

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

Prepared for

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EXECUTIVE SUMMARY

A Biological Resources Technical Report (BRTR) has been prepared for the 70 kilovolt (kV) power line component of 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. PG&E proposes to construct approximately 7 miles of a new double-circuit 70 kV power line in northern San Luis Obispo County extending from Estrella Substation to Paso Robles Substation, in the city of Paso Robles.

This BRTR was prepared to document the existing biological resources in the vicinity of the power line portions of the project. Biological resources considered for this report include sensitive species of plants and animals, sensitive habitats and natural communities, and water features potentially subject to state or federal jurisdiction. A literature review of existing information and field surveys were conducted to document biological resources at the project encompassed within a Biological Study Area (BSA). This report outlines the methodologies that were used to assess biological resources and documents existing biological resources in the vicinity of the power line portion of the project.

No special-status plants or animals were observed in the BSA. Fifteen special-status plant species were determined to have the potential to occur in the BSA, and 22 special-status wildlife species were determined to be either likely to occur or have potential to occur. There is also high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). A portion of the BSA is located in federally designated vernal pool fairy shrimp (*Branchinecta lynchi*) critical habitat and suitable habitat for this species was observed within the BSA. Several potentially jurisdictional waters, including Huerhuero Creek, unnamed natural drainages, and wetland features, were observed throughout the BSA. These features may also serve as a wildlife migration corridor for dispersal of species between local areas and at larger scales between regions.

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AAC	all-aluminum conductor
AOU	American Ornithologists' Union
APMs	Applicant Proposed Measures
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practice
BRTR	Biological Resources Technical Report
BSA	Biological Study Area
CCRWQCB	Central Coast Regional Water Quality Control Board
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
County	County of San Luis Obispo, agency
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBH	diameter at breast height
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
GIS	Geographic Information Systems
GO	General Order
GPS	global positioning system
kV	kilovolt
LCSLO	Land Conservancy of San Luis Obispo
LDSP	light-duty steel poles
LST	lattice steel tower

MBTA	Migratory Bird Treaty Act
MS4	municipal separate storm drain system
NEET West	NextEra Energy Transmission West, LLC
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
OSD	Official Soil Series Description
PG&E	Pacific Gas and Electric Company
PRC	Public Resources Code
project	Estrella Substation and Paso Robles Area Reinforcement Project
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SR	State Route
SSC	Species of Special Concern
SWANCC	Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TPD	triangular post and dead-end
TSP	tubular steel poles
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1 INTRODUCTION

Pacific Gas and Electric Company (PG&E) proposes to construct a new approximately 7-mile double-circuit 70 kilovolt (kV) power line and several substation upgrades in the Paso Robles area of San Luis Obispo County, California (Figure 1), to reinforce the electrical grid in the Paso Robles area. PG&E is undertaking this effort as part of the larger Estrella Substation and Paso Robles Area Reinforcement Project (project) proposed jointly by PG&E and NextEra Energy Transmission West, LLC (NEET West). This Biological Resources Technical Report (BRTR) has been prepared to document the existing biological resources in the vicinity of the power line portions of the project. A similar report has been prepared for the substation component of the project, referred to as Estrella Substation, 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 potentially subject to state or federal jurisdiction. This report describes the methodologies used to assess the biological resources known to occur and with the potential to occur at the project.

A Biological Study Area (BSA) was established to include the maximum anticipated extent of project-related effects. The BSA includes an additional 400-foot buffer around the new 70 kV power line segment, as well as two proposed staging areas: (1) an approximately 450-foot by 900-foot workspace located on the southeast corner of Charolais Road and South River Road, and (2) an approximately 800-foot by 1,000-foot workspace located at the eastern end of the project on Creston Road (Figure 2). The BSA was slightly expanded in some areas to account for variability in the project alignment. Field surveys focused on areas within the BSA, as described in Section 3.4, Field Surveys, below.

1.1 Project Location

The project is located in the north-central portion of San Luis Obispo County, within and around the city of Paso Robles (Figures 1 and 2). The project route begins at Estrella Substation approximately 5 miles east of downtown Paso Robles, extends southwest for approximately 4 miles, then generally northwest for approximately 3 miles along Creston Road, Charolais Road, and South River Road, and finally ties into Paso Robles Substation in Paso Robles. Land use within the project area generally consists of agricultural and rural residential areas, with areas of urban development. The project is located on a combination of privately owned and City of Paso Robles (City) owned parcels, PG&E easements, and a parcel owned by the Land Conservancy of San Luis Obispo (LCSLO).

1.2 Project Description

The project will include the construction of approximately 7 miles of a new double-circuit 70 kV power line extending from Estrella Substation to Paso Robles Substation. The new 70 kV power line will travel generally southwest from the new 70 kV substation for approximately 4 miles spanning over agricultural lands, rural developments, and Huerhuero Creek. The new power line then extends northwest for approximately 2.2 miles along Creston Road and Charolais Road before turning north along South River Road. The new power line continues generally north along South River Road and for 0.65 mile where it terminates at Paso Robles Substation at the intersection of South River Road and Niblick Road. A more detailed description of the new double-circuit is provided in the subsections that follow.

