Estrella Substation and Paso Robles Area Reinforcement Project
Biological Resources Technical Report for the
Templeton Route Alternatives
San Luis Obispo County, California

Prepared for

Pacific Gas and Electric Company
1455 East Shaw Avenue
Fresno, California 93760
Attn: Tom Johnson

Prepared by

SWCA Environmental Consultants
60 Stone Pine Road, Suite 100
Half Moon Bay, California 94019
(650) 440-4160
www.swca.com

June 2019

This page intentionally left blank

EXECUTIVE SUMMARY

A Biological Resources Technical Report (BRTR) has been prepared for the Paso Robles-Templeton Existing 70 kilovolt (kV) Route Alternative, the Paso Robles-Templeton South River Route Alternative, and Paso Robles-Templeton Creston Route Alternative (hereinafter collectively referred to as the "Templeton Route Alternatives") for the Estrella Substation and Paso Robles Area Reinforcement Project (project) proposed jointly by Pacific Gas and Electric Company (PG&E) and NextEra Energy Transmission West, LLC (NEET West). PG&E and NEET West prepared and filed a Proponent's Environmental Assessment (PEA) with the California Public Utilities Commission (CPUC) in May 2017 for the project (SWCA 2017a). The CPUC issued a PEA deficiency letter (Deficiency Letter No. 4, dated February 27, 2018) requiring that PG&E and NEET West evaluate alternatives to the project. This BRTR provides a technical environmental analysis of biological resources associated with the Templeton Route Alternatives.

The Templeton Route Alternatives are located within and adjacent to the Templeton and Paso Robles area of San Luis Obispo County. The Paso Robles-Templeton Existing 70 kV Route Alternative involves the reconstruction and conversion of an existing 4.9-mile 70 kV single-circuit power line into a double-circuit power line. The Paso Robles-Templeton South River Route Alternative involves the construction of a new, approximately 5.2-mile-long double-circuit 70 kV power line. The Paso Robles-Templeton Creston Route Alternative involves the construction of a new, approximately 6.1-mile-long double-circuit 70 kV power line.

This report is intended to identify biological resources within and adjacent to the Templeton Route Alternatives. Biological resources considered for this report include sensitive and common plants and animals, habitats and sensitive natural communities, wildlife movement corridors, and water features subject to federal or state jurisdiction. A literature review of existing information and field surveys was conducted to document biological resources within the Biological Study Areas (BSAs) for each route alternative. This BRTR outlines the methodologies used to assess the biological resources known to occur, or known to potentially occur, within the BSAs. Determinations regarding the likelihood of special-status species occurrence are based on an evaluation of available biological resource information on regional and local conditions, species biology, existing evaluations of the Templeton Substation Alternative location and surrounding areas, and professional field investigation experience.

Two special-status animals were observed in the BSAs: American badger (*Taxidea taxus;* California Department of Fish and Wildlife [CDFW] species of special concern [SSC]) was observed in the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs; and golden eagle (*Aquila chrysaetos*; CDFW fully protected species) was observed in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. In addition, 21 special-status plant species and 19 special-status wildlife species were determined to be either likely to occur, have potential to occur, or unlikely to occur within the BSAs. There is also high potential for common and special-status avian species to nest in the BSAs during the typical nesting season (February 1–August 31). Federally designated steelhead critical habitat occurs along the westernmost portion of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA along the Salinas River. In addition, several potentially jurisdictional wetlands and other waters, including the Salinas River, Spanish Camp Creek, and several unnamed drainages and wetland features, were observed throughout the BSAs. These features may also serve as wildlife migration corridors for dispersal of species between local areas and at larger scales between regions.

This page intentionally left blank

CONTENTS

Figures

Tables

Appendices

Acronyms and Abbreviations

°F	degrees Fahrenheit
AOU	American Ornithologists' Union
BGEPA	Bald and Golden Eagle Protection Act
BRTR	Biological Resources Technical Report
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Paso Robles, agency
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
COSE	Conservation and Open Space Element
County	County of San Luis Obispo, agency
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CWA	Clean Water Act
ESA	federal Endangered Species Act
ESU	Environmentally Sensitive Unit
GIS	Geographic Information Systems
GPS	global positioning system
HCP	Habitat Conservation Plan
HOA	Homeowners Association
kV	kilovolt
LCSLO	Land Conservancy of San Luis Obispo
MBTA	Migratory Bird Treaty Act
NCCP	Natural Communities Conservation Plan
NEET West	NextEra Energy Transmission West, LLC
NOAA	National Oceanic and Atmospheric Administration
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory

PEA	Proponent's Environmental Assessment
PG&E	Pacific Gas and Electric Company
project	Estrella Substation and Paso Robles Area Reinforcement Project
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 INTRODUCTION

Pacific Gas and Electric Company (PG&E) and NextEra Energy Transmission West, LLC (NEET West) propose to construct the Estrella Substation and Paso Robles Area Reinforcement Project (project) in the Paso Robles area of San Luis Obispo County, California (Figure 1). In May 2017, PG&E and NEET West jointly prepared and filed a Proponent's Environmental Assessment (PEA) with the California Public Utilities Commission (CPUC) for the project (SWCA 2017a). The CPUC issued a series of PEA deficiency letters, and Deficiency Letter No. 4, dated February 27, 2018, required that PG&E and NEET West evaluate additional route alternatives to the project. In response to the CPUC's Deficiency Letter No. 4, PG&E identified the following three power line route alternatives, collectively referred to as the "Templeton Route Alternatives."

- **Paso Robles-Templeton Existing 70 kilovolt (kV) Route Alternative** involves the reconstruction and conversion of an existing approximately 4.9-mile 70 kV single-circuit power line route into a double-circuit power line. The existing power line connects Paso Robles Substation to Templeton Substation.
- **Paso Robles-Templeton South River Route Alternative** involves the construction of a new, approximately 5.2-mile-long double-circuit 70 kV power line that would connect Paso Robles Substation to Templeton Substation.
- **Paso Robles-Templeton Creston Route Alternative** involves the construction of a new approximately 6.1-mile-long double-circuit 70 kV power line that would connect Paso Robles Substation to Templeton Substation.

This Biological Resources Technical Report (BRTR) has been prepared to document existing biological resources in the vicinity of the Templeton Route Alternatives. A similar report has been prepared for the Templeton Substation Alternative component of the alternatives analysis, and the results of that effort are presented under separate cover. Biological resources considered include sensitive and common plants and animals, habitats and sensitive natural communities, wildlife movement corridors, and water features subject to federal or state jurisdiction. This report describes the methodologies used to assess the biological resources known to occur and with potential to occur, and documents existing biological resources in the vicinity of the Templeton Route Alternatives.

Biological Study Areas (BSAs) were established to include the maximum anticipated extent of effects related to the Templeton Route Alternatives (Figure 2). The BSAs generally consist of a 400-foot-wide corridor along the Templeton Route Alternatives. The BSAs were slightly expanded in some areas to account for flexibility in siting the Templeton Route Alternatives. Field surveys focused on areas within the BSAs, as described in Section 3.4, Field Surveys, below.

Figure 1. General Vicinity Map

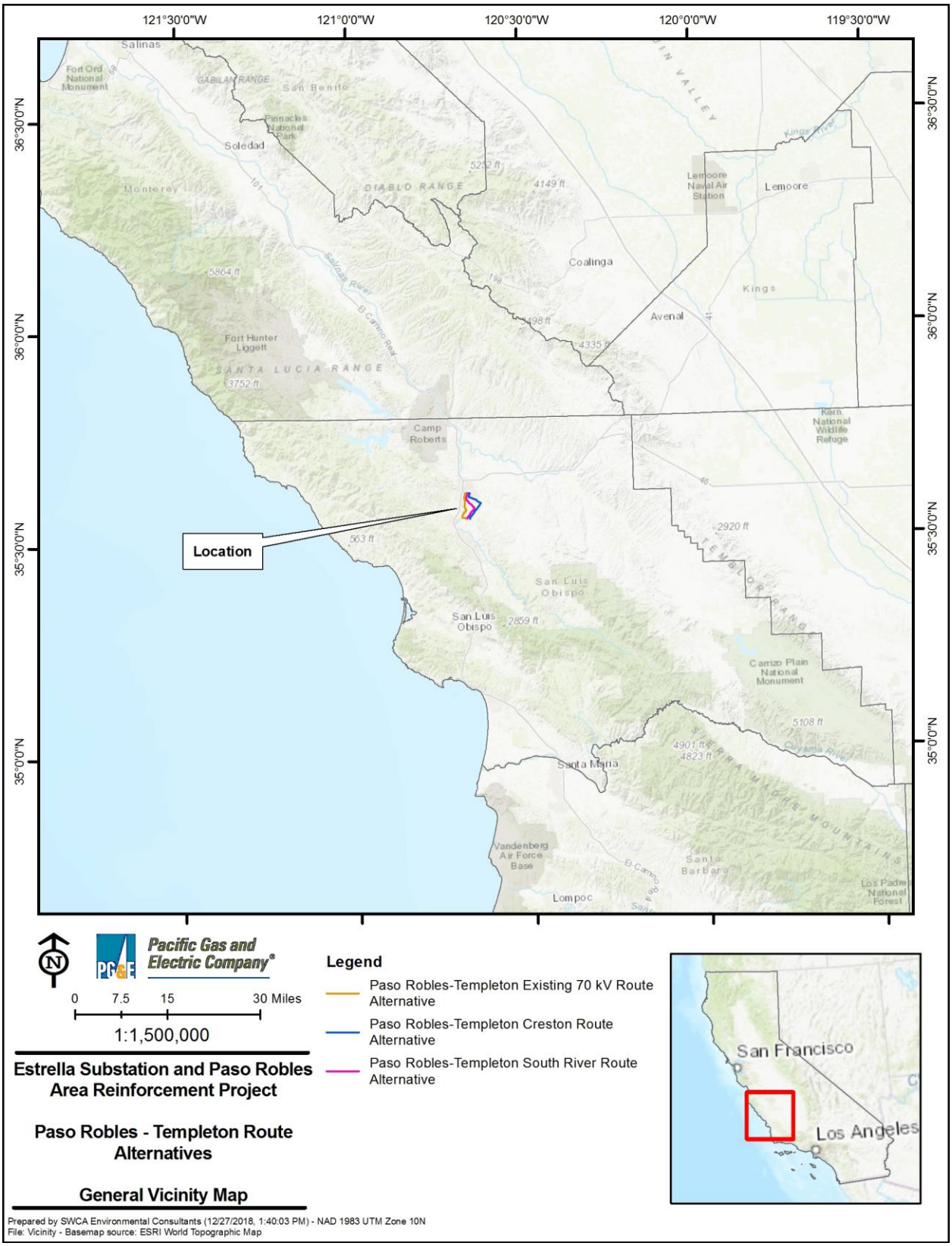
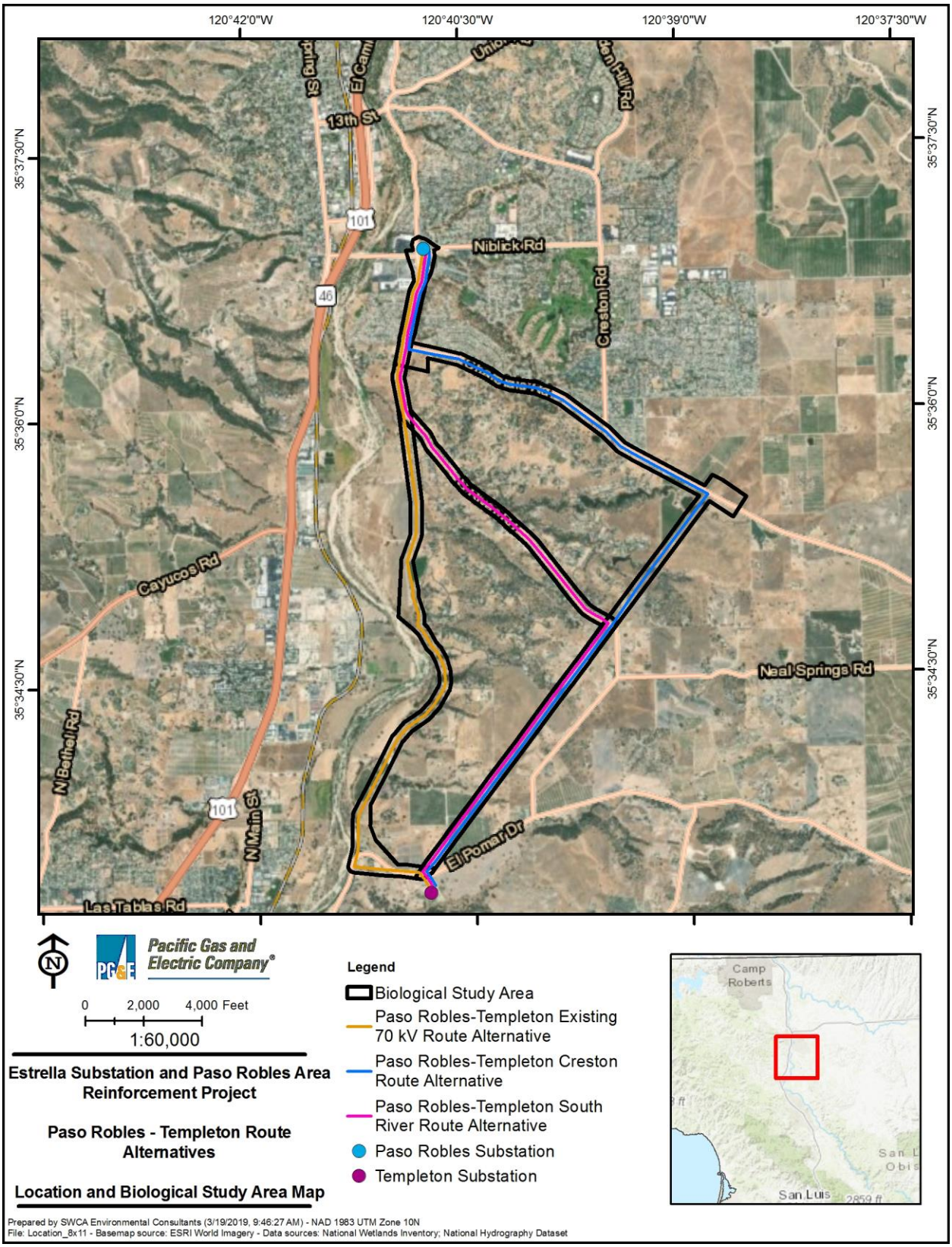


Figure 2. Location and Biological Study Area Map



1.1 PASO ROBLES-TEMPLETON EXISTING 70 KV ROUTE ALTERNATIVE

The Paso Robles-Templeton Existing 70 kV Route Alternative is in the north-central portion of San Luis Obispo County, east of the unincorporated community of Templeton and within and around the city of Paso Robles (Figures 1 and 2). The line begins by traveling west out of Templeton Substation for approximately 0.6 mile, then heads north generally paralleling Vaquero Drive for 0.7 mile before traveling adjacent to rural single-family residential homes and across undeveloped land for approximately 1.7 miles. The line then generally follows Santa Ysabel Avenue north for 0.8 mile and South River Road for an additional 1.1 miles before tying into Paso Robles Substation. The Paso Robles-Templeton Existing 70 kV Route Alternative BSA comprises approximately 286 acres. Land uses in the BSA primarily consist of rural residential developments and agricultural areas, with more dense urban developments along the northern end of the alignment. This route alternative is located on a combination of PG&E easements and privately-owned parcels, including the Santa Ysabel Ranch Homeowners Association (HOA).

1.2 PASO ROBLES-TEMPLETON SOUTH RIVER ROUTE ALTERNATIVE

The Paso Robles-Templeton South River Route Alternative is in the north-central portion of San Luis Obispo County, within and around the city of Paso Robles and east of the unincorporated community of Templeton (Figures 1 and 2). A new 70 kV power line would follow the existing 500 kV and 230 kV transmission line corridor northeasterly out of Templeton Substation for approximately 2.1 miles to where it intersects with South River Road. The route would then follow South River Road generally northwest for 3.1 miles before tying into Paso Robles Substation. The Paso Robles-Templeton South River Route Alternative BSA comprises approximately 265 acres. Land uses in the BSA consist of agricultural areas, rural residential areas, and areas of urban development. This route alternative is located on a combination of PG&E easements and privately owned parcels, including the Spanish Lakes and Santa Ysabel Ranch HOAs.

1.3 PASO ROBLES-TEMPLETON CRESTON ROUTE ALTERNATIVE

The Paso Robles-Templeton Creston Route Alternative is in the north-central portion of San Luis Obispo County, within and around the city of Paso Robles and east of the unincorporated community of Templeton (Figures 1 and 2). A new 70 kV power line would follow the existing 500 kV and 230 kV transmission line corridor northeasterly out of Templeton Substation for approximately 3.2 miles to where it intersects with Creston Road. At Creston Road, the line would head northwest for approximately 2.2 miles along Creston Road and Charolais Road, then continue north for approximately 0.7 mile along South River Road before tying into Paso Robles Substation. The Paso Robles-Templeton Creston Route Alternative BSA comprises approximately 343 acres. Land uses in the BSA primarily consist of agricultural and rural residential areas, with areas of urban development. This route alternative is located on a combination of privately owned and city of Paso Robles-owned parcels, PG&E easements, and a Land Conservancy of San Luis Obispo (LCSLO) conservation easement on private property, including the Spanish Lakes HOA.

2 REGULATORY BACKGROUND

2.1 FEDERAL

2.1.1 Endangered Species Act

The federal Endangered Species Act (ESA) of 1973 (United States Code [U.S.C.] Title 16, Sections 1531–1544), as amended, protects plants, fish, and wildlife that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NOAA Fisheries). Section 9 of the ESA prohibits the "take" of listed fish and wildlife, where "take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (Code of Federal Regulations [CFR] Title 50, Section 17.3). For plants, this statute prohibits removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in knowing violation of state law (16 U.S.C. 1538).

The ESA allows for issuance of incidental take permits to private parties either in conjunction with a Habitat Conservation Plan (HCP) or as part of a Section 7 consultation (which is discussed in the following paragraph). Under Section 10 of the ESA, a private party may obtain incidental take coverage by preparing an HCP to cover target species within the project area, identifying impacts to the covered species and presenting the measures that will be undertaken to avoid, minimize, and mitigate such impacts.

Under Section 7 of the ESA, federal agencies are required to consult with USFWS and/or NOAA Fisheries, as applicable, if their actions—including permit approvals or funding—may affect a federally listed species (including plants) or designated critical habitat. If the project is likely to adversely affect a species, the federal agency will initiate formal consultation with USFWS and/or NOAA Fisheries and issue a biological opinion as to whether a proposed agency action(s) is likely to jeopardize the continued existence of a listed species (jeopardy) or adversely modify critical habitat (adverse modification). As part of the biological opinion, USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided that the action will not jeopardize the continued existence of the species or adversely modify designated critical habitat.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703–711) protects all migratory birds, including active nests and eggs. Birds protected under the MBTA include all native waterfowl, shorebirds, hawks, eagles, owls, doves, and other common birds such as ravens, crows, sparrows, finches, swallows, and others, including their body parts (for example, feathers and plumes), active nests, and eggs. A complete list of protected species can be found in 50 CFR 10.13. Enforcement of the provisions of the federal MBTA is the responsibility of USFWS. On April 11, 2018, the USFWS issued guidance on the recent official opinion from the DOI Solicitor's Office, known as M-Opinion, affecting MBTA implementation (USFWS 2018d). The M-Opinion concludes that the take of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds. The USFWS interprets the M-Opinion to mean the MBTA prohibitions on take apply when the purpose of the action is to take migratory birds, their eggs, or their nests.

2.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 U.S.C. 668) specifically protects bald and golden eagles and their nests from intentional harm or trade in parts of these species. The 1972 amendments increased penalties for violating provisions of the BGEPA or regulations issued pursuant thereto and strengthened other enforcement measures.

2.1.4 Clean Water Act

2.1.4.1 WATERS AND WETLANDS: CLEAN WATER ACT SECTIONS 401 AND 404

The purpose of the Clean Water Act (CWA) (33 U.S.C. 1251 et seq.) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Waters of the U.S. include rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3).

The U.S. Environmental Protection Agency (USEPA) and U.S. Army Corps of Engineers (USACE) have recently released a new rule that would revise this definition and clarify which bodies of water are covered by the CWA. However, on October 9, 2015, the U.S. Court of Appeals for the 6th Circuit granted a nationwide stay on the rule, and the previous interpretations and guidance remain in effect until further notice.

USACE issues permits for work in wetlands and other waters of the U.S. based on guidelines established under Section 404 of the CWA. Section 404 of the CWA prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a permit from USACE. USEPA also has authority over wetlands and may, under Section 404(c), veto a USACE permit.

Section 401 of the CWA requires all Section 404 permit actions to obtain a state Water Quality Certification or waiver.

2.2 STATE

2.2.1 California Endangered Species Act

Sections 2050–2098 of the California Fish and Game Code (the California Endangered Species Act [CESA]) prohibit the take of state listed endangered and threatened species unless specifically authorized by the CDFW). The state definition of "take" is to hunt, pursue, catch, capture, or kill a member of a listed species or attempt to do so. CDFW administers the CESA and authorizes take through permits or memorandums of understanding issued under Section 2081 of the CESA, or through a consistency determination issued under section 2080.1. CESA Section 2090 requires state agencies to comply with threatened and endangered species protection and recovery and to promote conservation of these species.

2.2.2 Fully Protected Species Under the California Fish and Game Code

The California Fish and Game Code designates certain fish and wildlife species as "fully protected" under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish). Fully protected species may not be taken or possessed at any time, unless authorized by CDFW under a Natural Communities Conservation Plan (NCCP) (CDFW [2830], 2018e). San Luis Obispo County does not have a NCCP (CDFWh); therefore, no permits may be issued for incidental take of these species.

2.2.3 Protection for Birds Under the California Fish and Game Code

California Fish and Game Code Section 3503 et seq. state that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders of

Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird.

2.2.4 Native Plant Protection Act

The Native Plant Protection Act of 1977 (NPPA; California Fish and Game Code Sections 1900–1913) includes provisions that prohibit the taking of endangered or rare native plants. CDFW administers the NPPA and generally regards as rare many plant species included on California Rare Plant Rank (CRPR) 1A, 1B, 2A, and 2B of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California. In addition, sometimes CRPR 3 and 4 plants are considered if the population has local significance in the area and would be impacted by the project.

Section 1913(b) of the California Fish and Game Code includes a specific provision to allow for the incidental removal of endangered or rare plant species, if not otherwise salvaged by CDFW, within a right-of-way to allow a public utility to fulfill its obligation to provide service to the public.

2.2.5 California Species of Special Concern

Species of Special Concern (SSC) is a category conferred by CDFW to fish and wildlife species that meet the state definition of threatened or endangered, but have not been formally listed (e.g., federally or state listed species), or are considered at risk of qualifying for threatened or endangered status in the future based on known threats. SSC is an administrative classification only, but these species should be considered "special-status" for the purposes of the California Environmental Quality Act (CEQA) analysis (see the Significance Criteria section of this document).

2.2.6 Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB) have jurisdiction over all surface water and groundwater in California, including wetlands, headwaters, and riparian areas. SWRCB or the applicable RWQCB must issue waste discharge requirements for any activity that discharges waste that could affect the quality of waters of the state.

2.2.7 Lake and Streambed Alteration Agreement Under the California Fish and Game Code

In addition to listed and special-status species, CDFW regulates activities under California Fish and Game Code Sections 1600–1616 that require a streambed alteration agreement permit. California Fish and Game Code Section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake.
- Substantially change or use any material from the bed, channel, or bank of any river, stream, or lake.
- Deposit debris, waste, or other materials that could pass into any river, stream, or lake.

2.3 LOCAL

This section includes a summary of local or regional plans, policies, or regulations that identify sensitive or special-status species in the area of the Templeton Route Alternatives, as well as local policies or ordinances that protect biological resources. Because CPUC has exclusive jurisdiction over the siting, design, and construction of the project, the project is not subject to local discretionary regulations related

to biological resources. The following summary is provided for informational purposes and to assist with CEQA review.

2.3.1 County of San Luis Obispo General Plan

The County of San Luis Obispo General Plan includes a Conservation and Open Space Element (COSE), which addresses the protection and management of natural resources, as well as goals, policies, and strategies to conserve, protect, and restore biodiversity and open space (County of San Luis Obispo 2010). The COSE includes seven goals and policies within those goals. Specific goals pertaining to biological resources identified in the COSE include:

- **Goal BR 1:** Native habitat and biodiversity will be protected, restored, and enhanced.
- **Goal BR 2:** Threatened, rare, endangered, and sensitive species will be protected.
- **Goal BR 3:** Maintain the acreage of native woodlands, forests, and trees at 2008 levels.
- **Goal BR 4:** The natural structure and function of streams and riparian habitat will be protected and restored.
- **Goal BR 5:** Wetlands will be preserved, enhanced, and restored.
- **Goal BR 6:** The County's fisheries and aquatic habitats will be preserved and improved.
- **Goal BR 7:** Significant marine resources will be protected.

2.3.2 County of San Luis Obispo Oak Woodlands Management Plan

The Native Tree Committee of the County of San Luis Obispo (County) has established an Oak Woodland Management Plan to encourage the long-term conservation of oak woodlands. The plan is voluntary and for informational purposes only and is not bound by the law. The plan discusses the status, economic values, natural resource values, and aesthetic and open space values of oak woodlands. In addition, the plan offers the following conservation efforts: (1) design around existing oaks; (2) encourage clustered, denser developments; (3) encourage landscaping with oak trees/natives; (4) improve oak regeneration on grazed lands; and (5) purchase conservation easements (County of San Luis Obispo 2003).

2.3.3 County of San Luis Obispo San Joaquin Kit Fox Mitigation Requirements

The County evaluates impacts to San Joaquin kit fox (*Vulpes macrotis mutica*) for County-permitted projects to ensure impacts to kit fox are mitigated to an insignificant level under CEQA. CDFW and the County have developed mitigation measures to reduce impacts to San Joaquin kit fox habitat to an insignificant level. In addition, pre-determined standard mitigation ratios have been developed for County-permitted projects located within kit fox habitat areas (County of San Luis Obispo 2006).

The Templeton Route Alternatives' BSAs are located within a County-designated kit fox habitat area with recommended general measures and practices. The project proponents will take into consideration local policies and land use priorities and concerns as they relate to biological resources; however, the project is exempt from the County's discretionary permitting and mitigation and CPUC is the lead agency under CEQA.

2.3.4 City of El Paso de Robles General Plan

The City of El Paso de Robles General Plan includes a Conservation Element and Open Space Element, which address the City's commitment to rehabilitate and enhance the environmental quality of the planning

area through protection, planning, and management of natural resources (Rincon Consultants, Inc. 2003). The General Plan includes the following goal pertaining to biological resources:

- **Goal C-3: Biological Resources.** As feasible, preserve native vegetation and protected wildlife, habitat areas, and vegetation, through avoidance, impact mitigation, and habitat enhancement.

Specific policies identified to help achieve this goal include:

- **Policy C-3A: Oak Trees.** Preserve existing oak trees and oak woodlands. Promote the planting of new oak trees.

- **Policy C-3B: Sensitive Habitat.** Incorporate habitats into project design, as feasible, including: oak woodlands, native grasslands; wetlands, and riparian areas.

2.3.5 City of El Paso de Robles Oak Tree Preservation Ordinance

The City of El Paso de Robles Oak Tree Ordinance (Ordinance No. 835 N.S.), as amended in 2001 (Municipal Code Amendment 2001-001-Oak Trees), ensures the "preservation of oak trees in order to maintain the heritage and character of the City of El Paso de Robles ("The Pass of the Oaks") as well as preserve the beauty and identity of the community" (City of El Paso de Robles 2002). While not applicable to the project, the Oak Tree Ordinance requires permits to prune and permits to remove oak trees as identified in Section 10.01.030 as well as encourages preservation and maintenance of existing oak trees as identified in Section 10.01.070.

3 METHODOLOGY

A biological resources study was conducted to support this BRTR, using a literature and records review and field surveys to document the potential for biological resources to occur within the BSAs.

3.1 LITERATURE AND RECORDS REVIEW

Biologists reviewed available regional and local natural resources information, including published and unpublished documents, publicly available data sets, and herbarium records. Database searches included the nine U.S. Geological Survey (USGS) 7.5-minute quadrangles at and surrounding the Templeton Route Alternatives: Adelaida, York Mountain, Estrella, Paso Robles, Templeton, Creston, Morro Bay North, Atascadero, and Santa Margarita (USGS 2018b). Resources reviewed with respect to site-specific information included, but were not limited to:

- CDFW California Natural Diversity Database (CNDDB) (CDFW 2018c);
- CDFW California Wildlife Habitat Relationship Systems (CDFW 2018f);
- CDFW Special Animals List (CDFW 2018e);
- CNPS Rare Plant Program Inventory of Rare and Endangered Plants (CNPS 2018a);
- eBird: An online database of bird distribution and abundance [web application] (eBird 2018);
- *A Guide to the Amphibians and Reptiles of California* (California Herps 2000–2016);
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA NRCS 2018c);
- USFWS Critical Habitat Portal (USFWS 2018a);
- National Wetland Inventory (NWI) (USFWS 2018b);

- USFWS Species List (USFWS 2018c);
- USGS National Hydrography Dataset (USGS 2018a);
- USGS 7.5-minute series topographic quadrangle maps (USGS 2018b);
- Aerial imagery of the Templeton Route Alternatives' BSAs;
- *Estrella Substation and Paso Robles Area Reinforcement Project: Biological Resources Technical Report for the 70 kV Power Line* (SWCA 2017b); and
- *Estrella Substation and Paso Robles Area Reinforcement Project: Biological Resources Technical Report for Estrella Substation* (SWCA 2017c).

Biological resources data were collected and overlaid on to geospatial maps from desktop and field sources to develop a Geographic Information Systems (GIS) database specific to the Templeton Route Alternatives' BSAs. This was the first analysis level and it provided reviewers with essential sensitive species location data, preliminary habitat information, potential drainages, and other jurisdictional waters, and designated critical habitat for federally listed species.

Local expert botanist Dave Keil, Ph.D., provided expertise regarding special-status species that were historically recorded in the region (D. Keil, personal communication, June 3, 2016). Based on the preliminary review, biologists and botanists compiled a target list of special-status plants, as defined by the *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018b), that were likely to occur in the BSAs based on site-specific conditions (soils, geology, topography, elevation, and associated plant communities).

3.2 SENSITIVE BIOLOGICAL RESOURCES

Sensitive plants and animals are defined within this report to include species, subspecies, varieties, and populations recognized by USFWS and CDFW that are classified into the following categories:

- Species and subspecies listed or proposed for listing by the state of California as threatened or endangered pursuant to the CESA.
- Animals listed on the California Special Animals List as SSC and Fully Protected.
- Species, subspecies, and populations listed or proposed for listing as threatened or endangered pursuant to the federal ESA, and species that are candidates for such listings.
- Plants included in the Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2018d) as threatened, endangered, an SSC, or CRPR Rank 1 or 2.

In addition, natural communities recognized by CDFW as being of special concern were considered, along with riparian habitats and water bodies under the jurisdiction of USACE, CDFW, and/or RWQCB.

Throughout this document, species, subspecies, varieties, and populations are broadly referred to as "species," a term which is used here to indicate whichever pertinent taxonomic levels are recognized by the federal and state authorities with jurisdiction over plants and animals.

Species occurrences from the CDFW CNDDB RareFind5 (CDFW 2018c) and the CNPS Online Inventory of Rare and Endangered Plants (CNPS 2018) were queried for relevant sensitive species data. Records of sensitive plants, animals, and natural communities were queried within the Adelaida, York Mountain, Estrella, Paso Robles, Templeton, Creston, Morro Bay North, Atascadero, and Santa Margarita USGS 7.5-minute quadrangles. Using the information generated from literature reviews and field surveys, the list of

special-status species with the potential to occur was further refined to reflect the species that may occur within the BSA. The likelihood of special-status species occurrence was determined based on natural history parameters, including, but not limited to, the species' range, habitat, foraging needs, migration routes, and reproductive requirements. For the purpose of this study, potential for occurrence determinations were made using the following general categories:

- *Present*: Reconnaissance-level, focused, or protocol-level surveys documented the occurrence or observation of a species in the BSA.
- *Seasonally present*: Individuals were observed in the BSA only during certain times of the year.
- *Likely to occur*: The species has a strong likelihood to be found in the BSA prior to or during construction but has not been directly observed to date during surveys. The likelihood that a species may occur is based on the following considerations: suitable habitat that meets the life history requirements of the species is present in the BSA; migration routes or corridors are within the BSA; records of sighting are documented within or near (5 miles) the BSA; and there is an absence of invasive predators. The main assumption is that records of occurrence have been documented within or near (5 miles) the BSA, the BSA falls within the range of the species, suitable habitat is present, but it is undetermined whether the habitat is currently occupied.
- *Potential to occur*: There is a possibility that the species can be found in the BSA prior to or during construction but has not been directly observed to date. The likelihood that a species may occur is based on the following conditions: suitable habitat that meets the life history requirements of the species is present within the BSA; migration routes or corridors are within the BSA; and there is an absence of invasive predators. The main assumption is that the BSA falls within the range of the species, suitable habitat is present, but no records of sighting are located within or near (5 miles) the BSA, or the records are old and unreliable and it is undetermined whether the habitat is currently occupied.
- *Unlikely to occur*: The species is not likely to occur in the BSA based on the following considerations: lack of suitable habitat and features that are required to satisfy the life history requirements of the species (e.g., absence of foraging habitat, lack of reproductive areas, and lack of sheltering areas); presence of barriers to migration/dispersal; presence of predators or invasive species that inhibit survival or occupation (e.g., the presence of bullfrogs or invasive fishes); or lack of hibernacula, hibernation areas, or aestivation areas on site.
- *Absent*: Suitable habitat does not exist in the BSA, the species is restricted to or known to be present only within a specific area outside of the BSA, or focused or protocol-level surveys did not detect the species.

3.3 BIOLOGICAL STUDY AREA

The BSAs generally consist of a 400-foot-wide corridor along the Templeton Route Alternatives. The BSAs were established to account for flexibility in siting the Templeton Route Alternatives. Field surveys focused on areas within the BSAs (Figure 2), as described below in Section 3.4, Field Surveys.

3.4 FIELD SURVEYS

Biologists conducted a general reconnaissance-level field survey between June 11 and June 14, 2018. The reconnaissance-level survey included documentation of plant and animals; vegetation types; and identification of waters, wetlands, and riparian areas that were potentially under the jurisdiction of USACE, CDFW, and/or RWQCB. Vegetation communities were classified using *Preliminary Descriptions of the*

Terrestrial Natural Communities of California (Holland 1986). Habitat was evaluated for potential to support those special-status species identified during the desktop review, and detailed notes and photographs were taken to support determinations of the potential for those species to occur within the BSAs (Appendices A, B, and C). Surveyors noted and recorded all wildlife species encountered through direct observation or sign (scat, remains, or tracks), and for birds by their species-specific vocalizations. The use of binoculars also facilitated wildlife identification, and trees and other structures (such as buildings) within the BSAs were scanned for avian nests and roosting locations.

Botanical surveys were also conducted between June 11 and14, 2018; March 18, 20, 21, 22, 25, and 26, 2019; and April 19 and 22, 2019. CDFW's *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018b) was generally followed to facilitate a consistent and systematic approach to the survey and assessment of special-status native plants and natural communities so that reliable information was produced and the potential of locating a special-status plant species or natural community was maximized. Surveys were conducted by walking transects throughout the BSAs where suitable habitat was present to ensure thorough coverage. The surveyors referred to *The Jepson Manual* (Baldwin et al. 2012) to key every plant taxon that was identifiable (typically flowering or fruiting) down to the taxonomic level to determine rarity and listing status (Appendix A). The surveys were conducted at multiple times throughout the year to capture the appropriate bloom periods for all of the special-status plant species that have potential to occur in the BSAs.

A handheld GPS unit capable of sub-meter accuracy was used to record locations of any sensitive resources and other potential constraints to the Templeton Route Alternatives. A compiled list of all plant species observed during the surveys is included as Appendix A, and a compiled list of all wildlife species observed during the surveys is included as Appendix B.

Potentially jurisdictional waters of the state and U.S. were preliminarily mapped during the June 2018 field survey. Hydrological conditions such as presence of hydrophytic vegetation, ordinary high-water marks, and/or defined bed and banks were investigated to determine what features could be potentially jurisdictional under USACE, CDFW, and/or RWQCB. A formal jurisdictional delineation report has not been prepared as part of this study. Refer to Section 4.3.1, Jurisdictional Waters, below, for additional detail regarding potentially jurisdictional wetlands and other waters within the BSAs.

Biologists also conducted a California red-legged frog site assessment during the June 2018 field survey to determine locality records and potential California red-legged frog habitat within the BSAs. The biologists generally followed USFWS's *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog* (USFWS 2005) with the exception that the survey area was limited to the extent of the BSAs instead of surveying out to 1 mile from the BSAs. Biologists queried the CNDDB for all reported localities within the vicinity of the BSAs, reviewed existing literature and biological reports, and reviewed aerial imagery within the BSAs to assess suitable upland and aquatic habitat areas. Biologists then conducted field surveys to map and characterize all accessible aquatic habitats within the BSAs. Aquatic habitats were characterized based on the type of water feature (e.g., pond versus stream, pool versus riffle, ephemeral versus permanent), vegetation, water depth, bank characteristics and depth, substrate, and presence of aquatic predators (e.g., bullfrogs or centrarchid fishes). USFWS habitat site assessment data sheets were filled out for each aquatic habitat area that was surveyed and photographs were taken to document the habitat conditions. Aquatic features included in the California red-legged frog site assessment are shown in Appendix E. Site assessment data sheets are included in Appendix G.

In addition, biologists conducted an early evaluation survey as defined by the USFWS *San Joaquin Kit Fox Survey Protocol for the Northern Range* (USFWS 1999). Biologists examined vegetation communities and potential suitable natal and non-natal dens in the BSAs. Methodologies included walking meandering transects identifying suitable prey base, assessing burrows for den characteristics (e.g., "keyhole" shape

entrance, long soil apron from the entrance), and mapping burrows with entrances 4 inches in diameter or larger. Refer to Section 4.4, Sensitive Species, for a detailed discussion.

3.5 NOMENCLATURE CONVENTIONS

Vegetation alliance nomenclature in this report follows *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Taxonomic conventions follow *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) for plants, the American Ornithologists' Union (AOU) *Checklist of North and Middle American Birds* (Chesser et al. 2018) for birds, a *Complete List of Amphibian, Reptile, Bird and Mammal Species in California* (CDFW 2018a) for other vertebrate wildlife, and the *Special Animals List* (CDFW 2018e) for invertebrates.

4 EXISTING CONDITIONS

The Templeton Route Alternatives' BSAs are located within the city of Paso Robles as they approach Paso Robles Substation, and approximately 1.5 miles northeast of the community of Templeton in unincorporated San Luis Obispo County as they approach Templeton Substation. Topography within the BSAs ranges from generally flat (<5 percent) to steeper slopes (30 to 90 percent) along the Salinas River, with elevation between approximately 700 and 950 feet along the Paso Robles-Templeton Existing 70 kV Route Alternative; to gently sloping hills (0 to 30 percent) with elevation between approximately 700 and 1,200 feet along the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative.

San Luis Obispo County has a Mediterranean climate with warm to hot, dry summers and mild to cool, wet winters. The coastal climate is generally mild with average temperatures ranging from 45 to 70 degrees Fahrenheit (°F). Inland temperatures are much more variable, with average temperatures ranging from 35 to 93°F. Precipitation in the region also varies spatially and temporally with increasing precipitation typically occurring near the coast. Average annual rainfall in the vicinity of the BSAs is 15.2 inches with approximately 90% of the rain falling between October and April. Average monthly rainfall in the summer months is significantly lower than the winter months, averaging only about 0.2 inch per month between May and September. The temperature and precipitation data are based on Monthly Climate Normals data published by NOAA from the Paso Robles, California, climate station (COOP:046730) for the period between 1981 and 2000 (NOAA 2018).

4.1 SOILS

Soil type descriptions were queried using Official Soil Series Descriptions. Site-specific soil data were queried using the USDA Web Soil Survey database (USDA NRCS 2018c). Hydric ratings were determined using the Hydric Soils of the U.S. List (USDA NRCS 2018a). Soil types within the BSAs are described below, summarized in Table 1, and depicted in Appendix F.

Arbuckle soils are very deep, well-drained soils that are formed in alluvial materials from mainly conglomerate and metasedimentary rocks. Arbuckle soils occur on low terraces with slopes of 0 to 75 percent at elevations of 88 to 2,001 feet. They typically occur in dry, subhumid, mesothermal climates with hot dry summers and cool moist winters. Vegetation communities on these soils are mainly annual grasses and forbs either alone or as an understory of blue oak trees (*Quercus douglasii*). The soil is used for dryland and irrigated orchards, irrigated row and field crops, dry farmed grain, and rangeland grazing (NRCS 2018b).

Table 1. Soil Types within the BSAs

Soil Type	Presence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Presence within the Paso Robles-Templeton South River Route Alternative BSA	Presence within the Paso Robles-Templeton Creston Route Alternative BSA
Arbuckle fine sandy loam, 0 to 2 percent slopes	✓	✓	✓
Arbuckle-Positas complex, 9 to 15 percent slopes		✓	✓
Arbuckle-Positas complex, 15 to 30 percent slopes	✓	✓	✓
Arbuckle-Positas complex, 30 to 50 percent slopes	✓	✓	✓
Arbuckle-Positas complex, 50 to 75 percent slopes	✓	✓	✓
Arbuckle-San Ysidro complex, 2 to 9 percent slopes (hydric)	✓	✓	✓
Gazos shaly clay loam, 9 to 30 percent slopes		✓	
Linne-Calodo complex, 9 to 30 percent slopes	✓	✓	✓
Linne-Calodo complex, 50 to 75 percent slopes	✓		
Linne-Diablo complex, 9 to 15 percent slopes		✓	✓
Lockwood shaly loam, 2 to 9 percent slopes	✓	✓	✓
Lockwood-Concepcion complex, 9 to 15 percent slopes	✓	✓	✓
Metz loamy sand, 0 to 5 percent slopes (hydric)	✓		
Mocho clay loam, 0 to 2 percent slopes, MLRA 14 (hydric)	✓		
Nacimiento-Los Osos complex, 9 to 30 percent slopes		✓	✓
Pico fine sandy loam, 0 to 2 percent slopes	✓	✓	✓
Pico fine sandy loam, 2 to 9 percent slopes	✓	✓	✓
Ricon clay loam, 2 to 9 percent slopes, MLRA 14			✓
Sorrento clay loam, 0 to 2 percent slopes, MLRA 14	✓		
Still clay loam, 2 to 9 percent slopes	✓	✓	✓
Xerofluvents-Riverwash association (hydric)	✓		

Concepcion soils consist of deep, moderately well-drained soils that formed in weakly consolidated stratified alluvium or wind-deposited sandy material. These soils are located on nearly level to steep terraces with slopes of 0 to 50 percent at elevation of 40 to 200 feet adjacent to and within 1 to 2 miles of the Pacific Ocean (NRCS 2018b).

Diablo soils are typically well-drained soils that formed from weathered shale, sandstone, and consolidated sediments with minor areas of tuffaceous material. This soil type typically occurs on rolling to steep uplands with slopes 5 to 50 percent at elevations of 25 to 3,000 feet. Vegetation communities typically occurring on this soil type are annual grasses and forbs. The soil is most commonly used for grazing and for production of dry farmed grain, mainly barley (NRCS 2018b).

