oaks, and these remaining oaks are remnant of what used to be a more defined oak woodland habitat.

Small oak trees (less than 6 inches in diameter at breast height) occur throughout the distribution line alignment.

Oaks provide food, cover, and nesting habitat for many species of wildlife. Typical bird species that utilize oak woodlands include European starling (*Sturnus vulgaris*), California quail (*Callipepla californica*), oak titmouse (*Baeolophus inornatus*), California towhee (*Pipilo crissalis*), western scrub jay (*Aphelocoma californica*), acorn woodpecker (*Melanerpes formicivorus*), nuthatches (*Sitta* spp.), western bluebird (*Sialia mexicana*), red-shouldered hawk (*Buteo lineatus*), and other raptors. Typical mammals found in oak woodlands include western gray squirrel (*Sciurus griseus*), bats, mule deer (*Odocoileus hemionus*), and California ground squirrel.

#### **6.4.1.4 Developed**

The pole to be replaced along the existing Fulton No. 1 60 kV power line is located in landscaped vegetation, between Eagle Drive and the railroad tracks.

Developed/ornamental habitat includes commercial and residential development and associated infrastructure, and is commonly landscaped with nonnative ornamental species. Though this habitat type does not typically host many native species, a number of wildlife species commonly

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<sup>5</sup> Although CTS will utilize burrows in grasslands, the proposed substation site is not within the known range of the CTS.

utilize developed/ornamental habitat for foraging and roosting, and may even nest in ornamental trees or under bridges and other urban structures. Species typically associated with the urban environment include the western scrub jay, raccoon (*Procyon lotor*), European starling, northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), striped skunk (*Mephitis mephitis*), opossum (*Didelphis virginiana*), and rock dove (*Columba livia*). Other bird and bat species may also utilize developed/ornamental habitats for foraging, roosting, and/or nesting.

#### **6.4.1.5 Intermittent Stream**

The distribution line alignment spans an intermittent stream on the north side of Mitchell Lane. The section of stream that the line alignment spans is underground; however, the line alignment is less than 5 feet from where the stream becomes visible on the north side of Mitchell Lane. The vegetation occurring near the intermittent stream adjacent to the alignment includes mint (*menthe* spp.), rabbitsfoot grass (*Polypogon monspeliensis*), dock (*Rumex* spp.), dallisgrass (*Paspalum dilatatum*), nutsedge (*Cyperus* spp.), and water plantain (*Alisma plantago-aquatica*).

#### **6.4.1.6 Seasonal Watercourse**

A section of the alignment along Hembree Lane spans Pool Creek. The plant species observed in this section of Pool Creek included black mustard, Himalayan blackberry (*Rubus discolor*), arroyo willow (*salix lasiolepis*) and fennel (*Foeniculum vulgare*). Pool Creek provides habitat for fishes, amphibians, and numerous aquatic invertebrates.

### **6.4.2 Special-Status Plant Species**

Based on the CNDDDB searches, the CNPS' online *Inventory of Rare & Endangered Plants*, and the field habitat assessment conducted by ICF Jones & Stokes, it was determined that the initial larger site does not contain potential habitat (e.g., chaparral, bogs, marshes, coniferous forest) for 11 of the 26 species that could occur within the elevation range of the site. The remaining 15 special-status plants were identified as potentially occurring in the larger surveyed area because habitat exists for them (i.e., grasslands, seasonal wetlands). As the 3.2-acre proposed substation site and the distribution line alignment do not contain vernal pools or seasonal wetlands, 6 additional plants were ruled out from occurring at the site and along the alignment, leaving a total of 9 special-status plants that could potentially occur at the site and along the alignment. Only species that are federally or state-listed as threatened, endangered, and/or have a CNPS rating, and that are considered to have an unlikely, low, moderate, or high potential to occur or be affected by the project are listed in Table 6-1. The status, geographic distribution, habitat requirements, recorded blooming period, and potential of occurrence for each of the 9 species are shown in Table 6-1.