Figure 1. General Vicinity Map

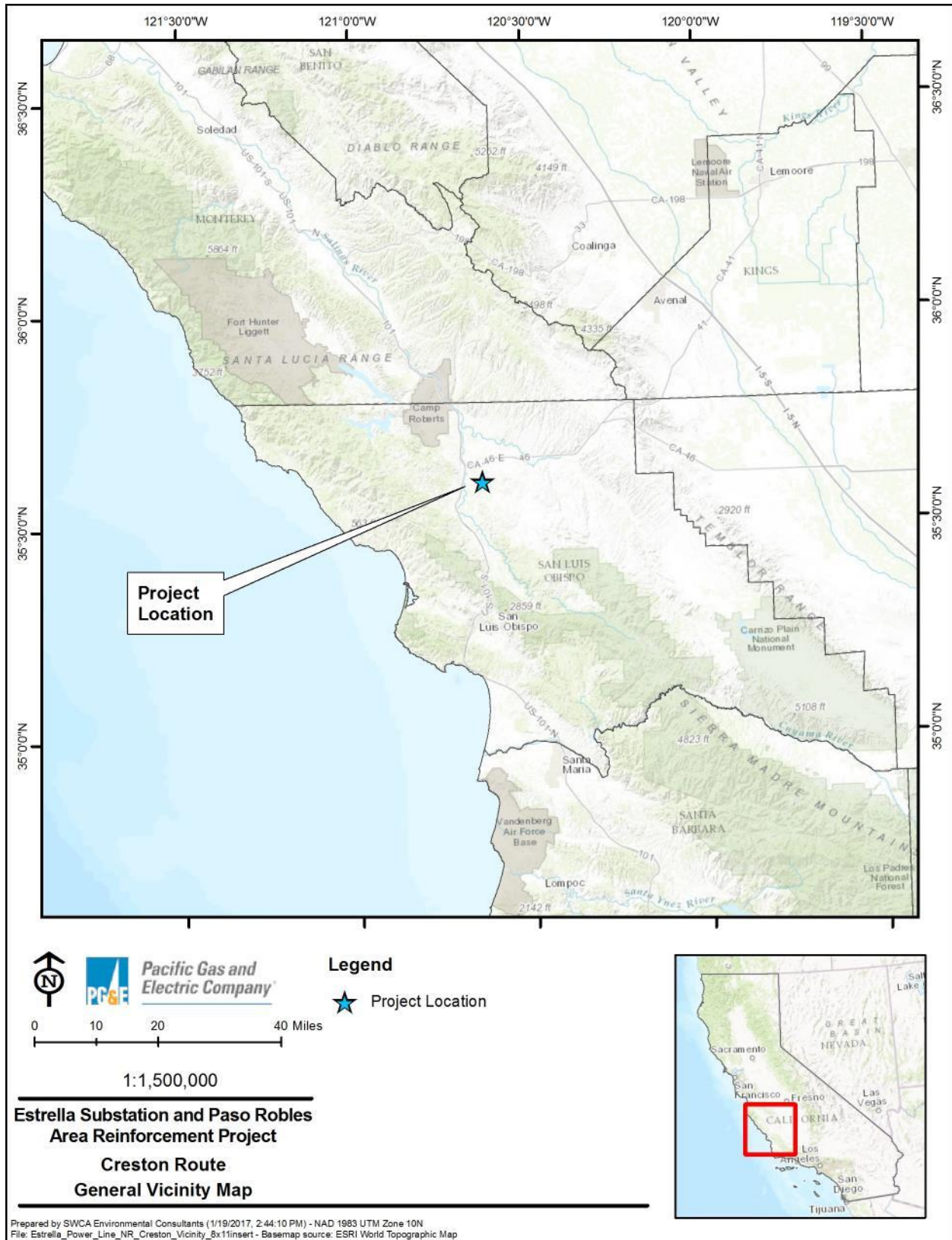
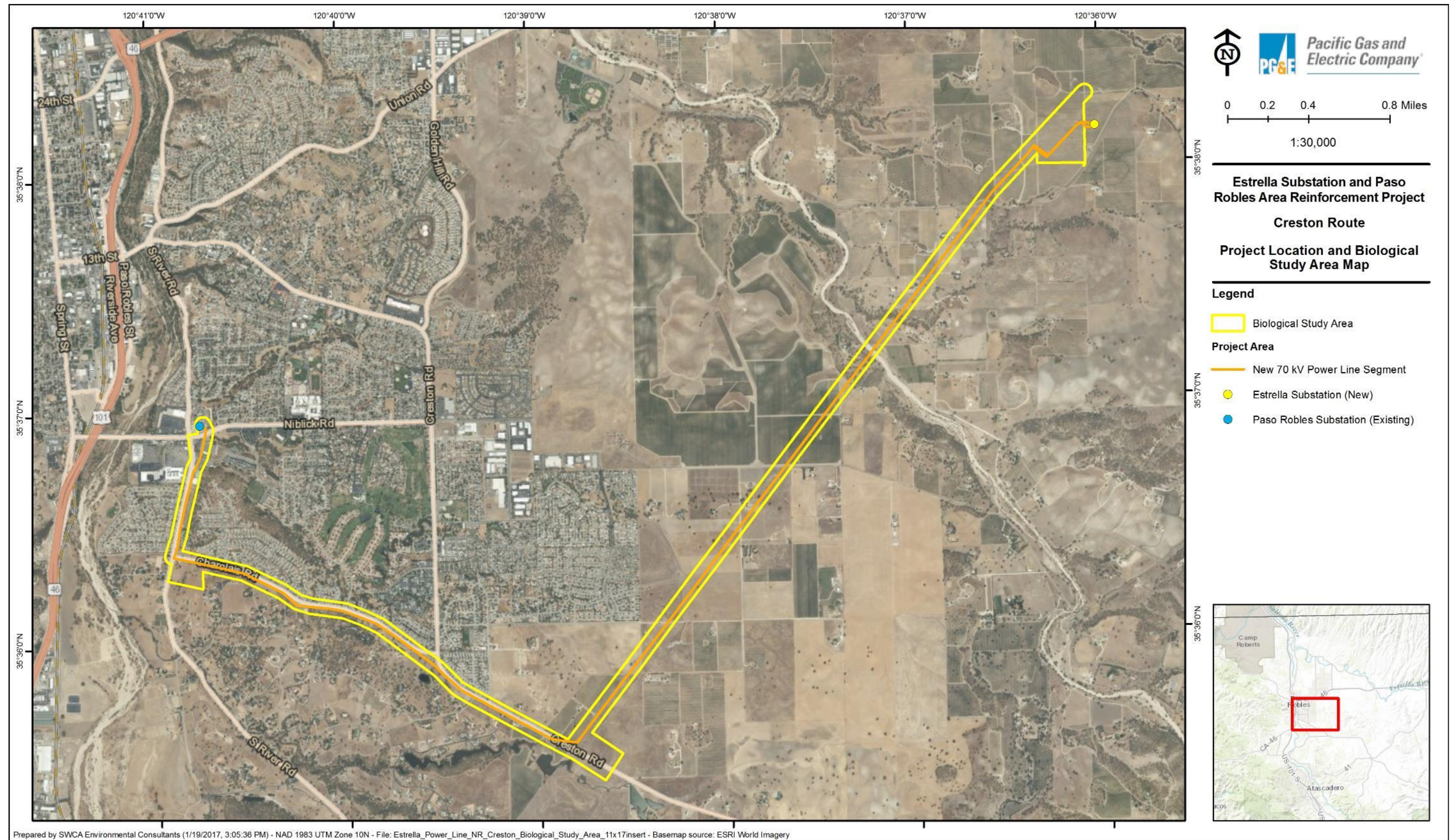


Figure 2. Biological Study Area Map



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1.2.1 Structures

The new 70 kV power line segment will consist of approximately 7 miles of double-circuit 70 kV line on a combination of lattice steel towers (LSTs), tubular steel poles (TSPs), wood poles, and light-duty steel poles (LDSPs). The portion of the line that will be installed within the existing PG&E transmission corridor will utilize LSTs. The LSTs will be installed generally adjacent to the existing 500 kV towers, utilizing an average span length of approximately 1,100 feet. Each LST will be installed on four individual concrete pier foundations.

The remainder of the new 70 kV power line segment will utilize two types of poles, as follows:

- **Tubular Steel Poles:** In locations where the new 70 kV power line segment is not parallel to the existing Diablo-Gates 500 kV transmission line, TSPs will be typically installed in locations where the alignment changes direction, utilizing an average span length of approximately 300 to 500 feet.
- **Light-Duty Steel Poles:** In locations where the new 70 kV power line segment is not parallel to the existing Diablo-Gates 500 kV transmission line, LDSPs will be typically installed in locations where the alignment is generally straight, utilizing an average span length of approximately 300 to 500 feet.

1.2.2 Staging Areas

The staging areas will be the main base of operations during project construction. They will be the assembly point for project personnel, as well as the location for temporary, portable bathroom facilities; equipment storage during off-work hours and weekends; materials storage; employee parking; office trailer staging; and a meeting area, as needed, for project management.