Gazos soils consist of moderately deep to bedrock, well-drained soils that formed in material weathered from sandstone and shale. This soil occurs on hills and has slopes of 9 to 75 percent at elevations of 50 to

4,000 feet. These soils occur in subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with these soils are mostly annual grasses and forbs with some brush and a few oak trees, used mainly for livestock grazing and for growing small grain and hay (NRCS 2018b).

Linne-Calodo soils consist of moderately deep, well-drained soils that formed in material weathered from sandstone and shale. These soils occur on uplands at elevations of 100 to 2,200 feet and have slopes of 5 to 75 percent. These soils typically occur in dry, subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with this soil type are annual grasses and forbs, a few scattered oak, and some brush. These soil types are typically used for grain crops, related crops, and almonds (NRCS 2018b).

Lockwood soils consist of very deep, well-drained soils that formed in alluvial material from dominantly siliceous shales. These soils occur on alluvial fans and bench terraces with slopes of 0 to 15 percent at elevations of 100 to 2,000 feet. They are found in the valleys of the central and southern part of the coast range in California, particularly in Salinas River. Vegetation communities associated with this soil type are annual grasses and forbs, a few scattered oaks, and some brush. The soil is used for growing irrigated row crops, truck crops, alfalfa, and some orchards; and extensive areas are used for growing dryland grain and some as rangeland (NRCS 2018b).

Los Osos soils consist of moderately deep, well-drained soils that formed in material weathered from sandstone and shale. These soils occur on uplands with slopes of 5 to 75 percent at elevations of 100 to 3,500 feet. These soils typically occur in dry, subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with this soil type are mostly annual grasses and forbs with some perennial grasses, coastal sagebrush, and live oaks. The soil is typically used for rangeland grazing, but some areas are used for grain crops and sudangrass pasture (NRCS 2018b).

Metz soils are very deep, excessively drained soils that consist of alluvial material derived primarily from sedimentary rock and some other mixed rock material. This soil type typically occurs in floodplains and alluvial fans with slopes of 0 to 15 percent and at elevations of 25 to 2,500 feet. Vegetation communities associated with this soil type generally consist of willows, annual grasses, and forbs. Cultivation on this soil type is typically irrigated pasture, hay, truck crops, field crops, and fruit crops (NRCS 2018b).

Mocho soils are typically deep, well-drained soils that consist largely of alluvium materials derived from sandstone and shale rock. This soil type is found in alluvial fans that have slopes of 0 to 9 percent at elevations between 20 to 3,500 feet. Vegetation communities associated with this soil type are typically annual grasses and forbs. This soil type is often intensively used for grain crops, forage, field, and some fruit crops (NRCS 2018b).

Nacimiento soils consist of moderately deep, well-drained soils that formed in material weathered from calcareous shale and sandstone. These soils occur on rolling uplands with slopes of 9 to 75 percent at elevations of 50 to 4,800 feet. These soils typically occur in dry, subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with this soil type are annual grasses and forbs with coast live oaks (*Quercus agrifolia*) and other trees in some places. The soil is often used for rangeland grazing and dry farmed grain (NRCS 2018b).

Pico soils consist of deep, well-drained soils that form in alkaline, moderately coarse-textured alluvium derived mostly from sedimentary formations. These soils occur on floodplains and alluvial fans with slopes of 0 to 9 percent at elevations of 10 to 1,500 feet. These soils occur in subhumid, mesothermal climates with warm dry summers and cool moist winters. Vegetation communities associated with these soils are

annual grasses and forbs in uncultivated areas. The soil is used primarily for growing row crops, citrus, grain, and pasture, and there is increasing urban use (NRCS 2018b).

Positas soils consist of deep and very deep, moderately well-drained soils that formed in alluvial material from mixed rock sources. These soils typically occur on stream terraces at elevations of 200 to 1,600 feet and have slopes of 2 to 75 percent. These soils occur in dry subhumid, mesothermal climates with hot, dry summers and cool, moist winters. Vegetation communities on these soils are typically annual grasses, forbs, and scattered oaks. Many areas with Positas soils are primarily used for rangeland grazing, but some are also used for dryland grain crops and vineyards (NRCS 2018b).

Rincon soils consist of deep, well-drained soils that formed in alluvium from sedimentary rocks. These soils occur on old alluvial fans and both stream and marine terraces with slopes of 0 to 30 percent at elevation of 20 to 2,000 feet. These soils occur in subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with these soils are annual grasses and forbs. The soil is used primarily for irrigated citrus, deciduous fruits, row crops, and alfalfa, as well as some dry farming for grain and pasture (NRCS 2018b).

San Ysidro soils consist of deep, moderately well-drained soils that are formed in alluvium from sedimentary rocks. These soils occur on old, low terraces in elevations of less than 1,500 feet and have slopes of 0 to 9 percent. These soils occur in dry subhumid, mesothermal climates with hot, dry summers and cool, moist winters. Vegetation communities associated with these soils are typically annual grasses and forbs. These soils are typically used for growing dryland grains, dryland pasture, and shallow rooted row crops (NRCS 2018b).

Sorrento soils consist of very deep, well-drained soils that formed in alluvium mostly from sedimentary rocks. Sorrento soils are on alluvial fans and stabilized floodplains and have slopes of 0 to 15 percent at elevations of 25 to 2,100 feet. These soils occur in dry subhumid with moderately warm, dry summers and cool, moist winters. Vegetation communities associated with these soils are irrigated fruit, nut, field, forage, and truck crops, and some dry grain. Uncultivated areas are mostly annual grasses and forbs with sycamore along drainageways (NRCS 2018b).

Still soils consist of deep, well-drained soils that formed in alluvial material from sedimentary rocks on flood plains and alluvial fans. These soils occur on uplands at elevations of 600 to 2,000 feet and have slopes of 0 to 30 percent. These soils typically occur in dry, subhumid, mesothermal climates with warm, dry summers and cool, moist winters. Vegetation communities associated with this soil type are mainly annual grasses with scattered oaks. The soil is used for cultivated alfalfa, sugar beets, and dry farmed grain (NRCS 2018b).

Xerofluvents are somewhat excessively drained soils that occur in floodplains with 0 to 2 percent slopes at an elevation of 600 to 1,500 feet. These soils are often comprised of sand, stratified gravel, sandy loam, and gravelly loam materials, and are not considered prime farmland (NRCS 2018b).

Riverwash are soils that occur in river channels at slopes of 0 to 2 percent and are comprised entirely of sandy material. These soils occur at an elevation of 600 to 1,500 feet and are not considered prime farmland (NRCS 2018b).

4.2 HABITATS AND NATURAL COMMUNITIES

4.2.1 Critical Habitat

Federally designated steelhead critical habitat (Evolutionary Significant Unit [ESU] for South-Central California Coast steelhead in Salinas Hydrologic Unit 3309, Paso Robles Hydrologic Sub-area 330981) occurs along the Salinas River in the westernmost portion of the Paso Robles-Templeton Existing 70 kV Route Alternative (Figure 3). Two small patches of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA overlap the upper banks and floodplain of the Salinas River riparian corridor (Appendix E). While the Salinas River does not support surface flows year- round, precipitation during the winter and spring months likely provides adequate surface flows to fill the river and to provide suitable physical or biological features (i.e., freshwater migration corridor) for steelhead. Additional detail regarding steelhead and associated habitat is provided below in Section 4.4.2, Special-Status Animals.

There are no other federally designated critical habitat areas for special-status plants or animals within or immediately adjacent to the Templeton Route Alternatives' BSAs.

Vernal pool fairy shrimp critical habitat unit 29C is approximately 2.5 miles northeast from the closest point of the Paso Robles-Creston Route Alternative's BSA. Vernal pool fairy shrimp are known to currently occupy this region. Unit 29C contains the following habitat constituents required to support this species: mound and inter-mound topography within a matrix of surrounding upland habitat, which provides for cyst dispersal and adequate pool hydroperiods, and vernal pool wetland features within a matrix of upland habitat, which provide for food, shelter, hatching, growth, and reproduction (USFWS 2006). Portions of the BSAs for all the Templeton Route Alternatives contain preliminarily mapped seasonal wetlands with adjacent upland habitat that could support this species. Additional detail regarding vernal pool fairy shrimp and associated habitat is provided below in Section 4.4.2, Special-Status Animals.

4.2.2 Vegetation Communities

The landscape within the Templeton Route Alternatives' BSAs consists of agricultural, urban/developed, ruderal, nonnative grasslands, blue oak woodlands, valley oak woodland, central (Lucian) coastal scrub, coastal and valley freshwater marsh, and sandy wash. Of the vegetation communities present, three (blue oak woodland, sandy wash [Salinas River], and coastal and valley freshwater marsh) are considered sensitive communities under the City of El Paso de Robles General Plan (Rincon Consultants, Inc. 2003). Valley oak woodland, sandy wash [Salinas River], and coastal and valley freshwater marsh are also considered California Sensitive Natural Communities by CDFW. Appendix E illustrates the vegetation communities traversed by the BSAs. The approximate acres of vegetation communities occurring in each BSA are summarized below in Table 2. The following subsections describe vegetation communities that were observed in the BSAs.

Figure 3. Critical Habitat Map

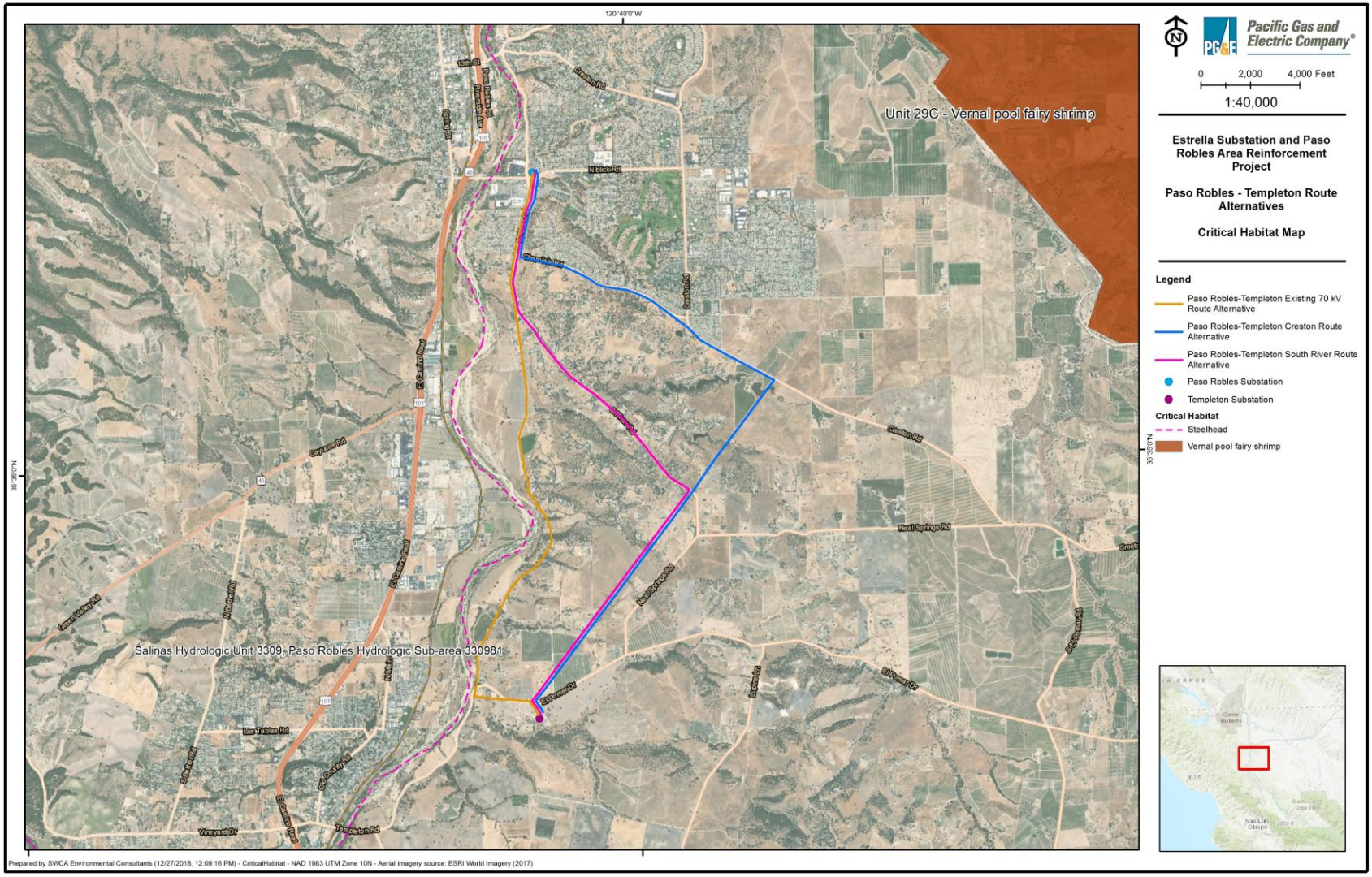


Table 2. Vegetation Communities Observed within the BSAs

Vegetation Communities	Paso Robles-Templeton Existing 70 kV Route Alternative BSA (acres)	Paso Robles-Templeton South River Route Alternative BSA (acres)	Paso Robles-Templeton Creston Route Alternative BSA (acres)
Agricultural	32.2	18.3	36.7
Urban/Developed	95.2	81.3	100.1
Ruderal	18.8	16.4	13.8
Nonnative Grassland	80.2	88.3	156.0
Blue Oak Woodland	52.1	57.0	34.1
Valley Oak Woodland	4.6	0	0
Central (Lucian) Coastal Scrub	1.5	0	0
Coastal and Valley Freshwater Marsh	0.3	3.7	1.2
Sandy Wash	0.7	0	0

4.2.2.1 AGRICULTURAL

Agricultural habitat is identified by active cultivation and planting of crops in an area. Agricultural areas typically provide low habitat value for sensitive plants and wildlife species. The main form of agriculture in the Paso Robles-Templeton South River Route Alternative BSA and the Paso Robles-Templeton Creston Route Alternative BSA is grape vineyards, whereas the main form of agriculture in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA is cultivated forage crops.

4.2.2.2 URBAN/DEVELOPED

Urban/developed habitat is found in regularly and highly disturbed areas, including areas that have been developed and/or include landscaping such as trees, shrubs, ornamental plants, and lawns. Vegetation density, canopy cover, and species composition will vary based on the structure and composition of the developed area. Vegetation may include native or exotic species, or a combination of both. The urban/developed areas within the Templeton Route Alternatives' BSAs include the existing Paso Robles and Templeton substations, as well as recreational, commercial, and rural residential developments. Vegetation observed in these areas included manicured lawns and landscaped trees and shrubs.

4.2.2.3 RUDERAL

Ruderal habitat areas are often defined as occurring along road edges and other highly disturbed areas. Typically, species dominating ruderal habitat areas are able to quickly colonize disturbed areas due to their high rates of seed dispersal and fast growth (i.e., weedy species of plants). Ruderal areas are typically dominated by nonnative vegetation, but some native species can also occur. Ruderal habitat within the Templeton Route Alternatives' BSAs occurs primarily along roadsides; within rural and urban developments, abandoned fields, and livestock pastures; and adjacent to agricultural areas. Species observed in ruderal areas in the BSAs included, but were not limited to, nonnative annual grasses, poison hemlock (*Conium maculatum*), green amaranthus (*Amaranthus retroflexus*), mustard (*Brassica spp*.), and various thistles.

4.2.2.4 NONNATIVE GRASSLAND

Nonnative grasslands consist of dense to sparse cover of annual grasses generally less than 1 meter high and are dominated by nonnative grasses and forbs, including, but not limited to, soft chess (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), slender wild oats (*Avena barbata*), cheatgrass (*Bromus tectorum*), red brome (*Bromus madritensis*), red-stemmed filaree (*Erodium cicutarium*), and short-pod mustard (*Hirschfeldia incana*). Native species may include western ragweed (*Ambrosia psilostachya*), lupines (*Lupinus* spp.), and doveweed (*Croton setigerus*) (Holland 1986). Nonnative grassland within the Templeton Route Alternatives' BSAs occur primarily between rural single-family homes, in areas used for livestock grazing and ranching, and on parcels proposed for future development.

4.2.2.5 BLUE OAK WOODLAND

Blue oak woodlands are typically dominated by blue oak trees, yet often include other oak species as well as gray pine (*Pinus sabiana*). Blue oak woodlands range from open savannas to dense woodlands, and often contain an understory of grasses and herbs. This habitat type usually contains well-drained soils and occurs below 4,000 feet (Holland 1986). Blue oak woodland within the Templeton Route Alternatives' BSAs varied from open savannas in rural areas, to dense woodlands along riparian corridors and hilly (>30 percent) terrain. Other oak species observed within this community include coast live oak, California scrub oak (*Quercus berberidifolia*), and valley oak (*Quercus lobate*).

Heritage oak trees protected under the City of El Paso de Robles Oak Tree Preservation Ordinance were observed along South River Road where it overlaps with the Templeton Route Alternatives' BSAs. In addition, the Paso Robles-Templeton Creston Route Alternative BSA contains a LCSLO agricultural conservation easement for oak trees.

4.2.2.6 VALLEY OAK WOODLAND

Valley oak woodland is similar to blue oak woodland, forming in a grassy-understoried savanna, but is usually the only tree present. Other oak species such as blue oak and coast live oak are associated with this community, as well as understory vegetation such as California coffeeberry (*Rhamnus californica*) and poison-oak (*Toxicodendron diversilobum*). This habitat type occurs on deep, well-drained alluvial soils and occurs below 2,000 feet (Holland 1986). Valley oak woodland was observed along the southern portion of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. This area was fragmented and disturbed due to roadways, residential developments, and grazing.

4.2.2.7 CENTRAL (LUCIAN) COASTAL SCRUB

Central (Lucian) coastal scrub is dominated by shrubs generally growing 3 to 6 feet tall in dense stands. This community typically occurs on exposed, often south-facing slopes with shallow, rocky soils in San Luis Obispo and Santa Barbara Counties (Holland 1986). Central coastal scrub was observed only in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA on a steep slope along the eastern bank of the Salinas River.

4.2.2.8 COASTAL AND VALLEY FRESHWATER MARSH

Coastal and valley freshwater marsh is generally dominated by perennial, emergent monocots such as cattail (*Typha* sp.) and bulrush (*Scirpus* sp.) growing in closed canopies. These areas are subject to permanent freshwater flooding or prolonged saturation, which leads to an accumulation of deep, peaty soils. This vegetation community typically occurs along the upper portion of the Sacramento-San Joaquin River Delta as well as along the coast and in coastal valleys near river mouths, lakes, and springs (Holland 1986). The Paso Robles-Templeton Existing 70 kV Route Alternative BSA comprises a small area of coastal and valley freshwater marsh located along Spanish Camp Creek at the intersection of South River Road and Santa

Ysabel Avenue. In the Paso Robles-Templeton South River Route Alternative BSA, this community was observed along the Spanish Camp Creek for approximately 0.60 mile along the northeast side of South River Road. In the Paso Robles-Templeton Creston Route Alternative BSA, coastal and valley freshwater marsh was observed along the edges of the large freshwater pond located on the LCSLO conservation easement immediately south of Creston Road. Vegetation observed in coastal and valley freshwater marsh habitat in the BSAs primarily consisted of cattail (*T. latifolia*), spikerush (*Eleocharis sp*.), and bulrush.

4.2.2.9 SANDY WASH

Sandy washes are comprised of sand and gravel accumulation found in riverbeds and floodplains (Anderson et al. 1976). Sandy wash was observed only in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA in two small areas where the BSA overlaps in the Salinas River's floodplain.

4.3 DRAINAGES AND WATER FEATURES

The Templeton Route Alternatives' BSAs are located within the Paso Robles Creek-Salinas River watershed. The central drainage feature in this watershed is the Salinas River. The Salinas River flows north-northwest through the Salinas Valley, bisecting the Coast Ranges, before draining into the Pacific Ocean nearly 100 miles northwest of the BSAs.

The BSAs cross several other perennial and ephemeral drainage and wetland features that eventually flow into the Salinas River. The BSAs are located east of the Salinas River, with the Paso Robles-Templeton Existing 70 kV Route Alternative paralleling the river and briefly overlapping the river's floodplain in two areas. Refer to Appendix D for the Templeton Route Alternatives' water feature data mapped from the NWI (USFWS 2018b) and USGS National Hydrography Dataset (USGS 2018a); and to Appendix E for potentially jurisdictional waters of the state and U.S. that were mapped during the June 2018 field surveys. A more in-depth discussion of potentially jurisdictional waters within the Templeton Route Alternatives' BSAs is provided below.

4.3.1 Jurisdictional Waters

The Salinas River, Spanish Camp Creek, several unnamed natural drainages, and wetland features were identified within the Templeton Route Alternatives' BSAs. Based on the presence of hydrophytic vegetation, wetland hydrology, hydric soils, defined bed and banks, and/or a nexus to waters of the U.S., these features may be subject to USACE and CDFW jurisdiction (Appendix D). A formal jurisdictional delineation report has not been prepared for the Templeton Route Alternatives' analysis. The following sections describe jurisdictional waters that were preliminarily mapped in the BSAs during the general reconnaissance-level field surveys.

4.3.1.1 PASO ROBLES-TEMPLETON EXISTING 70 KV ROUTE ALTERNATIVE

The Paso Robles-Templeton Existing 70 kV Route Alternative parallels the eastern portion of the Salinas River, briefly encroaching within the riparian corridor in two locations along the southern portion of the alignment. The BSA is approximately 0.4 mile east of the river at its farthest distance. In addition, Spanish Camp Creek, five unnamed ephemeral drainages, and two seasonal wetland features are present within the BSA (Appendix E). The Salinas River and other ephemeral drainages observed in the BSA may be suitable migration corridors for dispersal of species between local areas and at larger scales between regions.

4.3.1.2 PASO ROBLES-TEMPLETON SOUTH RIVER ROUTE ALTERNATIVE

The Paso Robles-Templeton South River Route Alternative is located approximately 0.10 to 1.3 miles east of the Salinas River. The primary water feature in the BSA is a perennial drainage feature referred to as Spanish Camp Creek. This creek flows northwest for approximately 0.60 mile within the BSA, from

Spanish Camp Road to Santa Ysabel Avenue, and eventually drains into the Salinas River approximately 0.10 mile west of the BSA. Biologists identified two other unnamed ephemeral drainages features and one seasonal wetland located along the eastern portion of the BSA (Appendix E). Spanish Camp Creek and other ephemeral drainages observed in the BSA may provide suitable dispersal corridors for wildlife species traveling between local areas as well as between larger regions.

4.3.1.3 PASO ROBLES-TEMPLETON CRESTON ROUTE ALTERNATIVE

The Paso Robles-Templeton Creston Route Alternative is located approximately 0.25 to 2.25 miles east of the Salinas River. The primary water feature in the BSA is a large freshwater pond located on the LCSLO conservation easement immediately south of Creston Road. The freshwater pond consists of open water habitat and coastal and valley freshwater marsh, and drains generally west into Spanish Camp Creek. In addition, biologists identified the following potentially jurisdictional features in the BSA: four other unnamed ephemeral drainages, three seasonal wetlands, and one detention basin. The ephemeral drainage features may provide suitable dispersal corridors for wildlife species traveling between local areas as well as between larger regions.

4.4 SENSITIVE SPECIES

All sensitive species identified during the literature review were evaluated for their potential to occur within the Templeton Route Alternatives' BSAs. Biologists examined these records and made determinations during the June 2018 field surveys. All plants and wildlife encountered during the field surveys were recorded. Complete lists of plant and animal species observed are shown in Appendices A and B, respectively.

4.4.1 Special-Status Plants

Forty-five special-status plant species (CDFW 2018a and CNPS 2018) and one sensitive community (valley oak woodland) have occurrence records within the nine USGS 7.5-minute topographic quadrangles (USGS 2018b) at and surrounding the BSAs. Valley oak woodland records were limited to the USGS 7.5-minute Adelaida quadrangle, but a small area (less than 5 acres) was observed in the Existing 70 kV Route Alternative BSA in the USGS 7.5-minute Templeton quadrangle.

Three federal- and/or state-listed species—San Luis Obispo fountain thistle (*Cirsium fontinale var. obispoense*), spreading navarretia (*Navarretia fossalis*), and California seablite (*Suaeda californica*)—were identified in the records search; however, either the BSAs are located outside of their known range, suitable soil types were absent, or the species records were outdated, with no known occurrences in the region. These species were therefore determined absent from the BSAs. No other federal- or state-listed species were returned in the records search.

It was determined that 16 CNPS-listed species have the potential to occur or are likely to occur within the Templeton Route Alternatives' BSAs, although the likelihood of species occurrence varies among the Templeton Route Alternatives due to site-specific conditions. These species and their likelihood for occurrence is described in Table 3. Five additional CNPS-listed species were determined to be unlikely to occur in the BSAs: San Luis mariposa-lily (*Calochortus obispoensis*), San Luis Obispo sedge (*Carex obispoensis*), Brewer's spineflower (*Chorizanthe breweri*), Eastwood's larkspur (*Delphinium parryi ssp. Eastwoodiae*), and Jones' layia (*Layia jonesii*). Determinations were based on the absence of suitable habitat and features required to satisfy the life history requirements of the species (i.e., habitat associations and soil type). The remaining 24 CNPS-listed plants were determined to be absent from the BSAs because either suitable habitat does not exist, or the species is restricted to or known to be present only within a specific area outside of the BSAs. Species that were determined to be unlikely to occur or have no potential to occur were excluded from Table 3; however, a complete table with all species that were evaluated can be provided

Table 3. Sensitive Plant Species Potential for Occurrence within the BSAs[1]

Common Name *Scientific Name*	Status Federal / State / CRPR[2]	Habitat Associations[3]	Likelihood of Occurrence within the Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the South River Route Alternative BSA	Likelihood of Occurrence within the Creston Route Alternative BSA
Miles' milk-vetch* *Astragalus didymocarpus var. milesianus*	-- /--/CRPR 1B.2	Annual herb that occurs in grassy areas near the coast. Blooming period: March–June. Elevation: < 400 meters.	**Likely to occur** Grasslands in the BSA may provide suitable habitat for this species. Two CNDDB occurrences have been recorded (1936 and 1969) within the 9-quad database search, with the nearest approximately 5 miles southeast of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Grasslands in the BSA may provide suitable habitat for this species. Two CNDDB occurrences have been recorded (1936 and 1969) within the 9-quad database search, with the nearest approximately 5 miles southeast of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Grasslands in the BSA may provide suitable habitat for this species. Two CNDDB occurrences have been recorded (1936 and 1969) within the 9-quad database search, with the nearest approximately 5 miles southeast of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
La Panza mariposa lily *Calochortus simulans*	--/--/ CRPR 1B.3	Perennial bulbiferous herb that occurs in meadow habitats found in chaparral, valley grassland, and foothill woodland communities. Associated with sandy (often granitic) soils. Blooming period: April–July. Elevation: 380–1,150 meters.	**Potential to occur** Nonnative grassland and blue oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
dwarf calycadenia *Calycadenia villosa*	--/--/ CRPR 1B.1	Annual herb that occurs in chaparral, cismontane woodland, and valley and foothill grassland. Associated with dry, rocky hills and ridges. Blooming period: May–October. Elevation: 240–1,350 meters	**Potential to occur** Nonnative grassland and blue oak woodlands within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
Hardham's evening-primrose *Camissoniopsis hardhamiae*	-- /--/CRPR 1B.2	Annual herb that occurs in chaparral and cismontane woodland that is typically found in sandy soil, limestone, and disturbed oak woodland. Blooming period: March–May. Elevation: 140–945 meters.	**Potential to occur** Blue oak woodland in sandy soils along the Salinas River may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Blue oak woodlands with sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Blue oak woodlands with sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
San Luis Obispo owl's-clover* *Castilleja densiflora* var. *Obispoensis*	--/--/ CRPR 1B.2	Annual herb that occurs in meadows, seeps, and valley and grassland. Sometimes serpentinite. Blooming period: March–June. Elevation: 10–430 meters.	**Likely to occur** Wetland features, roadside drainages, and grasslands within the BSA may provide suitable habitat for this species. One CNDDB occurrence (2005) was recorded approximately 3.85 miles northeast of the BSA. This species was also observed along Buena Vista Drive, approximately 3 miles north of the BSA, during the wetland delineation for the proposed project (2016 and 2017). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Spanish Camp Creek, nonnative grasslands and wetland features within the BSA may provide suitable habitat for this species. One CNDDB occurrence (2005) was recorded approximately 3.85 miles northeast of the BSA. This species was also observed along Buena Vista Drive, approximately 3 miles north of the BSA, during the wetland delineation for the proposed project (2016 and 2017). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Nonnative grasslands and wetland features within the BSA may provide suitable habitat for this species. One CNDDB occurrence (2005) was recorded approximately 3.85 miles northeast of the BSA. This species was also observed along Buena Vista Drive, approximately 3 miles north of the BSA, during the wetland delineation for the proposed project (2016 and 2017). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.

Table 3. Sensitive Plant Species Potential for Occurrence within the BSAs[1]

Common Name *Scientific Name*	Status Federal / State / CRPR[2]	Habitat Associations[3]	Likelihood of Occurrence within the Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the South River Route Alternative BSA	Likelihood of Occurrence within the Creston Route Alternative BSA
Lemmon's jewelflower* *Caulanthus lemmonii*	--/--/CRPR 1B.2	Annual herb that occurs in grassland, chaparral, and scrub habitat. Blooming period: February–May. Elevation: 80–1,580 meters.	**Potential to occur** Nonnative grassland within the BSA may provide suitable habitat. Two outdated CNDDB occurrences have been recorded approximately 2 miles northeast (1960) and 3 miles northwest (1957) of Paso Robles (exact location unknown). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland within the BSA may provide suitable habitat. Two outdated CNDDB occurrences have been recorded approximately 2 miles northeast (1960) and 3 miles northwest (1957) of Paso Robles (exact location unknown). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland within the BSA may provide suitable habitat. Two outdated CNDDB occurrences have been recorded approximately 2 miles northeast (1960) and 3 miles northwest (1957) of Paso Robles (exact location unknown). This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
Straight-awned spineflower *Chorizanthe rectispina*	--/--/CRPR 1B.3	Annual herb that occurs in chaparral, cismontane woodlands, and coastal scrub. Associated with sandy or gravelly soils. Blooming period is April–July. Elevation: 85–1035 meters	**Potential to occur** Nonnative grassland and oak woodlands in sandy/gravelly soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
Yellow-flowered eriastrum *Eriastrum luteum*	--/--/CRPR 1B.2	Annual herb that occurs in broadleafed upland forest, chaparral, and cismontane woodland on drying slopes. Associated with sandy or gravel soils. Blooming period: May–June. Elevation: < 1000 meters.	**Potential to occur** Oak woodlands with sandy/gravelly soil along the Salinas River may provide habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Oak woodlands with sandy soil within the BSA may provide habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Oak woodlands with sandy soil within the BSA may provide habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
Ojai fritillary *Fritillaria ojaiensis*	--/--/CRPR 1B.2	Perennial bulbiferous herb that occurs in chaparral, yellow pine forest, and mixed evergreen forest. Associated with rocky slopes and river basins. Blooming period: February–May. Elevation: 225–998 meters.	**Potential to occur** Rocky slopes and blue oak woodlands along the Salinas River may provide habitat. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**None** No suitable habitat was observed within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**None** No suitable habitat was observed within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
mesa horkelia* *Horkelia cuneata var. puberula*	--/--/CRPR 1B.1	Perennial herb that occurs in coastal sage, chaparral, and cismontane woodland in sandy to gravelly soil. Blooming period is February–July. Elevation 70–810 meters.	**Potential to occur.** Oak woodlands in sandy soils along the Salinas River may provide suitable habitat for this species. Two outdated CNDDB occurrences have been recorded (1913) and (1956) within 2 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. Two outdated CNDDB occurrences have been recorded (1913) and (1956) within 2 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Oak woodlands in sandy soils within the BSA may provide suitable habitat for this species. Two outdated CNDDB occurrences have been recorded (1913) and (1956) within 2 miles of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
Santa Lucia dwarf rush* *Juncus luciensis*	--/--/CRPR 1B.2	Annual grass-like herb that grows in wet, sandy soils of seeps, meadows, vernal pools, streams, and roadsides. Blooming period: April–August. Elevation: 300–2040 meters.	**Potential to occur** Wetland features and roadside drainages within the BSA may provide suitable habitat for this species. One outdated CNDDB occurrence (1958) was recorded approximately 3.5 miles east of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Spanish Camp Creek, wetland features, and roadside drainages within the BSA may provide habitat. One outdated CNDDB occurrence (1958) was recorded approximately 1 mile northeast of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Spanish Camp Creek, wetland features, and roadside drainages within the BSA may provide habitat. One outdated CNDDB occurrence (1958) was recorded approximately 0.7 mile southeast of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.

Table 3. Sensitive Plant Species Potential for Occurrence within the BSAs[1]

Common Name *Scientific Name*	Status Federal / State / CRPR[2]	Habitat Associations[3]	Likelihood of Occurrence within the Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the South River Route Alternative BSA	Likelihood of Occurrence within the Creston Route Alternative BSA
pale-yellow layia *Layia heterotricha*	--/--/CRPR 1B.1	Annual herb that occurs in cismontane, pinyon, and juniper woodland; coastal scrub; wetlands and non-wetlands; and valley and foothill grassland. Associated with open clay or sandy soils, sometimes +/- alkaline soils. Blooming period: March–June. Elevation: 200–1,800 meters.	**Potential to occur** Nonnative grassland with sandy soils and wetlands within the BSA may provide suitable habitat. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland with sandy soils and wetlands within the BSA may provide suitable habitat. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland with sandy soils and wetlands within the BSA may provide suitable habitat. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
woodland woollythreads* *Monolopia gracilens*	--/--/CRPR 1B.2	Annual herb that occurs often in serpentine grassland, open chaparral, and oak woodland. Blooming period: February–July. Elevation: 100–1,200 meters.	**Potential to occur** Nonnative grassland and blue oak woodlands may provide suitable habitat for this species. One outdated CNDDB occurrence (1957) was recorded approximately 2 miles northwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands may provide suitable habitat for this species. One outdated CNDDB occurrence (1957) was recorded approximately 2 miles northwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Nonnative grassland and blue oak woodlands may provide suitable habitat for this species. One outdated CNDDB occurrence (1957) was recorded approximately 2 miles northwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
shining navarretia* *Navarretia nigelliformis* ssp. *radians*	--/--/CRPR 1B.2	Annual herb that occurs in cismontane woodland and valley and foothill grassland. Associated with vernal pools and clay depressions. Blooming period: April–July. Elevation: 76–1,000 meters.	**Likely to occur** Wetland features, and roadside drainages within the BSA may provide suitable habitat for this species. Four CNDDB occurrences have been recorded within 3 miles of the BSA between 1937 and 2014. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Spanish Camp Creek, wetland features, and seasonal drainages within the BSA may provide habitat for this species. Four CNDDB occurrences have been recorded within 3 miles of the BSA between 1937 and 2014. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Likely to occur** Spanish Camp Creek, wetland features, and seasonal drainages within the BSA may provide habitat for this species. Four CNDDB occurrences have been recorded within 3 miles of the BSA between 1937 and 2014. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
chaparral ragwort *Senecio aphanactis*	--/--/CRPR 2B.2	Annual herb that occurs in foothill woodland, northern coastal scrub, coastal sage scrub. Alkaline flats, dry open rocky areas. Blooming period: January–May. Elevation: 10–800 meters.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences have been recorded within the 9-quad database search. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.
most beautiful jewelflower* *Streptanthus albidus ssp. peramoenus*	--/--/CRPR 1B.2	Annual herb that occurs in chaparral openings, cismontane woodland, and valley and foothill grassland. Associated with serpentine or metamorphic (Franciscan formation), rocky, generally barren slopes. Blooming period: March–October. Elevation: 95–1000 meters.	**Potential to occur.** Nonnative grassland and oak woodland within the BSA may provide habitat for this species. One outdated CNDDB occurrence (1956) was recorded in Graves stream within 5 miles southwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Unlikely to occur** Nonnative grassland and oak woodlands within the BSA may provide habitat for this species; however, associated habitats and soil types not observed in the BSA. One outdated CNDDB occurrence (1956) was recorded in Graves stream within 5 miles southwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.	**Unlikely to occur** Nonnative grassland and oak woodlands within the BSA may provide habitat for this species; however, associated habitats and soil types not observed in the BSA. One outdated CNDDB occurrence (1956) was recorded in Graves stream within 5 miles southwest of the BSA. This species was not observed in the BSA during surveys that were conducted during the appropriate bloom period.

Table 3. Sensitive Plant Species Potential for Occurrence within the BSAs[1]

Common Name *Scientific Name*	Status Federal / State / CRPR[2]	Habitat Associations[3]	Likelihood of Occurrence within the Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the South River Route Alternative BSA	Likelihood of Occurrence within the Creston Route Alternative BSA

[1] List of plant species based on CNPS and CNDDB searches of USGS 7.5-minute quadrangles—Adelaida, York Mountain, Estrella, Paso Robles, Templeton, Creston, Morro Bay North, Atascadero, and Santa Margarita (USGS 2018b).
[2] Listing status based on CNDDB and CNPS data.
[3] Habitat associations and blooming periods based on the Jepson Online Interchange for California Floristics (Queried in May/June 2016).
*CNDDB occurrences recorded within 5 miles of the BSAs.

Status Codes
-- = No status
FE = Federally listed endangered, FT = Federally listed threatened,
FC = Federal candidate for listing
SE = California state-listed endangered
ST = California state-listed threatened
SCE = California candidate endangered

California Rare Plant Ranking:
1A = Plants presumed extirpated in California and either rare or extinct elsewhere
1B = Plants rare, threatened, or endangered in California and elsewhere
2A = Plants presumed extirpated in California, but common elsewhere
2B = Plants rare, threatened, or endangered in California, but more common elsewhere

CRPR Threat Ranks:
0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat)
0.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat)

upon request. Special-status plant species occurrences recorded in the CNDDB (CDFW 2018c) are depicted in Figure 4.

No special-status plant species were observed in the Templeton Route Alternatives' BSAs during the 2018 and 2019 botanical surveys. The surveys were conducted at multiple times throughout the year to capture the appropriate bloom periods for all of the special-status plant species that have potential to occur in the BSAs. A complete list of plants identified during the surveys is in Appendix A.

4.4.2 Special-Status Animals

Twenty-seven special-status animal species (CDFW 2018c) have occurrence records within the nine USGS 7.5-minute topographic quadrangles (USGS 2018b) at and surrounding the BSAs. Two special-status animals—American badger (*Taxidea taxus*) and golden eagle (*Aquila chrysaetos*)—were observed during the June 2018 survey. The American badger was observed in the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs, and the golden eagle was observed in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. The desktop review, literature research, and field investigation concluded that 17 special-status wildlife species, eight of which are federal- and/or state-listed species or CDFW fully protected species, have potential to occur, are likely to occur, or to be present in the Templeton Route Alternatives' BSAs, although the likelihood of species occurrence varies among the Templeton Route Alternatives due to site-specific conditions. These species are discussed in the subsections and Table 4 presented below. In addition, two special-status animal species—Townsend's big-eared bat (*Corynorhinus townsendii*) and least Bell's vireo *(Vireo bellii pusillus*)—were determined unlikely to occur in the BSAs. The remaining six wildlife species—coast range newt (*Taricha torosa*), lesser slender salamander (*Batrachoseps minor*), Morro shoulderband snail (*Helminthoglypta walkeriana*), tidewater goby (*Eucyclogobius newberryi*), western snowy plover (*Charadrius alexandrinus nivosus*), and foothill yellow-legged frog (*Rana boylii*)—were determined to be absent in all three Templeton Route Alternatives' BSAs based on the lack of suitable habitat or because the BSAs are located outside of the species' range. Species that were determined to be unlikely to occur or have no potential to occur were excluded from Table 4; however, a complete table with all species that were evaluated can be provided upon request.

Species that were determined to be present, are likely to occur, or have potential to occur within the BSAs are discussed below. Special-status wildlife species occurrences recorded in the CNDDB (CDFW 2018c) are depicted in Figure 5.

4.4.2.1 STEELHEAD – SOUTH-CENTRAL CALIFORNIA COAST DISTINCT POPULATION SEGMENT

As mentioned in Section 4.2.1, critical habitat for California Coast steelhead in Salinas Hydrologic Unit 3309, Paso Robles Hydrologic Sub-area 330981 occurs along the Salinas River in the westernmost portion of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA (Figure 3; Appendix E). No CNDDB occurrences have been recorded within 5 miles of the BSA; however, three older occurrences dating back from 1970 to 1988 were recorded in the Morro Bay North USGS 7.5-minute quadrangle. These occurrences are on the west side of the Santa Lucia Range and lack hydrological connectivity to aquatic features in the BSAs.