### **6.4.3 Special-Status Wildlife Species**

Special-status wildlife species that could potentially occur in the project area were identified based on the preliminary biological assessments, the field habitat assessments and surveys, CNDDDB and CWHR database searches, and literature reviews. Species that are federally or state-listed as threatened, endangered, fully protected, candidates, species of concern, or have a

conservation status, and that are considered to have an unlikely, low, moderate, or high potential to occur or be affected by the project are listed in Table 6-2. Based on the habitat types in the project area, one invertebrate, five amphibian/reptiles, nineteen birds, and four mammals were identified as having potential to occur within the proposed substation site, distribution line alignment, and existing Fulton No. 1 60 kV power line ROW nearby pole no.3/11. The status, general habitat requirements, and potential for occurrence of all 28 species are shown in Table 6-2.

#### **6.4.4 Water Features**

There are no potential jurisdictional waters or wetland areas in the proposed substation site.

One section of the distribution line alignment along Mitchell Lane is located less than 5 feet from an intermittent stream, and another section of the alignment is located less than 100 feet from an existing culvert. One section spans Pool Creek.

The *Santa Rosa Plains Conservation Strategy* states that the small parcel to the northwest of the proposed substation site is set aside as an existing mitigation bank/preserve.

### **6.5 IMPACTS**

#### **6.5.1 Significance Criteria**

Standards of significance were derived from Appendix G of the CEQA Guidelines. Impacts to biological resources may be considered significant if they were to:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as threatened or endangered, or as a candidate, sensitive, or special-status species (including MBTA species) in local or regional plans, policies, or regulations, or by CDFG or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community (e.g., serpentine grassland) identified in local or regional plans, policies, regulations, or by the CDFG or USFWS;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

- result in the introduction or spread of a noxious weed or substantially increase the dispersal and spread of existing populations of noxious weeds such that an existing plant community or wildlife habitat is substantially degraded; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other governmental habitat conservation plan.

Significant impacts to biological resources are not limited to projects affecting only federally or state-listed endangered species. A species that is not listed will also be considered rare or endangered if it can be shown to meet the following criteria (CEQA Guidelines 15380):

- its survival and reproduction in the wild are in immediate jeopardy from one or more causes,
- it exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens, or
- it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

## **6.5.2 Construction, Operation and Maintenance**

Impacts to biological resources resulting from the construction of the proposed substation, reconductoring of the distribution line alignment, and connection of the Fulton No. 1 60 kV power line into the proposed substation depend primarily on the proximity and quality of the habitat, the presence of special-status species, the presence of breeding habitat, and the effectiveness of measures instituted to protect these resources from exposure to project activities. Impacts to biological resources due to construction of the proposed substation, reconductoring of the distribution line alignment, trenching and/or boring for installing the underground distribution line, connection of the Fulton No. 1 60 kV power line into proposed substation, as well as operations and other project elements, are less than significant with incorporation of the measures provided in Section 6.6 Avoidance and Protection Measures.

## **6.5.3 Habitat Types in Project Site, Fulton No. 1 60 kV Power Line ROW, and Distribution Line Alignment**

### ***6.5.3.1 Annual Grassland***

Construction of the proposed substation will result in the approximate permanent loss of 3.2 acres of annual grassland. Trenching and/or boring to install the distribution line underground will result in the approximate temporary loss of less than 0.5 acre of annual grassland. The grasslands could provide habitat for a variety of species; however, these impacts will be less than significant with implementation of the avoidance and protection measures incorporated into the project (see Section 6.6 Avoidance and Protection Measures).

### ***6.5.3.2 Ruderal/Disturbed***

Approximately 4,200 feet of the distribution line alignment spans ruderal/disturbed vegetation. This non-native vegetation provides minimal habitat value for sensitive biological resources. Impacts to this vegetation would be less than significant.