Two staging areas will be established during project construction. Proposed staging areas examined in the BSA include: (1) an approximately 450-foot by 900-foot workspace located on the southeast corner of Charolais Road and South River Road, and (2) an approximately 800-foot by 1,000-foot workspace located at the eastern end of the project on Creston Road where the alignment turns north (Figure 2). Final staging area sizes will vary depending on negotiations with third-party property owners to establish the staging area's temporary construction easements. If not already provided, in-ground chain-link fencing will be installed around the perimeter of the staging areas for security purposes. Power to staging areas will be supplied by tapping an existing distribution line in the area.

Prior to use, the staging area will be prepared to allow for the safe operation of construction equipment and vehicles. If the selected site is not comprised of a solid earth or concrete/paved foundation, any weeds will be cleared.

1.2.3 Work Areas

Several temporary work areas will be established to facilitate construction of the project. These temporary work areas are also described in further detail in the subsections that follow. The precise locations of the temporary work areas will be determined as part of the final design and may be changed, as necessary, at the time of construction due to land use changes, unanticipated impacts, and other factors. Unless specified in the subsections that follow, all work areas will be accessed from adjacent paved roads, unpaved roads, or site-specific overland access routes. In some locations, work areas may be accessed by footpaths if conditions preclude the use of vehicles. A more detailed description of the project access is included below. Following construction, all temporary work areas will be restored to pre-construction conditions.

1.2.3.1 STRUCTURE WORK AREAS

Structure work areas will be established at each tower/pole that will be installed as part of the project. These work areas will be used to facilitate the tower/pole assembly, erection, and hardware assembly processes. They will also be used to support the conductor installation/removal processes. These work areas will typically be centered on the proposed tower/pole location, and will vary in size from 120 feet by 120 feet to 40 feet by 40 feet, depending on the type of tower/pole being installed. The final tower/pole locations will be determined when engineering is complete and, where feasible, will be adjusted to account for property owner preferences. Structure work areas may also be adjusted to accommodate the final tower/pole locations and to avoid environmental resources. These work areas may be cleared of vegetation and graded, if necessary, prior to their use. Some sites may also require tree trimming, tree removal, and/or vine removal.

1.2.3.2 CROSSING STRUCTURE WORK AREAS

Prior to the installation of new conductors, temporary crossing structures—typically consisting of either vertical wood poles with crossarms or staged construction equipment—will be installed or mobilized at crossings of energized electric lines, communication facilities, and/or major roadways to prevent the conductors from sagging onto other lines or roads during removal or installation. To accommodate the installation of a crossing structure, PG&E will establish a work area measuring approximately 40 feet by 40 feet at each proposed crossing. Preparation of the site will typically be limited to mowing vegetation, as needed, to minimize the risk of fire.

1.2.3.3 PULL AND TENSION SITES

Conductor installation activities will include pull and tension equipment staging, temporary pole anchor installation, and pulling and tensioning of the conductor. Pull sites will typically be located within the easement and can be spaced between 2 and 3 miles apart, or from heavy angle to heavy angle as required by the final design. Access may be required throughout the right-of-way, away from structure work areas and pull sites, to support pull and tension activities. In locations where pulling will be required through an angle, or at the start of a new direction of the alignment, the pull site may be located at an angle outside of the easement or off the end of an easement corner. Pull sites will typically be 70 feet wide and will range between approximately 120 and 150 feet long. The final pull site locations will be determined during final design of the project. All pull sites located outside of paved areas may require vegetation trimming/removal to minimize the risk of fire and, depending on the local terrain, some minor grading may be required to ensure a flat and safe work environment. Depending on the time of year and conditions at the time of construction, gravel may be applied to help stabilize the ground for equipment use.

1.2.3.4 LANDING ZONES

Landing zones may be used during construction for the staging, storage, refueling, and operation of helicopters during construction. The final location and size of the landing zone(s) will be determined near the time of construction due to negotiations with third-party property owners, land use changes, and other factors.

1.2.3.5 ACCESS ROADS / OVERLAND ACCESS ROUTES

Construction crews, materials, and equipment will primarily access the project site by using State Route (SR-) 46, and may use paved and unpaved roads such as Union Road, Penman Springs Road, Linne Road, Hanson Road, Meadowlark Lane, Beechwood Drive, Creston Road, Charolais Road, South River Road, Niblick Road, and other spur roads. In addition to using a system of existing roads, PG&E may also grade or mow new temporary unpaved roads, or travel overland to provide access to Estrella Substation and/or pole locations along the new 70 kV power line. Some poles may also be accessed on foot if sensitive resources preclude the use of heavy equipment. Final access routes will be determined at the time of

construction due to land use changes, unanticipated impacts, and other factors. Work along the new overhead segment will occur from the road shoulder where feasible. As a result, access roads will generally not be required in these locations.

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 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.

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. Rewards are provided for information leading to arrest and conviction for violation of the BGEPA.

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 United States 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 United States 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 United States, 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 California Department of Fish and Wildlife [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, and no permits may be issued to PG&E for incidental take of these species.¹

¹ While take of fully protected species may be authorized by CDFW under a Natural Communities Conservation Plan (NCCP), PG&E activities are not covered by an NCCP so this permitting option is not available.

2.2.3 Protection for Birds: 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 of 1977

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 is 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 project area, as well as local polices 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; and,
- **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 project is 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; and
- **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 review and field surveys to document the potential for biological resources to occur within the project.

3.1 Literature and Records Review

Biologists reviewed available regional and local natural resources information including published and unpublished documents, publicly available data, and plant records. Database searches of the CDFW California Natural Diversity Database (CNDDDB) (CDFW 2016a) and the CNPS Inventory of Rare and Endangered Plants (CNPS 2016) included the 16 U.S. Geological Survey (USGS) 7.5-minute quadrangles at and surrounding the project—Bradley, San Miguel, Ranchito Canyon, Cholame Hills, Adelaida, Paso Robles, Estrella, Shandon, York Mountain, Templeton, Creston, Shedd Canyon, Morro Bay North, Atascadero, Santa Margarita, and Wilson Corner (USGS 2016b). Resources reviewed with respect to site-specific information included, but were not limited to:

- CDFW CNDDDB (CDFW 2016a);
- CDFW California Wildlife Habitat Relationship Systems (CDFW 2016d);
- CNPS Rare Plant Program (CNPS 2016);
- eBird: An online database of bird distribution and abundance [web application] (eBird 2016);
- *A Guide to the Amphibians and Reptiles of California* (California Herps 2000–2016);

- Natural Resources Conservation Service (NRCS) Web Soil Survey (U.S. Department of Agriculture [USDA] NRCS 2016b);
- USFWS Critical Habitat Portal (USFWS 2016a);
- USFWS National Wetland Inventory (NWI) (USFWS 2016b);
- USFWS Species List (USFWS 2016c);
- USGS National Hydrography Dataset (USGS 2016a);
- USGS 7.5-minute series topographic quadrangle maps (USGS 2016b); and,
- Aerial imagery of the project.

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 project. The database provides relevant sensitive species location data, habitat types (including vegetation cover), potential jurisdictional water features (including ditches and drainages), and critical habitat for federally listed species. The data were compiled using ArcGIS software.