Habitat constituents that are required to support this species include: (1) freshwater spawning sites, (2) freshwater rearing sites, (3) freshwater migration corridors, and (4) estuarine areas. Two small patches of the Pasto Robles-Templeton Existing 70kV Route Alternative BSA encroach within the upper banks and floodplain of the Salinas River riparian corridor (Appendix E). The lack of surface flows during summer and fall months, as well as the silty and sandy substrate, make this portion of the Salinas River unsuitable for spawning or rearing habitat. Precipitation during the winter and spring months, however, likely provides

Figure 4. CNDDB Records of Sensitive Plants Map

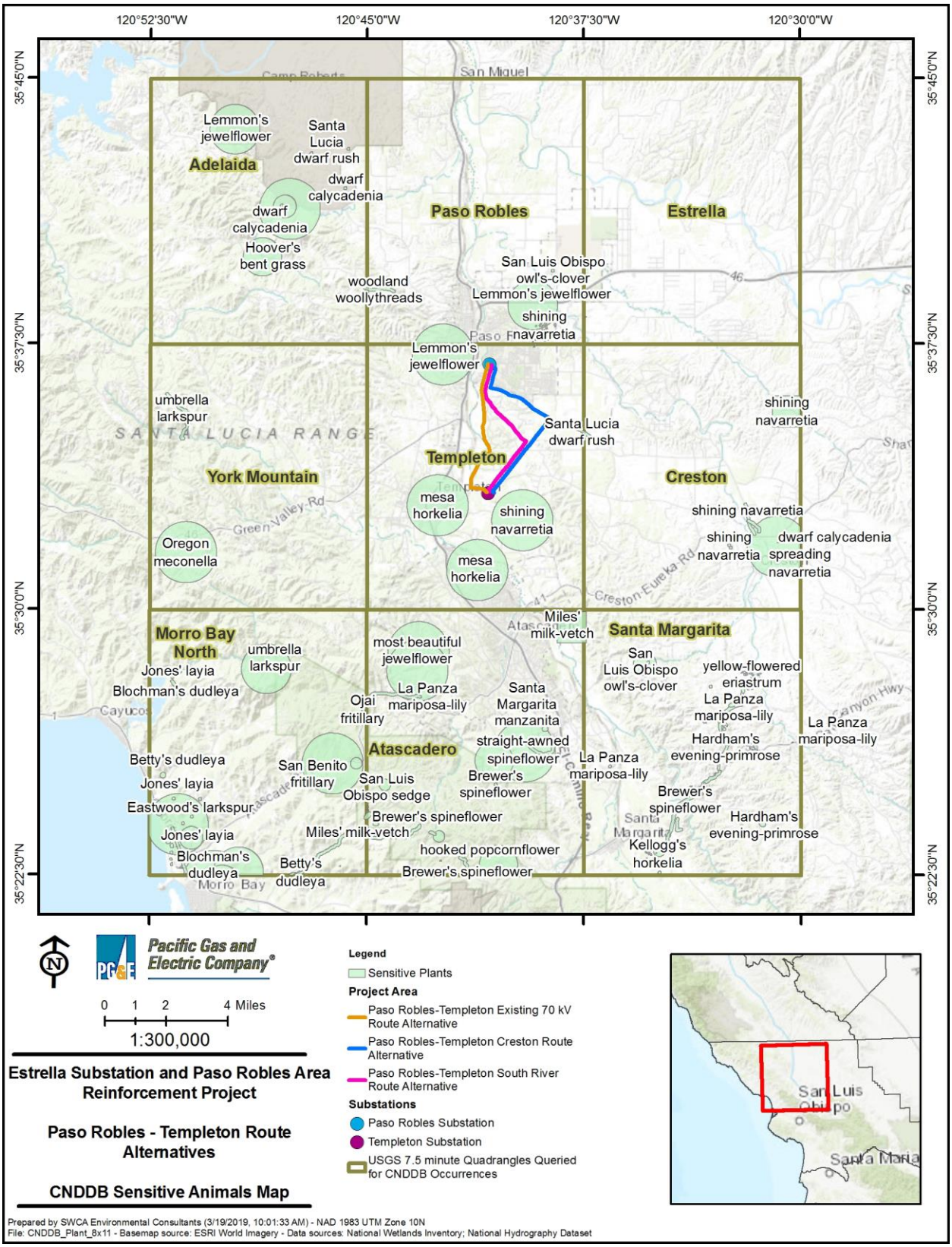


Table 4. Sensitive Wildlife Species Potential for Occurrence within the BSAs

Common Name *Scientific Name*	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton South River Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton Creston Route Alternative BSA
FISH					
steelhead – south-central California coast distinct population segment *Oncorhynchus mykiss irideus*	FT/--/--	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	**Potential to occur** The Salinas River provides a suitable freshwater migration corridor for steelhead. No CNDDB occurrences have been recorded within 5 miles of the BSA. Three CNDDB occurrences were recorded within the 9-quad database search between 1980 and 1997 in Chorro Creek and tributaries, Toro Creek, and Morro Creek; approximately 8, 10, and 12 miles southwest of the BSA, respectively. While these tributaries are known to provide suitable spawning and rearing habitat, they lack hydrological connectivity to the Salinas River and other aquatic features in the BSA.	**None** No suitable spawning, rearing, or migration habitat was observed within the BSA. Silty substrate and warm water temperatures make Spanish Camp Creek unsuitable for this species. No CNDDB occurrences have been recorded within 5 miles of the BSA. Three CNDDB occurrences were recorded within the 9-quad database search between 1980 and 1997 in Chorro Creek and tributaries, Toro Creek, and Morro Creek; approximately 8, 10, and 12 miles southwest of the BSA, respectively. While these tributaries are known to provide suitable spawning and rearing habitat, they lack hydrological connectivity to the Salinas River and other aquatic features in the BSA.	**None** No suitable spawning, rearing, or migration habitat was observed within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA. Three CNDDB occurrences were recorded within the 9-quad database search between 1980 and 1997 in Chorro Creek and tributaries, Toro Creek, and Morro Creek; approximately 8, 10, and 12 miles southwest of the BSA, respectively. While these tributaries are known to provide suitable spawning and rearing habitat, they lack hydrological connectivity to the Salinas River and other aquatic features in the BSA.
INVERTEBRATES					
vernal pool fairy shrimp* *Branchinecta lynchi*	FT/--/--	Vernal pool habitats including depressions in sandstone, to small swale, earth slump or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland.	**Likely to occur** Suitable vernal pool habitat is present in the BSA and crossed by the alignment. Three recent CNDDB occurrences between 2001 and 2005 were recorded within 5 miles of the BSA, approximately 3 and 4 miles northeast, and 0.5 mile northwest, of Paso Robles Substation.	**Likely to occur** Suitable vernal pool habitat is present in the BSA and crossed by the alignment. Three recent CNDDB occurrences between 2001 and 2005 were recorded within 5 miles of the BSA, approximately 3 and 4 miles northeast, and 0.5 mile northwest, of Paso Robles Substation.	**Likely to occur** Suitable vernal pool habitat is present in the BSA and crossed by the alignment. Three recent CNDDB occurrences between 2001 and 2005 were recorded within 5 miles of the BSA, approximately 3 and 4 miles northeast, and 0.5 mile northwest, of Paso Robles Substation.
AMPHIBIANS					
California red-legged frog* *Rana draytonii*	FT/--/SSC	Semi-permanent or permanent water at least 0.5 meter deep, bordered by emergent or riparian vegetation and upland grassland, forest, or scrub habitats for refugia and dispersal.	**Likely to occur** Spanish Camp Creek and coastal and valley freshwater marsh may provide suitable aquatic breeding and aquatic non-breeding habitat. Two recent CNDDB occurrences were recorded within 2 miles of the BSA (2003 in Paso Robles Creek, and 2016 in and Graves Creek).	**Likely to occur** Spanish Camp Creek, freshwater marsh, and seasonal wetlands provide suitable aquatic breeding and aquatic non-breeding habitat. Two recent CNDDB occurrences were recorded within 2 miles of the BSA (2003 in Paso Robles Creek, and 2016 in and Graves Creek).	**Likely to occur** Wetland features observed throughout the BSA provide suitable aquatic breeding and aquatic non-breeding habitat. Two recent CNDDB occurrences were recorded within 2 miles of the BSA (2003 in Paso Robles Creek, and 2016 in Graves Creek).
western spadefoot * *Spea hammondii*	--/--/SSC	Grasslands and valley foothill woodlands, with vernal pools that are used for breeding. Outside of breeding season, they burrow in upland areas.	**Likely to occur** Suitable breeding and upland habitat is present in the BSA. Three recent CNDDB occurrences have been recorded within 5 miles of the BSA.	**Likely to occur** Suitable breeding and upland habitat is present in the BSA. Three recent CNDDB occurrences have been recorded within 5 miles of the BSA.	**Likely to occur** Suitable breeding and upland habitat is present in the BSA. Three recent CNDDB occurrences have been recorded within 5 miles of the BSA.

Table 4. Sensitive Wildlife Species Potential for Occurrence within the BSAs

Common Name *Scientific Name*	Status Federal/ State/Other[2]	Habitat Associations	Likelihood of Occurrence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton South River Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton Creston Route Alternative BSA
REPTILES					
northern California legless lizard* *Anniella pulchra*	--/--/SSC	Dune scrub, coastal scrub, chaparral, pine-oak woodland, oak woodland, and riparian woodland. Requires loose soil for burrowing, moisture, warmth, and plant cover. Burrows in washes, dune sand, loose soil near bases of slopes, and near permanent or temporary streams.	**Likely to occur** Suitable habitat is present along the Salinas River riparian corridor. One CNDDB occurrence (2007) was recorded within 5 miles of the BSA.	**Likely to occur** Suitable habitat is present along Spanish Camp Creek. One CNDDB occurrence (2007) was recorded within 5 miles of the BSA.	**Potential to occur** Oak woodlands with some leafy debris are present within the BSA; however, conditions are drier than that typically associated with this species. One CNDDB occurrence (2007) was recorded within 5 miles of the BSA.
western pond turtle* *Emys marmorata*	--/--/SSC	Flowing waters with basking sites, generally with aquatic vegetation.	**Likely to occur** Spanish Camp Creek may provide suitable habitat, including areas where the BSA extends into the Salinas River riparian zone. Two CNDDB occurrences were recorded within 5 miles of the BSA. The closest record occurred along the Salinas River in 2006 approximately 0.30 mile west of Paso Robles Substation.	**Likely to occur** Suitable habitat is present along Spanish Camp Creek. Two CNDDB occurrences were recorded within 5 miles of the BSA. The closest record occurred along the Salinas River in 2006 approximately 0.30 mile west of Paso Robles Substation.	**Likely to occur** The LCSLO freshwater pond may provide suitable aquatic habitat for this species. Two CNDDB occurrences were recorded within 5 miles of the BSA. The closest record occurred along the Salinas River in 2006 approximately 0.30 mile west of Paso Robles Substation.
San Joaquin whipsnake *Coluber flagellum ruddocki (Masticophis flagellum ruddocki)*	--/--/SSC	Chaparral and scrub habitats but will also use adjacent grassland, oak savanna and woodland habitats; will inhabit abundant rodent burrows.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences were recorded within 5 miles of the project.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences were recorded within 5 miles of the project.	**Potential to occur** Grasslands and oak woodlands in the BSA may provide suitable habitat for this species. No CNDDB occurrences were recorded within 5 miles of the project.
coast horned lizard *Phrynosoma blainvillii*	--/--/SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes; open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Likely to occur** Salinas River riparian corridor and other ephemeral drainages in the BSA may provide suitable habitat for this species. Biologists observed one individual approximately 6.5 miles northeast of the BSA during 2016 field survey. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Likely to occur** Ephemeral drainages observed throughout the BSA may provide suitable habitat for this species. Biologists observed one individual approximately 5.75 miles northeast of the BSA during 2016 field survey. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Likely to occur** Ephemeral drainages observed throughout the BSA may provide suitable habitat for this species. Biologists observed one individual approximately 5 miles northeast of the BSA during 2016 field survey. No CNDDB occurrences have been recorded within 5 miles of the BSA.
BIRDS					
tricolored blackbird* *Agelaius tricolor*	--/ST/SSC; MBTA	(Nesting colony) Breeds near fresh water, preferably in emergent wetland with tall dense cattails or tules. Feeds in croplands and grasslands.	**Potential to occur** Suitable foraging habitat is present within grasslands, pastures, and agricultural habitat occurring throughout the BSA. Two CNDDB occurrences (1999 and 2008) have been recorded within 5 miles of the BSA.	**Potential to occur** Suitable foraging habitat is present within grasslands, pastures, and agricultural habitat occurring throughout the BSA. Two CNDDB occurrences (1999 and 2008) have been recorded within 5 miles of the BSA.	**Likely to occur** Suitable nesting and foraging habitat is present at and adjacent to the LCSLO freshwater pond. Two CNDDB occurrences (1999 and 2008) have been recorded within 5 miles of the BSA.
grasshopper sparrow *Ammodramus savannarum*	--/--/SSC; MBTA	Summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest. Occurs in dry, dense grasslands and prairies with patches of bare ground.	**Potential to occur** Suitable nesting and foraging habitat is present within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Potential to occur** Suitable nesting and foraging habitat is present within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Potential to occur** Suitable nesting and foraging habitat is present within the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA.

Table 4. Sensitive Wildlife Species Potential for Occurrence within the BSAs

Common Name *Scientific Name*	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton South River Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton Creston Route Alternative BSA
golden eagle* *Aquila chrysaetos*	--/--/FP; MBTA; BGEPA	Broad expanses of open country are required for foraging while nesting primarily occurs in rugged mountainous areas with large trees or on cliffs.	**Present** Suitable nesting and foraging habitat is present within and adjacent to the BSA along Salinas River. One CNDDB occurrence (2006) of an active nest was recorded approximately 4 miles northeast of the BSA, on the west side of Huerhuero Creek, between Golden Hill Road and Airport Road. Biologists observed one individual within the BSA and two nests known to be active in previous seasons approximately 200 feet and 2.4 miles east of the BSA during 2018 field surveys.	**Likely to occur** Suitable nesting and foraging habitat is present within and adjacent to the BSA along Salinas River. One CNDDB occurrence (2006) of an active nest 4 miles northeast of the BSA, on the west side of Huerhuero Creek, between Golden Hill Road and Airport Road. Biologists observed two nests known to be active in previous seasons approximately 0.2 and 0.3 mile southwest of the BSA during 2018 field surveys.	**Likely to occur** Suitable nesting and foraging habitat is present within and adjacent to the BSA along Salinas River. One CNDDB occurrence (2006) of an active nest was recorded approximately 4 miles northeast of the BSA, on the west side of Huerhuero Creek, between Golden Hill Road and Airport Road. Biologists observed two nests known to be active in previous seasons approximately 1 mile southwest of the BSA during 2018 field surveys.
white-tailed kite *Elanus leucurus*	--/--/FP; MBTA	Yearlong resident in coastal and valley lowlands; rarely away from agricultural areas. Inhabits herbaceous and open staged moist habitats mostly in cismontane areas.	**Likely to occur** Suitable nesting and foraging habitat is present in the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2007 and 2018 within 2 miles of the BSA (eBird 2018).	**Likely to occur** Suitable nesting and foraging habitat is present in the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2007 and 2018 within 2 miles of the BSA (eBird 2018).	**Likely to occur** Suitable nesting and foraging habitat is present in the BSA. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2007 and 2018 within 2 miles of the BSA (eBird 2018).
bald eagle *Haliaeetus leucocephalus*	DL/SE/FP; MBTA; BGEPA	Roosts communally in winter in dense, sheltered, remote conifer stands. Nests in large, old growth, or dominant live trees, often close to lakes and large rivers.	**Potential to occur** No suitable nesting and foraging habitat was observed in the BSA, but this species may occur based on nearby sightings. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2006 and 2018, with the nearest observed in 2015 at Lawrence Moore Park (eBird 2018).	**Potential to occur** No suitable nesting and foraging habitat was observed in the BSA, but this species may occur based on nearby sightings. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2006 and 2018, with the nearest observed in 2015 at Lawrence Moore Park (eBird 2018).	**Potential to occur** No suitable nesting and foraging habitat was observed in the BSA, but this species may occur based on nearby sightings. No CNDDB occurrences have been recorded within 5 miles of the BSA; however, multiple sightings have been recorded between 2006 and 2018, with the nearest observed in 2015 at Lawrence Moore Park (eBird 2018).
purple martin *Progne subis*	--/--/SSC; MBTA	Uncommon to rare, local summer resident in a variety of wooded, low-elevation habitats. Forages over riparian areas, forest, and woodland; found in a variety of open habitats in migration.	**Potential to occur** Suitable nesting and foraging habitat is present within the BSA. One CNDDB occurrence (2006) was recorded just outside the 5-mile buffer around the BSA.	**Potential to occur** Suitable nesting and foraging habitat was observed within the BSA. One CNDDB present (2006) was recorded just outside the 5 miles of the BSA.	**Potential to occur** Suitable nesting and foraging habitat is present within the BSA. One CNDDB occurrence (2006) was recorded just outside the 5-mile buffer around of the BSA.
least Bell's vireo* *Vireo bellii pusillus*	FE/SE/MBTA	Summer resident of cottonwood-willow forest, oak woodland, shrubby thickets, and dry washes with willow thickets at the edges. Requires dense groundcover (2–3 feet) for nesting and stratified canopy for foraging.	**Unlikely to occur** Salinas River may provide suitable nesting and foraging habitat for this species; however, the two areas where the BSA overlaps in the floodplain lacks the riparian strata composition required for nesting. These areas may provide marginally suitable foraging habitat. The closest and most recent (2005) CNDDB occurrence documented a breeding pair approximately 4 miles north-northwest of the BSA.	**None** No suitable nesting or foraging habitat was observed within the BSA. Although the BSA is within the species' summer range no suitable riparian vegetation is present within the BSA. The closest and most recent (2005) CNDDB occurrence was recorded approximately 4 miles north-northwest of the BSA.	**None** No suitable nesting or foraging habitat was observed within the BSA. Although the BSA is within the species' summer range, no suitable riparian vegetation is present within the BSA. The closest and most recent (2005) CNDDB occurrence was recorded approximately 4 miles north-northwest of the BSA.

Table 4. Sensitive Wildlife Species Potential for Occurrence within the BSAs

Common Name *Scientific Name*	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton South River Route Alternative BSA	Likelihood of Occurrence within the Paso Robles-Templeton Creston Route Alternative BSA
MAMMALS					
pallid bat *Antrozous pallidus*	--/--/SSC	True desert areas, moister oak woodlands, and redwood forests of coastal regions. At lower elevations, highly associated with oak woodlands and oak savannah.	**Potential to occur** Potential day and night roost sites were observed within the BSA. No CNDDB occurrences were recorded within 5 miles of the project.	**Potential to occur** Potential day and night roost sites were observed within the BSA. No CNDDB occurrences were recorded within 5 miles of the project.	**Potential to occur** Potential day and night roost sites were observed within the BSA. No CNDDB occurrences were recorded within 5 miles of the project.
Townsend's big-eared bat *Corynorhinus townsendii*	--/--/SSC	A colonial species found in all but subalpine and alpine habitats. Generally viewed as cave-dwelling species, but also found in man-made structures (e.g., mines, tunnels, buildings) for roosting. May use separate sites for night, day, hibernation, or maternity roosts.	**Unlikely to occur** Buildings and other man-made structures are present within the BSA; however, this species is likely to be found in buildings along the coast and are highly sensitive to human disturbance of roosting sites (Pierson et al. 1998). No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Unlikely to occur** Buildings and other man-made structures are present within the BSA; however, this species is likely to be found in buildings along the coast and are highly sensitive to human disturbance of roosting sites (Pierson et al. 1998). No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Unlikely to occur** Buildings and other man-made structures are present within the BSA; however, this species is likely to be found in buildings along the coast and are highly sensitive to human disturbance of roosting sites (Pierson et al. 1998). No CNDDB occurrences have been recorded within 5 miles of the BSA.
Monterey dusky-footed woodrat *Neotoma macrotis luciana*	--/--/SSC	Dense chaparral, coastal sage-scrub, pinyon-juniper, oak and riparian woodlands, and mixed coniferous forest habitat with well-developed understory in which to make its nest.	**Potential to occur** Oak and riparian woodlands with well-developed understory along the Salinas River provide suitable habitat. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Potential to occur** Oak woodlands within and adjacent to ephemeral drainages may provide suitable habitat. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Potential to occur** Oak woodlands within and adjacent to ephemeral drainages may provide suitable habitat. No CNDDB occurrences have been recorded within 5 miles of the BSA.
Salinas pocket mouse* *Perognathus inornatus psammophilus*	--/--/SSC	Habitat relations are not well known, but literature reported habitat for *P. inornatus* on the Carrizo Plain (previously considered to include *psammophilus*) as sandy loam flats dominated by herbs and grasses.	**Potential to occur** Nonnative grassland habitat with friable soils along the Salinas River may provide suitable habitat. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Unlikely to occur** Nonnative grassland is present within the BSA; however, no friable soils were observed during the 2018 field survey period. No CNDDB occurrences have been recorded within 5 miles of the BSA.	**Unlikely to occur** Nonnative grassland is present within the BSA; however, no friable soils were observed during the 2018 field survey period. No CNDDB occurrences have been recorded within 5 miles of the BSA.
American badger* *Taxidea taxus*	--/--/SSC	Open grassland, chaparral, and oak woodland with friable soils. Needs sufficient food and open, uncultivated ground.	**Present** One American badger carcass was observed on El Pomar Drive during the 2018 field survey period located immediately east of the BSA, across from Templeton Substation. Nonnative grasslands and oak woodlands are present within the BSA. One CNDDB occurrence (2003) was recorded within 5 miles of the BSA.	**Present** One American badger carcass was observed within the BSA on El Pomar Drive across from Templeton Substation during the 2018 field survey period. Nonnative grasslands and oak woodlands are present within the BSA. One CNDDB occurrence (2003) was recorded within 5 miles of the BSA.	**Present** One American badger carcass was observed within the BSA on El Pomar Drive across from Templeton Substation during the 2018 field survey period. Nonnative grasslands and oak woodlands are present within the BSA. One CNDDB occurrence (2003) was recorded within 5 miles of the BSA.

Table 4. Sensitive Wildlife Species Potential for Occurrence within the BSAs

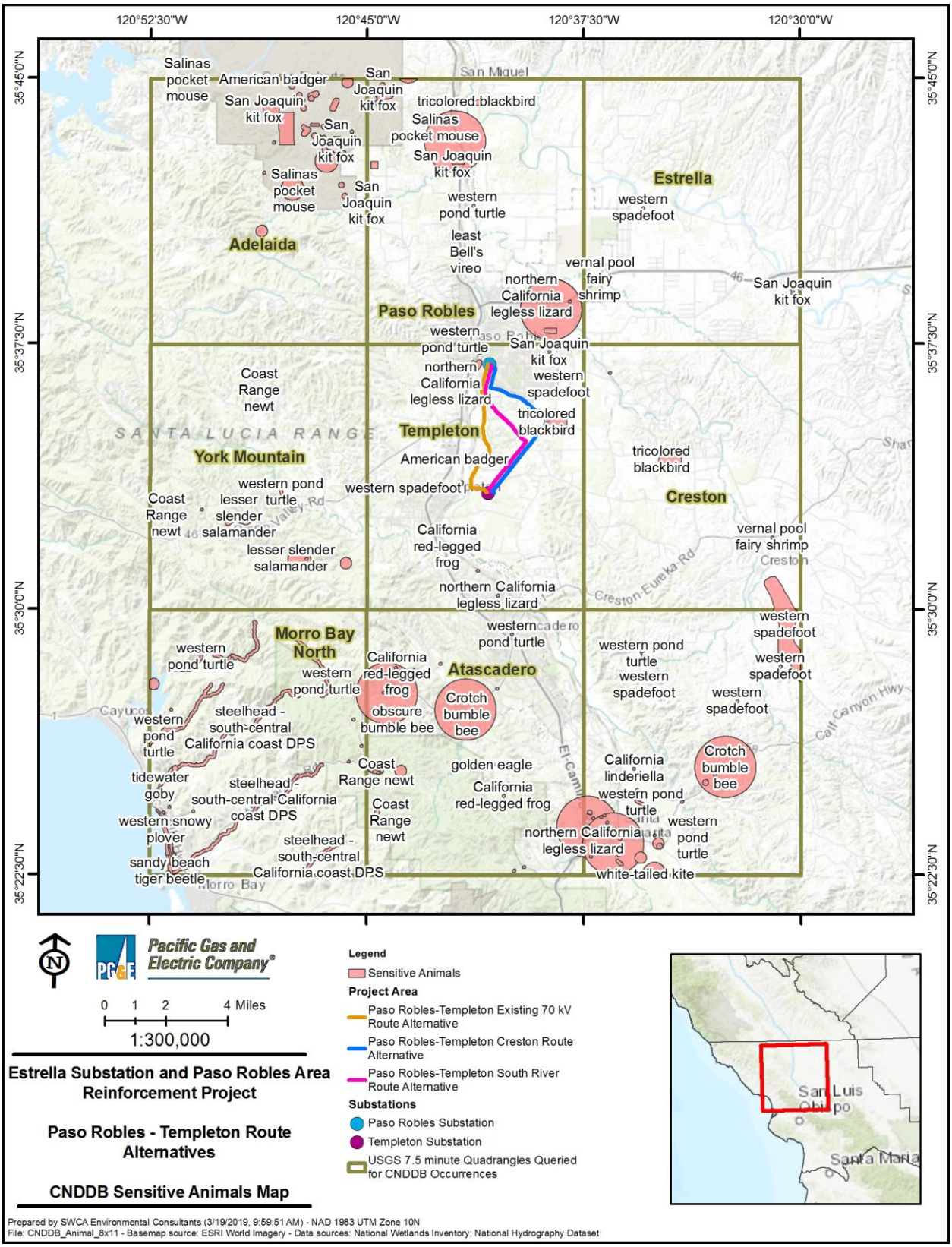
Common Name *Scientific Name*	**Status Federal/ State/Other²**	**Habitat Associations**	**Likelihood of Occurrence within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA**	**Likelihood of Occurrence within the Paso Robles-Templeton South River Route Alternative BSA**	**Likelihood of Occurrence within the Paso Robles-Templeton Creston Route Alternative BSA**
San Joaquin kit fox* *Vulpes macrotis mutica*	FE/ST/--	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance constitute suitable habitat for kit foxes. Some agricultural areas support these foxes.	**Potential to occur** Nonnative grassland within low topography, burrows of sufficient size (e.g., suitable as potential dens), and a suitable prey base was observed during the 2018 field survey period. Two CNDDB occurrences (1990 and 1991) were recorded within 5 miles of the BSA. In addition, positive scat occurrences were documented in 2014 near Whitley Gardens, approximately 10 miles northeast of Paso Robles Substation (Wampler 2014).	**Potential to occur** Nonnative grassland within low topography, burrows of sufficient size (e.g., suitable as potential dens), and a suitable prey base was observed during the 2018 field survey period. Two CNDDB occurrences (1990 and 1991) were recorded within 5 miles of the BSA. In addition, positive scat occurrences were documented in 2014 near Whitley Gardens, approximately 10 miles northeast of Paso Robles Substation (Wampler 2014).	**Potential to occur** Nonnative grassland within low topography, burrows of sufficient size (e.g., suitable as potential dens), and a suitable prey base was observed during the 2018 field survey period. Two CNDDB occurrences (1990 and 1991) were recorded within 5 miles of the BSA. In addition, positive scat occurrences were documented in 2014 near Whitley Gardens, approximately 10 miles northeast of Paso Robles Substation (Wampler 2014).

[1]List of animal species based on CNDDB searches of USGS 7.5-minute quadrangles – Adelaida, York Mountain, Estrella, Paso Robles, Templeton, Creston, Morro Bay North, Atascadero, and Santa Margarita, Templeton, Creston, Shedd Canyon, Shandon, Cholame Hills, Ranchito Canyon, San Miguel.
[2]Listing status based on CDFW CNDDB State & Federally Listed Endangered & Threatened Animals of California List, April 2018.
*CNDDB occurrences recorded within 5 miles of the BSAs.

Status Codes
-- = No Status
FE = Federally Listed Endangered
FT = Federally Listed Threatened
FC = Federal Candidate for Listing
SE = California State-Listed Endangered
ST = California State-Listed Threatened
SCE = California Candidate Endangered
DL = Delisted
FP = CDFW Fully Protected
SSC = CDFW Species of Special Concern

This page intentionally left blank

Figure 5. CNDDB Records of Sensitive Animals



adequate surface flows to fill the river and to provide a suitable freshwater migration corridor this species to migrate to suitable upstream tributaries to spawn. Therefore, migrating adult steelhead and smolts have the potential to temporarily occur in the Salinas River within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. Both the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs are outside the critical habitat for California Coast steelhead, and no suitable habitat for this species exists in these BSAs.

4.4.2.2 VERNAL POOL FAIRY SHRIMP

No critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) occurs in the Templeton Route Alternatives' BSAs. The nearest critical habitat—Unit 29C, Central Coast Range Region—is located approximately 2.5 miles from the northeastern portion of the Paso Robles-Templeton Creston Route Alternative BSA. Three CNDDB occurrences were recorded between 2001 and 2005 within 5 miles of the BSAs. The nearest and most recent occurrence was recorded approximately 0.50 mile west of Paso Robles Substation near the intersection of Niblick Road and Spring Street in small depressions and pools along a gravel access road.

Habitat constituents that are required to support this species include mound and inter-mound topography or vernal pool wetland features within a matrix of upland habitat (CDFW 2018f). Suitable habitat observed within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA includes: (1) a manmade depression subject to seasonal ponding located approximately 180 feet west of Lake Ysabel Road; and (2) a large low-lying seasonal wetland located immediately east of Vaquero Drive. Suitable habitat was observed in the Paso Robles-Templeton South River Route Alternative BSA in a seasonal wetland located approximately 650 feet southwest of the intersection of South River Road and Lothar Lane. Suitable habitat observed within the Paso Robles-Templeton Creston Route Alternative BSA includes: (1) a seasonal wetland located approximately 100 feet northeast of the intersection of Beechwood Drive and Creston Road; (2) a drainage swale with surrounding seasonal wetlands located immediately north of Creston Road; and (3) seasonal pond located along the easternmost portion of the BSA, between Creston Road and Hanging Tree Road. There are no recorded occurrences of vernal pool fairy shrimp in or around any of these features. Because of the presence of suitable habitat and proximity to documented occurrences within 5 miles of the BSAs, vernal pool fairy shrimp are likely to occur in the BSAs.

4.4.2.3 CALIFORNIA RED-LEGGED FROG

Two California red-legged frog (*Rana draytonii*) CNDDB occurrences (2003 and 2016) were recorded in Paso Robles and Graves creeks just southwest of the community of Templeton, approximately 2.5 and 4 miles south-southwest of the Templeton Route Alternatives' BSAs. Both Paso Robles and Graves creeks are tributaries to the Salinas River. Suitable aquatic breeding, aquatic non-breeding, and upland habitat was identified throughout the BSAs.

To determine the extent and quality of suitable red-legged frog habitat in the BSAs, a site assessment was conducted in June 2018. The site assessment followed the "*Revised Guidance on Site Assessment and Field Surveys for Red-legged Frogs* (Guidance)" issued by the USFWS with the exception that the survey area was limited to the extent of the BSAs instead of surveying out to 1 mile from the BSAs. Potential suitable breeding and non-breeding habitat was identified within the Templeton Route Alternatives' BSAs. These areas were surveyed, and observations recorded on assessment data sheets (Appendix G) with site identification numbers (e.g., California red-legged frog [CRLF] Site #) shown on Appendix E, Biological Resource Map, for each route alternative.

A total of eight sites were preliminarily identified in the BSAs in aerial photography, and all eight sites were assessed. Three sites were assessed in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA, including Spanish Camp Creek (CRLF Site #1), Salinas River (CRLF Site #6), and a man-made

retention pond (CRLF Site #8). Two sites were assessed in the Paso Robles-Templeton South River Route Alternative BSA, including Spanish Camp Creek (CRLF Site #1) and a seasonal wetland (CRLF Site #7). Five sites were assessed in the Paso Robles-Templeton Creston Route Alternative BSA, including a man-made retention basin (CRLF Site# 2), a stormwater detention basin (CRLF Site #3), another man-made detention basin (CRLF Site #4), the large freshwater pond within the LCSLO conservation easement (CRLF Site #5), and a seasonal wetland (CRLF Site #7). Based on the presence of aquatic predators (i.e., American bullfrogs [*Lithobates catesbeianus*] and centrarchid fishes) and/or lack of emergent vegetation, two of the eight survey areas (CRLF Sites #2 and #8) were determined to have either no potential or an unlikely potential to support a breeding population of California red-legged frogs (Table 5). The remaining six features may provide suitable aquatic breeding habitat for this species. In addition, ephemeral drainages observed in the Templeton Route Alternatives' BSAs may be suitable dispersal habitat for this species. The species could also be present in upland areas, such as grassland and blue oak woodland habitat during rain events due to dispersal from water bodies within and near the BSAs. While this species was not observed during the survey period, it is likely to occur in the BSAs because suitable breeding and upland habitat exists and the Templeton Route Alternatives are within the species' range.

4.4.2.4 WESTERN SPADEFOOT

Three western spadefoot toad (*Spea hammondii*) CNDDB occurrences were recorded between 2002 and 2016 within 5 miles of the Templeton Route Alternatives' BSAs. The nearest occurrence was recorded approximately 0.40 mile west of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. Additional CNDDB records show six large (up to 2 inches in length) spadefoot tadpoles were caught and released approximately 1.50 miles northeast of the Paso Robles-Templeton Creston Route Alternative BSA near Meadowlark Road in 2005. Therefore, the Salinas River and seasonal wetlands with sandy substrate observed within the Templeton Alternatives' BSAs may provide suitable breeding habitat for this species. While this species was not observed during the survey period, it is likely to occur because suitable breeding and upland habitat exists in the BSAs and the Templeton Route Alternatives are within the species' range.

4.4.2.5 NORTHERN CALIFORNIA LEGLESS LIZARD

One northern California legless lizard (*Anniella pulchra pulchra*) CNDDB occurrence (2007) was recorded within 5 miles of the Templeton Route Alternatives' BSAs. This species is found primarily in areas with sandy or loose organic soils or where there is sufficient leaf litter (CDFW 2018f). Suitable habitat was observed in blue oak woodlands along the Salinas River corridor in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA, as well as along Spanish Camp Creek in the Paso Robles-Templeton South River Route Alternative BSA. Therefore, this species is likely to occur in these BSAs. Based on the drier conditions and reduced litter debris observed along the Paso Robles-Templeton Creston Route Alternative BSA, northern California legless lizard was determined to have potential to occur in this BSA. While this species was not observed during the survey period, the Templeton Route Alternatives are within the species' range.

4.4.2.6 WESTERN POND TURTLE

Two western pond turtle (*Emys marmorata*) CNDDB occurrences were recorded within 5 miles of the Templeton Route Alternatives' BSAs: along the Salinas River's floodplain in 2006 and Atascadero Creek in 2005. Several potential suitable aquatic breeding habitats were identified within the Templeton Route Alternatives' BSAs, including the Salinas River, Spanish Camp Creek, the large freshwater pond within the LCSLO conservation easement, and seasonal wetlands (Appendix E). The species could also be present in upland areas within and near these aquatic habitats. While this species was not observed during the survey period, it is likely to occur because suitable breeding and upland habitat exists in the BSAs.

Table 5. California Red-legged Frog Site Assessment

Survey Location	Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Paso Robles-Templeton South River Route Alternative BSA	Paso Robles-Templeton Creston Route Alternative BSA	CRLF Present?	Emergent Vegetation Present?	Aquatic Predators Present?	Distance to Nearest CRLF Occurrence (miles)	Notes
CRLF Site #1	✓	✓		No	Yes	Yes	4.9	Spanish Camp Creek is a perennial creek with emergent vegetation. Adjacent upland habitat is present.
CRLF Site #2			✓	No	Yes	Yes	5.2	Man-made detention basin with emergent vegetation and a sandy substrate. No stream inlet or outlet; water intake is likely from an irrigation hose observed on site.
CRLF Site #3			✓	No	Yes	No	5.2	Stormwater retention basin with emergent vegetation and a silty loam substrate. No ponded water was observed at the time of the site visit.
CRLF Site #4			✓	No	Yes	Yes	5.3	Detention basin in a vineyard with emergent vegetation and silty substrate. The detention basin is fed by stormwater runoff and vineyard irrigation.

Table 5. California Red-legged Frog Site Assessment

Survey Location	Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Paso Robles-Templeton South River Route Alternative BSA	Paso Robles-Templeton Creston Route Alternative BSA	CRLF Present?	Emergent Vegetation Present?	Aquatic Predators Present?	Distance to Nearest CRLF Occurrence (miles)	Notes
CRLF Site #5			✓	No	Yes	Yes	5.1	Large freshwater perennial pond with emergent vegetation and an earthen substrate. Water is turbid and contains sulphur.
CRLF Site #6	✓			No	Yes	Yes	3.5	The Salinas River is ephemeral with perennial pools and a sandy and gravelly substrate. Pools contain emergent vegetation.
CRLF Site #7		✓	✓	No	Yes	No	4.1	Seasonal wetland with emergent vegetation and shallow water (<1 foot deep).
CRLF Site #8	✓			No	No	No	2.3	Man-made retention with silty loam substrate. Pond and surrounding habitat devoid of vegetation.

4.4.2.7 SAN JOAQUIN WHIPSNAKE (COACHWHIP)

No San Joaquin whipsnake (*Coluber flagellum ruddocki [=Masticophis flagellum ruddocki]*) CNDDB occurrences have been recorded within 5 miles of the project. An abundance of small mammal burrows was observed in grasslands and other dry open areas in the BSAs. Because of the presence of habitat and proximity to documented occurrences, San Joaquin whipsnake has potential to occur in the BSAs.

4.4.2.8 COAST HORNED LIZARD

No coast horned lizard (*Phrynosoma blainvillii*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs; however, one individual was observed in Dry Creek, approximately 5 miles northeast of the BSAs by biologists in March 2016 during field surveys for the proposed project (SWCA 2017b). Sandy soils, such as those observed in the Salinas River and ephemeral drainages, as well as soft soils along the south side of Creston Road may provide suitable habitat for this species. While this species was not observed during the survey period, it is likely to occur because suitable habitat exists in the BSAs, and the Templeton Route Alternatives are within the species' range.

4.4.2.9 TRICOLORED BLACKBIRD

Two tricolored blackbird (*Agelaius tricolor*) CNDDB occurrences (1999 and 2008) were recorded within 5 miles of the Templeton Route Alternatives' BSAs. The nearest and most recent occurrence was recorded between Franklin Hot Springs and the large freshwater pond within the LCSLO conservation easement in the Paso Robles-Templeton Creston Route Alternative BSA. Dense emergent cattails and tules were observed along the entire edge of the pond, as well as expansive grassland and agricultural habitat surrounding the pond. While this species was not observed during the survey period, it is likely to occur because suitable foraging and breeding habitat exists in this BSA. Open grasslands, pastures, and freshwater marsh habitat in the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs may also provide suitable habitat for this species. Therefore, tricolored blackbird has the potential to occur in these BSAs.

4.4.2.10 GRASSHOPPER SPARROW

No grasshopper sparrow (*Ammodramus savannarum*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs. This species may occur in open grasslands, pastures, and agricultural habitat in the BSAs. Although this species was not observed during the survey period, it has the potential to occur because suitable foraging and nesting habitat exists in the BSAs and the Templeton Route Alternatives' BSAs are within the species' summer range.

4.4.2.11 GOLDEN EAGLE

One golden eagle (*Aquila chrysaetos*) was observed flying near the entrance to Santa Ysabel Ranch HOA within the Paso Robles-Templeton Existing 70 kV Route Alternative BSA during the June 2018 field survey. According to local residents, the eagle was said to be nesting earlier in 2018 in a large stick nest located approximately 200 feet east of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA, in a eucalyptus tree on Santa Ysabel Road. Biologists confirmed the nest location during the June 2018 field survey. Furthermore, biologists observed a golden eagle sitting on a different stick nest located approximately 1,300 feet east of the Paso Robles-Templeton Existing 70 kV Route Alternative BSA in 2016. This nest was located in tall eucalyptus trees near Santa Ysabel Creek (Appendix E). Golden eagles have also been recorded in CNDDB (2006) approximately 3 miles northeast of the Templeton Route Alternatives' BSAs, on the west side of Huerhuero Creek in a blue oak tree, between Golden Hill Road and Airport Road. According to the CNDDB record, a golden eagle pair has been seen nesting at this location for at least 15 years, and a second unoccupied nest was observed in the vicinity. Suitable nesting and foraging habitat is present within the BSAs, including expansive spreads of grassland and oak woodland.

This species is present in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA, and is likely to occur in the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs.

4.4.2.12 WHITE-TAILED KITE

No white-tailed kite (*Elanus leucurus*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs; however, multiple sightings have been recorded in the area between 2007 and 2018 on eBird (2018). While this species was not observed during the survey period, open grasslands, pastures, and agricultural habitat exist in the Templeton Route Alternatives' BSAs which provide suitable foraging and nesting habitat. Therefore, this species is likely to occur.

4.4.2.13 BALD EAGLE

No bald eagle (*Haliaeetus leucocephalus*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs; however, multiple sightings have been recorded between 2006 and 2018. The nearest eBird sighting was recorded in 2015 at Lawrence Moore Park, approximately 0.3 miles west of the BSAs (eBird 2018). In addition, biologists observed one juvenile bald eagle flying near Golden Hill Road approximately 2 miles north of Paso Robles Substation during the June 2016 field survey for the proposed project (SWCA 2017b). While no suitable nesting or foraging habitat was recorded during reconnaissance surveys within the BSAs, this species is known to occur in the area and has the potential to occur (e.g., Salinas River riparian corridor, Atascadero Lake).

4.4.2.14 PURPLE MARTIN

No purple martin (*Progne subis*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs; however, numerous sightings were recorded between 1990 and 2016 in Atascadero, with one observation recorded in 2006 immediately south of the 5-mile search radii (eBird 2018). Natural and urban landscapes in the BSAs may provide suitable nesting and foraging habitat for this species. While this species was not observed during the survey period, it has the potential to occur because suitable foraging and nesting habitat exists in the BSAs and the Templeton Route Alternatives' BSAs are within the species' summer range.

4.4.2.15 PALLID BAT

No pallid bat (*Antrozous pallidus*) CNDDB occurrences have been recorded within 5 miles of the project. Blue oak woodlands, grasslands, and urban portions of the BSAs may provide suitable roosting and foraging habitat for this species. Because of the presence of suitable roosting and foraging habitat, pallid bat has potential to occur in the BSAs.

4.4.2.16 MONTEREY DUSKY-FOOTED WOODRAT

No Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs. This species is found primarily in oak and riparian woodlands with well-developed understory to nest (CDFW 2018f). No woodrat middens were observed during the 2018 field survey; however, woodlands along the Salinas River corridor and ephemeral drainages may provide suitable habitat for this species. Therefore, dusky-footed woodrats have the potential to occur in the BSA.

4.4.2.17 SALINAS POCKET MOUSE

No Salinas pocket mouse (*Perognathus inornatus psammophilus*) CNDDB occurrences have been recorded within 5 miles of the Templeton Route Alternatives' BSAs. This species occurs in annual grasslands, desert scrub, and woodland communities on sandy soils and other friable soils (Brylski 1998). This habitat was

observed along the Salinas River corridor; therefore, it has the potential to occur in the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. Grasslands and oak woodlands observed in the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs may provide suitable habitat for this species; however, it unlikely to occur due to the lack of friable soils observed in these BSAs. While this species was not observed during the survey period, the Templeton Route Alternatives' BSAs are within the species' range.

4.4.2.18 AMERICAN BADGER

One American badger carcass was observed on El Pomar Drive during the survey period. This individual was presumed to have been killed as a result of vehicular traffic and was found in an area where the Paso Robles-Templeton South River Route Alternative and Paso Robles-Templeton Creston Route Alternative BSAs overlap as the BSAs approaches Templeton Substation. One CNDDB occurrence (2003) was recorded within 5 miles of the BSAs. Nonnative grasslands and oak woodlands observed in the Templeton Route Alternatives' BSAs may provide suitable habitat for this species. In addition, an abundance of prey species is present within and around the BSAs, such as California ground squirrel (*Otospermophilus beecheyi*) and other small rodent species. Because of the presence of suitable habitat and the individual sighting along the road, this species is present in the Templeton Route Alternatives' BSAs.

4.4.2.19 SAN JOAQUIN KIT FOX

Current record searches show 10 San Joaquin kit fox (*Vulpes macrotis mutica*) CNDDB occurrences within the nine-quadrangle search between 1987 and 1997, six of which have been recorded at Camp Roberts, approximately 16 miles to the northwest. The two occurrences recorded within 5 miles of the Templeton Route Alternatives BSAs include: (1) one adult near the intersection of Union Road and Golden Hill Road in 1991, approximately 1 mile northeast of Paso Robles Substation; and (2) a denning site with one adult observed at Chandler Ranch within the undeveloped city limits of Paso Robles in 1990, approximately 1-mile northeast of the Paso Robles Substation. In addition, positive scat occurrences were documented in 2014 near Whitley Gardens, approximately 10 miles northeast of Paso Robles Substation (Wampler 2014).

Natural connections between the Salinas River and Pajaro River watersheds, the Carrizo Plain Natural Area, and the San Joaquin Valley provide migration corridors for San Joaquin kit fox; however, the amount of movement between these areas is unknown. While kit fox populations in the Salinas River watershed are known to be located at Camp Roberts and Fort Hunter Liggett (California State University, Stanislaus 2018), the Salinas River may function as a migration corridor for documented population between Shandon Valley and Camp Roberts. In addition, there are no known significant barriers to kit fox dispersal or migration between these two regions. This potential migration corridor occurs north of the BSAs.

As discussed in Section 4.2.2, vegetation communities in the BSAs included agricultural, oak woodlands, nonnative grasslands, ruderal habitat, and urban/developed areas. These areas (in particular, grassland areas) may provide suitable habitat for San Joaquin kit fox, and support a prey base (i.e., California ground squirrel and small mammals) and/or potential natal or non-natal den sites (White and Ralls 1993).