### **6.5.3.3 Oak Woodland**

Construction at the proposed substation site, reconductoring, and connection of the power line to the proposed substation will result in the loss of one oak tree in the oak woodland habitat. Additionally, some trees along the Fulton No. 1 60 kV power line ROW may need to be trimmed. The protection measures listed in Section 6.6 Avoidance and Protection Measures will help to reduce the impact to trees to a less-than-significant level.

### **6.5.3.4 Developed**

It is anticipated that some ornamental shrubs located in the landscaped vegetation adjacent to where the pole is located will need to be replaced following construction. Impacts to biological resources will be less than significant.

### **6.5.3.5 Intermittent Stream and Seasonal Watercourse**

One section of the distribution line alignment spans an intermittent stream and another section spans Pool Creek. Although unlikely, these water features could be affected by sedimentation runoff from disturbed soils. Sedimentation from ground disturbance at the project site and along the distribution line alignment could wash from the site into these aquatic habitats, especially during rain events. As a result of sedimentation runoff, species occurring in these habitats could be indirectly affected.

The avoidance and protection measures as listed in Section 6.6 Avoidance and Protection Measures and in Chapter 10: Hydrology and Water Quality will ensure that the impacts to the hydrology and aquatic habitats are less than significant.

## **6.5.4 Habitat Types in Areas Adjacent to the Project Site**

### **6.5.4.1 Wetlands, Intermittent Streams, and Creek**

There are nearby wetlands and sections of the intermittent stream and Pool Creek that are adjacent to the proposed substation site, Fulton No. 1 60 kV power line ROW or distribution line alignment. The proposed substation site is relatively flat and runoff is slow, and it is unlikely that sedimentation runoff from disturbed soils would reach the wetlands, intermittent stream, or Pool Creek.

The avoidance and protection measures as listed in Section 6.6 Avoidance and Protection Measures and in Chapter 10: Hydrology and Water Quality will ensure that the impacts to the hydrology and aquatic habitats are less than significant.

## **6.5.5 General Wildlife**

Direct mortality of general wildlife species could occur during construction as a result of increased vehicular and foot traffic, use of heavy construction equipment, grading and excavation for the proposed substation, pulling of new circuits, trenching and/or boring for the

underground distribution line, and other project activities. Approximately 3.2 acres of annual grassland will be permanently lost due to the construction of the proposed substation.

Some wildlife species are expected to leave the immediate vicinity of the project area once construction starts and will instead use nearby unaffected habitat. As a result, only a minimal amount of direct mortality is expected to occur. Impacts to general wildlife populations will be less than significant; therefore, no mitigation is required.

#### ***6.5.5.1 Nesting Passerines***

Noise and activity associated with the proposed substation construction and trenching and/or boring could cause disturbance to other avian species that are not designated as special-status species. These include migratory waterfowl, shorebirds, and other birds common to the area. Work performed near foraging and resting habitat could cause some birds to disperse, but this would be a temporary and less than significant impact. Construction activity also has the potential to cause nest abandonment if nests are present. Species covered under the MBTA are protected, and nest abandonment may be a significant impact. However, PG&E has designed the project with avoidance and protection measures to minimize impacts to nesting passerines as described in Section 6.6 Avoidance and Protection Measures. Impacts will be less than significant.

#### ***6.5.5.2 Bird Electrocutions***

Electrocutions occur when a bird simultaneously contacts two conductors of different phases or a conductor and the ground. This happens most frequently when a bird attempts to perch on a structure with insufficient clearance between these elements. Most lines that electrocute raptors are energized at voltage levels between 1 kV and 69 kV. The project power lines are insulated for operation at 115 kV and the resulting phase separation (greater than 60 inches) effectively precludes bird electrocutions.