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, subspecies, and populations listed or proposed for listing as threatened or endangered pursuant to the ESA, and species that are candidates for such listings.
- 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 (CDFW 2016c).
- Plants included in the Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2016c) with a threatened, endangered, SSC, or CRPR rank of 1 or 2.
- Plants assigned CRPR 1 and 2.

Additionally, riparian habitats and water bodies likely under the jurisdiction of USACE, CDFW, and/or RWQCB were considered.

Throughout this report, species, subspecies, varieties, and populations of species are broadly referred to as “species,” a term that is used in this BRTR to indicate the pertinent taxonomic levels that are recognized by the state and federal governments with jurisdiction over plants and animals.

Records of sensitive plants, animals, and natural communities within the Bradley, San Miguel, Ranchito Canyon, Cholame Hills, Adelaida, Paso Robles, Estrella, Shandon, York Mountain, Templeton, Creston, Shedd Canyon, Morro Bay North, Atascadero, Santa Margarita, and Wilson Corner USGS 7.5-minute quadrangles were queried from the CNDDDB RareFind5 (CDFW 2016a) and CNPS Online Inventory of Rare and Endangered Plants (CNPS 2016) databases. 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 project 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 (e.g., bullfrogs). 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 (e.g., bullfrogs). 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 Field Surveys

Biologists conducted general biological reconnaissance surveys and botanical surveys between April 20–22 and April 27–30, 2016. The surveys included documentation of plants 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 BSA (Appendices A, B, and C). The BSA was examined for presence or signs of occupation by special-status wildlife species (e.g., footprints, scat, feathers, or burrows) and auditory information (for example specific vocalizations of birds). Binoculars were also used to facilitate identification of species. Trees and other structures (such as buildings and bridges) within the BSA were scanned for avian nests and roosting locations.

Potential jurisdictional wetlands and waters of the State and United States were mapped at the desktop level using data available from the NWI (USFWS 2016b), USGS National Hydrography Dataset (USGS 2016a), USGS topographic maps, and aerial photographs. Wetland mapping field efforts were conducted in all areas suspected of having jurisdictional wetlands or waters. Delineators utilized A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (USACE 2008), The Jepson Manual: Higher Plants of California (Baldwin et al. 2012), and the 2016 National Wetland Plant List (Arid West Region) (USACE 2016). Presence of hydrophytic vegetation, hydrological conditions, hydric soil indicators, ordinary high water marks (OHWMs), and/or defined bed and banks were evaluated. Areas identified in the field as potentially jurisdictional waters are shown in Appendix E. Because the project is designed to avoid all potentially jurisdictional waters, a formal jurisdictional delineation was not conducted. Refer to Section 4.3.1, Jurisdictional Waters, below for additional detail regarding jurisdictional waters within the BSA.

CDFW's Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFW 2009) 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. Botanical surveys were conducted by walking transects throughout the BSA where suitable habitat was present to ensure thorough coverage. Every plant taxon that was observed in the BSA was identified to the taxonomic level necessary to determine rarity and listing status (Appendix A). The surveyors referred to The Jepson Manual (Baldwin et al. 2012) to verify plant identification.

A handheld Trimble GeoXT global positioning system (GPS) unit capable of sub-meter accuracy was used to record locations of all special-status species occurrences, sensitive resources, and other potential constraints to the project. 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.

3.4 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 (Baldwin et al. 2012) for plants, the American Ornithologists' Union (AOU) Checklist of North and Middle American Birds (AOU 2015) for birds, a Complete List of Amphibian, Reptile, Bird and Mammal Species in California (CDFW 2014) for other vertebrate wildlife, and the CDFW Special Animals List (CDFW 2016c) for invertebrates.

4 EXISTING CONDITIONS

The project is located within and around Paso Robles in San Luis Obispo County. Topography within the BSA ranges from flat (0%) to gently sloping rolling hills (0–30%). Elevation in the BSA ranges between approximately 650 (198 meters) and 1,000 feet (335 meters).

San Luis Obispo County has a Mediterranean climate, which includes warm to hot, dry summers and mild to cool, wet winters. The coastal climate within San Luis Obispo County 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 project 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, only averaging about 0.2 inches per month between May and September. The above temperature and precipitation data is based on Monthly Climate Normals data published by the National Oceanic and

Atmospheric Administration (NOAA) from the Paso Robles, California climate station (COOP:046730), located approximately 0.3 miles west of the project for the period between 1981 and 2000 (NOAA 2016a).

4.1 Soils

Soil type descriptions were queried using Official Soil Series Descriptions (OSDs; NRCS 2016a). Site-specific soil data was queried using the USDA Web Soil Survey database (NRCS 2016b). Hydric ratings were determined using the Hydric Soils of the United States List (NRCS 2015). Soil types in the project include the following (Figure 3):

- 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)
- Ayar and Diablo soils, 9 to 15 percent slopes
- Hanford and Greenfield gravelly sandy loams, 0 to 2 percent slopes
- Linne-Calodo complex, 9 to 30 percent slopes
- Lockwood-Concepcion complex, 2 to 9 percent slopes
- Nacimiento-Los Osos complex, 9 to 30 percent slopes
- Nacimiento-Los Osos complex, 30 to 50 percent slopes
- Pico fine sandy loam, 0 to 2 percent slopes
- Pico fine sandy loam, 2 to 9 percent slopes
- Rincon clay loam, 0 to 2 percent slopes
- Rincon clay loam, 2 to 9 percent slopes, Major Land Resource Area (MLRA) 14
- San Ysidro loam, 0 to 2 percent slopes, MLRA 14 (hydric)
- Still clay loam, 2 to 9 percent slopes
- Xerofluvents-Riverwash association (hydric)

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 27 to 610 meters. 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 2016a).

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 with slopes of 2 to 75 percent at elevations of 200 to 1,600 feet. 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. The soil is used primarily for rangeland grazing, but some are also used for dryland grain crops and vineyards (NRCS 2016a).

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 with slopes of 0 to 9 percent at elevations of less

than 1,500 feet. 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. The soil is used for growing dryland grains, dryland pasture, and shallow rooted row crops (NRCS 2016a).

Ayar soils are deep or very deep, well-drained soils that are formed from weathered, decomposed alkaline shale and sandstone material. This soil type is often associated with rolling hills with slopes of 5 to 75 percent at elevations of 150 to 3,500 feet. Natural vegetation communities associated with this soil type are annual grasses and forbs with scattered blue oak, coast live oak (*Quercus agrifolia*), and white oak (*Quercus alba*). The soil is used for dry farmed grain, almond and apricot orchards, and livestock grazing (NRCS 2016a).

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 2016a).

Hanford soils are typically very deep, well-drained soils that form from moderately coarse alluvium dominated by weathered granitic material. These soils are found on stream bottoms and floodplains, and in alluvial fans with slopes of 0 to 15 percent at elevations of 150 to 3,500 feet. This soil type is associated with dry, subhumid, mesothermal climates with hot, dry summers and cool, moist winters. Native vegetation occurring on this soil type is typically annual grasses and herbs. The soil is used for a wide range of agricultural cultivations including various fruit and vegetable crops (NRCS 2016a).