To assess the potential for San Joaquin kit fox to occur in the Templeton Route Alternatives' BSAs, biologists conducted an early evaluation survey as defined by the USFWS San Joaquin Kit Fox Survey Protocol for the Northern Range (USFWS 1999). Biologists examined vegetation communities and potential suitable natal and non-natal dens at and around the BSAs. Methodologies included walking transects approximately 10 feet apart, identifying suitable prey base and assessing burrows for den characteristics (e.g., "keyhole" shape entrance, long soil apron from the entrance). Small mammal burrows and canid burrows with entrances 4 inches in diameter or larger were mapped throughout the BSAs. These accounts are summarized below in Table 6, and locations are shown in Appendix E.

Table 6. Small Mammal Burrows within the BSAs

Burrows Greater than 4 Inches in Diameter	Paso Robles-Templeton Existing 70 kV Route Alternative BSA	Paso Robles-Templeton South River Route Alternative BSA	Paso Robles-Templeton Creston Route Alternative BSA
Small Mammal Burrows	7	1	27
Canid Burrows	1	0	0

Small mammal burrows observed in the Templeton Route Alternatives' BSAs appeared to be primarily inhabited by California ground squirrel and pocket gopher (*Thomomys bottae*). The highest number of burrows occurs in the Paso Robles-Templeton Creston Route Alternative BSA and are concentrated in open grassland near the large freshwater pond within the LCSLO conservation easement at the eastern end of the route before it turns south toward Templeton Substation. Many of the burrows observed in the BSAs showed fresh sign of mammal activity, but no signs of San Joaquin kit fox were observed (e.g., tracks, scat, etc.). No San Joaquin kit fox were observed during the surveys; however, due to the presence of nonnative grassland within low topography, burrows of sufficient size (e.g., suitable as potential dens), and the prey base availability in the Templeton Route Alternatives' BSA, there is potential for San Joaquin kit fox to occur.

5 DISCUSSION

5.1 PASO ROBLES-TEMPLETON EXISTING 70 KV ROUTE ALTERNATIVE

Based on an in-depth literature review and field surveys, two special-status animals—golden eagle and American badger—are present within or immediately adjacent to the Paso Robles-Templeton Existing 70 kV Route Alternative BSA. In addition, 21 special-status plant species and 19 special-status wildlife species were determined to be either likely to occur, have potential to occur, or unlikely to occur. There is also high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31), including golden eagle as two known active nests are located adjacent to the BSA. Federally designated steelhead critical habitat occurs along the westernmost portion of the BSA along the Salinas River. There are no other federally designated critical habitat areas for special-status species within or immediately adjacent to the BSA.

Blue oak woodlands observed in the BSA are considered sensitive under the City of El Paso de Robles General Plan. In addition, valley oak woodland, sandy wash [Salinas River], and coastal and valley freshwater marsh areas in the BSA are considered California Sensitive Natural Communities by CDFW. Heritage oak trees protected under the City of El Paso de Robles Oak Tree Ordinance (Ordinance No. 835 N.S.) were also observed along South River Road in the northern portion of the BSA.

The Salinas River, Spanish Camp Creek, coastal and valley freshwater marsh, ephemeral drainages, and seasonal wetland features were identified within the BSA. Based on the presence of hydrophytic vegetation, wetland hydrology, hydric soils, defined bed and banks, and/or a nexus to waters of the U.S., these features may be subject to USACE, RWQCB, and/or CDFW jurisdiction. Furthermore, these water features may also serve as foraging, breeding, and non-breeding habitats for special-status species, as well as wildlife migration corridors for dispersal of species between local areas and at larger scales between regions.

5.2 PASO ROBLES-TEMPLETON SOUTH RIVER ROUTE ALTERNATIVE

Based on an in-depth literature review and field surveys, one special-status animal—American badger—is present in the Paso Robles-Templeton South River Route Alternative BSA. In addition, 20 special-status plant species and 18 special-status wildlife species were determined to be either likely to occur, have potential to occur, or unlikely to occur in the BSA. There is also high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). There are no federally designated critical habitat areas for special-status species within or immediately adjacent to the BSA.

Blue oak woodlands observed in the BSA is considered a sensitive community under the City of El Paso de Robles General Plan. Heritage oak trees protected under the City of El Paso de Robles Oak Tree Ordinance (Ordinance No. 835 N.S.) were observed along South River Road in the northern portion of the BSA. In addition, the coastal and valley freshwater marsh areas in the BSA are considered California Sensitive Natural Communities by CDFW.

Spanish Camp Creek, coastal and valley freshwater marsh, and ephemeral drainages were identified within the BSA. Based on the presence of hydrophytic vegetation, wetland hydrology, hydric soils, defined bed and banks, and/or a nexus to waters of the U.S., these features may be subject to USACE, RWQCB, and/or CDFW jurisdiction. Furthermore, these water features may also serve as foraging, breeding and non-breeding habitats for special-status species, as well as wildlife migration corridors for dispersal of species between local areas and at larger scales between regions.

5.3 PASO ROBLES-TEMPLETON CRESTON ROUTE ALTERNATIVE

Based on an in-depth literature review and field surveys, one special-status animal—American badger—is present in the Paso Robles-Templeton Creston Route Alternative BSA. In addition, 20 special-status plant species and 18 special-status wildlife species were determined to be either likely to occur, have potential to occur, or unlikely to occur in the BSA. There is also high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). There are no federally designated critical habitat areas for special-status species within or immediately adjacent to the BSA.

Blue oak woodlands observed in the BSA is considered a sensitive community under the City of El Paso de Robles General Plan. Heritage oak trees protected under the City of El Paso de Robles Oak Tree Ordinance (Ordinance No. 835 N.S.) were observed along South River Road in the northern portion of the BSA. In addition, the Paso Robles-Templeton Creston Route Alternative BSA contains a LCSLO agricultural conservation easement for oak trees. The coastal and valley freshwater marsh areas in the BSA are also considered California Sensitive Natural Communities by CDFW.

The LCSLO freshwater pond, coastal and valley freshwater marsh, ephemeral drainages, and seasonal wetland features were identified within the BSA. Based on the presence of hydrophytic vegetation, wetland hydrology, hydric soils, defined bed and banks, and/or a nexus to waters of the U.S., these features may be subject to USACE, RWQCB, and/or CDFW jurisdiction. Furthermore, these water features may also serve as foraging, breeding and non-breeding habitats for special-status species, as well as wildlife migration corridors for dispersal of species between local areas and at larger scales between regions.

6 REFERENCES

Anderson, J. R., E. E. Hardy, J. T. Roach, and R. E. Witmer. 1976. *A Land Use and Land Cover Classification System for Use with Remote Sensor Data.* US Geological Professional Paper 964, 28 pp. Available at: http://www2.bren.ucsb.edu/~fd/gap/data/cnddb/11730.html. Accessed June 2018.

Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken (eds.). 2012. *The Jepson Manual: Vascular Plants of California*. Second edition. University of California Press, Berkeley.

Brylski, P. V. 1998. Salinas pocket mouse, *Perognathus inornatus psammophilus*. Terrestrial Mammal Species of Special Concern in California, Bolster, B.C., Ed., 1998. Draft Final Report prepared for the California Department of Fish and Game.

Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, B. M. Winger, and K. Winker. 2018. Checklist of North and Middle American Birds (online). American Ornithological Society. http://checklist.aou.org/taxa. Accessed June and September 2018.

California Department of Fish and Wildlife (CDFW). 2018a. *Complete List of Amphibian, Reptile, Bird and Mammal Species in California*. Sacramento, CA. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155. Accessed June and September 2018.

_____. 2018b. *Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities*. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959. Accessed June 2018.

_____. 2018c. California Natural Diversity Database (CNDDB) RareFind3. CDFW 2003, as updated 2018.

_____. 2018d. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383 . Accessed June and September 2018.

_____.2018e. Special Animals List. 126 pp. August 2018. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline. Accessed September 2018.

_____. 2018f. Life history accounts for species in the California Wildlife Habitat Relationships System (CWHRS). California Interagency Wildlife Task Group. CWHRS Version 9.0. Available at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Accessed September 2018.

_____. 2018g. Natural Community Conservation Planning Act. (Repealed and added by Stats. 2002, Ch. 4, Sec. 2. Effective January 1, 2003.)

_____. 2018h. Natural Community Conservation Planning. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline. Accessed October 2018.

_____. 2017. Evaluation of the Petition from the Center for Biological Diversity to List the Foothill Yellow-Legged Frog (Rana boylii) as Threatened under the California Endangered Species Act. Prepared by California Department of Fish and Wildlife April 2017.

California Native Plant Society (CNPS). 2018. *Inventory of Rare and Endangered Plants* (online edition, v8-02). California Native Plant Society Rare Plant Program, Sacramento, CA. Available at: http://www.rareplants.cnps.org. Accessed June and September 2018.

California State University, Stanislaus. 2018. Endangered Species Recovery Program: San Joaquin Kit Fox (*Vulpes macrotis mutica*). Available at: http://esrp.csustan.edu/publications/pubhtml.php?doc=sjvrp&file=chapter02L00.html. Accessed June and September 2018.

City of Paso Robles. 2002. Ordinance No. 835 N.S. An Ordinance of the City of El Paso de Robles. Amending Section 10.01 et seq. and Related Provisions of the Municipal Code (Municipal Code Amendment 2001-001-OAK TREES). Available at: http://www.prcity.com/government/departments/commdev/planning/pdf/OakTreeOrd.pdf. Accessed June 2018.

_____. 2018. Rainfall Totals. City of Paso Robles Public Works Department. Available at: http://www.prcity.com/government/departments/publicworks/water/rainfall.asp. Accessed September 2018.

County of San Luis Obispo. 2001. *Santa Ysabel Ranch Expanded Initial Study* (SCH No. 2001021087). Prepared by County of San Luis Obispo Department of Planning and Building. April 2001.

_____. 2003. *Oak Woodlands Management Plan.* Prepared by the Native Tree Committee of San Luis Obispo County. Autumn 2003. Available at: http://ucanr.edu/sites/oak_range/files/60623.pdf. Accessed June 2018.

_____. 2006. *Federal and State Regulations Guide to the San Joaquin Kit Fox*. San Luis Obispo County Planning and Building Department. Available at: http://www.slocounty.ca.gov/Assets/PL/environmental/Kit+Fox+Regulation+Brochure.pdf. Accessed June 2018.

_____. 2010. *County of San Luis Obispo General Plan: Conservation and Open Space Element.* San Luis Obispo County Department of Planning and Building. Available at: https://www.slocounty.ca.gov/getattachment/ba01754b-50ac-4c13-ba16-1a9eb9d56a01/Conservation-and-Open-Space-Element.aspx. Accessed June 2018.

Cornell University. 2015. All About Birds. The Cornell Lab of Ornithology. Available at: https://www.allaboutbirds.org/. Accessed April and September 2018.

DWR and USBR. 2000. Effects of the Central Valley Project and State Water Project on Steelhead and Spring-Run Chinook Salmon. California Department of Water Resources; U.S. Bureau of Reclamation.

eBird. 2018. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available at: http://www.ebird.org. Accessed September 2018.

FISHBIO. 2018. Fisheries and Environmental Consulting Firm. Fish monitoring report, February 17,2016. Available at: https://fishbio.com/field-notes/fish-monitoring/reconnected-river. Accessed October 2018.

Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Nongame-Heritage Program, The Resources Agency, California Department of Fish and Game, Sacramento. 156 pp

Jennings M. R., and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California.* Prepared for California Department of Fish and Game Inland Fisheries Division. Rancho Cordova, California.

Keil, D. J. 2016, June 3. Personal Communication with SWCA Environmental Consultants regarding special-status species that were historically recorded in the region.

Moyle, P. B. 2002. Salmon and Trout, Salmonidae - Rainbow Trout, (Oncorhynchus mykiss) in Inland Fishes of California. Los Angeles, California: University of California Press, 271-282.

National Atmospheric and Oceanic Administration (NOAA). 2018. National Weather Service Forecast Office-NOWData – NOAA Online Weather Data. Monthly Climate Normals (1981-2010)-Paso Robles. Available at: http://www.ncdc.noaa.gov/cdo-web/datatools/normals. Accessed September 2018.

Pierson, E. D., W. E. Rainey. 1998. Distribution, Status, And Management of Townsend's Big-Eared Bat (*Corynorhinus townsendii*) in California. Final Technical Report prepared for the California Department of Fish and Game.

Rincon Consultants, Inc. 2003. *City of El Paso de Robles General Plan: Conservation Element.* Available at: http://www.prcity.com/government/departments/commdev/planning/general-plan-final.asp. Accessed June 2018.

_____. 2006. *City of El Paso de Robles Chandler Ranch Area Specific Plan Environmental Impact Report. Volume 1 of 2: EIR Analysis.* Submitted to City of El Paso de Robles. May 2006. Available at: http://www.prcity.com/government/departments/commdev/planning/chandler-ranch_FEIR.asp. Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A manual of California vegetation*. Second edition. California Native Plant Society Press, in collaboration with California Department of Fish and Wildlife. Sacramento, CA.

Sibley, D. A. 2003. *The Sibley Field Guide to Birds of Western North America*. Alfred A. Knopf, New York, New York.

Stebbins, R. C. 2003. *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin Company, Boston.

SWCA Environmental Consultants. 2017a. *Proponent's Environmental Assessment Estrella Substation and Paso Robles Area Reinforcement Project, San Luis Obispo County, California.*

_____. 2017b. *Proponent's Environmental Assessment Estrella Substation and Paso Robles Area Reinforcement Project: Appendix Q. Biological Resources Technical Report for the 70 kV Power Line, San Luis Obispo County, California.*

_____. 2017c. *Proponent's Environmental Assessment Estrella Substation and Paso Robles Area Reinforcement Project: Appendix P. Biological Resources Technical Report for Estrella Substation, San Luis Obispo County, California.*

U.S. Army Corps of Engineers (USACE). 2008. *A Field Guide to the Identification of Ordinary High Water Mark (OHWM) in the Arid West Region of the United States*. Robert W. Lichvar and Shawn M. McColley (editors). Hanover, New Hampshire: ERDC/CRREL TR-08-12. U.S. Army Engineer Research and Development Center.

U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2018a. Hydric Soils of the United States. Available at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/. Accessed April and September 2018.

_____. 2018b. Official Soil Series Descriptions. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Available at: https://soilseries.sc.egov.usda.gov/osdname.aspx. Accessed April and September 2018.

_____. 2018c. Web Soil Survey. U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Staff. Available at: http://websoilsurvey.nrcs.usda.gov/. Accessed May and September 2018.

U.S. Fish and Wildlife Service (USFWS). 1999. *San Joaquin Kit Fox Survey Protocol for the Northern Range*. Sacramento, California.

_____. 2005. *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog*. August 2005.

_____. 2006. 5-year review of Least Bell's Vireo (*Vireo bellii pusillus*). Carlsbad Fish and Wildlife Office, Carlsbad, California. September 2006. Available at: https://www.fws.gov/carlsbad/SpeciesStatusList/5YR/20060926_5YR_LBV.pdf. Accessed September 2018.

_____. 2016. Department of Interior; National Marine Fisheries Service. *Listing Endangered and Threatened Species and Designating Critical Habitat; Implementing Changes to the Regulations for Designating Critical Habitat*. Federal Register / Vol. 81, No. 28 / Thursday, February 11, 2016.

_____. 2018a. USFWS Critical Habitat Portal. Available at: http://criticalhabitat.fws.gov/. Accessed May and September 2018.

_____. 2018b. National Wetlands Inventory, Geographic Information Systems Layers. Available at: http://atlas.ca.gov/. Accessed May and September 2018.

_____. 2018c. Species List. Available at: https://ecos.fws.gov/ipac/. Accessed April 2018.

_____. 2018d. Memorandum. *Guidance on the recent M-Opinion affecting the Migratory Bird Treaty Act*. Washington, D.C. April 11, 2018.

U.S. Geological Survey (USGS). 2018a. National Hydrography Dataset. Available at: http://nhd.usgs.gov/data.html. Accessed June 2016.

_____. 2018b. Bradley, Adelaida, York Mountain, Estrella, Paso Robles, Templeton, Creston, Morro Bay North, Atascadero, and Santa Margarita . 7.5-minute Series Topographic Quadrangles. Washington, DC: United States Department of the Interior.

Wampler, Derek. 2014. *Where Does the Fox Stay: Determination of San Joaquin Kit Fox Presence in Northern San Luis Obispo County Using Scat Survey*. California Polytechnic State University Department of Biological Sciences. December 2014.

White, P. J., and K. Ralls. 1993. *Reproduction and spacing patterns of kit foxes relative to changing prey availability.* Journal of Wildlife Management. 57(4):861–867.

7 LIST OF PREPARERS

- Kristen Outten, B.A.
- Chennie Castañon, B.S.
- Jessica Henderson-McBean, B.S.
- Erika Carrillo, M.S., Project Manager

Appendix A.
Flora Compendium

This page intentionally left blank

Table A-1. Flora Compendium
Paso Robles-Templeton Existing 70 kV Route Alternative

Scientific Name*	Common Name	Native	Species Status
GYMNOSPERMS			
Pinaceae	**Pine family**		
Pinus pinea	Italian stone pine	No	--
Taxodiaceae	**Bald cypress family**		
Sequoia sempervirens	coast redwood	Yes	--
ANGIOSPERMS (DICOTS)			
Aizoaceae	**Fig-marigold family**		
Carpobrotus chilensis	ice plant	No	--
Amaranthaceae	**Amaranth family**		
Amaranthus albus	tumbleweed	No	--
Amaranthus retroflexus	green amaranthus	No	--
Anacardiaceae	**Sumac family**		
Rhus aromatic	skunkbrush	Yes	--
Rhus integrifolia	lemonaid berry	Yes	--
Schinus molle	Peruvian pepper tree	No	--
Toxicodendron diversilobum	poison oak	Yes	--
Apiaceae	**Carrot family**		
Anthriscus caucalis	bur chivel	No	--
Bowlesia incana	bowlesia	Yes	--
Conium maculatum	poison hemlock	No	--
Daucus pusillus	rattle snake weed	Yes	--
Eryngium vaseyi	coyote thistle	Yes	--
Foeniculum vulgare	sweet fennel	No	--
Lomatium californicum	California lomatium	Yes	--
Torilis arvensis	field hedge parsley	No	--
Apocynaceae	**Dogbane family**		
Vinca major	greater periwinkle	No	--
Asclepiadaceae	**Milkweed family**		
Asclepias fascicularis	narrow-leaf milkweed	Yes	--
Asclepias vestita	woolly milkweed	Yes	--
Asteraceae	**Sunflower family**		
Achillea millefolium	yarrow	Yes	--
Achyrachaena mollis	blow-wives	Yes	--

Scientific Name*	Common Name	Native	Species Status
Ambrosia acanthicarpa	annual burweed	Yes	--
Anthemis cotula	Dog fennel	No	--
Baccharis pilularis ssp. consanguinea	Coyote brush	Yes	--
Baccharis salicifolia	Mule fat	Yes	--
Carduus pycnocephalus	Italian thistle	No	--
Carduus tenuiflorus	Slender flowered thistle	No	--
Centaurea melitensis	Tocalote	No	--
Centaurea solstitialis	Yellow starthistle	No	--
Centromadia pungens	Common spikeweed	Yes	--
Cirsium vulgare	Bull thistle	No	--
Deinandra fasciculata	clustered tarweed	Yes	--
Erigeron bonariensis	flax-leaved horseweed	No	--
Erigeron canadensis	horseweed	Yes	--
Erigeron foliosus	leafy fleabane	Yes	--
Erigeron glaucus	seaside daisy	Yes	--
Eriodictyon sp.	yerba santa	Yes	--
Eriophyllum confertifolium	golden yarrow	Yes	--
Helminthotheca echioides	bristly ox-tongue	No	--
Heterotheca grandiflora	Telegraph weed	Yes	--
Holocarpha heermannii	Heermann's tarweed	Yes	--
Hypochaeris glabra	smooth cat's ear	No	--
Hypochaeris radicata	rough cat's ear	No	--
Lactuca saligna	slender lettuce	No	--
Lactuca serriola	prickly lettuce	No	--
Lagophylla ramosissima	Common hareleaf	Yes	--
Logfia gallica	narrow-leafed filago	No	--
Micropus californicus var. *californicus*	slender cottonweed	Yes	--
Pseudognaphalium stramineum	cottonbatting plant	Yes	--
Pseudognaphalium luteoalbum	Jersey cudweed	No	--
Psilocarphus tenellus	Slender woolly marbles	Yes	--
Senecio vulgaris	ragwort	No	--
Silybum marianum	milk thistle	No	--
Sonchus oleraceus	sow thistle	No	--
Stephanomeria virgata	wire-lettuce	Yes	--
Taraxacum officinale	dandelion	No	--

Scientific Name*	Common Name	Native	Species Status
Xanthium spinosum	spiny cocklebur	Yes	--
Xanthium strumarium	cocklebur	Yes	--
Uropappus lindleyi	silver puffs	Yes	--
Wyethia helenoides	Whitehead wyethia	Yes	--
Boraginaceae	**Borage family**		
Amsinckia intermedia	common fiddleneck	Yes	--
Amsinckia menziesii	small flowered fiddleneck	Yes	--
Heliotropium curassavicum	salt heliotrope	Yes	--
Nemophila menziesii	Baby blue eyes	Yes	
Plagiobothrys canescens	valley popcorn flower	Yes	--
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	--
Brassica rapa	field mustard	No	--
Brassica tournefortii	Saharan mustard	No	--
Capsella bursa-pastoris	shepherd's purse	No	--
Hirschfeldia incana	summer mustard	No	--
Lepidium didymium	Lesser swine cress	No	--
Lepidium nitidum	Peppergrass	Yes	
Raphanus sativa	wild radish	No	--
Sisymbrium irio	London rocket	No	--
Thysanocarpus curvipes	lacepod	Yes	--
Caprifoliaceae	**Honeysuckle family**		
Lonicera interrupta	honeysuckle	Yes	--
Sambucus nigra	black elderberry	Yes	--
Symphoricarpos mollis	creeping snowberry	Yes	--
Caryophyllaceae	**Pink family**		
Silene gallica	catchfly	No	--
Spergularia rubra	red sand spurry	No	--
Stellaria media	Chickweed	No	--
Chenopodiaceae	**Goosefoot family**		
Atriplex semibiccata	Australian saltbush	No	--
Chenopodium album	pigweed	No	--
Chenopodium californicum	California pigweed	Yes	--
Salsola tragus	Russian thistle	No	--
Cistaceae	**Rock-rose family**		

Scientific Name*	Common Name	Native	Species Status
Cistus monspeliensis	resinous rockrose	No	--
Convolvulaceae	**Morning glory family**		
Convolvulus arvensis	bindweed	No	--
Cucurbitaceae	**Gourd family**		
Marah fabaceus var. *fabaceus*	wild cucumber	Yes	--
Ericaceae	**Heath family**		
Arctostaphylos glauca	big berry manzanita	Yes	--
Euphorbiaceae	**Spurge family**		
Croton setiger	doveweed/turkey mullein	Yes	--
Euphorbia ocellata ssp. *ocellata*	valley spurge	Yes	--
Fabaceae	**Pea family**		
Acmispon americanus	Spanish lotus	Yes	--
Acmispon glaber	deer weed	Yes	--
Astragalus douglasii var. *douglasii*	Douglas's milkvetch	Yes	--
Lathyrus odoratus	sweet pea	No	--
Lupinus albifrons	silver lupine	Yes	--
Lupinus bicolor	miniature lupine	Yes	--
Lupinus hirsutissimus	stinging lupine	Yes	--
Lupinus microcarpus var. *microcarpus*	chick lupine	Yes	--
Lupinus nanus	sky lupine	Yes	--
Lupinus succulentus	Succulent lupine	Yes	
Melilotus indica	sourclover	No	--
Medicago polymorpha	bur clover	No	--
Trifolium hirtum	rose clover	No	--
Vicia hassei	Hasse's vetch	Yes	--
Vicia sativa	spring vetch	No	--
Vicia villosa	hairy vetch	No	--
Fagaceae	**Oak family**		
Quercus agrifolia	coast live oak	Yes	--
Quercus berberidifolia	scrub oak	Yes	--
Quercus douglasii	blue oak	Yes	--
Quercus lobata	valley oak	Yes	--
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	--
Erodium moschatum	White-stem filaree	No	--

Scientific Name*	Common Name	Native	Species Status
Erodium botrys	filaree	No	--
Geranium dissectum	cut leaf geranium	No	--
Hydrophylaceae	**Waterleaf family**		
Phacelia distans	common phacelia	Yes	--
Phacelia malviflora	stinging phacelia	Yes	--
Pholistoma auritum	fiesta flower	Yes	--
Juglandaceae	**Walnut family**		
Juglans californica var *californica*	S. California black walnut	Yes	--
Lamiaceae	**Mint family**		
Lavandula sp.	lavender	No	--
Marrubium vulgare	horehound	No	--
Stachys bullata	hedge nettle	Yes	--
Trichostema lanceolatum	Vinegarweed	Yes	--
Lauraceae	**Laurel family**		
Umbellaria californica	California bay	Yes	--
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	--
Montiaceae	**Minor's lettuce family**		
Claytonia perfoliata	miners lettuce	Yes	--
Myrsinaceae	**Myrsine family**		
Lysimachia arvensis	scarlet pimpernel	No	--
Myrtaceae	**Myrtle family**		
Eucalyptus globules	blue gum	No	--
Oleaceae	**Ash family**		
Olea europaea	olive	No	--
Onagraceae	**Evening primrose family**		
Clarkia affinis	chaparral fairyfan	Yes	--
Clarkia bottae	punch bowl clarkia	Yes	--
Clarkia purpurea ssp quadrivulnera	purple clarkia	Yes	--
Clarkia speciosa	red spotted clarkia	Yes	--
Clarkia unguiculata	elegant clarkia	Yes	--
Epilobium canum	California fuchsia	Yes	--
Eremothera boothii ssp. *decorticans*	shredding evening primrosa	Yes	--
Orobanchaceae	**Broomrape family**		

Scientific Name*	Common Name	Native	Species Status
Castilleja exserta	Owl's clover	Yes	
Oxalidaceae	**Woodsorrel family**		
Oxalis pes-caprae	Bermuda buttercup	No	--
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Yes	--
Plantaginaceae	**Plantain family**		
Collinsia heterophylla	Chinese houses	Yes	--
Plantago lanceolata	English plantain	No	--
Plantago major	Common plantain	No	--
Veronica anagalis-aquatica	Water speedwell	No	--
Plantanaceae	**Sycamore family**		
Platanus racemosa	western sycamore	Yes	--
Polemoniaceae	**Phlox family**		
Navarretia atractyloides	holly leaf navarretia	Yes	--
Polygonaceae	**Buckwheat family**		
Chorizanthe membranacea	pink spineflower	Yes	--
Eriogoinum fasciculatum	California buckwheat	Yes	
Eriogonum gracillimum	slender-stemmed buckwheat	Yes	--
Eriogonum nudum	naked buckwheat	Yes	--
Eriogonum roseum	wand buckwheat	Yes	--
Polygonum aviculare	prostrate knotweed	No	--
Rumex acetosella	sheep sorrel	No	--
Rumex crispus	curly dock	No	--
Rumex pulcher	fiddle dock	No	--
Ranunculaceae	**Buttercup family**		
Delphinium parryi ssp. *parryi*	San Berbardino larkspur	Yes	--
Ranunculus californicus	California buttercup	Yes	
Rhamnaceae	**Buckthorn family**		
Ceanothus cuneatus var. *cuneatus*	wedgeleaf ceanothus	Yes	--
Frangula californica	coffeeberry	Yes	--
Rhamnus ilicifolia	evergreen buckthorn	Yes	--
Rosaceae	**Rose family**		
Heteromeles arbutifolia	toyon	Yes	--
Rosa californica	California wild rose	Yes	--

Scientific Name*	Common Name	Native	Species Status
Rubiaceae	**Madder family**		
Galium aparine	goose grass	Yes	--
Salicaceae	**Willow family**		
Populus fremontii ssp. *fremontii*	Fremont's cottonwood	Yes	--
Salix exigua	sandbar willow	Yes	--
Salix lasiandra	red willow	Yes	--
Salix lasiolepis	arroyo willow	Yes	--
Salix laevigata	red willow	Yes	--
Scrophulariaceae	**Figwort family**		
Verbascum thapsus	common mullein	No	--
Solanaceae	**Nightshade family**		
Datura wrightii	jimson weed	Yes	--
Nicotiana acuminate	manyflowered tobacco	No	--
Solanum americanum	American black nightshade	Yes	--
Urticaceae	**Nettle family**		
Urtica dioica	hoary nettle	Yes	--
Urtica urens	dwarf nettle	No	--
Verbenaceae	**Verbena family**		
Verbena lasiostachys	common vervain	No	--
Violoaceae	**Violet family**		
Viola pedunculata	Johnny jump-up	Yes	--
Viscaceae	**Mistletoe family**		
Phoradendron villosum	oak mistletoe	Yes	--
Vitaceae	**Grape family**		
Vitis sp.	cultivated grape	Unknown	--
ANGIOSPERMS (MONOCOTS)			
Araceae	**Arum family**		
Lemna sp.	duckweed	Yes	--
Cactaceae	**Cactus family**		
Opunita ficus-indica	Mission cactus	No	--
Cyperaceae	**Sedge family**		
Cyperus eragrostis	tall flat sedge	Yes	--
Eleocharis macrostachya	common spikerush	Yes	--
Eleocharis parishii	spikerush	Yes	--

Scientific Name*	Common Name	Native	Species Status
Schoenoplectus americanus	bulrush	Yes	--
Scirpus microcarpus	Mountain bog bulrush	Yes	--
Liliaceae	**Lily family**		
Bloomeria crocea	common goldenstar	Yes	--
Brodiaea terrestris	dwarf brodiaea	Yes	--
Calochortus luteus	yellow mariposa lily	Yes	--
Dichelostemma capitatum	blue dicks	Yes	--
Juncaceae	**Rush family**		
Juncus effusus	Common bog rush	Yes	--
Juncus phaeocephalus	Brown headed rush	Yes	--
Juncus patens	Rush	Yes	--
Juncus xiphiodes	Irish leaved rush	Yes	--
Poaceae	**Grass family**		
Avena barbata	slender wild oats	No	--
Avena fatua	wild oats	No	--
Briza maxima	rattle snake grass	No	--
Bromus arenarius	Australian chess	No	--
Bromus carinatus	California brome	Yes	--
Bromus diandrus	ripgut brome	No	--
Bromus hordeaceus	soft chess brome	No	--
Bromus madritensis	Spanish brome	No	--
Bromus rubens	red brome	No	--
Distichlis spicata	saltgrass	Yes	--
Elymus glaucus	Blue wild rye	Yes	--
Elymus hispidus	Intermediate wheatgrass	No	--
Elymus triticoides	Creeping wildrye	Yes	--
Festuca bromoides	brome fescue	No	--
Festuca microstachys	small fescue	Yes	--
Festuca myuros	rattail fescue	No	--
Festuca perennis	Italian ryegrass	No	--
Hordeum brachyantherum	meadow barley	Yes	--
Hordeum murinum ssp. leporinum	foxtail	No	--
Hordeum marinum ssp. gussoneanum	Mediterranean barley	No	--
Melica imperfecta	melic grass	Yes	--
Poa bulbosa	Bulbous blue grass	No	

Scientific Name*	Common Name	Native	Species Status
Poa secunda	Pine bluegrass	Yes	
Polypogon monspelliensis	Rabbit foot grass	No	--
Stipa pulchra	purple needle-grass	Yes	--
Stipa cernua	nodding needle grass	Yes	--
Typhaceae	**Cattail family**		
Typha latifolia	cattail	Yes	--

*Vascular Plants nomenclature follows "The Jepson Manual" and http://ucjeps.berkeley.edu/interchange.html.

Table A-2. Flora Compendium
Paso Robles-Templeton South River Route Alternative

Scientific Name*	Common Name	Native	Species Status
GYMNOSPERMS			
Pinaceae	**Pine family**		
Pinus pinea	Italian stone pine	No	--
Taxodiaceae	**Bald cypress family**		
Sequoia sempervirens	coast redwood	Yes	--
ANGIOSPERMS (DICOTS)			
Aizoaceae	**Fig-marigold family**		
Carpobrotus chilensis	ice plant	No	--
Amaranthaceae	**Amaranth family**		
Amaranthus albus	tumbleweed	No	--
Amaranthus retroflexus	green amaranthus	No	--
Anacardiaceae	**Sumac family**		
Rhus aromatic	skunkbrush	Yes	--
Rhus integrifolia	lemonaid berry	Yes	--
Schinus molle	Peruvian pepper tree	No	--
Toxicodendron diversilobum	poison oak	Yes	--
Apiaceae	**Carrot family**		
Anthriscus caucalis	bur chivel	No	--
Bowlesia incana	bowlesia	Yes	--
Conium maculatum	poison hemlock	No	--
Daucus pusillus	rattle snake weed	Yes	--
Eryngium vaseyi	Coyote thistle	Yes	
Foeniculum vulgare	sweet fennel	No	--
Lomatium californicum	California lomatium	Yes	--
Lomatium utriculatum	Hog fennel	Yes	
Sanicula bipinnata	Poison sanicle	Yes	
Torilis arvensis	field hedge parsley	No	--
Apocynaceae	**Dogbane family**		
Vinca major	greater periwinkle	No	--
Asclepiadaceae	**Milkweed family**		
Asclepias fascicularis	narrow-leaf milkweed	Yes	--
Asclepias vestita	woolly milkweed	Yes	--
Asteraceae	**Sunflower family**		

Scientific Name*	Common Name	Native	Species Status
Achyrachaena mollis	blow-wives	Yes	--
Ambrosia acanthicarpa	annual burweed	Yes	--
Artemisia californica	California sagebrush	Yes	
Baccharis pilularis ssp. consanguinea	Coyote brush	Yes	--
Baccharis salicifolia	Mule fat	Yes	--
Carduus pynocephlus	Italian thistle	No	
Carduus tenuiflorus	Slender flowered thistle	No	--
Centaurea melitensis	Tocalote	No	--
Centaurea solstitialis	Yellow starthistle	No	--
Corethrogyne filaginifolia	California aster	Yes	
Cirsium vulgare	Bull thistle	No	--
Deinandra fasciculata	clustered tarweed	Yes	--
Erigeron bonariensis	flax-leaved horseweed	No	--
Erigeron canadensis	horseweed	Yes	--
Erigeron foliosus	leafy fleabane	Yes	--
Erigeron glaucus	seaside daisy	Yes	--
Eriodictyon sp.	yerba santa	Yes	--
Eriophyllum confertifolium	golden yarrow	Yes	--
Helminthotheca echioides	bristly ox-tongue	No	--
Heterotheca grandiflora	Telegraph weed	Yes	--
Hypochaeris glabra	smooth cat's ear	No	--
Hypochaeris radicata	rough cat's ear	No	--
Lactuca saligna	slender lettuce	No	--
Lactuca serriola	Prickly lettuce	No	
Logfia gallica	narrow-leafed filago	No	--
Matricaria discoidea	Pineapple weed	Yes	
Micropus californicus var. *californicus*	slender cottonweed	Yes	--
Pseudognaphalium stramineum	cottonbatting plant	Yes	--
Pseudognaphalium luteoalbum	Jersey cudweed	No	--
Psilocarpus tenellus	Slender woolly marbles	Yes	
Senecio vulgaris	ragwort	No	--
Silybum marianum	Milk thistle	No	
Sonchus asper	Spiny sowthistle	No	
Stephanomeria virgata	wire-lettuce	Yes	--
Taraxacum officinale	dandelion	No	--

Scientific Name*	Common Name	Native	Species Status
Xanthium strumarium	cocklebur	Yes	--
Uropappus lindleyi	silver puffs	Yes	--
Boraginaceae	**Borage family**		
Amsinckia douglasiana	Douglas' fiddleneck	Yes	
Amsinckia menziesii	small flowered fiddleneck	Yes	--
Plagiobothrys canescens	Valley popcorn flower	Yes	
Plagiobothrys nothofulvus	Rusty popcornflower	Yes	
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	--
Brassica rapa	field mustard	No	--
Capsella bursa-pastoris	shepherd's purse	No	--
Cardamine oligosperma	Bitter cress	Yes	
Hirschfeldia incana	summer mustard	No	--
Lepidium strictum	peppergrass	Yes	
Raphanus sativa	wild radish	No	--
Sisymbrium irio	London rocket	No	--
Thysanocarpus curvipes	lacepod	Yes	--
Caprifoliaceae	**Honeysuckle family**		
Lonicera interrupta	honeysuckle	Yes	--
Sambucus nigra	black elderberry	Yes	--
Symphoricarpos mollis	creeping snowberry	Yes	--
Caryophyllaceae	**Pink family**		
Cerastium glomeratum	Mouse ears chickweed	No	
Silene gallica	catchfly	No	--
Spergularia rubra	Red sand spurry	No	--
Chenopodiaceae	**Goosefoot family**		
Atriplex semibiccata	Australian saltbush	No	--
Chenopodium album	pigweed	No	--
Chenopodium californicum	California pigweed	Yes	--
Salsola tragus	Russian thistle	No	--
Cistaceae	**Rock-rose family**		
Cistus monspeliensis	resinous rockrose	No	--
Convolvulaceae	**Morning glory family**		
Convolvulus arvensis	bindweed	No	--
Cucurbitaceae	**Gourd family**		

Scientific Name*	Common Name	Native	Species Status
Marah fabaceus var. *fabaceus*	wild cucumber	Yes	--
Ericaceae	**Heath family**		
Arctostaphylos glauca	big berry manzanita	Yes	--
Euphorbiaceae	**Spurge family**		
Croton setiger	doveweed/turkey mullein	Yes	--
Euphorbia ocellata ssp. *ocellata*	valley spurge	Yes	--
Fabaceae	**Pea family**		
Acmispon americanus	Spanish lotus	Yes	--
Acmispon glaber	deer weed	Yes	--
Acmispon strigosus	Strigose lotus	yes	
Acmispon wrangelianus	Chilean trefoil	Yes	
Astragalus douglasii var. *douglasii*	Douglas's milkvetch	Yes	--
Lathyrus odoratus	sweet pea	No	--
Lupinus albifrons	silver lupine	Yes	--
Lupinus bicolor	miniature lupine	Yes	--
Lupinus hirsutissimus	stinging lupine	Yes	--
Lupinus microcarpus	chick lupine	yes	
Lupinus nanus	sky lupine	Yes	--
Lupinus succulentus	Succulent lupine	Yes	
Medicago polymorpha	bur clover	No	--
Trifolium gracilentum	Pin point clover	Yes	
Trifolium hirtum	rose clover	No	--
Trifolium willdenovii	tomcat clover	Yes	
Vicia hassei	Hasse's vetch	Yes	--
Vicia villosa	hairy vetch	No	--
Fagaceae	**Oak family**		
Quercus agrifolia	coast live oak	Yes	--
Quercus berberidifolia	scrub oak	Yes	--
Quercus douglasii	blue oak	Yes	--
Quercus lobata	valley oak	Yes	--
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	--
Erodium moschatum	White-stem filaree	No	--
Erodium botrys	filaree	No	--
Erodium brachycarpum	White stemmed filaree		

Scientific Name*	Common Name	Native	Species Status
Geranium dissectum	cut leaf geranium	No	--
Hydrophylaceae	**Waterleaf family**		
Phacelia distans	common phacelia	Yes	--
Phacelia malviflora	stinging phacelia	Yes	--
Pholistoma auritum	fiesta flower	Yes	--
Pholistoma membranaceum	White fiesta flower	Yes	
Juglandaceae	**Walnut family**		
Juglans californica var *californica*	S. California black walnut	Yes	--
Lamiaceae	**Mint family**		
Lavandula sp.	lavender	No	--
Lamium amplexicaule	Henbit	No	
Marrubium vulgare	horehound	No	--
Stachys bullata	hedge nettle	Yes	--
Lauraceae	**Laurel family**		
Umbellaria californica	California bay	Yes	--
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	--
Montiaceae	**Minor's lettuce family**		
Calandrinia menziesii	red maids	Yes	
Claytonia perfoliata	miners lettuce	Yes	--
Myrsinaceae	**Myrsine family**		
Lysimachia arvensis	scarlet pimpernel		
Myrtaceae	**Myrtle family**		
Eucalyptus globules	blue gum	No	--
Oleaceae	**Ash family**		
Olea europaea	olive	No	--
Onagraceae	**Evening primrose family**		
Clarkia affinis	chaparral fairyfan	Yes	--
Clarkia bottae	punch bowl clarkia	Yes	--
Clarkia purpurea ssp quadrivulnera	purple clarkia	Yes	--
Clarkia speciosa	red spotted clarkia	Yes	--
Clarkia unguiculata	elegant clarkia	Yes	--
Epilobium canum	California fuchsia	Yes	--
Epilobium ciliatum	Slender willow herb	Yes	

Scientific Name*	Common Name	Native	Species Status
Eremothera boothii ssp. *decorticans*	shredding evening primrosa	Yes	--
Orobanchaceae	**Broomrape Family**		
Castilleja exserta	Owl's clover	Yes	
Oxalidaceae	**Woodsorrel family**		
Oxalis pes-caprae	Bermuda buttercup	No	--
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Yes	--
Papaver heterophyllum	Wind poppy	Yes	
Platystemon californicus	cream cups	Yes	
Plantaginaceae	**Plantain family**		
Collinsia heterophylla	Chinese houses	Yes	--
Plantago erecta	California plantain	Yes	
Plantago lanceolata	English plantain	No	--
Plantago major	Common plantain	No	--
Veronica arvensis	Speedwell	No	
Plantanaceae	**Sycamore family**		
Platanus racemosa	western sycamore	Yes	--
Polemoniaceae	**Phlox family**		
Gilia tricolor	Tricolor gilia	Yes	
Navarretia atractyloides	holly leaf navarretia	Yes	--
Polygonaceae	**Buckwheat family**		
Chorizanthe membranacea	pink spineflower	Yes	--
Eriogoinum fasciculatum	California buckwheat	Yes	
Eriogonum gracillimum	slender-stemmed buckwheat	Yes	--
Eriogonum nudum	naked buckwheat	Yes	--
Eriogonum roseum	wand buckwheat	Yes	--
Polygonum aviculare	prostrate knotweed	No	--
Rumex acetosella	sheep sorrel	No	--
Rumex crispus	curly dock	No	--
Rumex pulcher	fiddle dock	No	
Ranunculaceae	**Buttercup family**		
Delphinium parryi ssp. *parryi*	San Berbardino larkspur	Yes	--
Ranunculus californicus	California buttercup	Yes	
Rhamnaceae	**Buckthorn family**		

Scientific Name*	Common Name	Native	Species Status
Ceanothus cuneatus var. *cuneatus*	wedgeleaf ceanothus	Yes	--
Frangula californica	coffeeberry	Yes	--
Rhamnus ilicifolia	evergreen buckthorn	Yes	
Rosaceae	**Rose family**		
Heteromeles arbutifolia	toyon	Yes	--
Prunus ilicfolia	Holly leaf cherry	yes	
Rosa californica	California wild rose	Yes	--
Rubiaceae	**Madder family**		
Galium andrewsii	Phlox leaved bedstraw	Yes	
Galium aparine	goose grass	Yes	--
Galium parisiense	wall bedstraw	No	
Salicaceae	**Willow family**		
Populus fremontii ssp. *fremontii*	Fremont's cottonwood	Yes	--
Salix exigua	sandbar willow	Yes	--
Salix lasiandra	red willow	Yes	--
Salix lasiolepis	arroyo willow	Yes	--
Scrophulariaceae	**Figwort family**		
Verbascum thapsus	common mullein	No	--
Solanaceae	**Nightshade family**		
Datura wrightii	jimson weed	Yes	--
Nicotiana acuminate	manyflowered tobacco	No	--
Solanum americanum	American black nightshade	Yes	--
Urticaceae	**Nettle family**		
Urtica dioica	hoary nettle	Yes	--
Urtica urens	dwarf nettle	No	--
Verbenaceae	**Verbena family**		
Verbena lasiostachys	common vervain	No	--
Violoaceae	**Violet family**		
Viola pedunculata	Johnny jump-up	Yes	--
Viscaceae	**Mistletoe family**		
Phoradendron villosum	oak mistletoe	Yes	--
Vitaceae	**Grape family**		
Vitis sp.	cultivated grape	Unknown	--

Scientific Name*	Common Name	Native	Species Status
ANGIOSPERMS (MONOCOTS)			
Araceae	**Arum family**		
Lemna sp.	duckweed	Yes	--
Cactaceae	**Cactus family**		
Opunita ficus-indica	Mission cactus	No	--
Cyperaceae	**Sedge family**		
Cyperus eragrostis	tall flat sedge	Yes	--
Eleocharis macrostachya	common spikerush	Yes	--
Eleocharis parishii	spikerush	Yes	--
Schoenoplectus americanus	bulrush	Yes	--
Scirpus microcarpus	Mountain bog bulrush	Yes	--
Iridaceae	**Iris family**		
Sisyrinchium bellum	Blue eyed grass	Yes	
Liliaceae	**Lily family**		
Bloomeria crocea	common goldenstar	Yes	--
Brodiaea terrestris	dwarf brodiaea	Yes	--
Calochortus luteus	yellow mariposa lily	Yes	--
Dichelostemma capitatum	blue dicks	Yes	--
Juncaceae	**Rush family**		
Juncus bufonius	Common toad rush	Yes	
Juncus effusus	Common bog rush	Yes	--
Juncus phaeocephalus	Brown headed rush	Yes	--
Poaceae	**Grass family**		
Avena barbata	slender wild oats	No	--
Avena fatua	wild oats	No	--
Briza maxima	rattle snake grass	No	--
Bromus arenarius	Australian chess	No	--
Bromus carinatus	California brome	Yes	--
Bromus diandrus	ripgut brome	No	--
Bromus hordeaceus	soft chess brome	No	--
Bromus madritensis	Spanish brome	No	--
Bromus rubens	red brome	No	--
Bromus tectorum	Cheatgrass	No	
Distichlis spicata	saltgrass	Yes	--
Festuca bromoides	brome fescue	No	--

Scientific Name*	Common Name	Native	Species Status
Festuca microstachys	small fescue	Yes	--
Festuca myuros	rattail fescue	No	--
Festuca perennis	Italian ryegrass	No	--
Hordeum brachyantherum	meadow barley	Yes	--
Hordeum murinum ssp. leporinum	foxtail	No	--
Hordeum marinum ssp. gussoneanum	Mediterranean barley	No	--
Melica imperfecta	melic grass	Yes	--
Poa bulbosa	Bulbous blue grass	No	
Poa secunda	Pine bluegrass	Yes	
Polypogon monspelliensis	Rabbit foot grass	No	--
Stipa pulchra	purple needle-grass	Yes	--
Stipa cernua	nodding needle grass	Yes	--
Typhaceae	**Cattail family**		
Typha latifolia	cattail	Yes	--

*Vascular Plants nomenclature follows " The Jepson Manual" and http://ucjeps.berkeley.edu/interchange.html.