Although the non-energized metal structures in a substation are grounded, birds and climbing animals can be electrocuted by reaching energized conductors from grounded equipment. Recent surveys have reported discussion on bird- and animal-caused substation outages in the United States. These surveys focus on problems that wildlife cause to substations, but indicate that most problems in substations are caused by tree squirrels, raccoons, domestic cats, and birds, especially starlings, blackbirds, and pigeons. Raptors are rarely electrocuted at substations, other than an occasional hawk or owl attempting to roost or feed on the equipment. In a qualitative survey of animal-caused outages at PG&E substations, squirrels, raccoons, and birds were identified as the primary pests. Electrocutions of wildlife as a result of the project will be very rare. Avoidance and protection measures to minimize bird electrocutions are included in Section 6.6 Avoidance and Protection Measures.

#### ***6.5.5.3 Bird Collisions***

Bird collisions with manmade structures have been reported in scientific literature for over a century. A number of bird collision studies have been done at transmission lines. These studies

suggest that the primary factor in determining the number of birds colliding with a transmission line is the number of birds flying through the area.

The potential for raptors to utilize the project site and surrounding habitat listed in Table 6-2: Special-Status Wildlife Species With Potential to Occur in the Project Area is low to moderate. Bird collisions are most likely to occur where there are long spans of line in open areas. Due to the density of the existing trees and vegetation along the railroad and the surrounding urbanized area, there is low possibility that a raptor would collide with the power line. Impacts will be less than significant. Mitigation, therefore, is not proposed.

#### **6.5.6 Critical Habitat**

The project site and distribution line alignment do not occur in any designated critical habitat for any federally-listed species; therefore, no proposed or designated critical habitat will be adversely modified or destroyed, resulting in no impacts.

#### **6.5.7 Special-Status Plant Species**

USFWS has already assessed potential impacts to federally listed plant species in their site-specific appendage to the programmatic biological opinion. The USFWS appendage states the mitigation that was required for three special-status plants which likely could have been found in the wetland habitat near the project site; Burke's goldfields, Sonoma sunshine, and Sebastopol meadowfoam. Many-flowered navarettia was not included in the appendage because it only occurs in a few locations on the Santa Rosa Plain. Sonoma sunshine was determined to have moderate potential for occurring at the current project site while Burke's goldfields, Sebastopol meadowfoam, and many-flowered navarettia were determined not to occur at the project site. The developer of the subdivision that created the project site, however, has already secured appropriate mitigation credits for site-specific impacts to all of these species at the initial larger site.

No special-status plants were found during the two 2009 botanical surveys conducted in the appropriate blooming periods, nor in the 2009 biological survey for the distribution line alignment.

There will be no impacts to special-status plant species at the proposed substation site, along the Fulton No. 1 kV line ROW or the distribution line alignment.

#### **6.5.8 Special-Status Wildlife Species**

A summary of impacts to potentially occurring special-status wildlife species as a result of the proposed substation construction and operation is provided below. A detailed assessment of avoidance and protection measures for these impacts is provided in Section 6.6 Avoidance and Protection Measures.

#### **6.5.8.1 *Blennosperma vernal pool andrenid bee***

The annual grasslands at the project site and along a portion of the distribution line alignment may provide suitable nesting habitat for the blennosperma vernal pool andrenid bee (bee). The bee uses uplands near vernal pools to build nests on the ground. The grasslands may qualify as suitable upland nesting habitat for the bee. Direct mortality to the bee and young in the nest could result from construction activities, such as the clearing of the grassland and movement of heavy equipment across the site and alignment, and trenching and/or boring through the grassland area for installation of the underground distribution line. The protection measures included in Section 6.6 Avoidance and Protection Measures instituted to minimize impacts to the nesting bees will result in less than significant impacts to the bee.