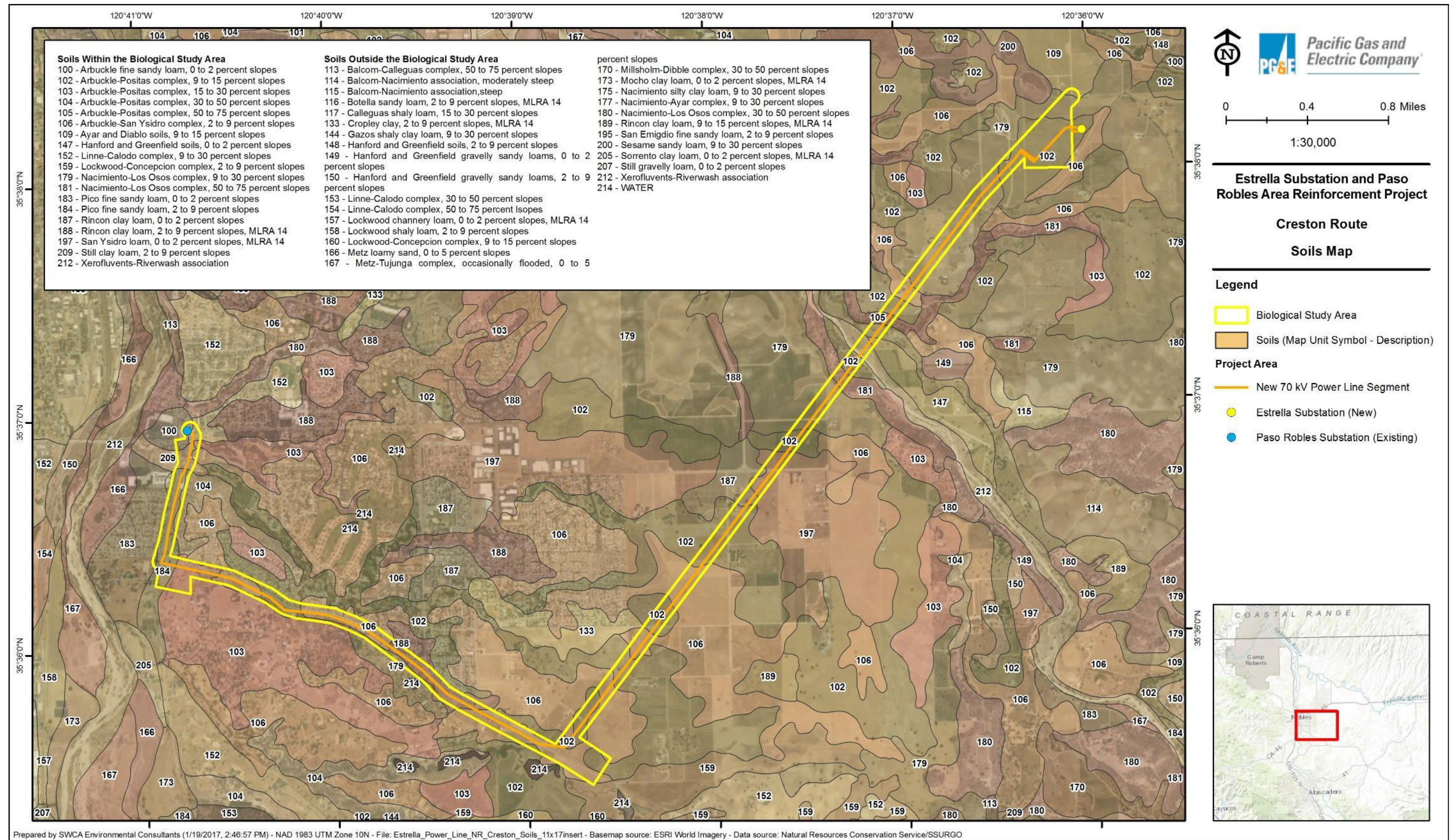
Greenfield soils are deep, well-drained soils that are formed from alluvium materials derived from granitic and other mixed rock sources. These soils occur within alluvial fans and terraces with slopes of 0 to 30 percent at elevations of 100 to 3,500 feet. Greenfield soils occur in dry, subhumid, mesothermal climates with hot, dry summers and cool, moist winters. This soil type is often associated with annual grasses, forbs, some shrubs, and scattered oak trees. The soil is used for irrigated fields, forage and fruit crops, and dryland grain crops (NRCS 2016a).

Linne soils are moderately deep, well-drained soils that consist largely of weathered soft shale and sandstone materials. These soils typically occur on mountainous uplands and foothills with slopes of 5 to 75 percent at elevations of 100 to 2,200 feet. Vegetation communities associated with this soil type are typically native annual grasses and forbs, live oak woodlands, and coastal sage scrub. These soils are often farmed for grain crops and almond orchards (NRCS 2016a).

Calodo soils are shallow, well-drained soils that consist of calcareous shale and sandstone material. These soils occur in uplands with slopes of 15 to 75 percent at elevations from 500 to 2,500 feet. Vegetation associated with this soil type is primarily live oak woodlands, a mixture of toyon and manzanita, and an understory of annual grasses. The soil is often used for dryland grain crops (NRCS 2016a).

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 2016a).

Figure 3. Soil Units Map



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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 2016a).

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 and other trees in some places. The soil is often used for rangeland grazing and dry farmed grain (NRCS 2016a).

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 are used for grain crops and sudangrass pasture (NRCS 2016a).

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 2016a).

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 2016a).

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 with slopes of 0 to 9 percent in elevations of less than 1,500 feet. 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. The soil is typically used for growing dryland grains, dryland pasture, and shallow rooted row crops (NRCS 2016a).

Still consists of deep, well-drained soils that formed in alluvial material from sedimentary rocks. These soils occur on flood plains and alluvial fans with slopes of 0 to 30 percent at elevations of 600 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 mainly annual grasses with scattered oaks. The soil is used for cultivated alfalfa, sugar beets, and dryfarmed grain (NRCS 2016b).

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 2016b).

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 2016b).

4.2 Habitats and Natural Communities

4.2.1 Critical Habitat

The BSA is located within federally designated critical habitat Unit 29C for vernal pool fairy shrimp (*Branchinecta lynchi*) (USFWS 2006b, 2016a) (Figure 4). Federally designated vernal pool fairy shrimp critical habitat Unit 29C, Central Coast Ranges, is located in San Luis Obispo County, northeast of Paso Robles. Vernal pool fairy shrimp are known to currently occupy this region. Unit 29C contains the following habitat constituents that are required to support this species: mound and inter-mound topography within a matrix of surrounding upland habitat, which provide 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 2006b).

The northeastern portion of the new 70 kV power line segment, between Estrella Substation and Huerhuero Creek, is located within critical habitat Unit 29C (Figure 4). No habitat constituents required for the growth and survival of vernal pool fairy shrimp were observed in the portion of the BSA that is located within designated critical habitat; however, other portions of the BSA contain potential vernal pool species habitats with associated swale complexes. Additional detail regarding vernal pool fairy shrimp and associated habitat is provided in Section 4.4.2, Special-Status Animals, below.

In addition, federally designated steelhead (*Oncorhynchus mykiss*; federally threatened) 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 Salinas River approximately 0.35 mile west at the closest point of the project. Primary constituent elements for steelhead critical habitat include: (1) freshwater spawning sites, (2) freshwater rearing sites, (3) freshwater migration corridors, and (4) estuarine areas (NOAA 2005). No steelhead critical habitat or primary constituent elements required to support this species occur in the BSA (Figure 4).