Table A-3. Flora Compendium
Paso Robles-Templeton Creston Route Alternative

Scientific Name*	Common Name	Native	Species Status
GYMNOSPERMS			
Pinaceae	**Pine family**		
Pinus pinea	Italian stone pine	No	--
Taxodiaceae	**Bald cypress family**		
Sequoia sempervirens	coast redwood	Yes	--
ANGIOSPERMS (DICOTS)			
Aizoaceae	**Fig-marigold family**		
Carpobrotus chilensis	ice plant	No	--
Amaranthaceae	**Amaranth family**		
Amaranthus albus	tumbleweed	No	--
Amaranthus retroflexus	green amaranthus	No	--
Anacardiaceae	**Sumac family**		
Rhus aromatic	skunkbrush	Yes	--
Rhus integrifolia	lemonaid berry	Yes	--
Schinus molle	Peruvian pepper tree	No	--
Toxicodendron diversilobum	poison oak	Yes	--
Apiaceae	**Carrot family**		
Anthriscus caucalis	bur chivel	No	--
Bowlesia incana	bowlesia	Yes	--
Conium maculatum	Poison hemlock	No	
Daucus pusillus	rattle snake weed	Yes	--
Eryngium vaseyi	coyote thistle	Yes	--
Foeniculum vulgare	sweet fennel	No	--
Lomatium californicum	California lomatium	Yes	--
Sanicula bipinnata	Poison sanicle	Yes	
Sanicula bipinnatafida	Purple sanicle	Yes	
Sanicula crassicaulis	Pacific sanicle	Yes	
Torilis arvensis	field hedge parsley	No	--
Apocynaceae	**Dogbane family**		
Vinca major	greater periwinkle	No	--
Asclepiadaceae	**Milkweed family**		
Asclepias fascicularis	narrow-leaf milkweed	Yes	--
Asclepias vestita	woolly milkweed	Yes	--

Scientific Name*	Common Name	Native	Species Status
Asteraceae	**Sunflower family**		
Achillea millefolium	yarrow	Yes	--
Achyrachaena mollis	blow-wives	Yes	--
Ambrosia acanthicarpa	annual burweed	Yes	--
Anthemis cotula	Dog fennel	No	--
Baccharis pilularis ssp. consanguinea	Coyote brush	Yes	--
Baccharis salicifolia	Mule fat	Yes	--
Carduus pycnocephalus	Italian thistle	No	--
Carduus tenuiflorus	Slender flowered thistle	No	--
Centaurea melitensis	Tocalote	No	--
Centaurea solstitialis	Yellow starthistle	No	--
Centromadia pungens	Common spikeweed	Yes	--
Cirsium vulgare	Bull thistle	No	--
Corethrogyne filaginifolia	sandaster	Yes	
Cotula coronopifolia	Brass buttons	No	
Deinandra fasciculata	clustered tarweed	Yes	--
Erigeron bonariensis	flax-leaved horseweed	No	--
Erigeron canadensis	horseweed	Yes	--
Erigeron foliosus	leafy fleabane	Yes	--
Erigeron glaucus	seaside daisy	Yes	--
Eriodictyon sp.	yerba santa	Yes	--
Eriophyllum confertifolium	golden yarrow	Yes	--
Helminthotheca echioides	bristly ox-tongue	No	--
Heterotheca grandiflora	Telegraph weed	Yes	--
Holocarpha heermannii	Heermann's tarweed	Yes	--
Hypochaeris glabra	smooth cat's ear	No	--
Hypochaeris radicata	rough cat's ear	No	--
Lactuca saligna	slender lettuce	No	--
Lactuca serriola	prickly lettuce	No	--
Lagophylla ramosissima	Common hareleaf	Yes	--
Logfia gallica	narrow-leafed filago	No	--
Matricaria discoidea	Pineapple weed	Yes	
Micropus californicus var. *californicus*	slender cottonweed	Yes	--
Microseris douglasii ssp. douglasii.	Douglas' microseris	yes	
Pseudognaphalium stramineum	cottonbatting plant	Yes	--

Scientific Name*	Common Name	Native	Species Status
Psilocarphus tenellus	Slender woolly marbles	Yes	--
Senecio vulgaris	ragwort	No	--
Silybum marianum	milk thistle	No	--
Sonchus asper	spiny sow thistle	No	
Sonchus oleraceus	sow thistle	No	--
Stephanomeria virgata	wire-lettuce	Yes	--
Taraxacum officinale	dandelion	No	--
Xanthium spinosum	spiny cocklebur	Yes	--
Xanthium strumarium	cocklebur	Yes	--
Uropappus lindleyi	silver puffs	Yes	--
Wyethia helenoides	Whitehead wyethia	Yes	--
Boraginaceae	**Borage family**		
Amsinckia intermedia	common fiddleneck	Yes	--
Amsinckia menziesii	small flowered fiddleneck	Yes	--
Heliotropium curassavicum	salt heliotrope	Yes	--
Plagiobothrys acanthocarpus	Adobe popcorn flower	Yes	
Plagiobothrys canescens	valley popcorn flower	Yes	--
Plagiobothrys nothofulvus	Rusty popcorn flower	Yes	
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	--
Brassica rapa	field mustard	No	--
Brassica tournefortii	Saharan mustard	No	--
Capsella bursa-pastoris	shepherd's purse	No	--
Hirschfeldia incana	summer mustard	No	--
Lepidium didymium	Lesser swine cress	No	--
Lepidium nitidum	Peppergrass	Yes	
Raphanus sativa	wild radish	No	--
Thysanocarpus curvipes	lacepod	Yes	--
Caprifoliaceae	**Honeysuckle family**		
Lonicera interrupta	honeysuckle	Yes	--
Sambucus nigra	black elderberry	Yes	--
Symphoricarpos mollis	creeping snowberry	Yes	--
Caryophyllaceae	**Pink family**		
Cerastium glomeratum	Mouseear chickweed	No	
Silene gallica	catchfly	No	--

Scientific Name*	Common Name	Native	Species Status
Spergularia arvensis	Corn spurry	No	
Spergularia rubra	red sand spurry	No	--
Stellaria media	Chickweed	No	--
Chenopodiaceae	**Goosefoot family**		
Chenopodium album	pigweed	No	--
Chenopodium californicum	California pigweed	Yes	--
Salsola tragus	Russian thistle	No	--
Cistaceae	**Rock-rose family**		
Cistus monspeliensis	resinous rockrose	No	--
Convolvulaceae	**Morning glory family**		
Convolvulus arvensis	bindweed	No	--
Crassulaceae	**Stonecrop family**		
Crassula connata	Pigmy weed	Yes	
Cucurbitaceae	**Gourd family**		
Marah fabaceus var. *fabaceus*	wild cucumber	Yes	--
Ericaceae	**Heath family**		
Arctostaphylos glauca	big berry manzanita	Yes	--
Euphorbiaceae	**Spurge family**		
Croton setiger	doveweed/turkey mullein	Yes	--
Euphorbia ocellata ssp. *ocellata*	valley spurge	Yes	--
Fabaceae	**Pea family**		
Acmispon americanus	Spanish lotus	Yes	--
Acmispon glaber	deer weed	Yes	--
Acmispon strigosus	Strigose lotus	Yes	
Astragalus douglasii var. *douglasii*	Douglas's milkvetch	Yes	--
Lathyrus odoratus	sweet pea	No	--
Lotus corniculatus	Bird's foot trefoil		
Lupinus albifrons	silver lupine	Yes	--
Lupinus bicolor	miniature lupine	Yes	--
Lupinus hirsutissimus	stinging lupine	Yes	--
Lupinus microcarpus var. *microcarpus*	chick lupine	Yes	--
Lupinus nanus	sky lupine	Yes	--
Lupinus succulentus	Succulent lupine	Yes	
Melilotus indica	sourclover	No	--
Medicago polymorpha	bur clover	No	--

Scientific Name*	Common Name	Native	Species Status
Trifolium albopurpureum	Indian clover	Yes	
Trifolium depauperatum	Dwarf sack clover	Yes	
Trifolium hirtum	rose clover	No	--
Trifolium willdenovii	Tomcat clover	Yes	
Vicia hassei	Hasse's vetch	Yes	--
Vicia sativa	spring vetch	No	--
Vicia villosa	hairy vetch	No	--
Fagaceae	**Oak family**		
Quercus agrifolia	coast live oak	Yes	--
Quercus berberidifolia	scrub oak	Yes	--
Quercus douglasii	blue oak	Yes	--
Quercus lobata	valley oak	Yes	--
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	--
Erodium moschatum	White-stem filaree	No	--
Erodium botrys	filaree	No	--
Erodium brachycarpum	Foothill filaree	No	
Geranium dissectum	cut leaf geranium	No	--
Hydrophylaceae	**Waterleaf family**		
Phacelia distans	common phacelia	Yes	--
Phacelia malviflora	stinging phacelia	Yes	--
Pholistoma auritum	fiesta flower	Yes	--
Pholistoma membranaceum	White fiesta flower	Yes	
Juglandaceae	**Walnut family**		
Juglans californica var *californica*	S. California black walnut	Yes	--
Lamiaceae	**Mint family**		
Lamium amplexicaule	Henbit deadnettle	No	
Lavandula sp.	lavender	No	--
Marrubium vulgare	horehound	No	--
Stachys bullata	hedge nettle	Yes	--
Trichostema lanceolatum	Vinegarweed	Yes	--
Lauraceae	**Laurel family**		
Umbellaria californica	California bay	Yes	--
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	--

Scientific Name*	Common Name	Native	Species Status
Montiaceae	**Minor's lettuce family**		
Claytonia perfoliata	miners lettuce	Yes	--
Calandrinia menziesii	Red maids	Yes	
Myrsinaceae	**Myrsine family**		
Lysimachia arvensis	scarlet pimpernel	No	--
Myrtaceae	**Myrtle family**		
Eucalyptus globules	blue gum	No	--
Oleaceae	**Ash family**		
Olea europaea	olive	No	--
Onagraceae	**Evening primrose family**		
Clarkia affinis	chaparral fairyfan	Yes	--
Clarkia bottae	punch bowl clarkia	Yes	--
Clarkia purpurea ssp quadrivulnera	purple clarkia	Yes	--
Clarkia speciosa	red spotted clarkia	Yes	--
Clarkia unguiculata	elegant clarkia	Yes	--
Epilobium canum	California fuchsia	Yes	--
Eremothera boothii ssp. *decorticans*	shredding evening primrosa	Yes	--
Orobanchaceae	**Broomrape Family**		
Castilleja attenuata	Narrow leaved owls clover	Yes	
Oxalidaceae	**Woodsorrel family**		
Oxalis pes-caprae	Bermuda buttercup	No	--
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Yes	--
Platystemon californicus	Cream cups	Yes	
Plantaginaceae	**Plantain family**		
Collinsia heterophylla	Chinese houses	Yes	--
Plantago erecta	California plantain	Yes	
Plantago lanceolata	English plantain	No	
Veronica anagalis-aquatica	Water speedwell	No	--
Veronica arvensis	Speedwell	No	
Plantanaceae	**Sycamore family**		
Platanus racemosa	western sycamore	Yes	--
Polemoniaceae	**Phlox family**		**--**
Gilia tricolor	Tricolor gilia	Yes	

Scientific Name*	Common Name	Native	Species Status
Navarretia atractyloides	holly leaf navarretia	Yes	--
Polygonaceae	**Buckwheat family**		
Chorizanthe membranacea	pink spineflower	Yes	--
Eriogoinum fasciculatum	California buckwheat	Yes	
Eriogonum gracillimum	slender-stemmed buckwheat	Yes	--
Eriogonum nudum	naked buckwheat	Yes	--
Eriogonum roseum	wand buckwheat	Yes	--
Polygonum aviculare	prostrate knotweed	No	--
Rumex acetosella	sheep sorrel	No	--
Rumex crispus	curly dock	No	--
Rumex pulcher	fiddle dock	No	--
Ranunculaceae	**Buttercup family**		
Delphinium parryi ssp. *parryi*	San Berbardino larkspur	Yes	--
Ranunculus californicus	California buttercup	Yes	
Rhamnaceae	**Buckthorn family**		
Ceanothus cuneatus var. *cuneatus*	wedgeleaf ceanothus	Yes	--
Frangula californica	coffeeberry	Yes	--
Rhamnus ilicifolia	evergreen buckthorn	Yes	--
Rosaceae	**Rose family**		
Heteromeles arbutifolia	toyon	Yes	--
Prunus ilicfolia	Holly leaf cherry	yes	
Rosa californica	California wild rose	Yes	--
Rubiaceae	**Madder family**		
Galium aparine	goose grass	Yes	--
Salicaceae	**Willow family**		
Populus fremontii ssp. *fremontii*	Fremont's cottonwood	Yes	--
Salix exigua	sandbar willow	Yes	--
Salix lasiandra	red willow	Yes	--
Salix lasiolepis	arroyo willow	Yes	--
Salix laevigata	red willow	Yes	--
Saxifragaceae	**Saxifrage Family**		
Lithophragma sp.	Woodland star	Yes	
Scrophulariaceae	**Figwort family**		
Verbascum thapsus	common mullein	No	--

Scientific Name*	Common Name	Native	Species Status
Solanaceae	**Nightshade family**		
Datura wrightii	jimson weed	Yes	--
Nicotiana acuminate	manyflowered tobacco	No	--
Solanum americanum	American black nightshade	Yes	--
Urticaceae	**Nettle family**		
Urtica urens	dwarf nettle	No	--
Verbenaceae	**Verbena family**		
Verbena lasiostachys	common vervain	No	--
Violoaceae	**Violet family**		
Viola pedunculata	Johnny jump-up	Yes	--
Viscaceae	**Mistletoe family**		
Phoradendron villosum	oak mistletoe	Yes	--
Vitaceae	**Grape family**		
Vitis sp.	cultivated grape	Unknown	--
ANGIOSPERMS (MONOCOTS)			
Agavaceae	**Century plant family**		
Chlorogalum pomeridianum	Soap plant	Yes	
Cyperaceae	**Sedge family**		
Eleocharis macrostachya	common spikerush	Yes	--
Eleocharis parishii	spikerush	Yes	--
Schoenoplectus americanus	bulrush	Yes	--
Iridaceae	**Iris Family**		
Sisyrinchium bellum	Blue eyed grass	Yes	
Liliaceae	**Lily family**		
Bloomeria crocea	common goldenstar	Yes	--
Brodiaea terrestris	dwarf brodiaea	Yes	--
Calochortus luteus	yellow mariposa lily	Yes	--
Dichelostemma capitatum	blue dicks	Yes	--
Juncaceae	**Rush family**		
Juncus bufonius	Toad rush	Yes	
Juncus patens	Rush	Yes	--
Juncus xiphiodes	Irish leaved rush	Yes	--
Poaceae	**Grass family**		
Avena barbata	slender wild oats	No	--

Scientific Name*	Common Name	Native	Species Status
Avena fatua	wild oats	No	--
Briza maxima	rattle snake grass	No	--
Briza minor	Little rattlesnake grass	No	
Bromus arenarius	Australian chess	No	--
Bromus carinatus	California brome	Yes	--
Bromus diandrus	ripgut brome	No	--
Bromus hordeaceus	soft chess brome	No	--
Bromus madritensis	Spanish brome	No	--
Bromus rubens	red brome	No	--
Bromus tectorum	Cheatgrass	No	
Distichlis spicata	saltgrass	Yes	--
Elymus glaucus	Blue wild rye	Yes	--
Elymus hispidus	Intermediate wheatgrass	No	--
Elymus triticoides	Creeping wildrye	Yes	--
Festuca bromoides	brome fescue	No	--
Festuca microstachys	small fescue	Yes	--
Festuca myuros	rattail fescue	No	--
Festuca perennis	Italian ryegrass	No	--
Hordeum brachyantherum	meadow barley	Yes	--
Hordeum murinum ssp. leporinum	foxtail	No	--
Hordeum marinum ssp. gussoneanum	Mediterranean barley	No	--
Melica imperfecta	melic grass	Yes	--
Poa bulbosa	Bulbous blue grass	No	
Poa secunda	Pine bluegrass	Yes	
Polypogon monspelliensis	Rabbit foot grass	No	--
Schismus arabicus	Mediterranean grass	No	
Stipa pulchra	purple needle-grass	Yes	--
Stipa cernua	nodding needle grass	Yes	--
Typhaceae	**Cattail family**		
Typha latifolia	cattail	Yes	--

*Vascular Plants nomenclature follows " The Jepson Manual" and http://ucjeps.berkeley.edu/interchange.html.

Table A-4. Flora Compendium Templeton Substation Alternative

Scientific Name*	Common Name	Native	Species Status
ANGIOSPERMS (DICOTS)			
Anacardiaceae	**Sumac family**		
Rhus aromatic	skunkbrush	Yes	--
Apiaceae	**Carrot family**		
Bowlesia incana	bowlesia	Yes	--
Conium maculatum	poison hemlock	No	--
Daucus pusillus	rattle snake weed	Yes	--
Foeniculum vulgare	sweet fennel	No	--
Sanicula bipinnata	Poison sanicle	Yes	
Sanicula crassicaulis	Pacific sanicle	Yes	
Torilis arvensis	field hedge parsley	No	--
Apocynaceae	**Dogbane Family**		
Asclepias fascicularis	Narrow leaf milkweed	Yes	
Asteraceae	**Sunflower family**		
Achillea millefolium	yarrow	Yes	--
Agoseris heterophylla	Mountain dandelion	Yes	
Artemisia douglasiana	mugwort	Yes	
Baccharis pilularis ssp. consanguinea	Coyote brush	Yes	--
Baccharis salicifolia	mule fat	Yes	
Carduus pycnocephalus	Italian thistle	No	--
Centaurea melitensis	Tocalote	No	--
Centaurea solstitialis	Yellow starthistle	No	--
Corethrogyne filaginifolia	California aster	Yes	
Hypochaeris glabra	smooth cat's ear	No	--
Lactuca serriola	prickly lettuce	No	--
Matricaria discoidea	Pineapple weed	Yes	
Senecio vulgaris	ragwort	No	--
Silybum marianum	milk thistle	No	--
Sonchus asper	Prickly sow thistle	No	
Sonchus oleraceus	Sow thistle	No	
Boraginaceae	**Borage family**		
Amsinckia menziesii	small flowered fiddleneck	Yes	--

Scientific Name*	Common Name	Native	Species Status
Plagiobothrys acanthocarpus	Adobe allocarya	Yes	
Plagiobothrys canescens	valley popcorn flower	Yes	--
Plagiobothrys nothofulvus	Rusty popcorn flower	Yes	
Brassicaceae	**Mustard family**		
Brassica nigra	black mustard	No	--
Capsella bursa-pastoris	shepherd's purse	No	--
Hirschfeldia incana	summer mustard	No	--
Lepidium strictum	peppergrass	Yes	
Sinapis arvensis	Charlock	No	
Caprifoliaceae	**Honeysuckle family**		
Lonicera sp.	honeysuckle		--
Sambucus nigra	black elderberry	Yes	--
Symphoricarpos mollis	creeping snowberry	Yes	--
Caryophyllaceae	**Pink family**		
Cerastium glomeratum	Mouse ears chickweed	No	
Silene gallica	Windmill pink	No	
Stellaria media	Chickweed	No	--
Chenopodiaceae	**Goosefoot family**		
Chenopodium californicum	California pigweed	Yes	--
Salsola tragus	Russian thistle	No	--
Convolvulaceae	**Morning glory family**		
Convolvulus arvensis	bindweed	No	--
Crassulaceae	**Stonecrop family**		
Crassula connata	Pygmy weed	yes	
Euphorbiaceae	**Spurge family**		
Croton setiger	doveweed/turkey mullein	Yes	--
Fabaceae	**Pea family**		
Acmispon americanus	Spanish lotus	Yes	--
Lathyrus odoratus	sweet pea	No	--
Lupinus bicolor	miniature lupine	Yes	--
Lupinus microcarpus var. *microcarpus*	chick lupine	Yes	--
Lupinus nanus	sky lupine	Yes	--
Lupinus succulentus	Succulent lupine	Yes	
Medicago polymorpha	bur clover	No	--
Trifolium hirtum	rose clover	No	--

Scientific Name*	Common Name	Native	Species Status
Vicia villosa	hairy vetch	No	--
Fagaceae	**Oak family**		
Quercus agrifolia	coast live oak	Yes	--
Quercus lobata	valley oak	Yes	--
Geraniaceae	**Geranium family**		
Erodium cicutarium	red-stemmed filaree	No	--
Erodium moschatum	White-stem filaree	No	--
Erodium botrys	filaree	No	--
Erodium brachycarpum	foothill filaree	No	
Geranium dissectum	cut leaf geranium	No	--
Lamiaceae	**Mint family**		
Lamium amplexicaule	henbit	No	
Marrubium vulgare	horehound	No	--
Malvaceae	**Mallow family**		
Malva parviflora	cheeseweed	No	--
Montiaceae	**Minor's lettuce family**		
Calandrinia menziesii	Red maids	Yes	
Claytonia perfoliata	miners lettuce	Yes	--
Myrsinaceae	**Myrsine family**		
Lysimachia arvensis	scarlet pimpernel	No	--
Oleaceae	**Ash family**		
Olea europaea	olive	No	--
Onagraceae	**Evening Primrose Family**		
Clarkia sp.	Clarkia		
Orobanchaceae	**Broomrape Family**		
Castilleja attenuata	Narrow leaved owls clover	Yes	
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Yes	--
Plantaginaceae	**Plantain family**		
Platago erecta	California plantain	Yes	
Plantago lanceolata	English plantain	No	--
Veronica anagallis-aquatica	Water speedwell	No	
Veronica arvensis	Speedwell	No	
Polygonaceae	**Buckwheat family**		

Scientific Name*	Common Name	Native	Species Status
Polygonum aviculare	prostrate knotweed	No	--
Rumex crispus	curly dock	No	--
Rumex pulcher	fiddle dock	No	--
Ranunculaceae	**Buttercup family**		
Ranunculus californicus	California buttercup	Yes	
Rosaceae	**Rose family**		
Rosa californica	California wild rose	Yes	--
Rubiaceae	**Madder family**		
Galium aparine	goose grass	Yes	--
Galium parisiense	Wall bedstraw	No	
Salicaceae	**Willow family**		
Populus fremontii ssp. *fremontii*	Fremont's cottonwood	Yes	--
Simaroubaceae	**Simarouba family**		
Ailanthus altissima	Tree of heaven	No	
Verbenaceae	**Verbena family**		
Verbena lasiostachys	common vervain	No	--
Violoaceae	**Violet family**		
Viola pedunculata	Johnny jump-up	Yes	--
ANGIOSPERMS (MONOCOTS)			
Agavaceae	**Century plant family**		
Chlorogalum pomeridianum	Soap plant	Yes	
Cactaceae	**Cactus family**		
Opunita ficus-indica	Mission cactus	No	--
Cyperaceae	**Sedge family**		
Eleocharis macrostachya	spikerush	Yes	--
Iridaceae	**Iris Family**		
Sisyrinchium bellum	Blue eyed grass	Yes	
Liliaceae	**Lily Family**		
Brodiaea terrestris	dwarf brodiaea	Yes	
Dichelostemma capitatum	blue dicks	Yes	--
Juncaceae	**Rush family**		
Juncus sp.	rush	Yes	--
Poaceae	**Grass family**		
Avena barbata	slender wild oats	No	--
Avena fatua	wild oats	No	--

Scientific Name*	Common Name	Native	Species Status
Avena sativa	cultivated oat	No	
Bromus diandrus	ripgut brome	No	--
Bromus madritensis rubens	Spanish brome	No	--
Bromus tectorum	Cheatgrass	No	
Elymus triticoides	Beardless wild rye	Yes	
Festuca microstachys	Small fescue	Yes	
Festuca myuros	rattail fescue	No	--
Hordeum murinum ssp. leporinum	foxtail	No	--
Hordeum vulgare	Common barley	No	
Melica imperfecta	melic grass	Yes	--
Muhlenbergia rigens	deergrass	Yes	
Poa annua	Annual bluegrass	No	
Poa secunda	Pine bluegrass	Yes	
Stipa pulchra	Purple needle-grass	Yes	--

*Vascular Plants nomenclature follows “The Jepson Manual” and http://ucjeps.berkeley.edu/interchange.html.

Appendix B.
Fauna Compendium

This page intentionally left blank

Table B-1. Fauna Compendium
Paso Robles-Templeton Existing 70 kV Route Alternative

Common Name	Scientific Name
BIRDS	
Anatidae	
mallard	*Anas platyrhynchos*
Bombycillidae	
Cedar waxwing	*Bombycilla cedrorum*
Odontophoridae	
California quail	*Callipepla californica*
Cathartidae	
turkey vulture	*Cathartes aura*
Accipitridae	
golden eagle**	*Aquila chrysaetos*
red-tailed hawk	*Buteo jamaicensis*
Falconiformes	
prairie falcon	*Falco mexicanus*
Rallidae	
sora	*Porzana carolina*
Charadriidae	
killdeer	*Charadrius vociferus*
Columbidae	
mourning dove	*Zenaida macroura*
Eurasian collared dove*	*Streptopelia decaocto*
Apodidae	
white-throated swift	*Aeronautes saxatalis*
Picidae	
acorn woodpecker	*Melanerpes formicivorus*
downy woodpecker	*Picoides pubescens*
hairy woodpecker	*Picoides villosus*
northern flicker	*Colaptes auratus*
Strigidae	
Great horned owl	*Bubo virginianus*
Troglodytidae	

Common Name	Scientific Name
Bewick's wren	*Thryomanes bewickii*
Tyrannidae	
black phoebe	*Sayornis nigricans*
western kingbird	*Tyrannus verticalis*
western wood-pewee	*Contopus sordidulus*
pacific-slope flycatcher	*Empidonax difficilis*
ash-throated flycatcher	*Myiarchus cinerascens*
Paridae	
oak titmouse	*Baeolophus inornatus*
Laniidae	
loggerhead shrike	*Lanius ludovicianus*
Corvidae	
California scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Hirundinidae	
barn swallow	*Hirundo rustica*
cliff swallow	*Petrochelidon pyrrhonota*
tree swallow	*Tachycineta bicolor*
Sittidae	
white-breasted nuthatch	*Sitta carolinensis*
Turdidae	
western bluebird	*Sialia mexicana*
Mimidae	
northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
Sturnidae	
European starling*	*Sturnus vulgaris*
Emberizidae	
spotted towhee	*Pipilo maculatus*
California towhee	*Melozone crissalis*
savannah sparrow	*Passerculus sandwichensis*
white-crowned sparrow	*Zonotrichia leucophrys*

Common Name	Scientific Name
song sparrow	*Melospiza melodia*
Icteridae	
red-winged blackbird	*Agelaius phoeniceus*
Brewer's blackbird	*Euphagus cyanocephalus*
western meadowlark	*Sturnella neglecta*
Fringillidae	
house finch	*Haemorhous mexicanus*
lesser goldfinch	*Spinus psaltria*
Passerellidae	
Dark eyed junco	*Junco hyemalis*
Passeridae	
house sparrow*	*Passer domesticus*
MAMMALS	
Canidae	
coyote	*Canis latrans*
Felidae	
bobcat	*Lynx rufus*
domestic cat*	*Felis catus*
Cervidae	
mule deer	*Odocoileus hemionus*
Sciuridae	
California ground squirrel	*Otospermophilus beecheyi*
Leporidae	
brush rabbit	*Sylvilagus bachmani*
Procyonidae	
raccoon	*Procyon lotor*
Taxideainae	
American badger**	*Taxidea taxus*
Didelphidae	
Virginia opossum	*Didelphis virginiana*
AMPHIBIANS	
Bufonidae	

Common Name	Scientific Name
western toad	*Anaxyrus boreas*
Hulidae	
northern pacific treefrog	*Pseudacris regilla*
Ranidae	
American bullfrog*	*Lithobates catesbeianus*
REPTILES	
Phrynosomatidae	
western fence lizard	*Sceloporus occidentalis*
INSECTS	
Acrididae	
short-horned grasshopper	*Unknown*
Papilionidae	
western tiger swallowtail	*Papilio rutulus*
FISH	
Cyprinidae	
koi*	*Cyprinus carpio*
Centrarchidae	
bluegill*	*Lepomis macrochirus*
largemouth bass*	*Micropterus salmoides*

*Introduced species
**Special-status species

Table B-2. Fauna Compendium
Paso Robles-Templeton South River Route Alternative

Common Name	Scientific Name
BIRDS	
Anatidae	
mallard	*Anas platyrhynchos*
Odontophoridae	
California quail	*Callipepla californica*
Cathartidae	
turkey vulture	*Cathartes aura*
Accipitridae	
red-tailed hawk	*Buteo jamaicensis*
Charadriidae	
killdeer	*Charadrius vociferus*
Columbidae	
mourning dove	*Zenaida macroura*
Eurasian collared dove*	*Streptopelia decaocto*
Apodidae	
white-throated swift	*Aeronautes saxatalis*
Picidae	
acorn woodpecker	*Melanerpes formicivorus*
downy woodpecker	*Picoides pubescens*
hairy woodpecker	*Picoides villosus*
northern flicker	*Colaptes auratus*
Tyrannidae	
black phoebe	*Sayornis nigricans*
western kingbird	*Tyrannus verticalis*
western wood-pewee	*Contopus sordidulus*
ash-throated flycatcher	*Myiarchus cinerascens*
Paridae	
oak titmouse	*Baeolophus inornatus*
Laniidae	
loggerhead shrike	*Lanius ludovicianus*

Common Name	Scientific Name
Corvidae	
western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Hirundinidae	
barn swallow	*Hirundo rustica*
cliff swallow	*Petrochelidon pyrrhonota*
tree swallow	*Tachycineta bicolor*
Sittidae	
white-breasted nuthatch	*Sitta carolinensis*
Turdidae	
western bluebird	*Sialia mexicana*
Mimidae	
northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
Sturnidae	
European starling*	*Sturnus vulgaris*
Emberizidae	
spotted towhee	*Pipilo maculatus*
California towhee	*Melozone crissalis*
savannah sparrow	*Passerculus sandwichensis*
white-crowned sparrow	*Zonotrichia leucophrys*
song sparrow	*Melospiza melodia*
Icteridae	
red-winged blackbird	*Agelaius phoeniceus*
Brewer’s blackbird	*Euphagus cyanocephalus*
Bullock's oriole	*Icterus bullockii*
western meadowlark	*Sturnella neglecta*
Certhiidae	
brown creeper	*Certhia americana*
Fringillidae	
house finch	*Haemorhous mexicanus*
lesser goldfinch	*Spinus psaltria*

Common Name	Scientific Name
Troglodytidae	
house wren	*Troglodytes aedon*
Anna's hummingbird	*Calypte anna*
Passeridae	
house sparrow*	*Passer domesticus*
Lincoln's sparrow	*Melospiza lincolnii*
rufous-crowned sparrow	*Aimophila ruficeps*
MAMMALS	
Canidae	
coyote	*Canis latrans*
Felidae	
bobcat	*Lynx rufus*
domestic cat*	*Felis catus*
Cervidae	
mule deer	*Odocoileus hemionus*
Sciuridae	
California ground squirrel	*Otospermophilus beecheyi*
Leporidae	
brush rabbit	*Sylvilagus bachmani*
Procyonidae	
raccoon	*Procyon lotor*
Didelphidae	
Virginia opossum	*Didelphis virginiana*
AMPHIBIANS	
Hulidae	
northern pacific treefrog	*Pseudacris regilla*
Ranidae	
American bullfrog*	*Lithobates catesbeianus*
REPTILES	
Phrynosomatidae	
western fence lizard	*Sceloporus occidentalis*
INSECTS	

Common Name	Scientific Name
Acrididae	
short-horned grasshopper	*Unknown*
Papilionidae	
western tiger swallowtail	*Papilio rutulus*
FISH	
Cyprinidae	
koi*	*Cyprinus carpio*
Centrarchidae	
bluegill*	*Lepomis macrochirus*
largemouth bass*	*Micropterus salmoides*

*Introduced species
**Special-status species

Table B-3. Fauna Compendium
Paso Robles-Templeton Creston Route Alternative

Common Name	Scientific Name
BIRDS	
Anatidae	
mallard	*Anas platyrhynchos*
Ardeidae	
Ardea alba	Great egret
Odontophoridae	
California quail	*Callipepla californica*
Cathartidae	
turkey vulture	*Cathartes aura*
Accipitridae	
red-tailed hawk	*Buteo jamaicensis*
Charadriidae	
killdeer	*Charadrius vociferus*
Columbidae	
mourning dove	*Zenaida macroura*
Eurasian collared dove*	*Streptopelia decaocto*
Apodidae	
white-throated swift	*Aeronautes saxatalis*
Picidae	
acorn woodpecker	*Melanerpes formicivorus*
downy woodpecker	*Picoides pubescens*
hairy woodpecker	*Picoides villosus*
northern flicker	*Colaptes auratus*
Tyrannidae	
ash-throated flycatcher	*Myiarchus cinerascens*
black phoebe	*Sayornis nigricans*
western kingbird	*Tyrannus verticalis*
western wood-pewee	*Contopus sordidulus*
Paridae	
oak titmouse	*Baeolophus inornatus*
Laniidae	

Common Name	Scientific Name
loggerhead shrike	*Lanius ludovicianus*
Corvidae	
western scrub-jay	*Aphelocoma californica*
American crow	*Corvus brachyrhynchos*
Hirundinidae	
barn swallow	*Hirundo rustica*
cliff swallow	*Petrochelidon pyrrhonota*
tree swallow	*Tachycineta bicolor*
Sittidae	
white-breasted nuthatch	*Sitta carolinensis*
Turdidae	
western bluebird	*Sialia mexicana*
Mimidae	
northern mockingbird	*Mimus polyglottos*
California thrasher	*Toxostoma redivivum*
Sturnidae	
European starling*	*Sturnus vulgaris*
Emberizidae	
California towhee	*Melozone crissalis*
savannah sparrow	*Passerculus sandwichensis*
white-crowned sparrow	*Zonotrichia leucophrys*
song sparrow	*Melospiza melodia*
Icteridae	
red-winged blackbird	*Agelaius phoeniceus*
Brewer’s blackbird	*Euphagus cyanocephalus*
western meadowlark	*Sturnella neglecta*
Trochilidae	
Anna's hummingbird	*Calypte anna*
Fringillidae	
house finch	*Haemorhous mexicanus*
lesser goldfinch	*Spinus psaltria*
Passeridae	

Common Name	Scientific Name
house sparrow*	*Passer domesticus*
MAMMALS	
Canidae	
coyote	*Canis latrans*
Felidae	
bobcat	*Lynx rufus*
domestic cat*	*Felis catus*
Cervidae	
mule deer	*Odocoileus hemionus*
Sciuridae	
California ground squirrel	*Otospermophilus beecheyi*
Leporidae	
black-tailed jackrabbit	*Lepus californicus*
brush rabbit	*Sylvilagus bachmani*
Procyonidae	
raccoon	*Procyon lotor*
Didelphidae	
Virginia opossum	*Didelphis virginiana*
AMPHIBIANS	
Hulidae	
northern pacific treefrog	*Pseudacris regilla*
Ranidae	
American bullfrog*	*Lithobates catesbeianus*
REPTILES	
Phrynosomatidae	
western fence lizard	*Sceloporus occidentalis*
INSECTS	
Acrididae	
short-horned grasshopper	*Unknown*
Papilionidae	
western tiger swallowtail	*Papilio rutulus*
FISH	

Common Name	Scientific Name
Cyprinidae	
koi*	*Cyprinus carpio*
Centrarchidae	
bluegill*	*Lepomis macrochirus*
largemouth bass*	*Micropterus salmoides*

*Introduced species
**Special-status species

Table B-4. Fauna Compendium Templeton Substation

Common Name	Scientific Name
BIRDS	
Aegithalidae	
Bushtit	*Psaltriparus minimus*
Odontophoridae	
California quail	*Callipepla californica*
Cathartidae	
turkey vulture	*Cathartes aura*
Phasianidae	
Wild turkey	*Meleagris gallopavo*
Accipitridae	
red-tailed hawk	*Buteo jamaicensis*
Red-shouldered hawk	*Buteo lineatus*
bald eagle	*Haliaeetus leucocephalus*
Charadriidae	
killdeer	*Charadrius vociferus*
Columbidae	
mourning dove	*Zenaida macroura*
Eurasian collared dove*	*Streptopelia decaocto*
Rock pigeon	*Columba livia*
Picidae	
acorn woodpecker	*Melanerpes formicivorus*
Nuttall's woodpecker	*Picoides nuttallii*
northern flicker	*Colaptes auratus*
Tyrannidae	
ash-throated flycatcher	*Myiarchus cinerascens*
black phoebe	*Sayornis nigricans*
Paridae	
oak titmouse	*Baeolophus inornatus*
Corvidae	
California scrub-jay	*Aphelocoma californica*
common raven	*Corvus corax*

Common Name	Scientific Name
Yellow-billed magpie	*Pica nuttalli*
Hirundinidae	
Violet-green swallow	*Tachycineta thalassina*
Regulidae	
Ruby-crowned kinglet	*Regulus calendula*
Sittidae	
white-breasted nuthatch	*Sitta carolinensis*
Troglodytidae	
House wren	*Troglodytes aedon*
Turdidae	
western bluebird	*Sialia mexicana*
Mimidae	
Northern mockingbird	*Mimus polyglottos*
Sturnidae	
European starling*	*Sturnus vulgaris*
Passerellidae	
Dark-eyed junco	*Junco hyemalis*
California towhee	*Melozone crissalis*
white-crowned sparrow	*Zonotrichia leucophrys*
Golden-crowned sparrow	*Zonotichia atricapilla*
Icteridae	
western meadowlark	*Sturnella neglecta*
Trochilidae	
Anna's Hummingbird	*Calypte anna*
Fringillidae	
house finch	*Haemorhous mexicanus*
lesser goldfinch	*Spinus psaltria*
MAMMALS	
Mustelidae	
American badger	*Taxidea taxus*
Leporidae	
brush rabbit	*Sylvilagus bachmani*

Common Name	Scientific Name
AMPHIBIANS	
Bufonidae	
California toad	*Anaxyrus boreas halophilus*
Hulidae	
northern pacific treefrog	*Pseudacris regilla*

*Introduced species
**Special-status species

This page intentionally left blank

Appendix C.
Photo Documentation

This page intentionally left blank

Photo 1 (Paso Robles-Templeton Existing 70 kV Route Alternative): View facing north of the Salinas River where one of the two the BSA segments overlaps within the riparian corridor.

Photo 2 (Paso Robles-Templeton Existing 70 kV Route Alternative): View facing north of the Salinas River where one of the two BSA segments overlaps within the riparian corridor.

Photo 3 (Paso Robles-Templeton Existing 70 kV Route Alternative): View facing north of an approximately 800-foot by 300-foot seasonal wetland depression within grassland habitat along Lake Ysabel Road.

Photo 4 (Paso Robles-Templeton Existing 70 kV Route Alternative): View facing southeast of the eucalyptus tree where a golden eagle nest is located approximately 200 feet east of the BSA on Santa Ysabel Road.

Photo 5 (Paso Robles-Templeton Existing 70 kV Route Alternative): View facing southwest, where the route alternative would tie into Paso Robles Substation.

Photo 6 (Paso Robles-Templeton South River Route Alternative): View facing southwest (downstream) of Spanish Camp Creek (CRLF Site #1). May be suitable breeding and non-breeding habitats for California red-legged frogs and western pond turtles, as well as foraging habitat for other special-status species.

Photo 7 (Paso Robles-Templeton South River Route Alternative): View facing east (upstream) of Spanish Camp Creek along the north side of South River Road. May be suitable breeding and non-breeding habitats for California red-legged frogs and western pond turtles, as well as foraging habitat for other special-status species.

Photo 8 (Paso Robles-Templeton South River Route Alternative): View facing west along the south side of South River Road within the BSA.

Photo 9 (Paso Robles-Templeton South River Route Alternative): View facing east along the south side of South River Road within the BSA.

Photo 10 (Paso Robles-Templeton South River Route Alternative): View facing south of an intermittent drainage observed in the BSA that may be subject to USACE and CDFW jurisdiction, and may be a suitable migration corridor for dispersal of species.

Photo 11 (Paso Robles-Templeton South River Route Alternative): View facing southeast of the vineyard just north of the existing Templeton Substation.

Photo 12 (Paso Robles-Templeton Creston Route Alternative): View facing west on the south side of Creston Road within the BSA. Intermittent housing surrounded by open areas and blue oak woodlands occur along the south side, while residential developments are located on the north side of the road.

Photo 13 (Paso Robles-Templeton Creston Route Alternative): View showing a man-made fountain pond (CRLF Site# 2) on Creston Road that may be suitable breeding and non-breeding habitats for California red-legged frogs.