#### **6.5.8.2 *Northwestern pond turtle***

Although there is low potential that the northwestern pond turtle (NWPT) would utilize the grasslands at the proposed substation site and along the distribution line alignment for nesting and/or aestivation, construction activities that may remove or disturb the grasslands occupied by the NWPT could result in direct mortality of the adults, juveniles and nests. The NWPT could get crushed by construction equipment and vehicles and their nests could get destroyed from ground disturbing activities. The NWPT could also get crushed as they try to migrate back to aquatic habitats adjacent to the proposed substation site and distribution line alignment or Pool Creek. Suitable aquatic habitat exists near the distribution line alignment in Pool Creek and the wetland feature, and marginal aquatic habitat exists adjacent to the proposed substation site and distribution line alignment in the wetlands. Sedimentation runoff may indirectly affect the aquatic habitat of the NWPT should the sedimentation reach any of these aquatic habitats. The protection measures that will be instituted to minimize impacts to potentially nesting and migrating adult NWPT, juveniles, and nests, as well as the measures to protect the aquatic habitat, will result in less than significant impacts to the NWPT. The avoidance and protection measures to protect this species are included in Section 6.6 Avoidance and Protection Measures.

#### **6.5.8.3 *California tiger salamander***

The USFWS has already assessed potential impacts to the California tiger salamander (CTS) associated with development of the project site in their appendage to the programmatic biological opinion. The USFWS appendage states that development of the site is not likely to adversely affect the endangered Sonoma County population of the CTS because the parcel is located out of the known range of the CTS. Therefore there will be no impact to this species.

#### **6.5.8.4 *California red-legged frog***

In a personal communication between TRC and Vince Griego of the USFWS on May 11, 2009, Mr. Griego indicated that it is unlikely that the California red-legged frog (CRLF) would occur at the project site. There are CRLF occurrences within the study area of the Conservation Strategy; however the occurrences are located approximately 15 miles south of the project in the vicinity of Stony Point Road west of Cotati. It is unclear to the USFWS what the population status of the CRLF is north of Cotati. No CRLF have been observed during numerous CTS or crustacean surveys in the Santa Rosa Plain. Additionally, Brad Schaffer of the Center for Population

Biology at the University of California, Davis, informed the USFWS that he believes that the inundation period of vernal pools in the Santa Rosa Plain is likely too short for CRLF. However, if CRLF are found within the project site during construction, this would be considered new information to the USFWS and an incidental take permit would need to be obtained to provide exemption from Section 9 of the ESA.

Other planned projects within the Town of Windsor and the Sonoma County area also indicate that the CRLF is unlikely to occur within the project area:

- The nearby Sonoma Marin Area Rail Transit (SMART) Project (located adjacent to the project site along the existing Northwestern Pacific Railroad) states in its *Draft Environmental Impact Report* that, “no California red-legged frogs were detected in protocol surveys conducted in consultation with the USFWS; [and] therefore, this species is considered unlikely to occur within the proposed project corridor.” The Conde Lane Industrial Subdivision Project (located south of the project area) biological impact analysis indicated similar findings.
- In the USFWS, ‘*Formal Consultation on three Hwy 101 Lane Widening and Improvement Projects in Sonoma County, CA: the Old Redwood Highway in Petaluma to Rohnert Park Expressway in Rohnert Park Project, the Wilfred Avenue Interchange Project and the Steele Lane in Santa Rosa to Windsor River Road Project*’, the USFWS states, “The proposed three Highway 101 projects are not likely to adversely affect the threatened [California red-legged frog] CRLF due to an apparent lack of occupied or potential habitat for this listed species in the project area.” The three Highway 101 project areas analyzed in this biological opinion encompassed Windsor River Road, located north of the project site, and the stretch of Highway 101 east of the project site.
- The Windsor Eastside Road Storage Project *Environmental Impact Report* and *Habitat Assessment* deemed aquatic habitat unsuitable for the CRLF, and consequently, upland corridors as having no potential for impact to CRLF.

Information from the USFWS and analysis of other projects near the project site suggest that it is unlikely that the CRLF will utilize the nearby wetlands and upland habitat within the project site for breeding, dispersal or refuge habitat. Therefore, the project is not likely to adversely affect the California red-legged frog, and there will be no impacts to this species.