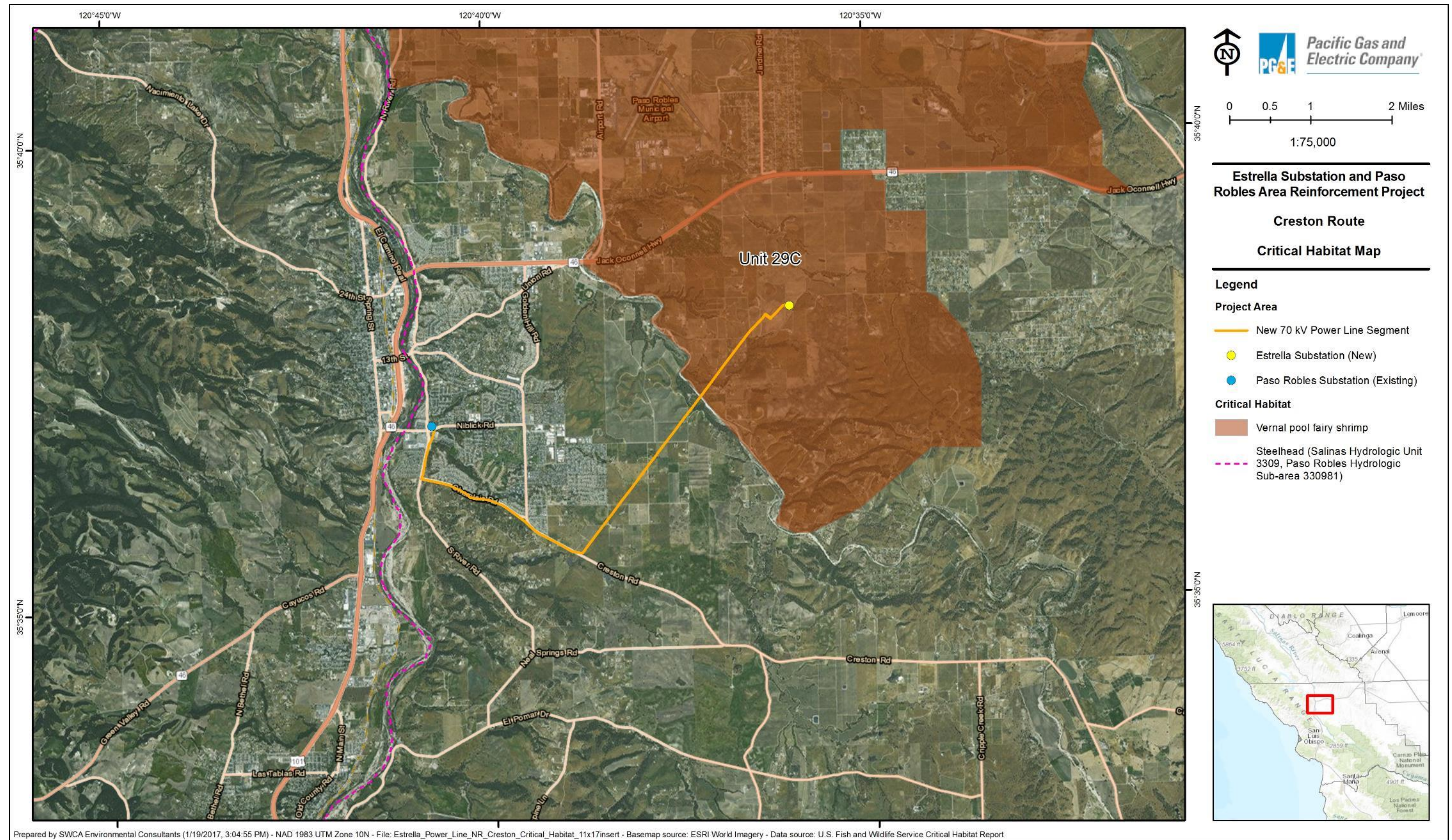
4.2.2 Vegetation Communities

The landscape within and surrounding the BSA is composed of a mosaic composition of blue oak woodlands, nonnative grasslands, agricultural, sandy wash of Huerhuero Creek, and ruderal/disturbed areas. Urban and agricultural landscape consisting of vineyards, orchards, and cultivated crops comprise a large portion of the BSA, as well as areas proposed for future development. Of the vegetation communities present, only one (blue oak woodland) is considered a sensitive community under the *City of El Paso De Robles General Plan* (Rincon Consultants, Inc. 2003). Similarly, two vegetation communities observed in the BSA (blue oak woodlands and sandy wash) are considered sensitive by CDFW. The sections below provide descriptions of these classifications. Appendix E illustrates the vegetation communities traversed by the project.

4.2.2.1 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 sabiniana*). 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).

Figure 4. Federally Designated Critical Habitat near the Project



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Blue oak woodland comprises approximately 34 acres within the BSA, and was the dominant vegetation community along drainage channels (Appendix D). This vegetation contained a relatively open canopy and an understory of nonnative grasses and forbs, with more dense stands occurring along drainage areas. Interspersed stands of valley oak trees (*Quercus lobata*) were observed throughout the blue oak woodlands in the BSA. A total of approximately 600 oak trees greater than 6 inches in diameter at breast height (DBH) were observed in the BSA, including a mixture of coast live oak, blue oak, and valley oak.

4.2.2.2 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 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 comprises approximately 109 acres within the BSA, frequently overlapping with blue oak woodlands and rural developments throughout the BSA. Vegetation were primarily dominated by nonnative annual grasses, including wild oats (*Avena* spp.), barley (*Hordeum* spp.), and ripgut brome, with interspersed patches of native species such as purple needle-grass (*Stipa pulchra*) and nodding needle-grass (*S. cernua*). Several areas of nonnative grasslands throughout the BSA are subject to frequent mowing or grading.

4.2.2.3 AGRICULTURAL

Agricultural habitat is identified by active cultivation and planting of crops in an area, including vineyards, irrigated crop fields, and nurseries. The main forms of agriculture observed in the BSA are crop production and grazing pastures with intermittent vineyards. Agricultural habitat comprises approximately 154 acres within the BSA, primarily along the eastern portion of the project.

4.2.2.4 SANDY WASH

Sandy washes are comprised of sand and gravel accumulation found in riverbeds and floodplains (Anderson et al. 1976). Sandy wash in the BSA occurs along a dry ephemeral creek channel known as Huerhuero Creek. This area contained little to no vegetation between the OHWMs with a higher density of grasses and forbs in the floodplain. Intermittent woody shrubs were scattered along the edges of the creek, with annual grassland and oak woodlands on the south side, and disturbed upland areas used for cattle corrals on the north side. Approximately 1 acre of sandy wash was observed in the BSA, exclusively within Huerhuero Creek.

4.2.2.5 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.

Approximately 17 acres of ruderal habitat occur within the BSA, observed mainly along South River Road and Creston Road. Other areas include firebreaks between agricultural fields, cattle and horse corrals, and within rural residential areas. Species observed in in ruderal areas in the BSA include poison hemlock (*Conium maculatum*), radish (*Raphanus* spp.), mustard (*Brassica* spp.), and various thistles.