Photo 14 (Paso Robles-Templeton Creston Route Alternative): View facing southwest of a large freshwater pond within the LCSLO conservation easement (CRLF Site #5) that may be

suitable breeding and non-breeding habitats for California red-legged frog, western pond turtles, and tricolored blackbirds, as well as foraging habitat for other special-status species.

Photo 15 (Paso Robles-Templeton Creston Route Alternative): View showing an example of a small mammal burrow with an entrance 4 inches diameter or larger observed along the route alternative within the BSA.

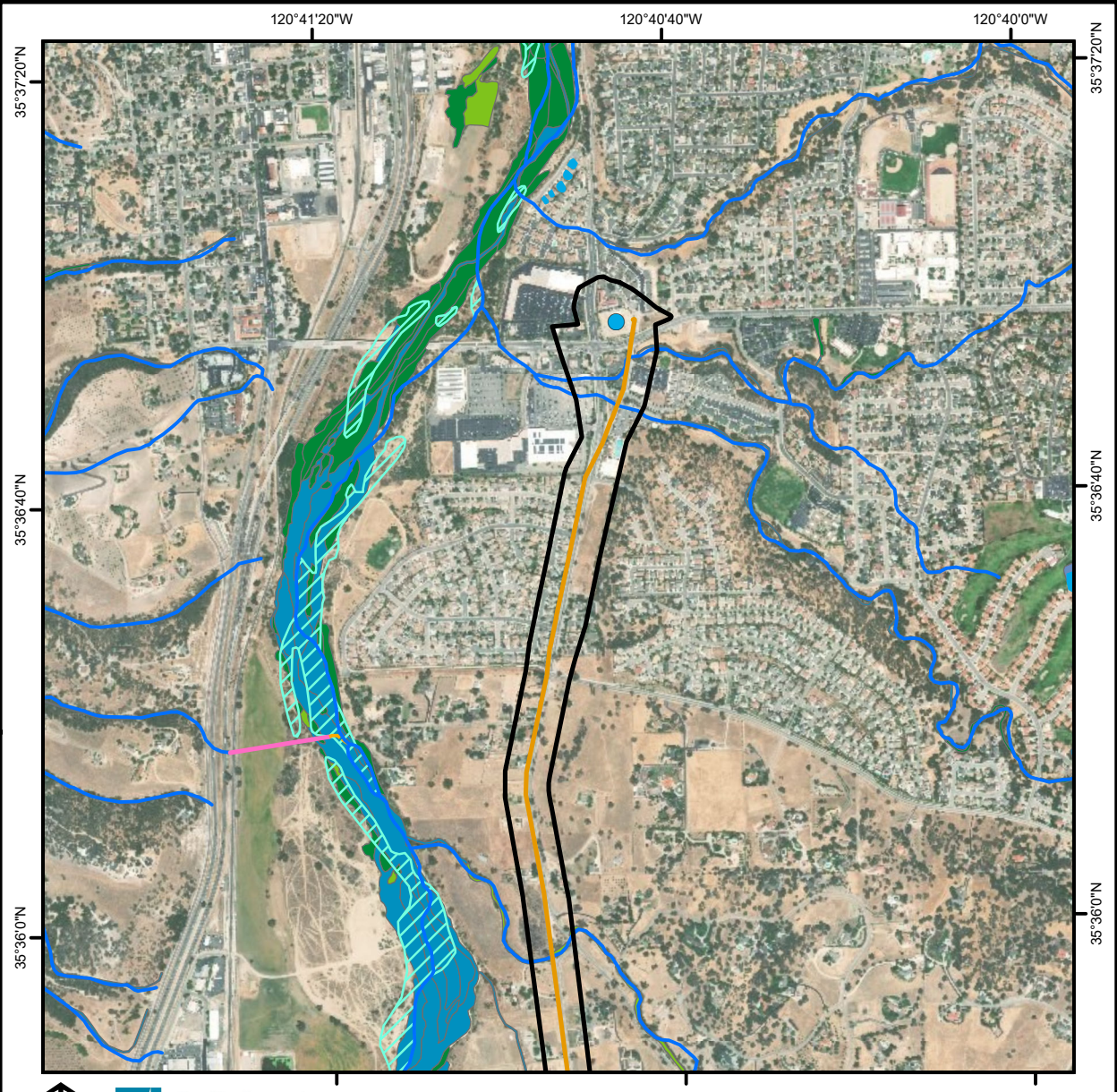
Photo 16 (Paso Robles-Templeton Creston Route Alternative): View facing south of a seasonal emergent wetland with culvert drainages to the east and south, with an adjoining cattle pond that extends west of the BSA (CRLF Site #7). May be suitable breeding and non-breeding habitats for California red-legged frogs, western pond turtles and vernal pool species, as well as foraging habitat for other special-status species.

Photo 17 (Paso Robles-Templeton Creston Route Alternative): View facing south along the route alternative showing grassland habitat and surrounding landscape communities within the BSA.

This page intentionally left blank

Appendix D.
National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD) Map

This page intentionally left blank



Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,500

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70kV Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Legend

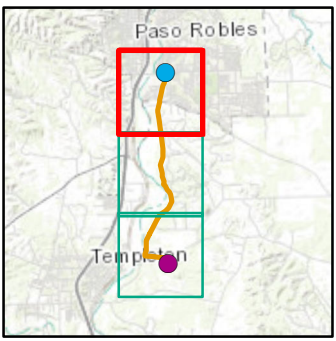
- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles Substation

National Hydrography Dataset

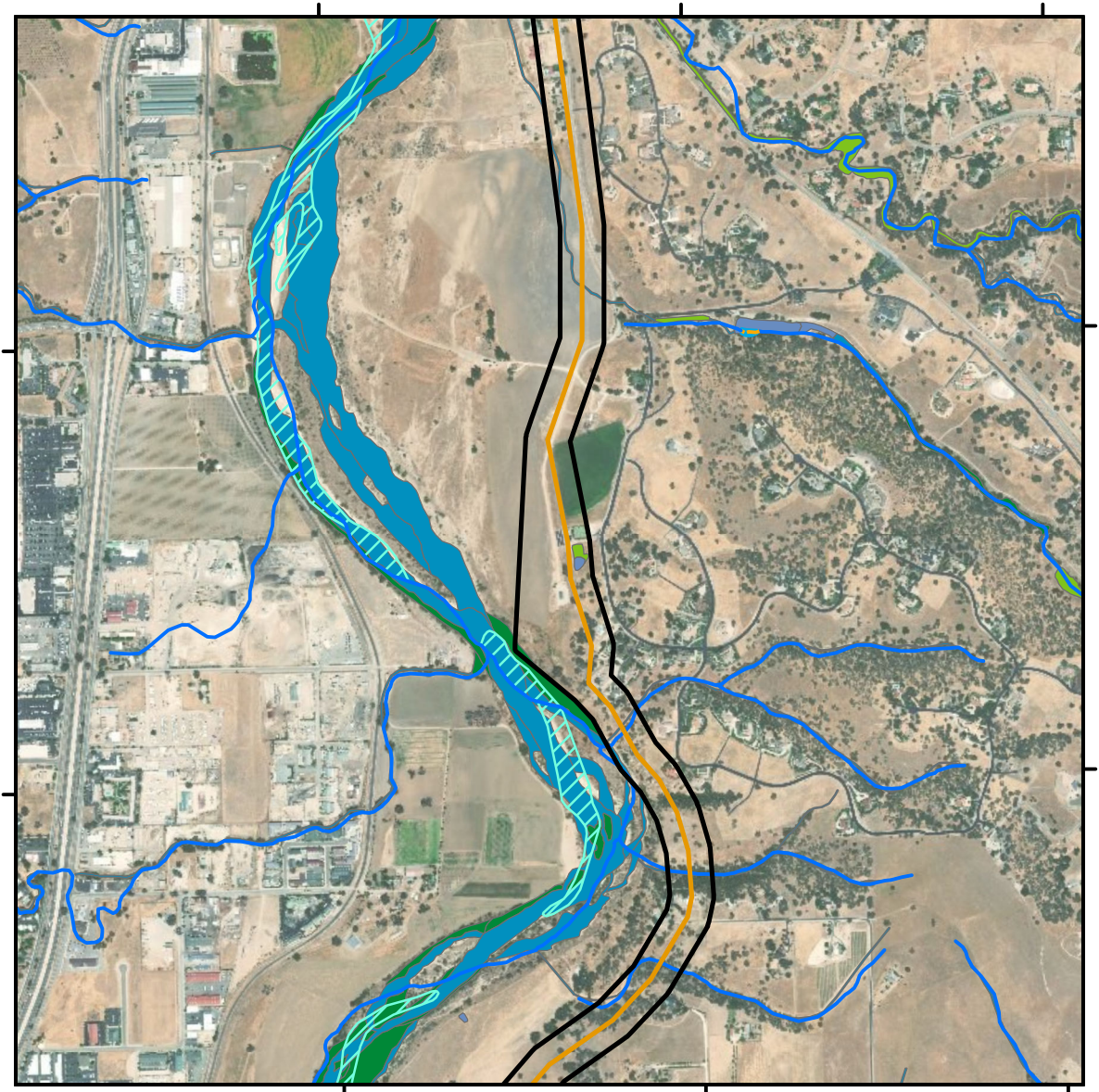
- Artificial Path
- Connector
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Prepared by SWCA Environmental Consultants (12/27/2018, 1:12:39 PM) - NAD 1983 UTM Zone 10N
File: Existing70kV_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,500

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70kV Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Legend

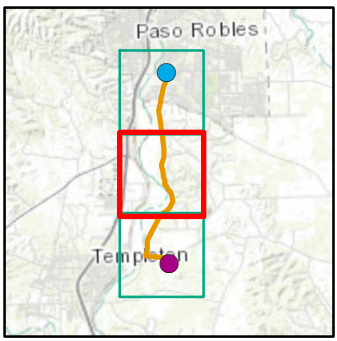
- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

National Hydrography Dataset

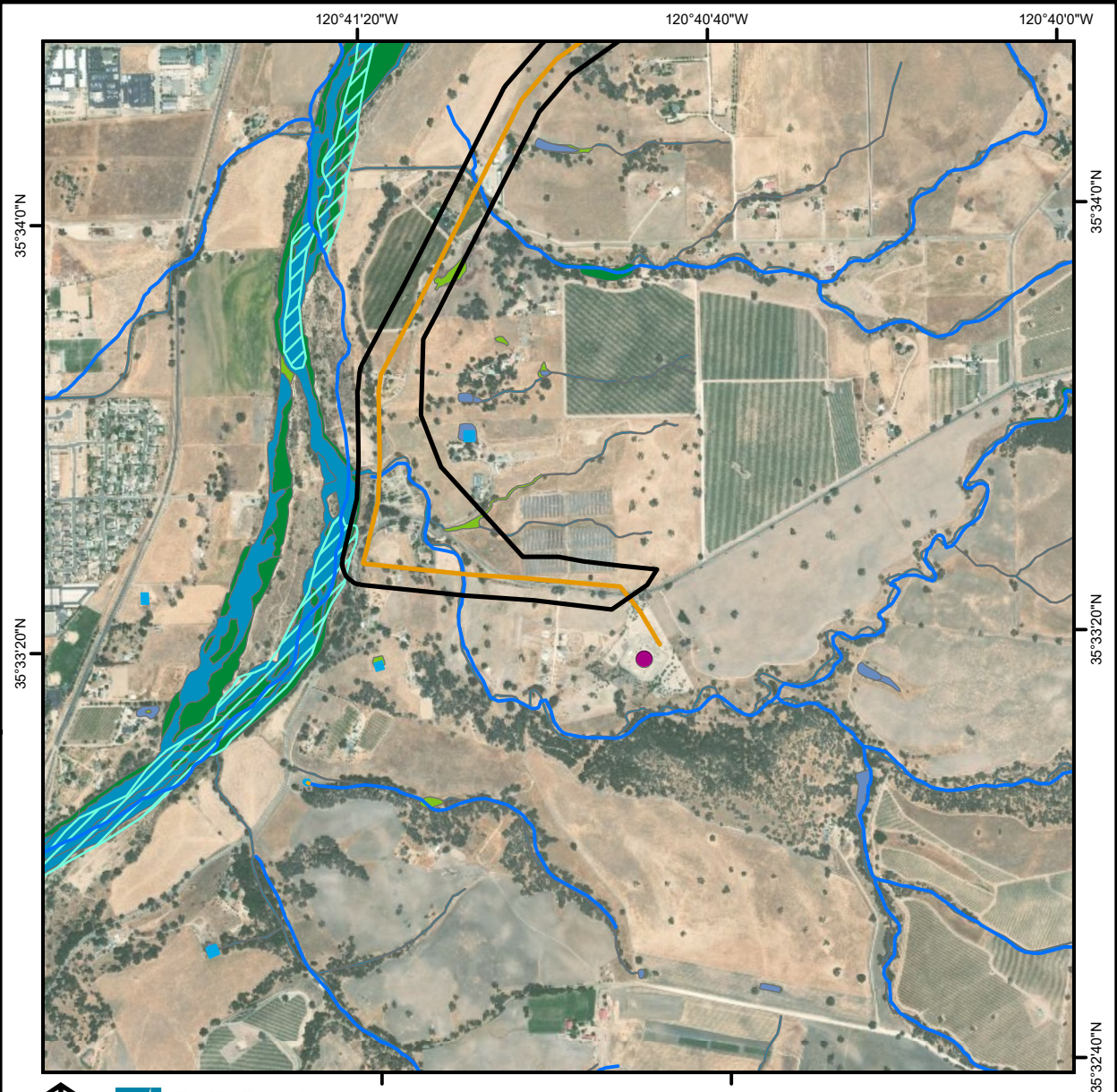
- Artificial Path
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Prepared by SWCA Environmental Consultants (12/27/2018, 1:12:44 PM) - NAD 1983 UTM Zone 10N
File: Existing70kV_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,500

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70kV Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Legend

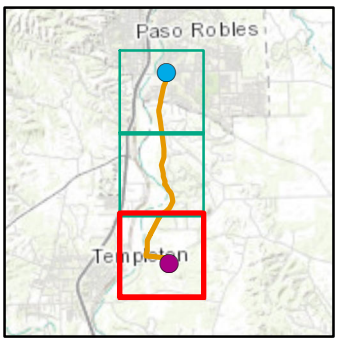
- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Templeton Substation

National Hydrography Dataset

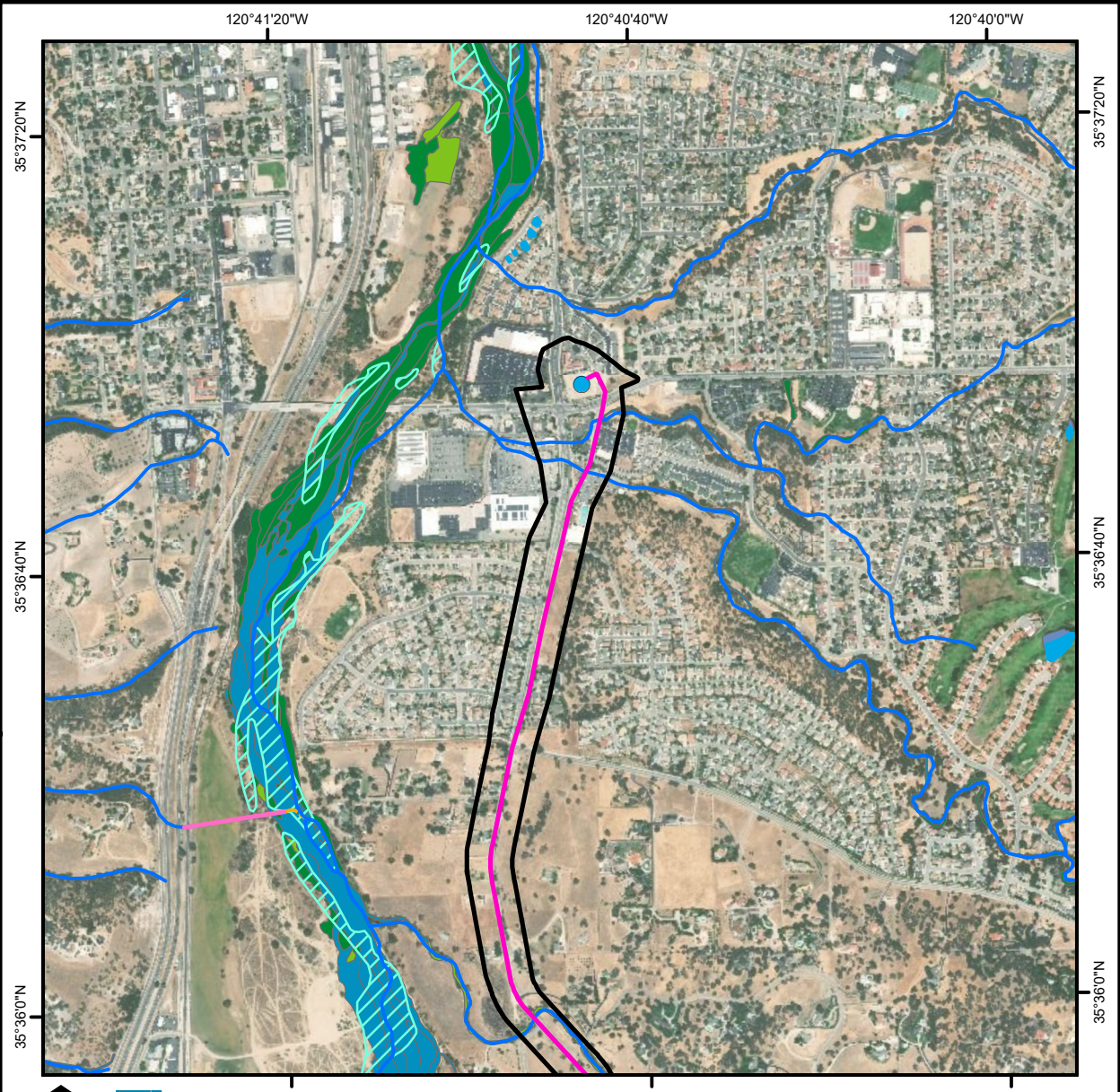
- Artificial Path
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Prepared by SWCA Environmental Consultants (12/27/2018, 1:12:48 PM) - NAD 1983 UTM Zone 10N
File: Existing70kV_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



N

Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Legend

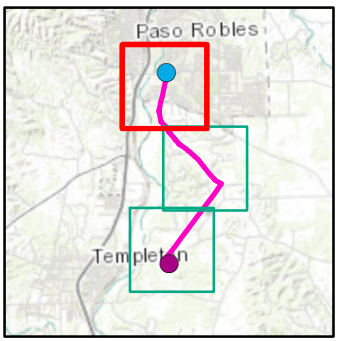
- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Paso Robles Substation

National Hydrography Dataset

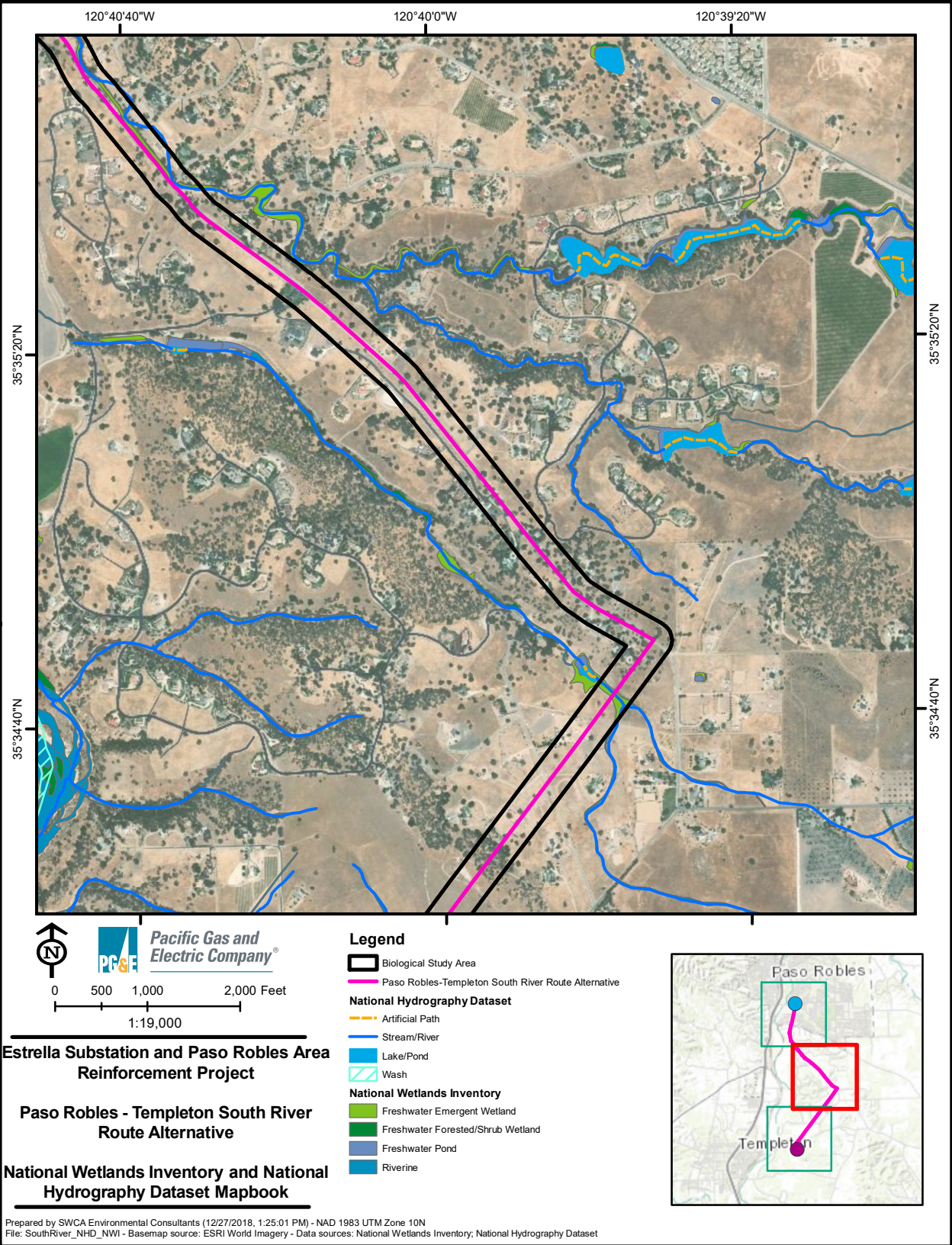
- Artificial Path
- Connector
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Prepared by SWCA Environmental Consultants (12/27/2018, 1:24:56 PM) - NAD 1983 UTM Zone 10N
File: SouthRiver_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset

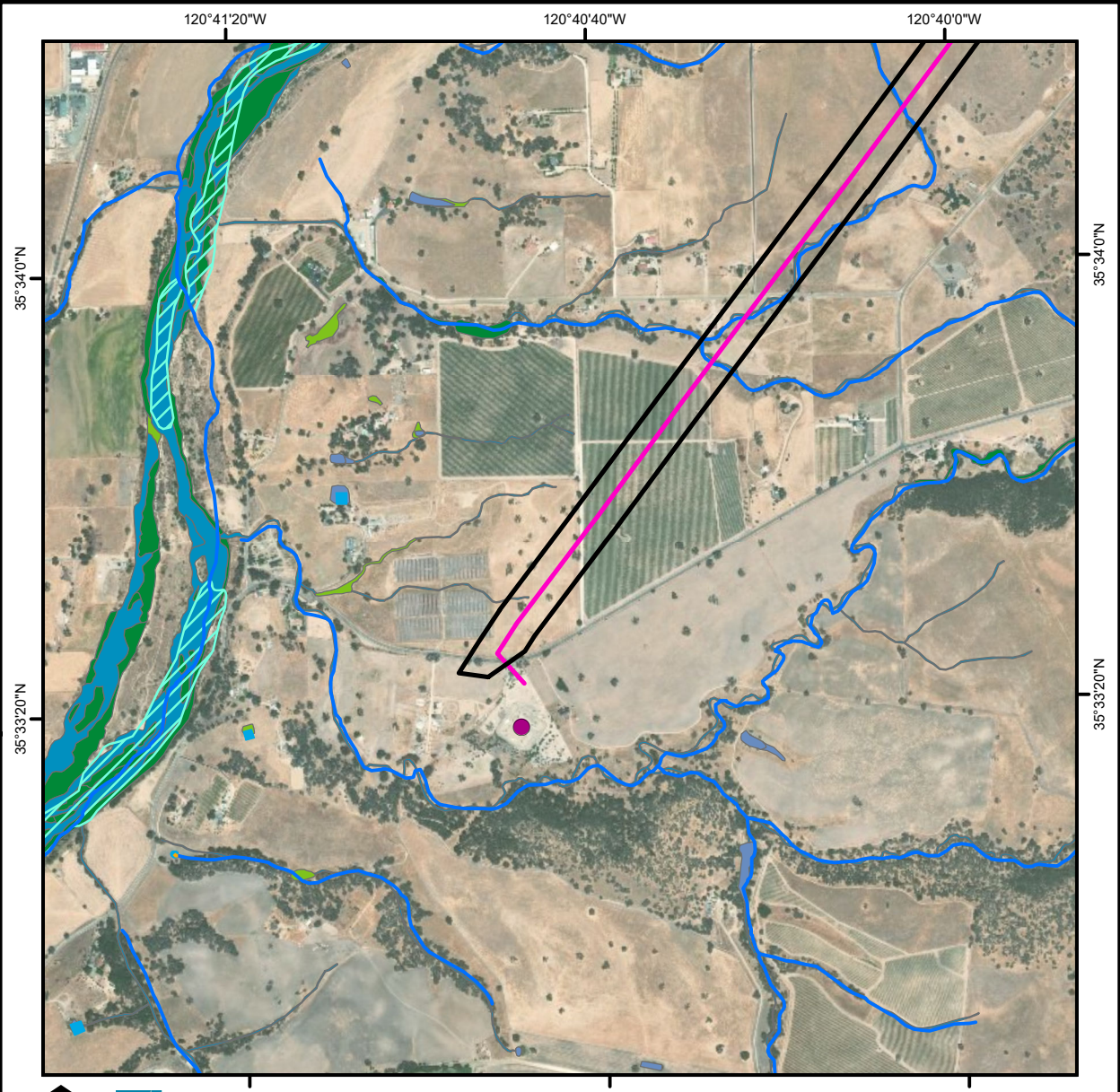


Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:25:01 PM) - NAD 1983 UTM Zone 10N
File: SouthRiver_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



N

Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,000

Legend

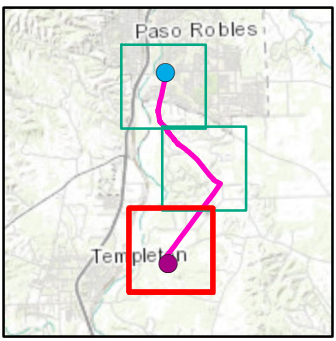
- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Templeton Substation

National Hydrography Dataset

- Artificial Path
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

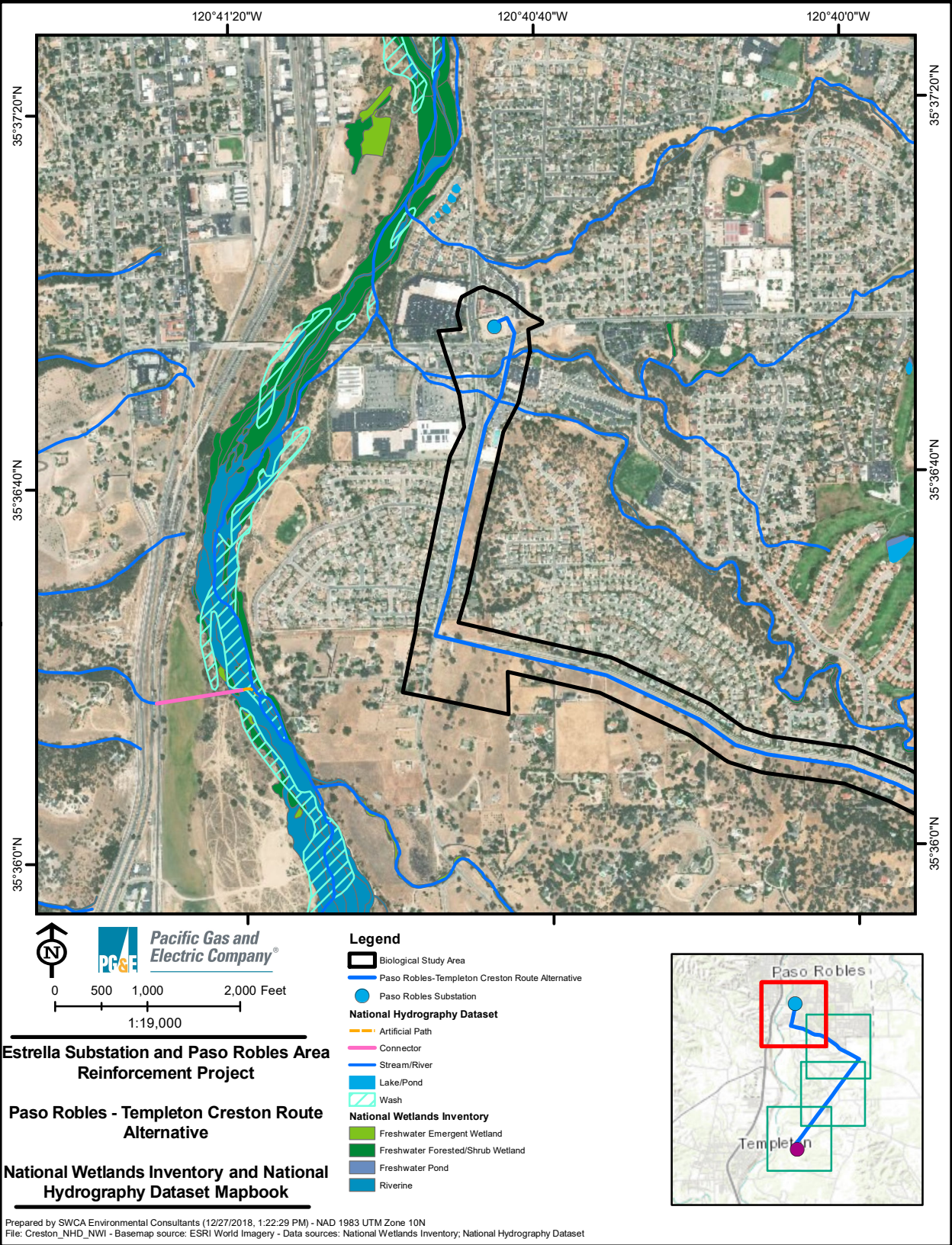


Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:25:05 PM) - NAD 1983 UTM Zone 10N
File: SouthRiver_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset

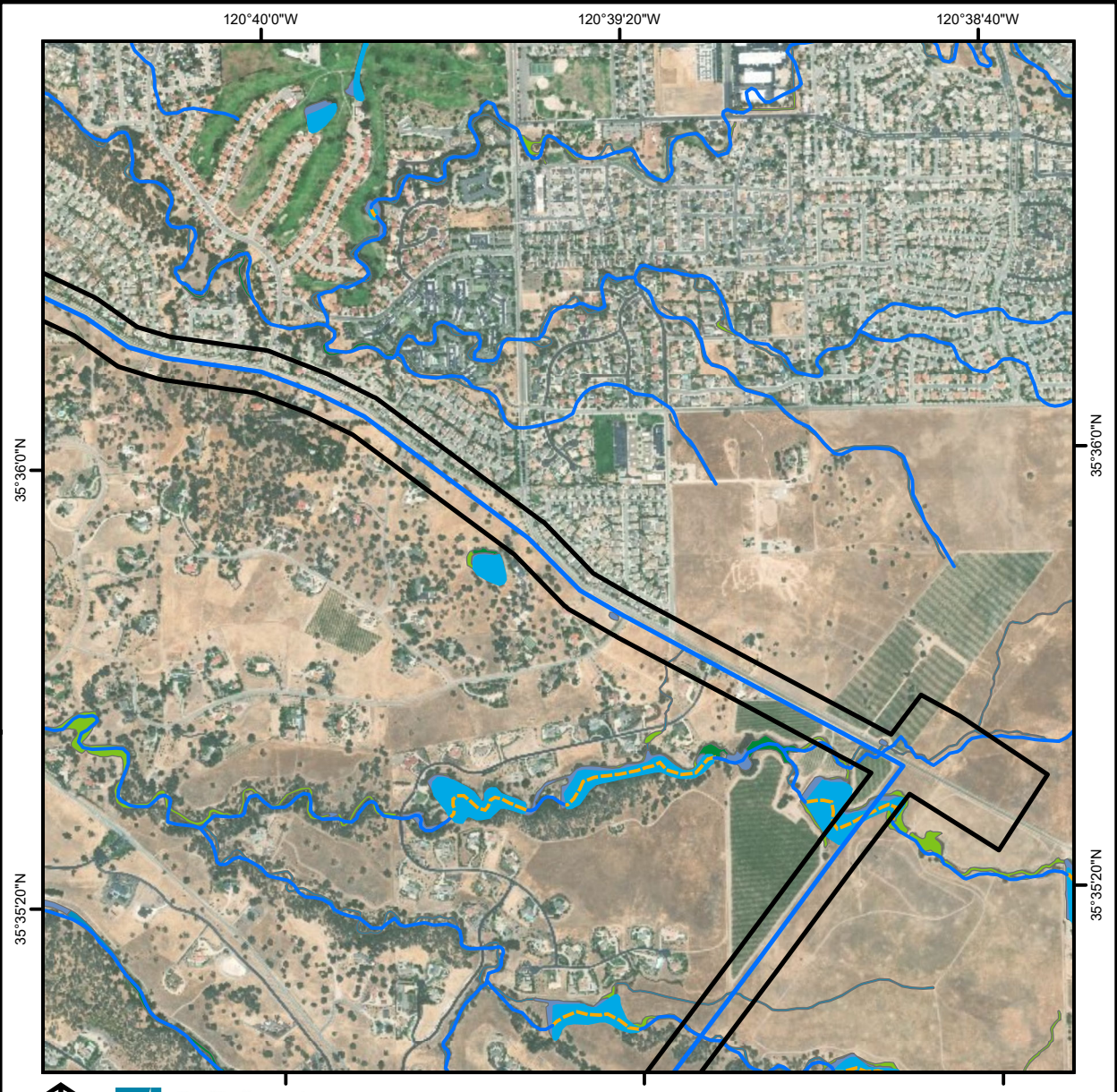


Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:22:29 PM) - NAD 1983 UTM Zone 10N
File: Creston_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



N

Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,000

Legend

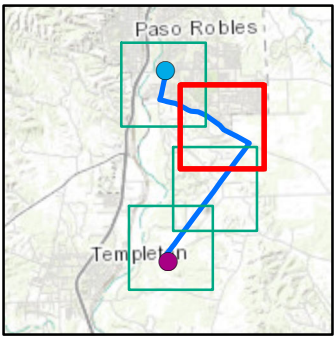
- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative

National Hydrography Dataset

- Artificial Path
- Stream/River
- Lake/Pond

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

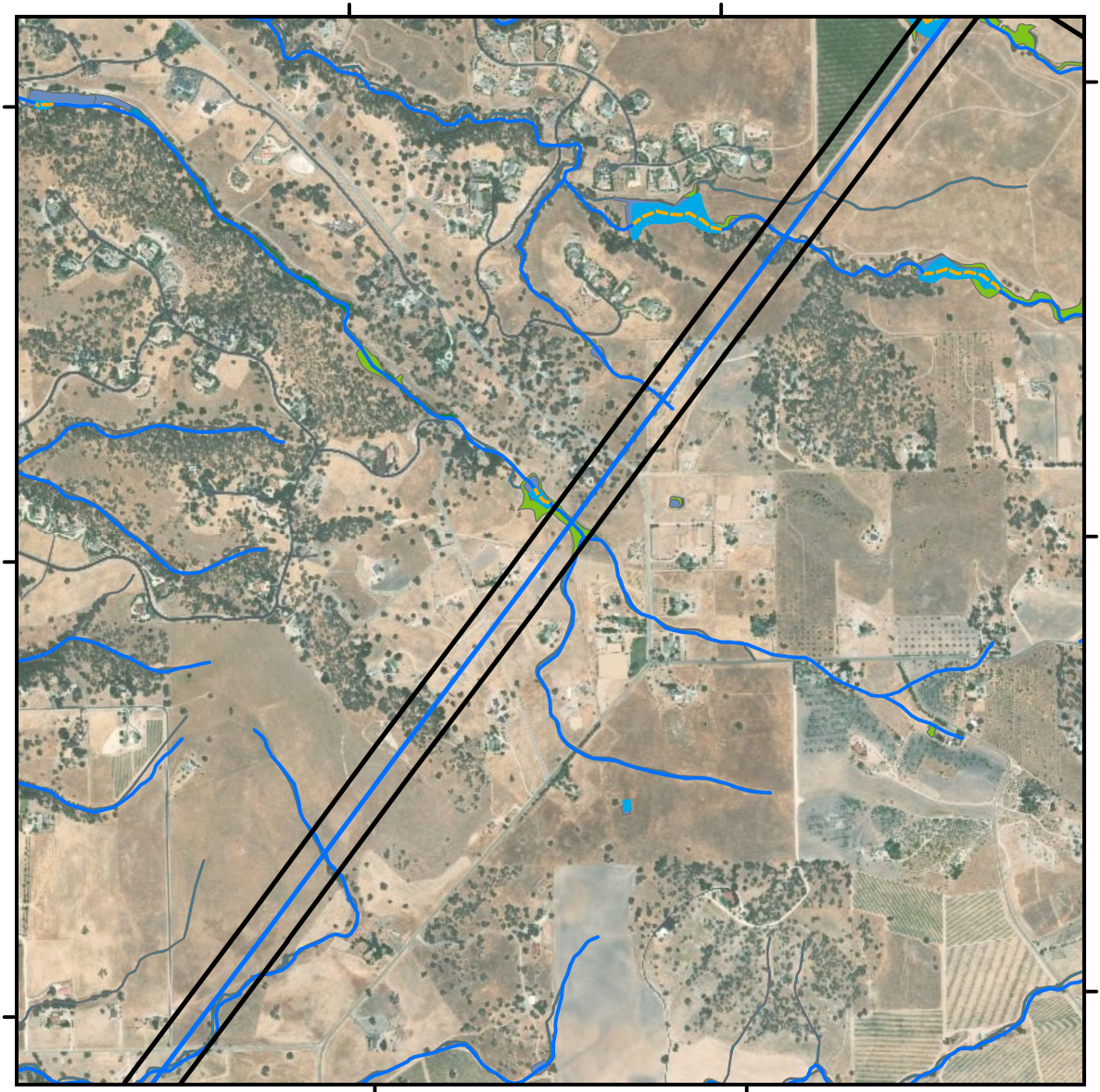


Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:22:37 PM) - NAD 1983 UTM Zone 10N
File: Creston_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset



N

Pacific Gas and Electric Company®

0 500 1,000 2,000 Feet

1:19,000

Legend

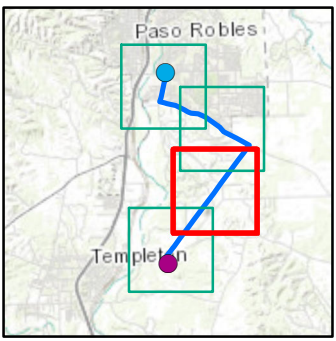
- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative

National Hydrography Dataset

- Artificial Path
- Stream/River
- Lake/Pond

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

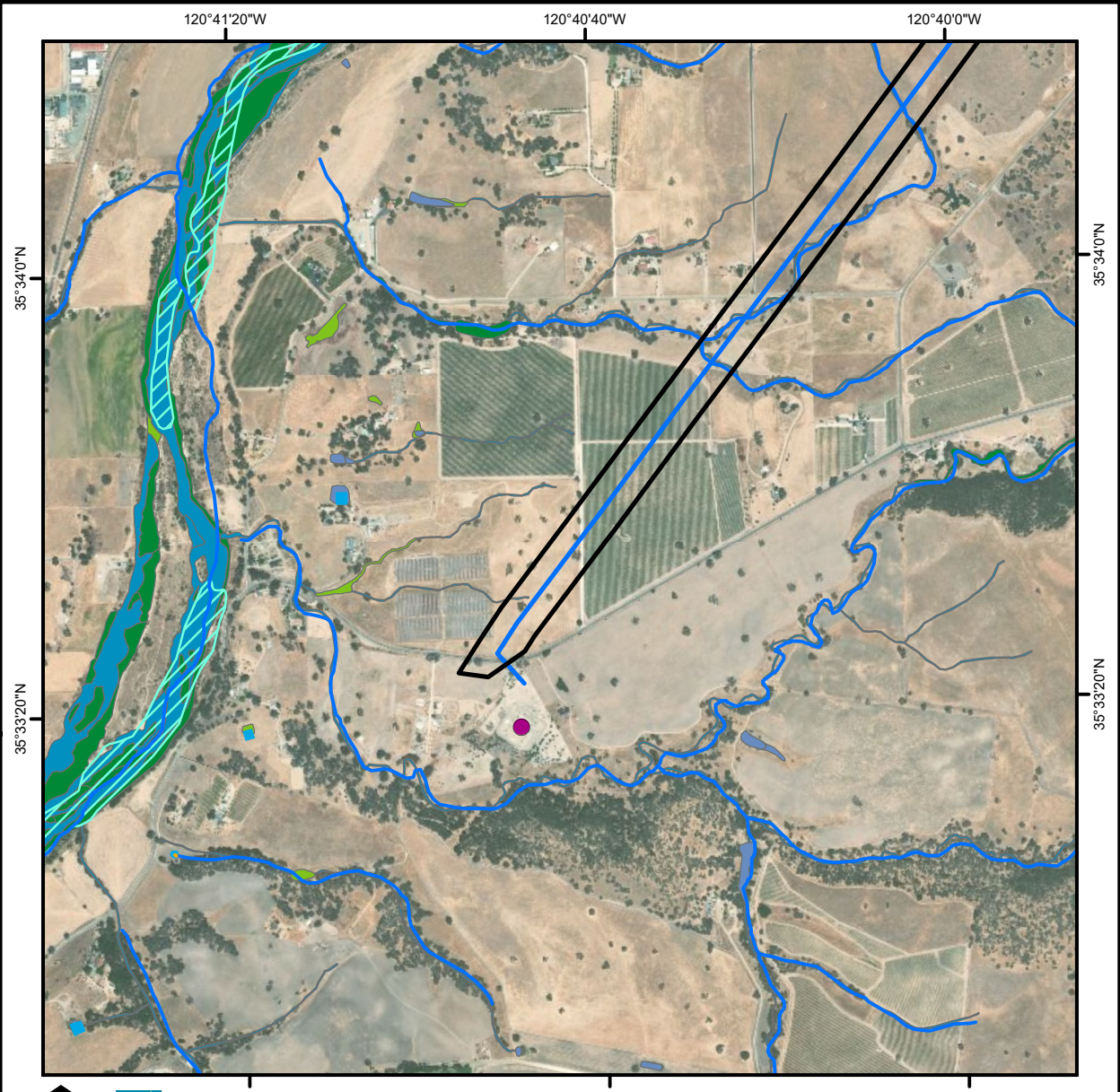


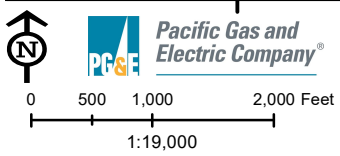
Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:22:42 PM) - NAD 1983 UTM Zone 10N
File: Creston_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset





Legend

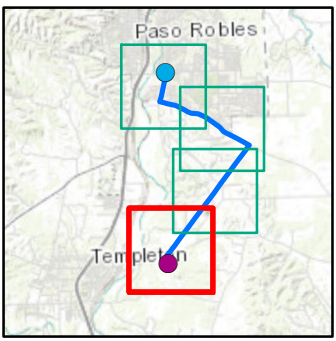
- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Templeton Substation

National Hydrography Dataset

- Artificial Path
- Stream/River
- Lake/Pond
- Wash

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

National Wetlands Inventory and National Hydrography Dataset Mapbook

Prepared by SWCA Environmental Consultants (12/27/2018, 1:22:46 PM) - NAD 1983 UTM Zone 10N
File: Creston_NHD_NWI - Basemap source: ESRI World Imagery - Data sources: National Wetlands Inventory; National Hydrography Dataset

Appendix E.
Biological Resource Map

This page intentionally left blank

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°44'10"W 120°43'20"W 120°42'30"W 120°41'40"W 120°40'50"W 120°40'0"W 120°39'10"W 120°38'20"W 120°37'30"W

35°36'40"N 35°35'50"N 35°35'0"N 35°34'10"N 35°33'20"N

1 2 3 4 5 6 7 8 9 10 11

Pacific Gas and Electric Company®

0 750 1,500 3,000 Feet

1:30,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

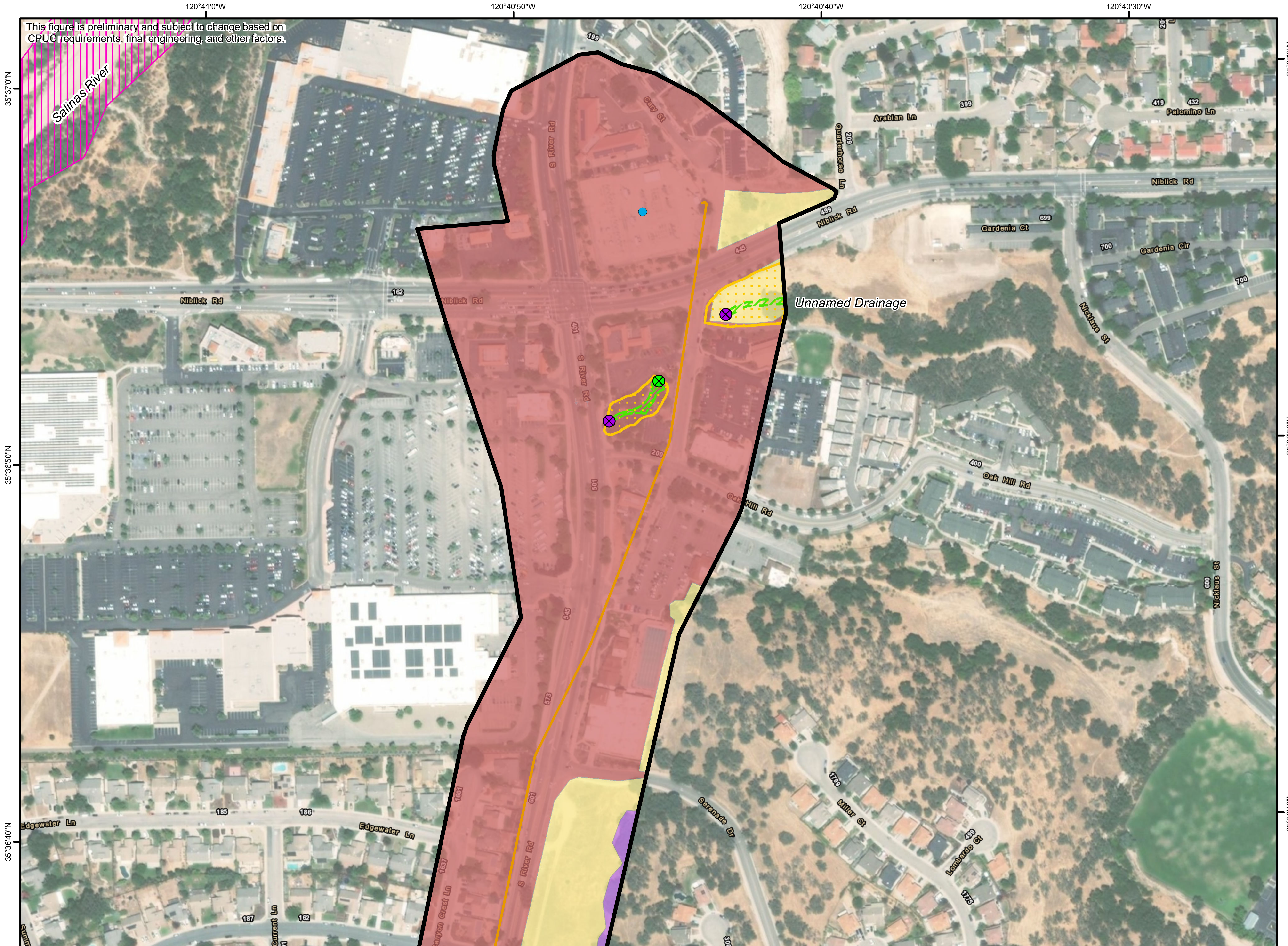
Index Sheet

Legend

- Biological Study Area
- Mapbook Pages
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles Substation
- Templeton Substation
- City of El Paso de Robles Limits

Prepared by SWCA Environmental Consultants (12/26/2018, 12:46:36 PM) - Existing70kV_Bio_Mapbook_11x17_Index - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 1 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles Substation
- Paso Robles City Limits

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

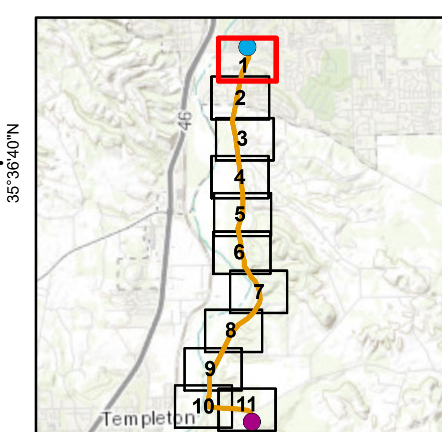
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:47:48 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W 120°41'0"W 120°40'50"W 120°40'40"W

35°36'30"N 35°36'20"N

City of El Paso de Robles Limits

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

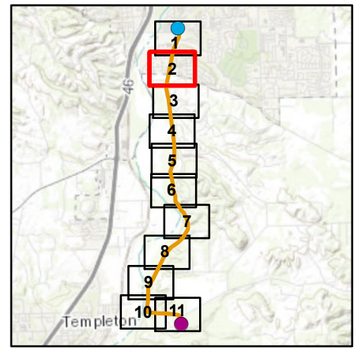
Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles City Limits

Vegetation Communities

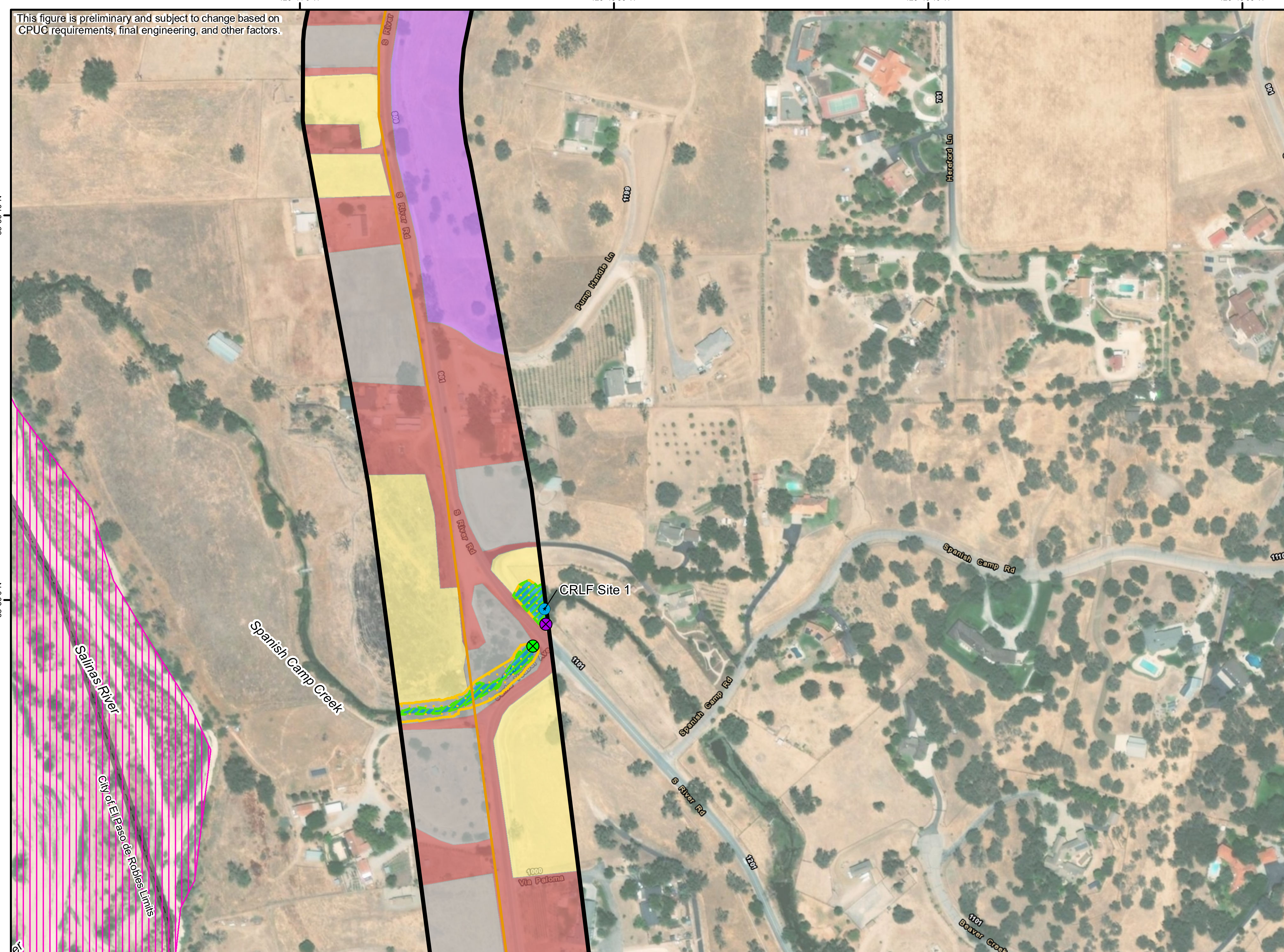
- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal
- Small Mammal Burrow (>4 inches in diameter)

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:50:14 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 3 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles City Limits

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Coastal and Valley Freshwater Marsh ***
- Ruderal

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction
- Potential USACE/CDFW Jurisdiction

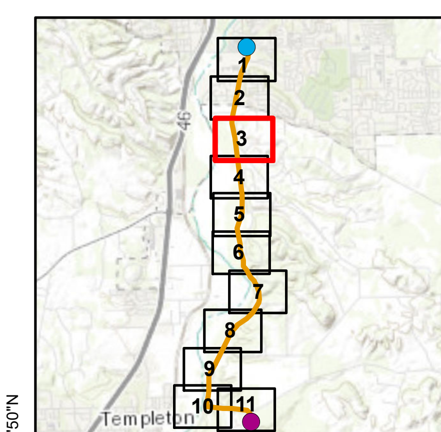
Culverts

- Culvert Inlet
- Culvert Outlet
- California Red-Legged Frog (CRLF) Site Assessment

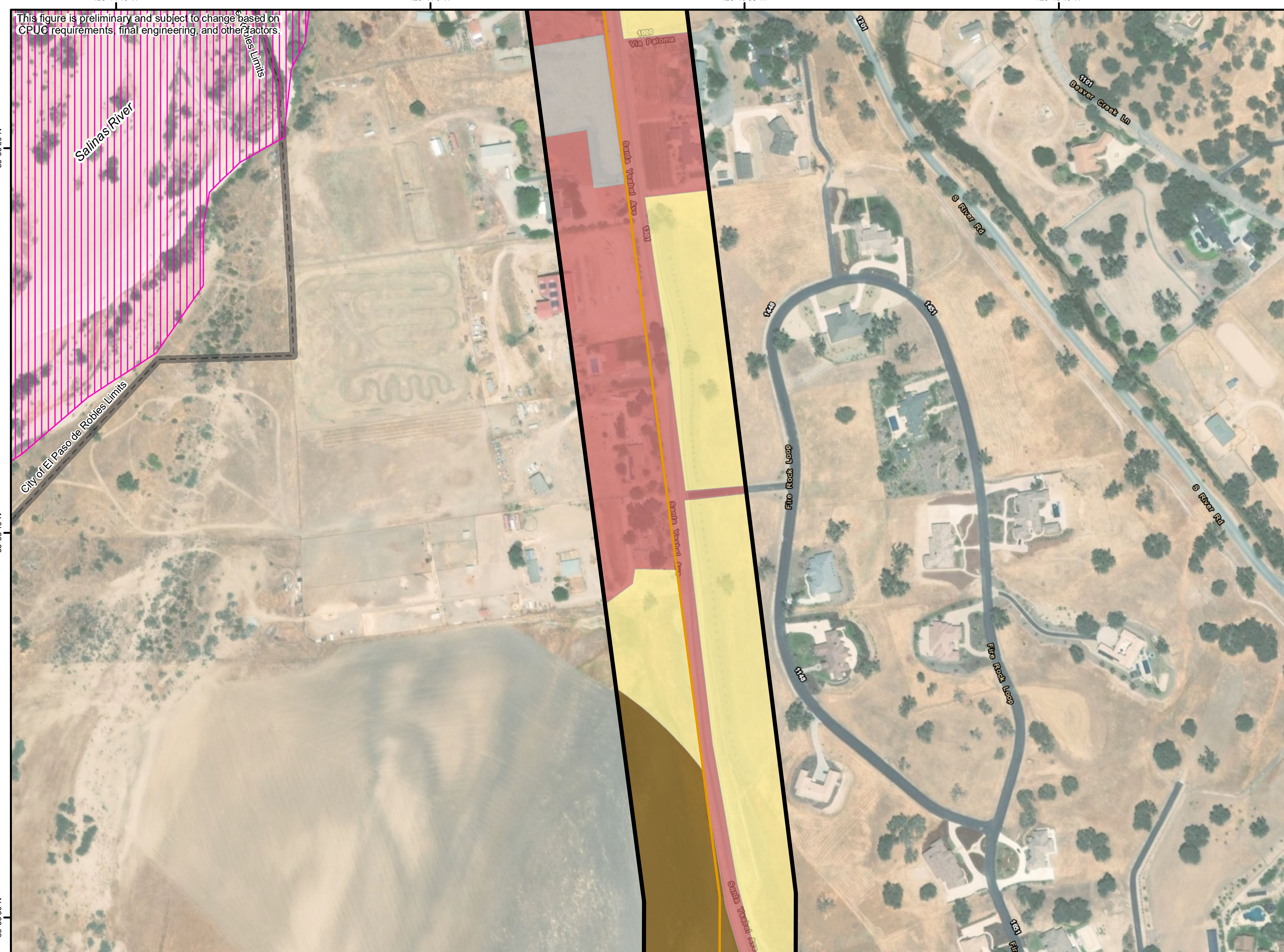
Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:48:10 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Pacific Gas and Electric Company

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 4 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles City Limits

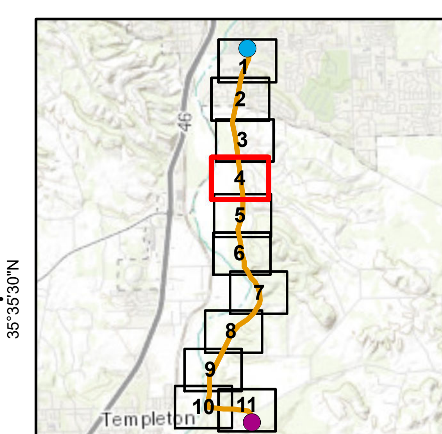
Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural
- Ruderal

Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:48:20 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W
120°41'0"W
120°40'50"W
120°40'40"W
35°35'30"N
35°35'20"N
35°35'10"N

Santa Ysabel Ave
1st Fire Rock Loop
Fire Rock L
Lake Ysa
Lake Ysabel Rd
Santa Ysabel Rd
1st Santa Ysabel Ave
2043
Lake Ysabel Rd
Iron Stone Loop
Salinas River

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 5 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Golden Eagle Nests

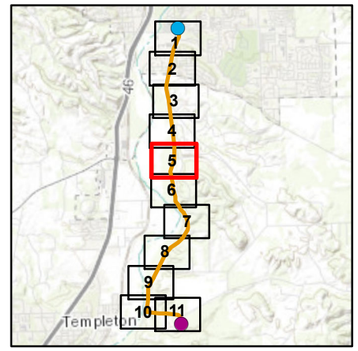
Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural

Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:48:30 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W
120°41'0"W
120°40'50"W
120°40'40"W
35°35'0"N
35°34'50"N

Salinas River
699
Iron Stone Loop
2029
2101
Iron Stone Loop
Lake Ysabel Rd
Lake Ysabel Rd
1000

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 6 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural
- Ruderal

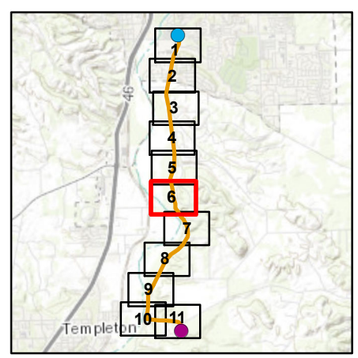
Potentially Jurisdictional Waters

- Potential CDFW Jurisdiction
- Canid Burrow (>4 inches in diameter)

Other Features

- Potential Least Bell's Vireo Habitat
- Seasonal Wetland / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer

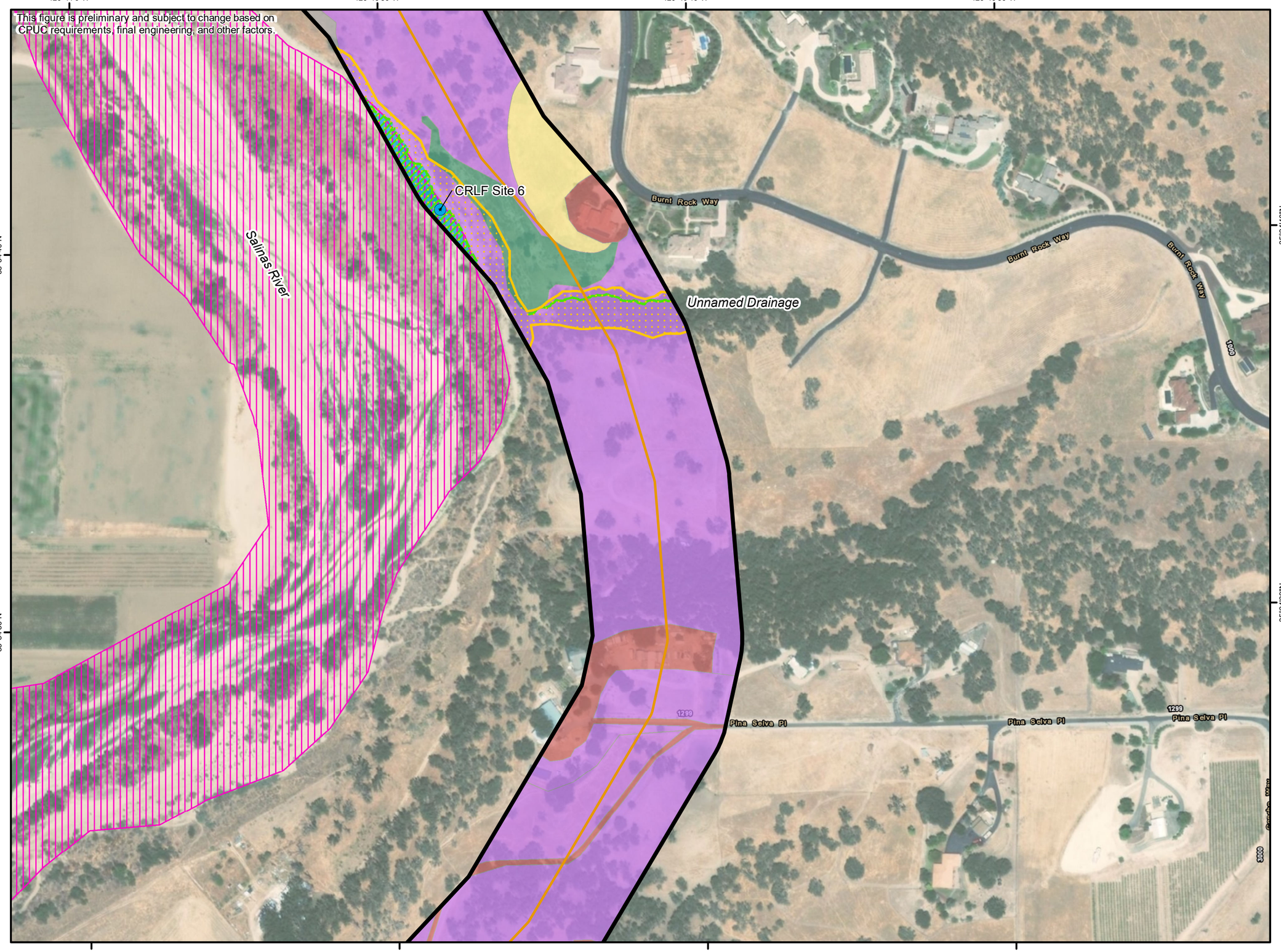
* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:48:42 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

120°41'0"W
120°40'50"W
120°40'40"W
120°40'30"W
35°34'40"N
35°34'30"N

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 7 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

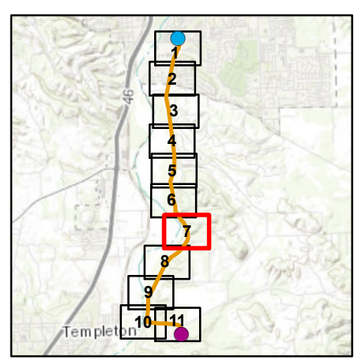
Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Central (Lucian) Coastal Scrub
- Ruderal
- Sandy Wash *

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction
- California Red-Legged Frog (CRLF) Site Assessment
- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/6/2019, 10:20:27 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'20"W 120°41'10"W 120°41'0"W 120°40'50"W 120°40'40"W

35°34'20"N 35°34'10"N 35°34'0"N

Salinas River

Unnamed Drainage

Unnamed Drainage

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural

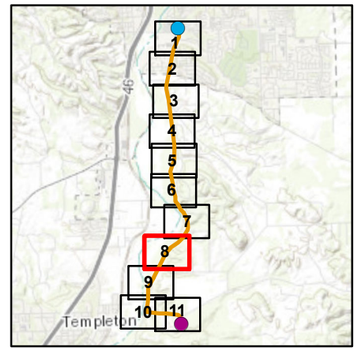
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

Other Features

- Potential Least Bell's Vireo Habitat
- Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:49:06 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'30"W 120°41'20"W 120°41'10"W 120°41'0"W

35°34'10"N 35°33'50"N 35°33'40"N

Salinas River

CRLF Site 8

Vaquero Dr

401

Prepared by SWCA Environmental Consultants (3/6/2019, 6:34:53 PM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural

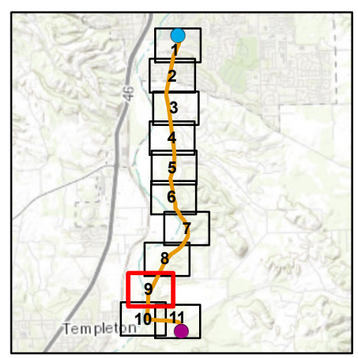
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction
- California Red-Legged Frog (CRLF) Site Assessment
- Small Mammal Burrow (>4 inches in diameter)

Other Features

- Retention Basin
- Potential Least Bell's Vireo Habitat
- Seasonal Wetland / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'40"W 120°41'30"W 120°41'20"W 120°41'10"W

35°33'40"N 35°33'30"N 35°33'20"N

Creekside Ranch Rd
698
Salinas River
Unnamed Drainage
El Pomar Dr
701
570
743

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 10 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative

Vegetation Communities

- Valley Oak Woodland *
- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural
- Ruderal
- Sandy Wash *

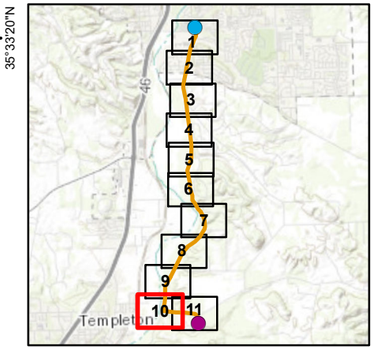
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

Culverts

- Culvert Inlet
- Culvert Outlet
- Small Mammal Burrow (>4 inches in diameter)
- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/6/2019, 10:21:44 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W 120°41'0"W 120°40'50"W 120°40'40"W

35°33'30"N 35°33'20"N

El Pomar Dr

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Existing 70 kV Route Alternative

Biological Resources Mapbook

Page 11 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Templeton Substation

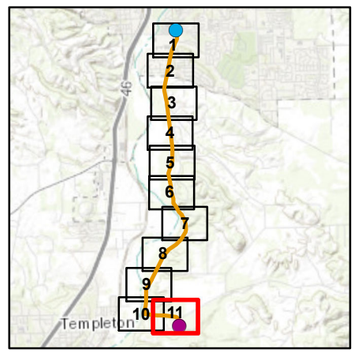
Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural
- Ruderal

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 10:50:41 AM) - Existing70kV_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°43'20"W 120°42'30"W 120°41'40"W 120°40'50"W 120°40'0"W 120°39'10"W 120°38'20"W 120°37'30"W

35°36'40"N 35°35'50"N 35°35'0"N 35°34'10"N 35°33'20"N

1 2 3 4 5 6 7 8 9 10 11

Pacific Gas and Electric Company®

0 750 1,500 3,000 Feet

1:30,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Index Sheet

Legend

- Biological Study Area
- Mapbook Pages
- Paso Robles-Templeton South River Route Alternative
- Paso Robles Substation
- Templeton Substation
- City of El Paso de Robles Limits

Prepared by SWCA Environmental Consultants (12/26/2018, 1:37:12 PM) - SouthRiver_Bio_Mapbook_11x17_Index - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'0"W 120°40'50"W 120°40'40"W 120°40'30"W

35°37'0"N 35°36'50"N 35°36'40"N

Salinas River
Unnamed Drainage
Niblick Rd
S River Rd
Gary St
Arabian Ln
Palomino Ln
Christopher
Gardenia Ct
Gardenia Cir
Nicklaus St
Oak Hill Rd
Edgewater Ln
Current Ln
Canyon Crest Ln
Serenade Dr
Miller Ct
Lombardo Ct

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 1 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Paso Robles Substation
- Paso Robles City Limits

Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

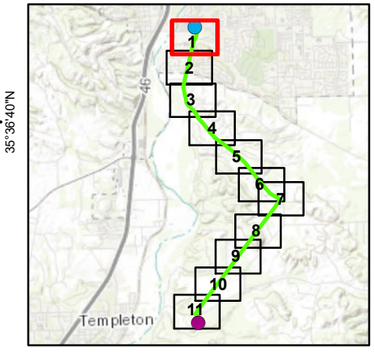
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:27:35 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W
120°41'0"W
120°40'50"W
120°40'40"W
35°36'30"N
35°36'20"N

City of El Paso de Robles Limits

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Paso Robles City Limits

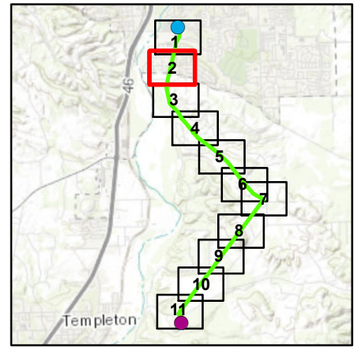
Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal

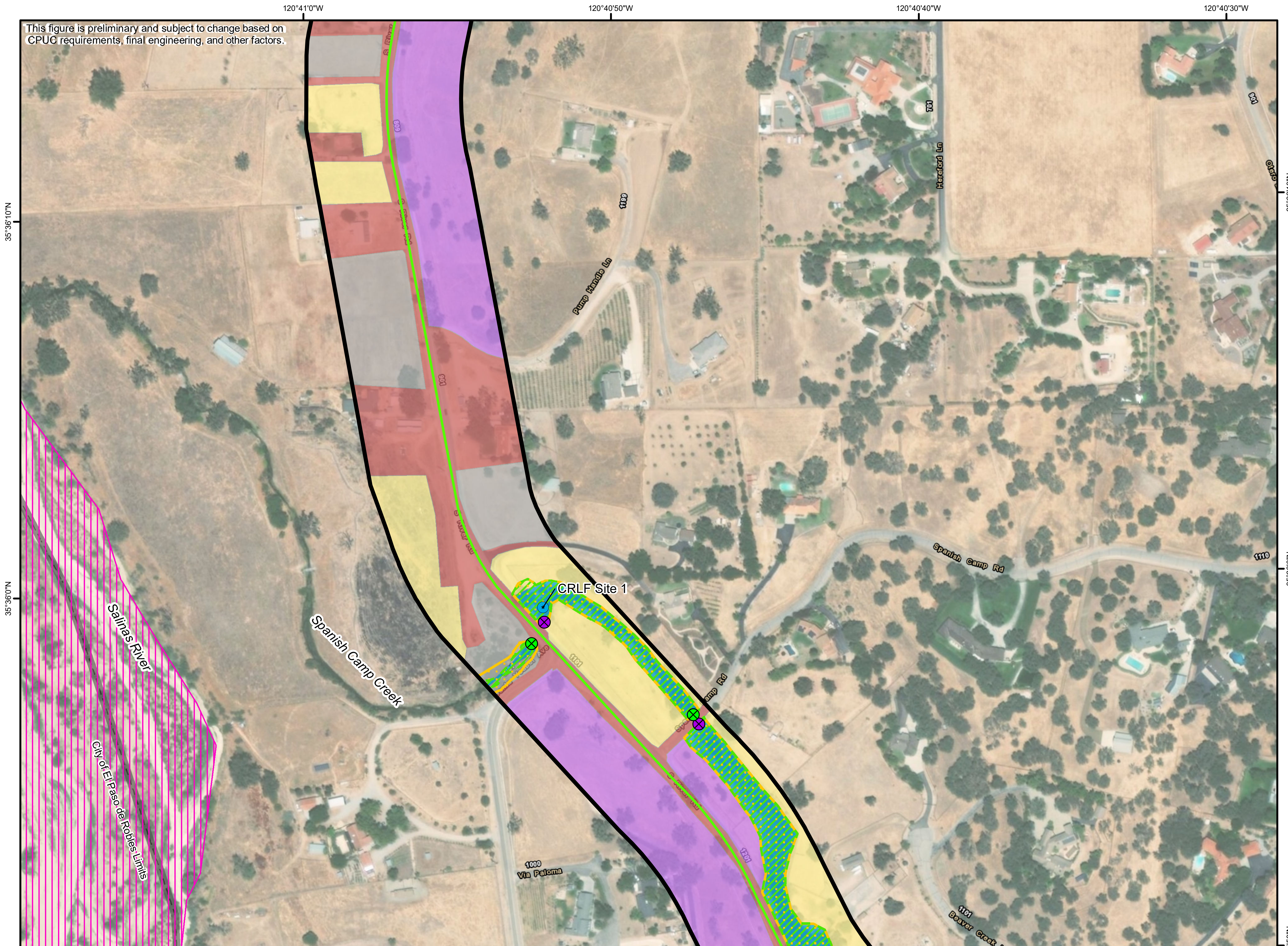
Other Features

- Small Mammal Burrow (>4 inches in diameter)

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:27:13 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 3 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Paso Robles City Limits

Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Coastal and Valley Freshwater Marsh ***
- Ruderal

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction
- Potential USACE/CDFW Jurisdiction

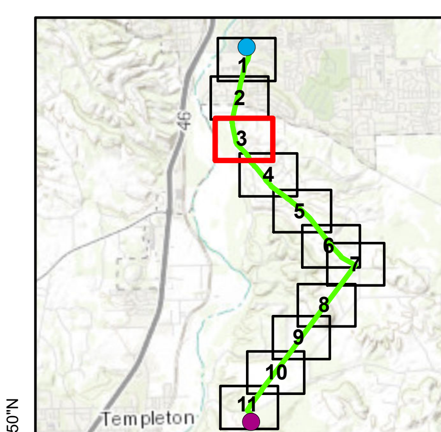
Culverts

- Culvert Inlet
- Culvert Outlet

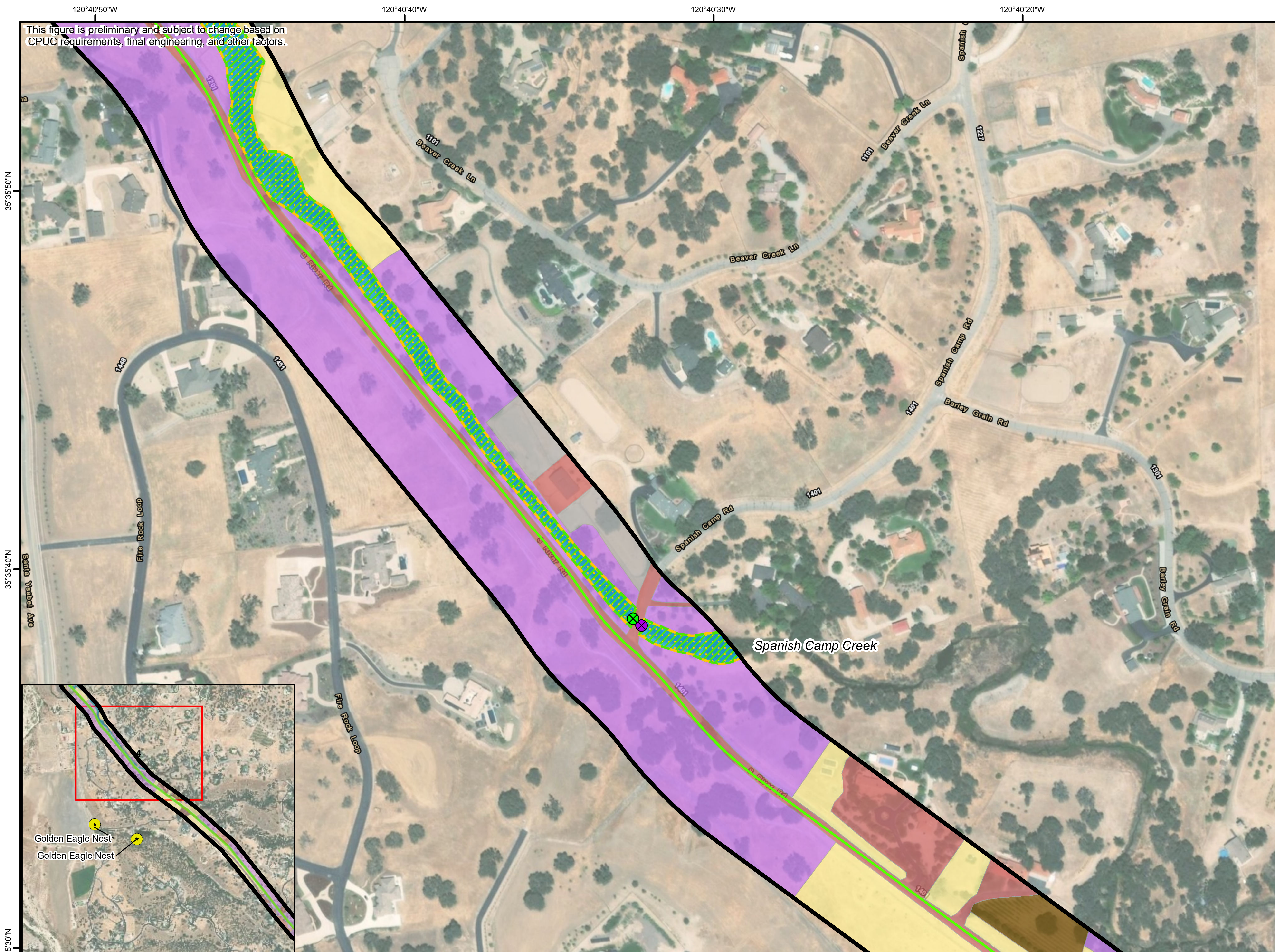
Other Features

- California Red-Legged Frog (CRLF) Site Assessment
- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:26:48 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Pacific Gas and Electric Company

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural
- Coastal and Valley Freshwater Marsh ***
- Ruderal

Potentially Jurisdictional Waters

- Potential USACE/CDFW Jurisdiction

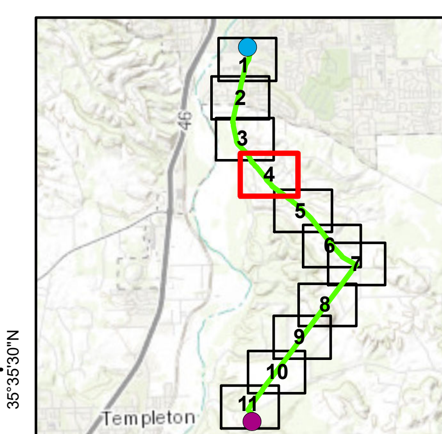
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- Golden Eagle Nests

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community

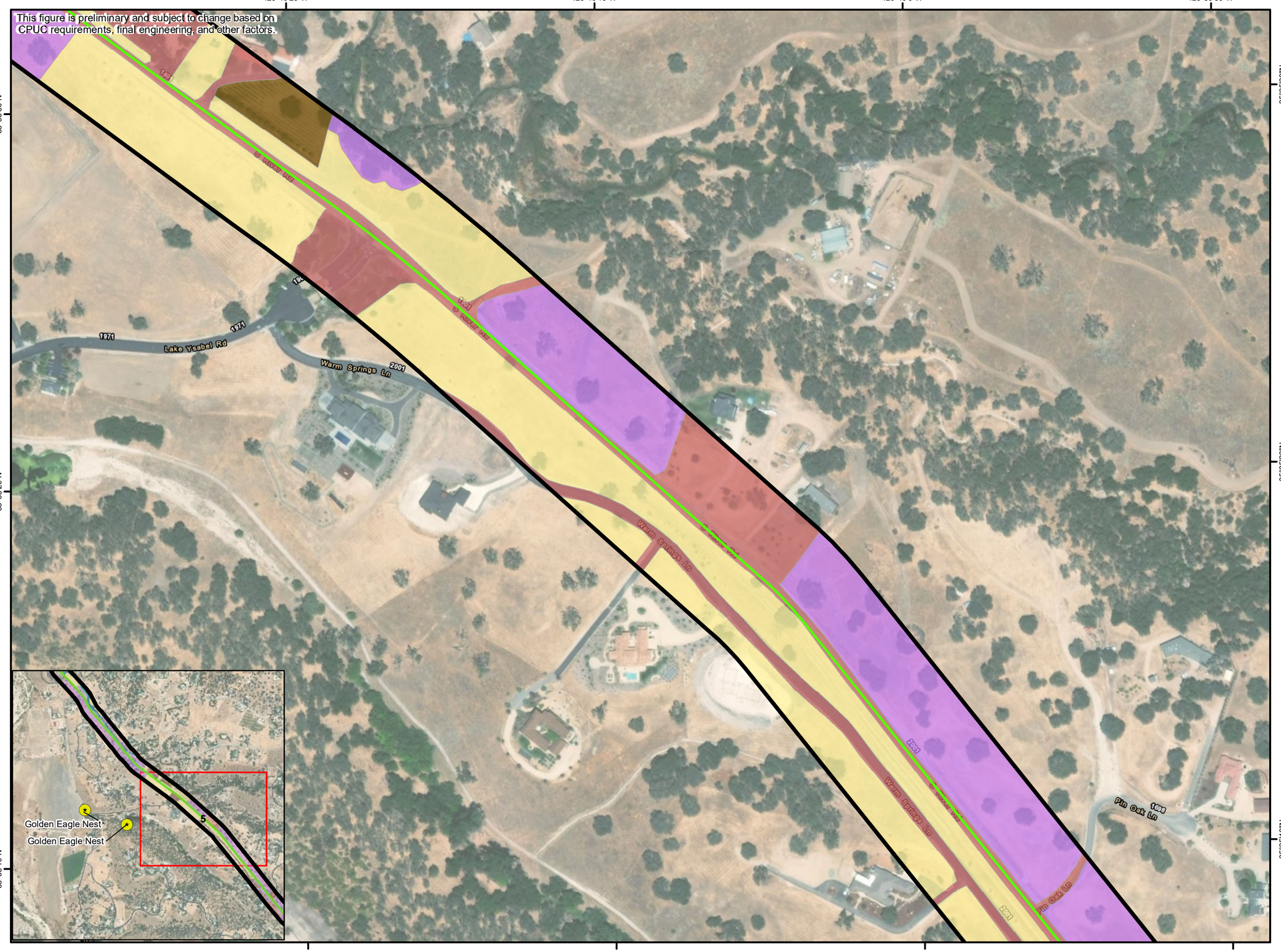


Prepared by SWCA Environmental Consultants (3/6/2019, 10:26:01 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'20"W 120°40'10"W 120°40'0"W 120°39'50"W

35°35'30"N 35°35'20"N 35°35'10"N



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

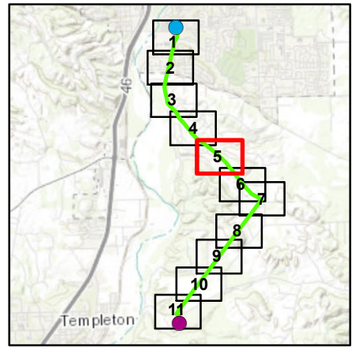
Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural

Other Features

- Golden Eagle Nests

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/6/2019, 10:26:31 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'0"W 120°39'50"W 120°39'40"W 120°39'30"W

35°35'10"N 35°35'0"N 35°34'50"N

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

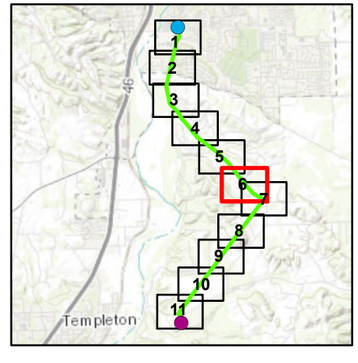
Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