#### **6.5.8.5 Western spadefoot toad**

It is unlikely that the western spadefoot toad (WST) would utilize the nearby wetlands for feeding or dig burrows in the annual grassland at the project site and distribution line alignment as the proposed substation site and alignment are located out of the current and known range of the WST. Therefore, the project is not likely to adversely affect the WST, and there will be no impacts to this species.

#### **6.5.8.6 Foothill yellow-legged frog**

Although only marginal habitat exists at the proposed substation site and along the western portion of the distribution line alignment, construction activities that affect dispersal habitat may disturb or remove habitat occupied by or potentially occupied by the Foothill yellow-legged frog (FYLF). Movement of construction equipment, grading and clearing activities, trenching and/or boring, and construction of the proposed substation will destroy the grassland habitat that the FYLF may utilize. Additionally, FYLF could become injured or killed as a result of the activities conducted in construction of the proposed substation. Although the seasonal wetlands located south of the proposed substation site and western portion of the distribution line alignment do not provide adequate breeding habitat for the FYLF, the FYLF could still utilize the wetlands for aquatic refuge habitat. In addition, the FYLF could utilize Pool Creek and the wetland feature near the distribution line alignment as a migratory corridor. Sedimentation may indirectly affect the aquatic habitat of the FYLF should the sedimentation reach the seasonal wetlands, Pool Creek, or wetland feature located near the proposed substation site and distribution line alignment. The protection measures that will be instituted to minimize impacts to potentially dispersing FYLF, as well as the measures to protect the aquatic habitat, will result in less than significant impacts to the FYLF. These measures to protect this species are included in Section 6.6 Avoidance and Protection Measures.

#### **6.5.8.7 Raptors and other listed birds**

Noise and activity associated with project construction during the non-nesting season could disturb raptors and other sensitive birds, and cause them to temporarily avoid the construction area. This would be a less than significant impact. Sensitive raptor and other bird species could abandon nesting attempts if disturbed during the breeding season during construction. This could be a potentially significant impact. The permanent loss of foraging habitat is expected to be a less than significant impact because of the available grassland habitat adjacent and south of the proposed substation site and distribution line alignment. Protection measures to reduce potentially significant impacts to raptors and other sensitive birds to less than significant levels are included in Section 6.6 Avoidance and Protection Measures.

#### **6.5.8.8 Bats**

There is suitable habitat for bats in the oaks around the project area. Impacts to special-status bat species include the potential for destruction of individual bats, if present, which would be a potentially significant impact. Construction noise could cause bats to abandon their roosts and could result in reproductive failure, which would also be a significant impact. Avoidance and protection measures ensure that impacts to bats are less than significant are included in Section 6.6 Avoidance and Protection Measures.

#### **6.5.8.9 American badger**

Marginal foraging and burrowing habitat exists in the proposed substation site and in the western section of the distribution line alignment for the American badger (badger). The permanent loss of upland habitat may occur as a result of the proposed substation construction and trenching and/or boring for the underground distribution line. Implementation of the mitigation measures

in Section 6.6 Avoidance and Protection Measures will ensure no direct mortality occurs. Removal of or disturbance to upland habitat will not be considered potentially significant impacts given the marginal quality of the habitat. Additionally, implementation of avoidance and protection measures included in Section 6.6 Avoidance and Protection Measures will ensure that these impacts are less than significant.

### **6.5.9 Noxious Weeds**

The proposed substation site will be turned into a graveled industrial site with a surrounding landscaped buffer. The proposed substation site and entire distribution line alignment will be surveyed for noxious weeds during the special-status plant species surveys in the appropriate season prior to construction and PG&E's vegetation management crew will implement their standard vegetation practices. If any noxious weeds are found, avoidance and protection measures in Section 6.6 will be addressed to stop the spread of the weeds into other areas. Implementation of these measures will ensure that the impact of noxious weeds are less than significant.