4.2.2.6 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.

Approximately 83 acres of urban/developed lands occur in the BSA along and within rural and urban developments. Vegetation in these areas includes manicured lawns and landscaped trees and shrubs.

4.3 Drainages and Water Features

The project is located within the Huerhuero Creek and Paso Robles Creek-Salinas River watersheds. These watersheds are located in the north-central portion of San Luis Obispo County. The headwaters of Huerhuero Creek occur in the Coast Ranges just south of Creston. Huerhuero Creek generally flows northwest through San Luis Obispo County and Paso Robles and crosses the new 70 kV power line route 1.5 miles southwest of Estrella Substation. Huerhuero Creek then continues northwest for another 7 miles before draining into Salinas River in Paso Robles.

In the Paso Robles Creek-Salinas River watershed, the central drainage feature is Salinas River. The river flows north-northwest through the Salinas Valley, bisecting the Coast Ranges, before draining into the Pacific Ocean nearly 100 miles northwest of the project. Paso Robles Substation is located approximately 0.35 mile east of the Salinas River riparian corridor (Figure 5).

The project crosses several unnamed drainages that eventually flow into Huerhuero Creek and/or Salinas River. Refer to Appendix D for watershed boundaries and water feature data mapped on the NWI (USFWS 2016b) and USGS National Hydrography Dataset (USGS 2016a). Refer to Appendix E for potentially jurisdictional waters of the State and United States that were mapped during the April 2016 field surveys. A more in-depth discussion of potentially jurisdictional waters within the BSA is provided below.

4.3.1 Jurisdictional Waters

Huerhuero Creek, natural drainages, and wetland features were identified within the BSA during reconnaissance-level field assessments (Appendix E). A formal jurisdictional delineation report has not been prepared at this time for this project.

4.3.1.1 USACE JURISDICTIONAL WETLANDS AND OTHER WATERS

Huerhuero Creek and four other ephemeral drainages in the BSA may be subject to USACE jurisdiction (Appendix E). These features contained an OHWM and a connection to downstream waters of the United States. In addition, two seasonal wetlands with associated drainage swale features were preliminarily mapped during the April 2016 field surveys (Appendix E). Based on the presence of hydrophytic vegetation, wetland hydrology, hydric soils, and/or a nexus to waters of the United States, these features may also be subject to USACE jurisdiction. Other drainage and wetland features observed in the BSA either: a) did not exhibit an OHWM, b) did not have an apparent connection to downstream waters of the United States, or c) did not meet the definition of a USACE jurisdictional wetland, and are therefore are not generally considered jurisdictional by USACE.

4.3.1.2 CDFW JURISDICTIONAL WATERS AND RIPARIAN HABITATS

Huerhuero Creek and the four other ephemeral drainages in the BSA contained defined bed and banks and may be subject to CDFW jurisdiction (Appendix E).

4.4 Sensitive Species

All species identified during the literature review were evaluated for their potential to occur within the BSA. Biologists examined these records and made determinations during reconnaissance-level surveys. All plants and wildlife encountered during reconnaissance-level surveys were recorded. A complete list of species observed is located in Appendices A and B.

4.4.1 Special-Status Plants

Biologists and botanists queried the CNDDDB and CNPS databases to review recent accounts of special-status plants within the 16 USGS 7.5-minute topographic quadrangles at and surrounding the project. Local expert botanist, Dr. Dave Keil, also 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 list of special-status plants, as defined by CDFW's Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities (CDFW 2009), which were likely to occur in the BSA based on site-specific conditions (soils, geology, topography, elevation, and associated plant communities). The field surveys were floristic in nature, identifying each plant to the taxonomic level. Surveys were conducted in April 2016 following a season of good rainfall (approximately 88% of the average) (City of Paso Robles 2016), providing optimal conditions for the detection of rare plants. The surveys captured the bloom period for the majority of the species on the target list. Additional botanical surveys conducted over a range of bloom periods may be necessary to better determine presence or absence of special-status plant species in the BSA.

No federal, state, or CRPR 1 or 2 listed special-status plant species were observed in the BSA. Elegant buckwheat (*Eriogonum elegans*; CRPR 4.3), was observed in the BSA during the April 2016 botanical survey in the sandy wash of Huerhuero Creek. CRPR 4 listed species do not require evaluation for impact significance during preparation of environmental documents relating to CEQA. Furthermore, this species is not considered to be locally significant; therefore, this species is not address further in this report. A complete list of plants identified during the surveys is located in Appendix A, Flora Compendium. A total of 80 special-status plants and two natural communities (valley oak woodland and northern interior cypress forest) have occurrence records within the 16 USGS 7.5-minute topographic quadrangles at and surrounding the project. Six federal and/or state listed species (Santa Lucia purple amole [*Chlorogalum purpureum* var. *purpureum*], San Luis Obispo fountain thistle [*Cirsium fontinale* var. *obispoense*], island rush-rose [*Crocianthemum greenei*], spreading navarretia [*Navarretia fossalis*], northern Channel Islands phacelia [*Phacelia insularis* var. *insularis*], and California seablite [*Suaeda californica*]) were identified in the records search; however, either the BSA is located outside of their known range, suitable soil types were absent from the BSA, or they had outdated records with no known occurrences in the region (D. Keil, personal communication, June 3, 2016). These species were therefore determined to have no potential or were unlikely to occur in the BSA. No other federally or state listed species were returned in the records search.

Due to site-specific conditions, it was determined that 15 plants have the potential to occur (Table 1). The remaining 65 plants and two natural communities were determined to be unlikely to occur or absent from the BSA either because 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 or community. Species that were determined to be unlikely to occur (Santa Lucia manzanita [*Arctostaphylos Luciana*], Santa Margarita manzanita [*Arctostaphylos pilosula*], Brewer's spineflower [*Chorizanthe breweri*], Blochman's dudleya [*Dudleya blochmaniae* ssp. *blochmaniae*], San Joaquin spearscale [*Extriplex joaquinana*], Ojai fritillary [*Fritillaria ojaiensis*], San Benito fritillary [*Fritillaria viridea*], Pale-yellow layia [*Layia heterotricha*], Jones' layia [*Layia jonesii*], and Santa Cruz microseris [*Stebbinsoseris decipiens*]) or absent from the BSA are not discussed further in this report.

Species that were determined to be present, have potential to occur, or are likely to occur within the BSA are discussed below. Special-status plant species occurrences recorded in the CNDDDB (CDFW 2016a) are depicted in Figure 5.