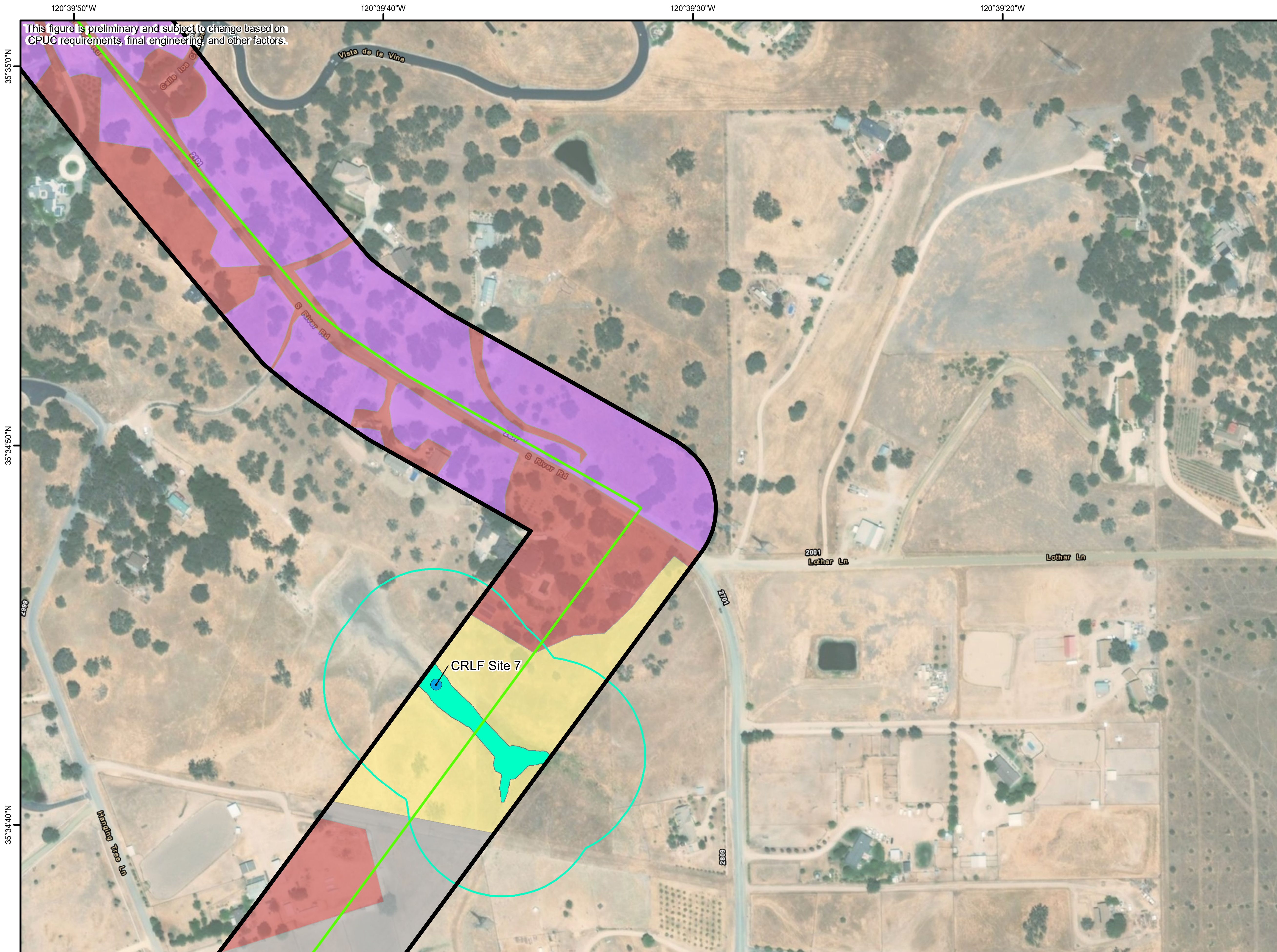
Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:30:23 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 7 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

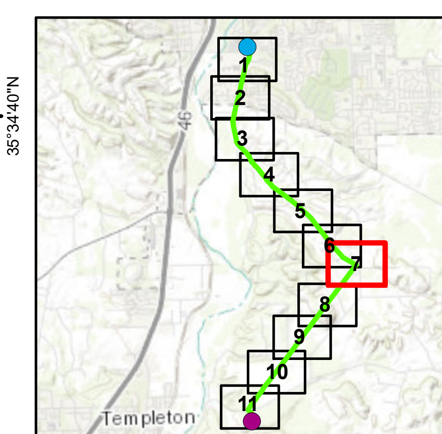
Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal

Other Features

- California Red-Legged Frog (CRLF) Site Assessment
- Seasonal Wetland / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:26:08 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'10"W
120°40'0"W
120°39'50"W
120°39'40"W
35°34'30"N
35°34'20"N

Handley Tree Ln
Neal Springs Rd
Templeton

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 8 of 11

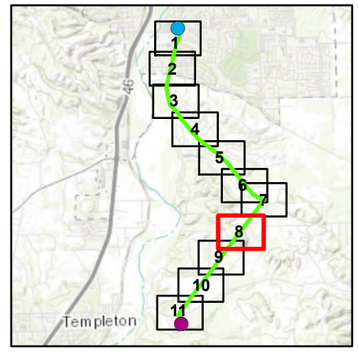
Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

Vegetation Communites

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:30:43 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'30"W 120°40'20"W 120°40'10"W 120°40'0"W

35°34'10"N 35°34'0"N

Concho Way
Concho Way
3000
Unnamed Drainage
Nacl Springs Rd
2239
2221
2139
Nacl Springs Rd
Vaquero Dr
613
701

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

Vegetation Communites

- Urban/Developed
- Nonnative Grassland

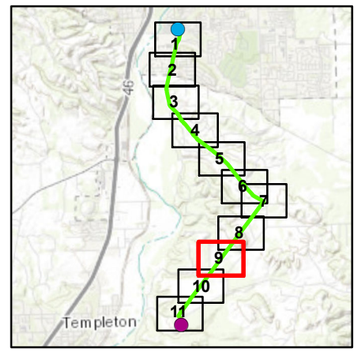
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

Culverts

- Culvert Inlet
- Culvert Outlet

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:30:54 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'50"W 120°40'40"W 120°40'30"W 120°40'20"W 120°40'10"W

35°33'50"N 35°33'40"N

Vaquero Dr 613 701 El Pomar Dr

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 10 of 11

Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative

Vegetation Communites

- Urban/Developed
- Nonnative Grassland
- Agricultural

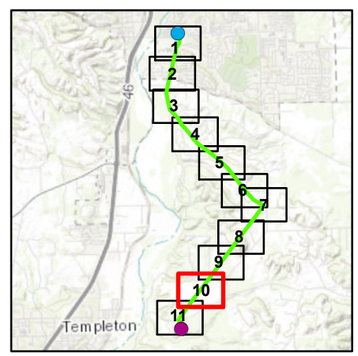
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

Culverts

- Culvert Inlet
- Culvert Outlet

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W 120°41'0"W 120°40'50"W 120°40'40"W 120°40'30"W

35°33'30"N

35°33'20"N

El Pomar Dr

743

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton South River Route Alternative

Biological Resources Mapbook

Page 11 of 11

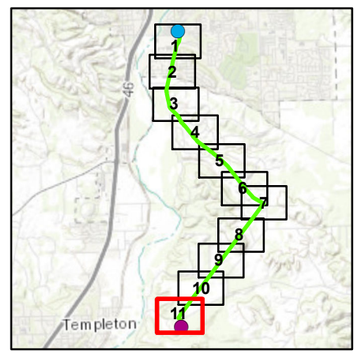
Legend

- Biological Study Area
- Paso Robles-Templeton South River Route Alternative
- Templeton Substation

Vegetation Communites

- Urban/Developed
- Nonnative Grassland
- Agricultural

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:31:14 AM) - SouthRiver_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°43'20"W 120°42'30"W 120°41'40"W 120°40'50"W 120°40'0"W 120°39'10"W 120°38'20"W 120°37'30"W

35°36'40"N 35°35'50"N 35°35'0"N 35°34'10"N 35°33'20"N

1 2 3 4 5 6 7 8 9 10 11 12

Pacific Gas and Electric Company®

0 750 1,500 3,000 Feet

1:30,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Index Sheet

Legend

- Biological Study Area
- Mapbook Pages
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles Substation
- Templeton Substation
- City of El Paso de Robles Limits

Prepared by SWCA Environmental Consultants (12/26/2018, 1:08:40 PM) - Creston_Bio_Mapbook_11x17_Index - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'0"W 120°40'50"W 120°40'40"W 120°40'30"W

35°37'0"N 35°36'50"N 35°36'40"N

Salinas River

Unnamed Drainage

Niblick Rd
S River Rd
Gary St
Arabian Ln
Palomino Ln
Gardenia Ct
Gardenia Cir
Nicklaus St
Oak Hill Rd
Serenade Dr
Miller Ct
Lombardo Ct
Edgewater Ln
Current Ln
Canyon Crest Ln

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles Substation
- Paso Robles City Limits

Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

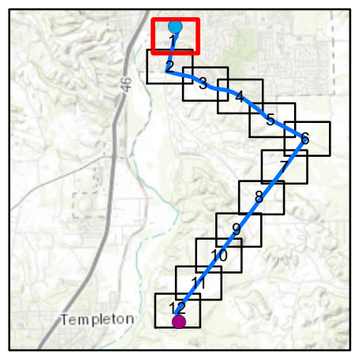
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- Potential Least Bell's Vireo Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°41'10"W
120°41'0"W
120°40'50"W
120°40'40"W
35°36'30"N
35°36'20"N

City of El Paso de Robles Limits

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles City Limits

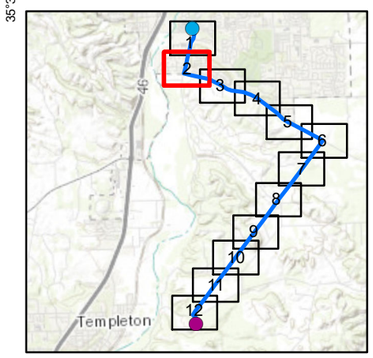
Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland

Other Features

- Small Mammal Burrow (>4 inches in diameter)

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:12:36 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'40"W 120°40'30"W 120°40'20"W 120°40'10"W 120°40'0"W

35°36'20"N 35°36'10"N

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 3 of 12

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles City Limits

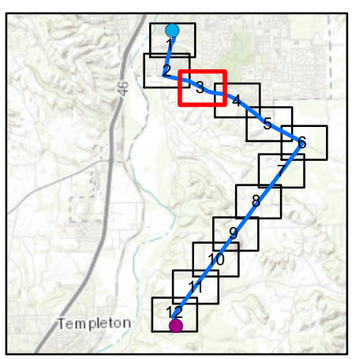
Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Agricultural

Other Features

- Small Mammal Burrow (>4 inches in diameter)

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:12:46 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'0"W 120°39'50"W 120°39'40"W 120°39'30"W

35°36'10"N 35°36'0"N

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 4 of 12

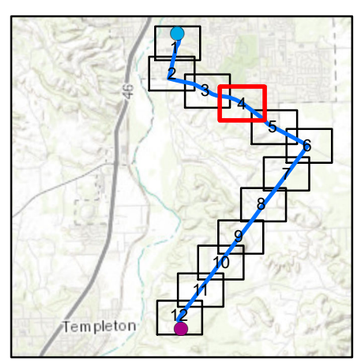
Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles City Limits

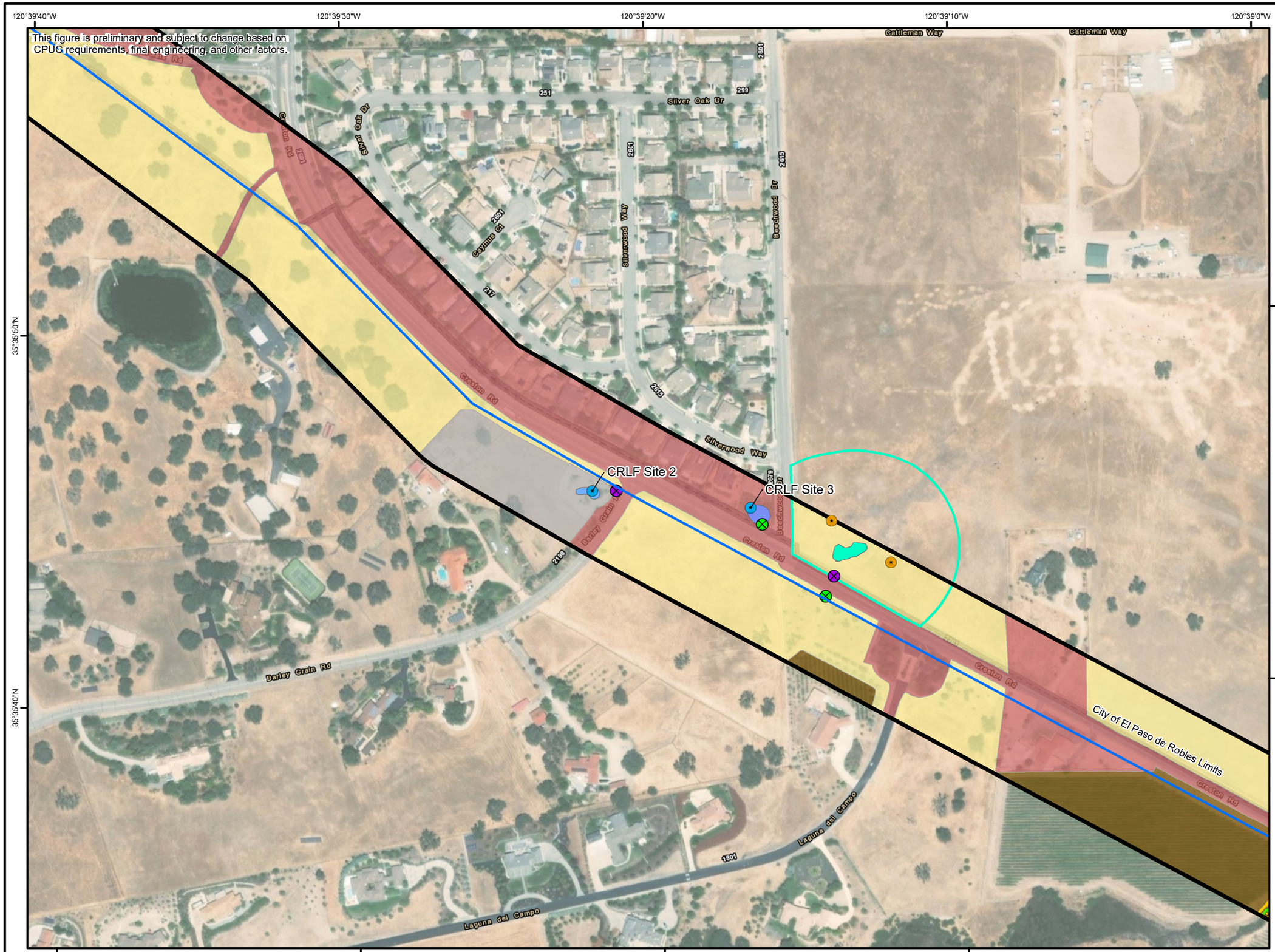
Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:16:44 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Prepared by SWCA Environmental Consultants (3/5/2019, 11:13:07 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 5 of 12

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles City Limits

Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural
- Ruderal

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

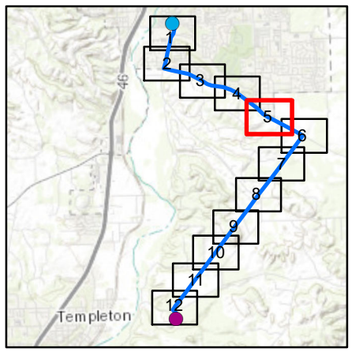
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- California Red-Legged Frog (CRLF) Site Assessment
- Small Mammal Burrow (>4 inches in diameter)
- Detention Basin
- Retention Basin
- Seasonal Wetland / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°39'0"W
120°38'50"W
120°38'40"W
120°38'30"W
35°35'40"N
35°35'30"N
35°35'20"N

City of El Paso de Robles Limits
Unnamed Drainage
CRLF Site 4
CRLF Site 5
Open Water
Coastal and Valley Freshwater Marsh

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 6 of 12

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles City Limits

Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural
- Coastal and Valley Freshwater Marsh ***
- Open Water

Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction
- Potential USACE/CDFW Jurisdiction

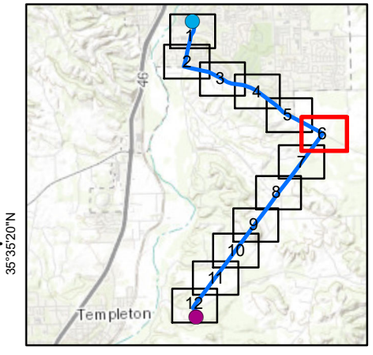
Culverts

- Culvert Inlet
- Culvert Outlet

Other Features

- California Red-Legged Frog (CRLF) Site Assessment
- Small Mammal Burrow (>4 inches in diameter)
- Drainage Swale - Potential Vernal Pool Species Habitat
- Detention Basin / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/6/2019, 6:46:04 PM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°39'30"W 120°39'20"W 120°39'10"W 120°39'0"W 120°38'50"W

35°35'20"N 35°35'10"N 35°35'0"N

2098 Calle Patito

1998 Calle Patito

Unnamed Drainage

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 7 of 12

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative

Vegetation Communities

- Blue Oak Woodland **
- Nonnative Grassland
- Agricultural

Potentially Jurisdictional Waters

- Potential USACE/CDFW Jurisdiction

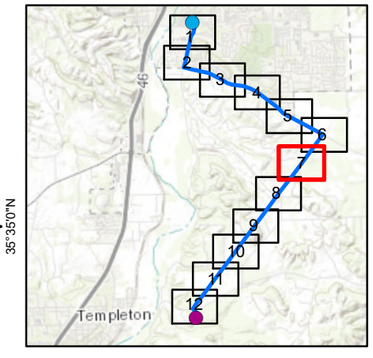
Culverts

- Culvert Inlet
- Culvert Outlet

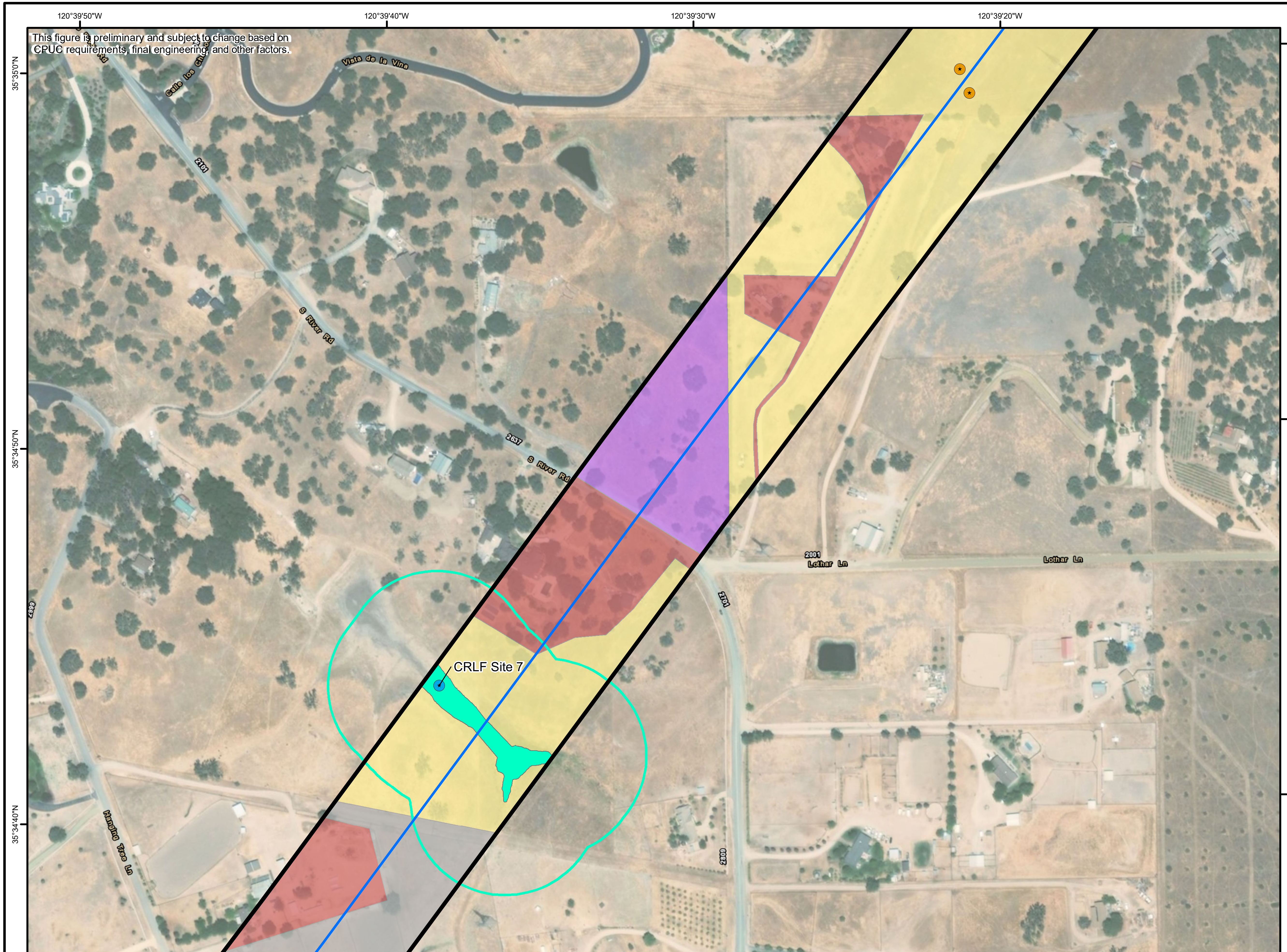
Other Features

- Small Mammal Burrow (>4 inches in diameter)
- Drainage Swale - Potential Vernal Pool Species Habitat
- Seasonal Wetland / Potential Vernal Pool Species Habitat
- Potential vernal pool species habitat buffer
- Seasonal Pond / Potential Vernal Pool Species Habitat

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:13:30 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 8 of 12

Legend

Biological Study Area

Paso Robles-Templeton Creston Route Alternative

Vegetation Communities

Blue Oak Woodland **

Urban/Developed

Nonnative Grassland

Ruderal

Other Features

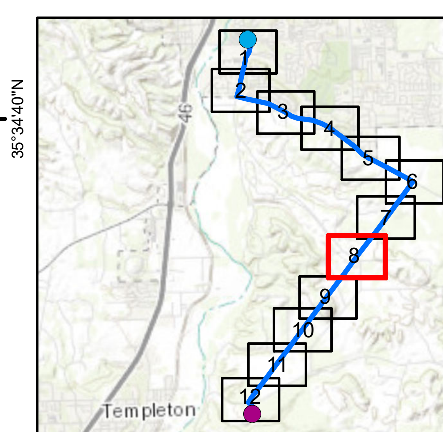
California Red-Legged Frog (CRLF) Site Assessment

Small Mammal Burrow (>4 inches in diameter)

Seasonal Wetland / Potential Vernal Pool Species Habitat

Potential vernal pool species habitat buffer

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:13:43 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'10"W
120°40'0"W
120°39'50"W
120°39'40"W
35°34'30"N
35°34'20"N

Hanging Tree Ln
Neal Springs Rd
229
RD

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

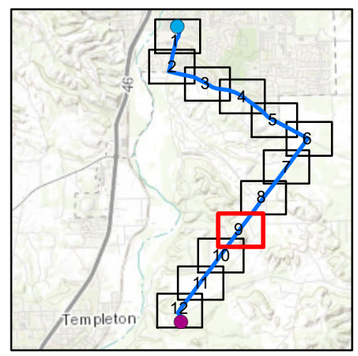
Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative

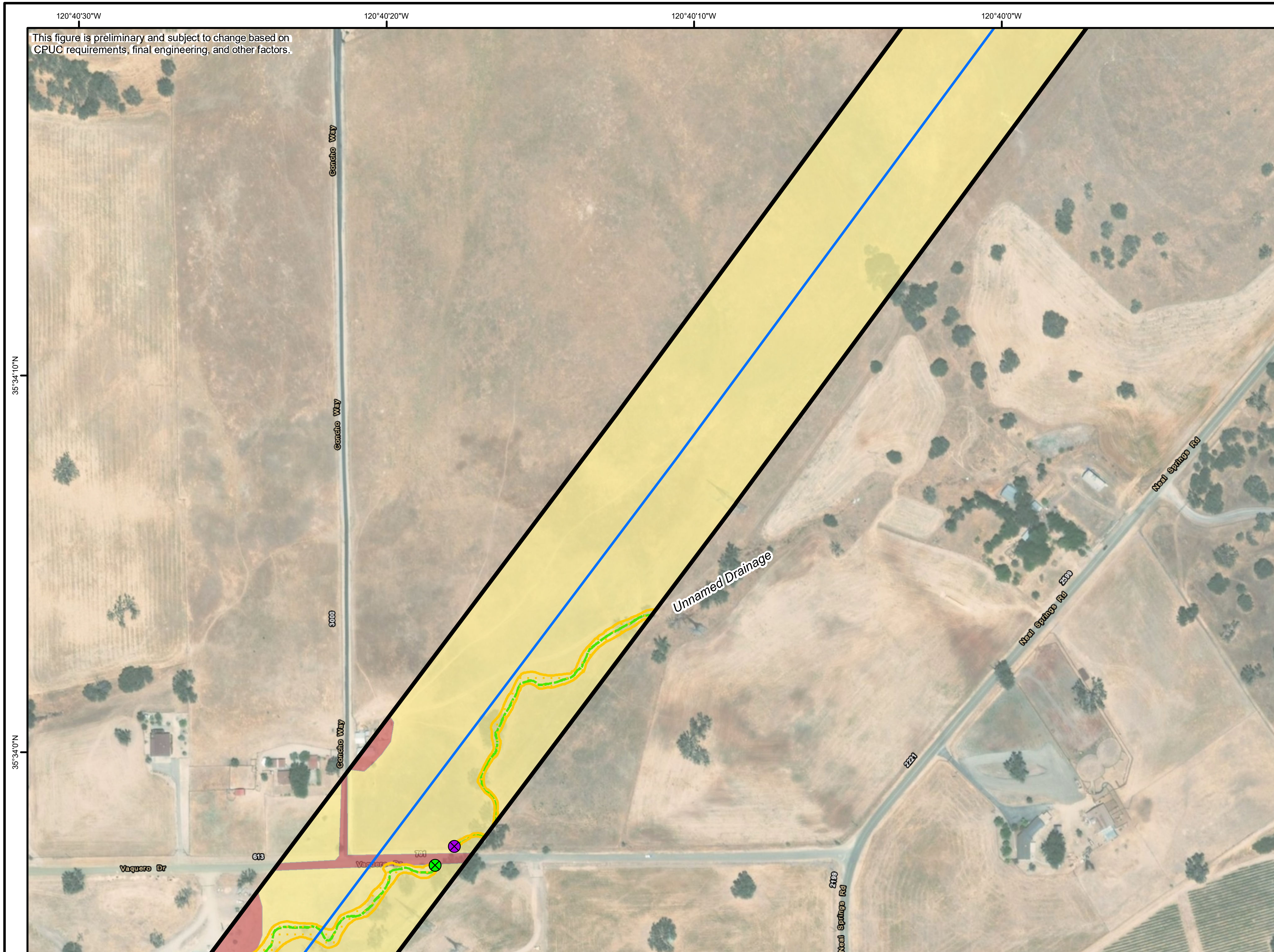
Vegetation Communities

- Blue Oak Woodland **
- Urban/Developed
- Nonnative Grassland
- Ruderal

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:18:08 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)



Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 10 of 12

Legend

Biological Study Area

Paso Robles-Templeton Creston Route Alternative

Vegetation Communities

Urban/Developed

Nonnative Grassland

Potentially Jurisdictional Waters

Potential USACE Jurisdiction

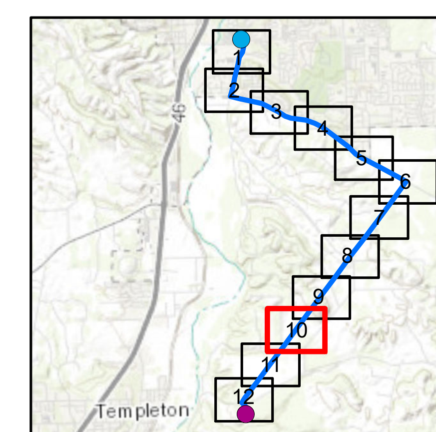
Potential CDFW Jurisdiction

Culverts

Culvert Inlet

Culvert Outlet

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:18:37 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

120°40'50"W 120°40'40"W 120°40'30"W 120°40'20"W 120°40'10"W

35°33'50"N 35°33'40"N

Vaquero Dr 613 Vaquero Dr 613 Vaquero Dr 701 Vaquero Dr El Pomar Dr

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 11 of 12

Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative

Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural

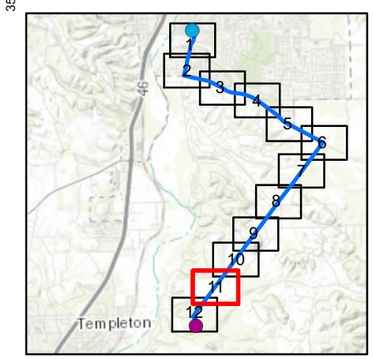
Potentially Jurisdictional Waters

- Potential USACE Jurisdiction
- Potential CDFW Jurisdiction

Culverts

- Culvert Inlet
- Culvert Outlet

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:19:02 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

120°41'10"W 120°41'0"W 120°40'50"W 120°40'40"W 120°40'30"W

35°33'30"N

35°33'20"N

This figure is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

El Pomar Dr

73

El Pomar Dr

El Pomar Dr

El Pomar Dr

Pacific Gas and Electric Company®

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Paso Robles - Templeton Creston Route Alternative

Biological Resources Mapbook

Page 12 of 12

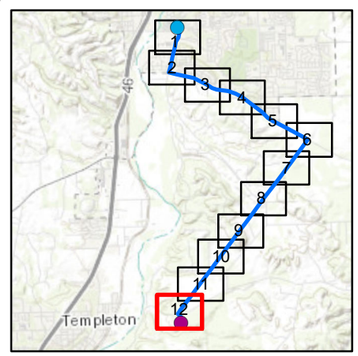
Legend

- Biological Study Area
- Paso Robles-Templeton Creston Route Alternative
- Templeton Substation

Vegetation Communities

- Urban/Developed
- Nonnative Grassland
- Agricultural

* CDFW Sensitive Natural Community
** City of El Paso de Robles General Plan Sensitive Natural Community
*** CDFW and City of El Paso de Robles General Plan Sensitive Natural Community



Prepared by SWCA Environmental Consultants (3/5/2019, 11:19:28 AM) - Creston_Bio_Resources_11x17 - NAD 1983 UTM Zone 10N - Aerial imagery source: ESRI World Imagery (2017)

Appendix F.
Soils Unit Map

This page intentionally left blank

35°33'0"N 35°34'0"N 35°35'0"N 35°36'0"N 35°37'0"N

120°42'0"W 120°41'0"W 120°40'0"W 120°39'0"W

0 1,000 2,000 4,000 Feet

1:30,000

Paso Robles - Templeton Existing 70 kV Route Alternative

Soil Units Map

Legend

- Biological Study Area
- Soils (Map Unit Symbol - Description)
- Paso Robles-Templeton Existing 70 kV Route Alternative
- Paso Robles Substation
- Templeton Substation

Soils Within the Biological Study Area

100 - Arbuckle fine sandy loam, 0 to 2 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
106 - Arbuckle-San Ysidro complex, 2 to 9 percent slopes
152 - Linne-Calodo complex, 9 to 30 percent slopes
154 - Linne-Calodo complex, 50 to 75 percent slopes
158 - Lockwood shaly loam, 2 to 9 percent slopes
159 - Lockwood shaly loam, 2 to 9 percent slopes
160 - Lockwood-Concepcion complex, 9 to 15 percent slopes
166 - Metz loamy sand, 0 to 5 percent slopes
173 - Mocho clay loam, 0 to 2 percent slopes, MLRA 14
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
205 - Sorrento clay loam, 0 to 2 percent slopes, MLRA 14
209 - Still clay loam, 2 to 9 percent slopes
212 - Xerofluvents-Riverwash association

Soils Outside the Biological Study Area

102 - Arbuckle-Positas complex, 9 to 15 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
108 - Arnold-San Andreas complex, 30 to 75 percent slopes
110 - Ayar and Diablo soils, 15 to 30 percent slopes
114 - Balcom-Nacimiento association, moderately steep
115 - Balcom-Nacimiento association,steep
133 - Cropley clay, 2 to 9 percent slopes, MLRA 14
134 - Dibble clay loam, 9 to 15 percent slopes
140 - Elder loam, 0 to 5 percent slopes, flooded
144 - Gazos shaly clay loam, 9 to 30 percent slopes
147 - Hanford and Greenfield soils, 0 to 2 percent slopes
148 - Hanford and Greenfield soils, 2 to 9 percent slopes
154 - Linne-Calodo complex, 50 to 75 percent lsopes
158 - Lockwood shaly loam, 2 to 9 percent slopes
174 - Mocho clay loam, 2 to 9 percent slopes, MLRA 14
175 - Nacimiento silty clay loam, 9 to 30 percent slopes
176 - Nacimiento silty clay loam, 30 to 50 percent slopes, MLRA 15
181 - Nacimiento-Los Osos complex, 50 to 75 percent slopes
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
185 - PITS
187 - Rincon clay loam, 0 to 2 percent slopes
188 - Rincon clay loam, 2 to 9 percent slopes, MLRA 14
189 - Rincon clay loam, 9 to 15 percent slopes, MLRA 14
195 - San Emigdio fine sandy loam, 2 to 9 percent slopes
196 - San Ysidro sandy loam, 2 to 9 percent slopes
198 - Santa Lucia-Lopez complex, 15 to 50 percent slopes
199 - Santa Lucia-Gazos complex, 50 to 75 percent slopes
205 - Sorrento clay loam, 0 to 2 percent slopes, MLRA 14
209 - Still clay loam, 2 to 9 percent slopes
212 - Xerofluvents-Riverwash association
214 - WATER

Prepared by SWCA Environmental Consultants (12/27/2018, 11:11:35 AM) - NAD 1983 UTM Zone 10N - File: Existing70kV_Soils - ESRI World Imagery - Data source: Natural Resources Conservation Service/SSURGO (2016)

35°33'0"N 35°34'0"N 35°35'0"N 35°36'0"N 35°37'0"N

120°41'0"W 120°40'0"W 120°39'0"W 120°38'0"W

0 1,000 2,000 4,000 Feet

1:30,000

Paso Robles - Templeton South River Route Alternative

Soil Units Map

Legend

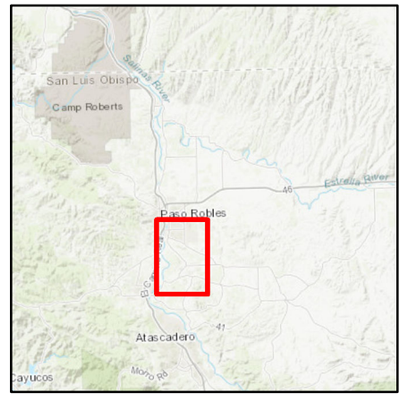
- Biological Study Area
- Soils (Map Unit Symbol - Description)
- Paso Robles-Templeton South River Route Alternative
- Paso Robles Substation
- Templeton Substation

Soils Within the Biological Study Area

100 - Arbuckle fine sandy loam, 0 to 2 percent slopes
102 - Arbuckle-Positas complex, 9 to 15 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
106 - Arbuckle-San Ysidro complex, 2 to 9 percent slopes
144 - Gazos shaly clay loam, 9 to 30 percent slopes
152 - Linne-Calodo complex, 9 to 30 percent slopes
155 - Linne-Diablo complex, 9 to 15 percent slopes
159 - Lockwood shaly loam, 2 to 9 percent slopes
160 - Lockwood-Concepcion complex, 9 to 15 percent slopes
179 - Nacimiento-Los Osos complex, 9 to 30 percent slopes
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
209 - Still clay loam, 2 to 9 percent slopes

Soils Outside the Biological Study Area

102 - Arbuckle-Positas complex, 9 to 15 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
108 - Arnold-San Andreas complex, 30 to 75 percent slopes
110 - Ayar and Diablo soils, 15 to 30 percent slopes
114 - Balcom-Nacimiento association, moderately steep
115 - Balcom-Nacimiento association,steep
133 - Cropley clay, 2 to 9 percent slopes, MLRA 14
134 - Dibble clay loam, 9 to 15 percent slopes
140 - Elder loam, 0 to 5 percent slopes, flooded
144 - Gazos shaly clay loam, 9 to 30 percent slopes
147 - Hanford and Greenfield soils, 0 to 2 percent slopes
148 - Hanford and Greenfield soils, 2 to 9 percent slopes
154 - Linne-Calodo complex, 50 to 75 percent lsopes
158 - Lockwood shaly loam, 2 to 9 percent slopes
174 - Mocho clay loam, 2 to 9 percent slopes, MLRA 14
175 - Nacimiento silty clay loam, 9 to 30 percent slopes
176 - Nacimiento silty clay loam, 30 to 50 percent slopes, MLRA 15
181 - Nacimiento-Los Osos complex, 50 to 75 percent slopes
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
185 - PITS
187 - Rincon clay loam, 0 to 2 percent slopes
188 - Rincon clay loam, 2 to 9 percent slopes, MLRA 14
189 - Rincon clay loam, 9 to 15 percent slopes, MLRA 14
195 - San Emigdio fine sandy loam, 2 to 9 percent slopes
196 - San Ysidro sandy loam, 2 to 9 percent slopes
198 - Santa Lucia-Lopez complex, 15 to 50 percent slopes
199 - Santa Lucia-Gazos complex, 50 to 75 percent slopes
205 - Sorrento clay loam, 0 to 2 percent slopes, MLRA 14
209 - Still clay loam, 2 to 9 percent slopes
212 - Xerofluvents-Riverwash association
214 - WATER



Prepared by SWCA Environmental Consultants (12/27/2018, 11:10:13 AM) - NAD 1983 UTM Zone 10N - File: SouthRiver_Soils - ESRI World Imagery - Data source: Natural Resources Conservation Service/SSURGO (2016)

35°33'0"N 35°34'0"N 35°35'0"N 35°36'0"N 35°37'0"N

120°41'0"W 120°40'0"W 120°39'0"W 120°38'0"W

0 1,000 2,000 4,000 Feet

1:30,000

Paso Robles - Templeton Creston Route Alternative

Soil Units Map

Legend

- Biological Study Area
- Soils (Map Unit Symbol - Description)
- Paso Robles-Templeton Creston Route Alternative
- Paso Robles Substation
- Templeton Substation

Soils Within the Biological Study Area

100 - Arbuckle fine sandy loam, 0 to 2 percent slopes
102 - Arbuckle-Positas complex, 9 to 15 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
106 - Arbuckle-San Ysidro complex, 2 to 9 percent slopes
152 - Linne-Calodo complex, 9 to 30 percent slopes
155 - Linne-Diablo complex, 9 to 15 percent slopes
159 - Lockwood shaly loam, 2 to 9 percent slopes
160 - Lockwood-Concepcion complex, 9 to 15 percent slopes
179 - Nacimiento-Los Osos complex, 9 to 30 percent slopes
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
188 - Rincon clay loam, 2 to 9 percent slopes, MLRA 14
209 - Still clay loam, 2 to 9 percent slopes
214 - WATER

Soils Outside the Biological Study Area

102 - Arbuckle-Positas complex, 9 to 15 percent slopes
103 - Arbuckle-Positas complex, 15 to 30 percent slopes
104 - Arbuckle-Positas complex, 30 to 50 percent slopes
105 - Arbuckle-Positas complex, 50 to 75 percent slopes
108 - Arnold-San Andreas complex, 30 to 75 percent slopes
110 - Ayar and Diablo soils, 15 to 30 percent slopes
114 - Balcom-Nacimiento association, moderately steep
115 - Balcom-Nacimiento association,steep
133 - Cropley clay, 2 to 9 percent slopes, MLRA 14
134 - Dibble clay loam, 9 to 15 percent slopes
140 - Elder loam, 0 to 5 percent slopes, flooded
144 - Gazos shaly clay loam, 9 to 30 percent slopes
147 - Hanford and Greenfield soils, 0 to 2 percent slopes
148 - Hanford and Greenfield soils, 2 to 9 percent slopes
154 - Linne-Calodo complex, 50 to 75 percent lsopes
158 - Lockwood shaly loam, 2 to 9 percent slopes
174 - Mocho clay loam, 2 to 9 percent slopes, MLRA 14
175 - Nacimiento silty clay loam, 9 to 30 percent slopes
176 - Nacimiento silty clay loam, 30 to 50 percent slopes, MLRA 15
181 - Nacimiento-Los Osos complex, 50 to 75 percent slopes
183 - Pico fine sandy loam, 0 to 2 percent slopes
184 - Pico fine sandy loam, 2 to 9 percent slopes
185 - PITS
187 - Rincon clay loam, 0 to 2 percent slopes
188 - Rincon clay loam, 2 to 9 percent slopes, MLRA 14
189 - Rincon clay loam, 9 to 15 percent slopes, MLRA 14
195 - San Emigdio fine sandy loam, 2 to 9 percent slopes
196 - San Ysidro sandy loam, 2 to 9 percent slopes
198 - Santa Lucia-Lopez complex, 15 to 50 percent slopes
199 - Santa Lucia-Gazos complex, 50 to 75 percent slopes
205 - Sorrento clay loam, 0 to 2 percent slopes, MLRA 14
209 - Still clay loam, 2 to 9 percent slopes
212 - Xerofluvents-Riverwash association
214 - WATER

Prepared by SWCA Environmental Consultants (12/27/2018, 11:10:48 AM) - NAD 1983 UTM Zone 10N - File: Creston_Soils - ESRI World Imagery - Data source: Natural Resources Conservation Service/SSURGO (2016)

Appendix G.
California Red-Legged Frog Site Assessment Data Sheets

This page intentionally left blank

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:	Castañon	Chennie	Belt	Travis
	(Last name)	(first name)	(Last name)	(first name)
	(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry:____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by _____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)******

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Site ID: CRLF #6

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:	Castañon	Chennie	Belt	Travis
	(Last name)	(first name)	(Last name)	(first name)
	(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM: Salinas River
Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by _____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by_____ _____ _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 06/14/2018
(mm/dd/yyyy)

Site Assessment Biologists:

Castañon	Chennie	Belt	Travis
(Last name)	(first name)	(Last name)	(first name)
(Last name)	(first name)	(Last name)	(first name)

Site Location: San Luis Obispo County, CRLF Site #1, 35.598772, -120.68009
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)******

Proposed project name: Paso Robles-Templeton Existing 70 kV and South River Route Alternatives
Brief description of proposed action:
Paso Robles-Templeton Existing 70 kV Route Alternative: Conversion of approximately 5.7 miles of an existing single-circuit 70 kV power line to a double-circuit 70 kV power line and a construction of a temporary shoo-fly in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.
Paso Robles-Templeton South River Route Alternative: Construction of approximately 6.2 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Paso Robles Substation to Templeton Substation.

1) Is this site within the current or historic range of the CRF (check one)? ✓ YES ___ NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? ___ YES ✓ NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: Not Applicable (N/A) Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 8 to 425 feet
Depth at bank full: 3 to 4 feet
Stream gradient: 3.8%

Are there pools (check one)? ____YES ✓NO
If yes,
Size of stream pools: N/A
Maximum depth of stream pools: N/A

Characterize non-pool habitat: run, riffle, glide, other: Water is slow moving with no riffles. Multiple culverts are located at road intersections.

Vegetation: emergent, overhanging, dominant species: Freshwater Marsh. Dominant species are eleocharis macrostachya, typha angustifolia, cyperus sp., and salix sp., which occur along the creek banks.

Substrate: Earthen substrate.

Bank description: The bank width varies along the creek, which has a mosaic of emergent vegetation. Herbaceous plants occur along the margins, which are bordered by non-native grasses, typically near residential homes. Signs of mowing activities were observed.

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Other aquatic habitat characteristics, species observations, drawings, or comments:
Spanish Camp Creek contains slow, perennial flows with emergent vegetation along the banks. The length of creek within the BSA is approximately 0.5 mile along South River Road. Species observed include Eleocharis macrostachya, Juncus bufonius, Typha angustifolia, Cyperus sp., Epilobium watsonii, Veronica anagallis aquatica, J. balticus, Polypogon monspeliensis, Lolium multiflorum, and Hordeum murinum. Creek is adjacent to oak savanna, dominated by blue oaks. Bullfrogs and pacific tree frogs were observed along the creek.

While Spanish Camp provides suitable aquatic breeding and aquatic non-breeding habitat, the presence of predatory fish and bullfrogs may reduce the potential for a successful breeding population of red-legged frogs.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs
3. Maps with important habitat features and species location