## **6.6 AVOIDANCE AND PROTECTION MEASURES**

The following avoidance and protection measures are recommended to avoid or minimize anticipated impacts to biological resources from project development:

- An ongoing special-status species/sensitive habitat education program for construction crews will be conducted by a qualified biologist(s) prior to the commencement of the project and during construction activities. Sessions will include discussion of the FESA and CESA, the consequences of noncompliance with these acts, identification and values of sensitive species and adjacent wetland habitats, and the importance of keeping all project activities and sediments within the designated work area. A fact sheet or other supporting materials containing this information will be prepared and distributed. Upon completion of training, employees will sign a form stating that they attended the training and understood all of the conservation and protection measures.
- The wetlands, intermittent stream, and Pool Creek will be denoted as environmentally sensitive areas and will be avoided during construction at all times. Best Management Practices will be implemented between the poles and Pool Creek and between the poles and the intermittent stream to avoid sedimentation or pollutant runoff resulting from construction activities associated with the distribution line alignment reconductoring.
- Soil and vegetation disturbance will be minimized to the greatest extent possible.
- An educational brochure will be produced for construction crews working on the project. Color photos of some of the special-status species will be included, as well as a discussion of protective measures agreed to by PG&E and the resource agencies.

- A pre-construction wildlife survey will be conducted prior to the start of construction activities to identify any special-status species in the proposed substation site, Fulton No. 1 60 kV power line and distribution line alignment, nesting birds or mammals, and occupied burrows. Should a sensitive wildlife species be found, CDFG and/or USFWS will be contacted immediately.
- A biological monitor will be on-site during grading activities and installation of the silt fence around the proposed substation site perimeter and needed areas along the distribution line alignment. After these activities are completed, the biological monitor will visit the proposed substation site and distribution line alignment once a week. If necessary, the monitor will inform the project foreman of any construction activities that compromise environmental integrity. The project foreman will have the authority to stop and/or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project. The biologist will complete a weekly report summarizing activities and environmental compliance.
- Trash dumping, firearms, and pets will be prohibited in project work areas.

### **6.6.1 Special-Status Plant Species**

Because no special-status plant species were found during the 2009 botanical surveys, no additional avoidance and protection measures will be implemented other than what is stated in the USFWS programmatic biological opinion and the appendage to the programmatic biological opinion for special-status plant species.

### **6.6.2 Special-Status Wildlife Species**

#### ***6.6.2.1 Blennosperma vernal pool andrenid bee***

The following practice will be implemented as part of the project design to minimize impacts to the areas potentially occupied by the blennosperma vernal pool andrenid bee:

- Precautions will be taken to minimize the introduction of noxious or invasive weeds into the adjacent seasonal wetlands in order to protect the plants that provide habitat for the bee (see Section 6.6.2.8 Noxious Weeds).

#### ***6.6.2.2 Yellow-legged frog, Northwestern pond turtle***

The following practices will be implemented as part of the project design to minimize disturbance to areas potentially occupied by FYLF and NWPT.

- A qualified biologist shall conduct a pre-construction survey in the project area no earlier than two days before the start of ground-disturbing activities for the FYLF and NWPT. The annual grasslands, intermittent stream, portion of Pool Creek spanned by the distribution line alignment and nearby wetlands will be surveyed. If these species are found near any proposed construction areas, impacts on individuals and their habitat shall be avoided to the extent feasible. If the FYLF or NWPT is determined to be present in work areas, the biologist

will contact CDFG to obtain approval to capture the frog or turtle prior to construction activities and relocate them to nearby, suitable habitat out of harm's way.

- Mobile equipment will not be parked overnight within 100 feet of aquatic habitat. Stationary equipment (e.g., pumps and generators) used or stored within 100 feet of aquatic habitat will be positioned over secondary containment.

### **6.6.2.3 Raptors**

Protective measures that will be implemented include:

- Anti-perch devices may be applied to the overhead distribution line improvements associated with the project to inhibit raptor perching and nesting.
- Prior to the start of construction, a survey for potential raptor nests will be performed by a qualified biologist at the proposed substation site, along the Fulton No. 1 60 kV power line and distribution line alignment. It is expected that if construction occurs within or nearby potential nests before the onset of the breeding season, the construction disturbance may cause the raptors to seek alternate sites for breeding and nest construction.
- If construction activities do not start until the onset of the nesting season for raptors (generally March through September), a qualified biologist will conduct a raptor survey at the proposed substation site, along the Fulton No. 1 60 kV power line and distribution line alignment and of the surrounding area within 500 feet.
- In the event that an active raptor nest is found within 500 feet of the project area, USFWS and/or CDFG will be consulted to determine appropriate buffer and monitoring requirements.

### **6.6.2.4 Nesting Passerines**

Protective measures that will be implemented include:

- During the spring breeding season (and prior to the start of construction), the proposed substation site, Fulton No. 1 60 kV power line and distribution line alignment will be surveyed for potential breeding birds. If active nests or breeding species are located prior to construction, PG&E will consult with the USFWS and/or CDFG to coordinate mitigation if the active nests cannot be avoided.

### **6.6.2.5 Bats**

Protective measures that will be implemented include:

- Before the spring breeding season (and prior to start of construction), a survey for roosting or maternity colonies will be performed by a qualified biologist at the proposed substation site, and along the Fulton No. 1 60 kV power line and distribution line alignment. It is expected that if construction occurs near suitable roosting habitat before the onset of breeding season,

the construction disturbance will cause the bats to seek alternate sites for breeding and nest construction.

- If avoidance of an active roosting or maternity colony is not practicable, a sufficient buffer will be established at the discretion of the appropriate agency.
- In the event that a roosting or maternity colony occurs within or near the project area, the CDFG will be notified, and a qualified biological monitor will be provided and will remain on-site during construction activities to ensure there is no nest abandonment

#### **6.6.2.6 American badger**

The following practices will be implemented as part of the project design to minimize disturbance to areas potentially occupied by the American badger.

- Badger dens will be clearly demarcated with appropriate flagging and signs and avoided if possible.
- If a badger den cannot be avoided, CDFG will be consulted to discuss the possible relocation of the badger.

#### **6.6.2.7 Bird Electrocutions**

Although electrocutions of sensitive species at substations are expected to be very rare events, perch deterrents may be placed on the distribution line improvements associated with the project to help minimize bird electrocutions. Distribution line replacement wood poles will use an avian-safe design to protect raptors and other birds from being electrocuted. Power line poles installed will provide the following clearances:

- At least 60 inches of separation phase to phase between energized components.
- At least 60 inches of separation phase to ground between an energized component and a grounded component.

Additionally, since substation outages threaten reliability, PG&E's customary practice is to correct any problem at a substation causing repeated outages. Solutions to wildlife-caused outages at substations are specific to the equipment and species involved.

#### **6.6.2.8 Noxious Weeds**

The following practices will be implemented as part of the project design to minimize the spread of noxious weeds.

- The introduction of noxious weeds carried in with construction equipment will be minimized by ensuring the equipment is clean before it arrives on the proposed substation site, Fulton No. 1 60 kV power line and distribution line alignment. In addition, only weed-free erosion control materials will be used on the project.

- Any landscaping involving vegetation other than trees and/or shrubs will consist of a native seed mix.

### 6.6.3 Section 27.36.031 Tree Mitigation for the Town of Windsor

The valley oaks and oak woodlands to the west and north of the substation site will be denoted as environmentally sensitive and will be avoided to the extent practical. One oak tree located on the northern side of the substation site is anticipated for removal. One pine tree located on private property on Conde Lane will also be removed. While it is unlikely that any other protected oak trees will need to be removed, any protected oaks removed will be replaced as instructed in the Town of Windsor's Ordinance for Tree Mitigation. Installation of the underground distribution circuits in either the Public Utility Easement or within Mitchell Lane may affect the root zone of existing oak trees. Encroachment permits obtained for the installation of these circuits will include a review by a Town-approved arborist to ensure impacts are avoided or minimized.

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