Table 1. Sensitive Plant Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal / State / CRPR²	Habitat Associations³	Likelihood to Occur in the BSA
round-leaved filaree* <i>California macrophylla</i>	--/--/CRPR 1B.2	Annual herb that occurs in open sites, scrub, vertic clay, and occasionally serpentine soils in valley and foothill grasslands. Blooming period: March–July. Elevation: <1,200 meters.	Potential to occur. Grassland may provide habitat for this species. Two CNDDDB occurrences were recorded 3.59 (1937) and 5.72 (1952) miles from the project. Species not observed in the BSA during surveys conducted in the appropriate season.
La Panza mariposa lily <i>Calochortus simulans</i>	--/--/ 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. Grassland and oak woodlands may provide habitat for this species. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.
dwarf calycadenia <i>Calycadenia villosa</i>	--/--/ CRPR 1B.1	Annual herb that occurs in chaparral, valley grassland, and foothill woodlands. Associated with dry, rocky hills, and ridges. Blooming period: May–October. Elevation: 240–1,350 meters.	Potential to occur. Grassland and oak woodlands may provide habitat for this species. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted outside of the appropriate season.
Hardham’s evening-primrose <i>Camissoniopsis hardhamiae</i>	-- /--/CRPR 1B.2	Annual herb that is typically found in sandy soil, limestone, and disturbed oak woodland. Blooming period: March–May. Elevation: 140–945 meters.	Potential to occur. Sandy soils along Huerhuero Creek and oak woodlands may provide suitable habitat for this species. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.

Table 1. Sensitive Plant Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal / State / CRPR²	Habitat Associations³	Likelihood to Occur in the BSA
San Luis Obispo owl's-clover* <i>Castilleja densiflora</i> var. <i>Obispoensis</i>	--/--/CRPR 1B.2	Annual herb that occurs in meadows, seeps, and valley and grassland. Sometimes serpentinite. Blooming period: March–June. Elevation: 10–430 meters.	Potential to occur. Nonnative grasslands may provide suitable habitat for this species. One CNDDB occurrence was recorded 2.63 miles northwest of the project in 2005. Species not observed in the BSA during surveys conducted in the appropriate season.
Lemmon's jewelflower* <i>Caulanthus lemmonii</i>	--/--/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 may provide suitable habitat for this species. Two CNDDB occurrences have been recorded within 5 miles of the project; however, these records date back to 1957 and 1960. Species not observed in the BSA during surveys conducted in the appropriate season.
straight-awned spineflower <i>Chorizanthe rectispina</i>	--/--/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: 85–1,035 meters.	Potential to occur. Sandy soils along Huerhuero Creek may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.
yellow-flowered eriastrum <i>Eriastrum luteum</i>	--/--/CRPR 1B.2	Annual herb that occurs in broadleaved upland forest, chaparral, and foothill woodland on drying slopes. Associated with sandy or gravel soils. Blooming period: May–June. Elevation: < 1,000 meters.	Potential to occur. Blue oak woodlands and sandy soils along Huerhuero Creek may provide suitable habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted outside of the appropriate season.
Temblor buckwheat <i>Eriogonum temblorense</i>	--/--/CRPR 1B.2	Annual herb that occurs in valley and foothill grassland. Associated with sandy soils. Blooming period: April–September. Elevation: 300–1,000 meters.	Potential to occur. Nonnative grassland and oak woodlands may provide habitat for this species. No CNDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.

Table 1. Sensitive Plant Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal / State / CRPR²	Habitat Associations³	Likelihood to Occur in the BSA
Santa Lucia dwarf rush* <i>Juncus luciensis</i>	--/--/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 observed within the BSA may provide habitat for this species. One CNDDDB occurrence was recorded 0.72 mile southeast of the project; however, this record dates back to 1958. Species not observed in the BSA during surveys conducted in the appropriate season.
pale-yellow layia <i>Layia heterotricha</i>	--/--/CRPR 1B.1	Annual herb that occurs in cismontane, pinyon and juniper woodland, coastal scrub, and valley and foothill grassland. Associated with open clay or sandy, sometimes +/- alkaline soils. Blooming period: March–June. Elevation: 200–1,800 meters.	Potential to occur. Suitable habitat within BSA. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.
woodland woollythreads* <i>Monolopia gracilens</i>	--/--/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 CNDDDB occurrence was recorded 3.83 miles northwest of the project; however, this record dates back to 1957. Species not observed in the BSA during surveys conducted in the appropriate season.
shining navarretia* <i>Navarretia nigelliformis</i> ssp. <i>radians</i>	--/--/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.	Potential to occur. Wetland features and drainages may provide habitat for this species. Four CNDDDB occurrences have been recorded within 5 miles of the project between 1937 and 2014, with the most recent occurrence recorded 0.86 miles northwest of the project. Species not observed in the BSA during surveys conducted in the appropriate season.

Table 1. Sensitive Plant Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal / State / CRPR²	Habitat Associations³	Likelihood to Occur in the BSA
prostrate vernal pool navarretia <i>Navarretia prostrata</i>	--/--/CRPR 1B.1	Annual herb that occurs in coastal scrub, meadows and seeps, valley and foothill grasslands (alkaline), and vernal pools. Blooming period: April–July. Elevation: <1,210 meters.	Potential to occur. Seasonal wetlands may provide habitat for this species. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.
most beautiful jewelflower <i>Streptanthus albidus</i> <i>ssp. peramoenus</i>	--/--/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: 95–1,000 meters.	Potential to occur. Grassland habitat may provide habitat for this species. No CNDDDB occurrences have been recorded within 5 miles of the project. Species not observed in the BSA during surveys conducted in the appropriate season.

¹ List of plant species based on CNPS and CNDDDB searches of USGS 7.5-minute quadrangles—Bradley, San Miguel, Ranchito Canyon, Cholame Hills, Adelaida, Paso Robles, Estrella, Shandon, York Mountain, Templeton, Creston, Shedd Canyon, Morro Bay North, Atascadero, Santa Margarita, and Wilson Corner.

² Listing status based on CNDDDB and CNPS data.

³ Habitat associations and blooming periods based on the Jepson Online Interchange for California Floristics (Queried in May/June 2016).

*CNDDDB occurrences recorded within 5 miles of the project.

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)

Round-Leaved Filaree

Round-leaved filaree (*California macrophylla*; CRPR 1B.1) occurs in clay soils and occasionally serpentine soils in valley grassland and foothill woodland communities. While no serpentine soils were detected in the BSA, clay soils are present. Therefore, it was determined this species has the potential to occur. The most recent known occurrence of this species was recorded in 1952, approximately 5.72 miles south of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

La Panza Mariposa Lily

La Panza mariposa lily (*Calochortus simulans*; CRPR 1B.3) occurs in sandy soils in valley grasslands, foothill woodlands, and chaparral habitat. This habitat was observed throughout the BSA; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Dwarf Calycadenia

Dwarf calycadenia (*Calycadenia villosa*; CRPR 1B.1) occurs on rocky, dry hills, ridges, grasslands, chaparral, and openings in foothill woodlands. This habitat was observed throughout the BSA; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted outside of the appropriate bloom season did not identify this species in the BSA.

Hardham's Evening-Primrose

Hardham's evening-primrose (*Camissoniopsis hardhamiae*; CRPR 1B.2) occurs on sandy soils or limestone in chaparral and oak woodlands. This soil type was observed most prominently along the south side of Creston Road, Huerhuero Creek, and intermittent drainages; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

San Luis Obispo Owl's-Clover

San Luis Obispo owl's clover (*Castilleja densiflora* var. *obispoensis*; CRPR 1B.2) occurs in valley and foothill grasslands. This habitat was observed throughout the BSA; therefore, it was determined this species has the potential to occur. One CNDDDB occurrence has been recorded 2.63 miles northwest of the project in 2005. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

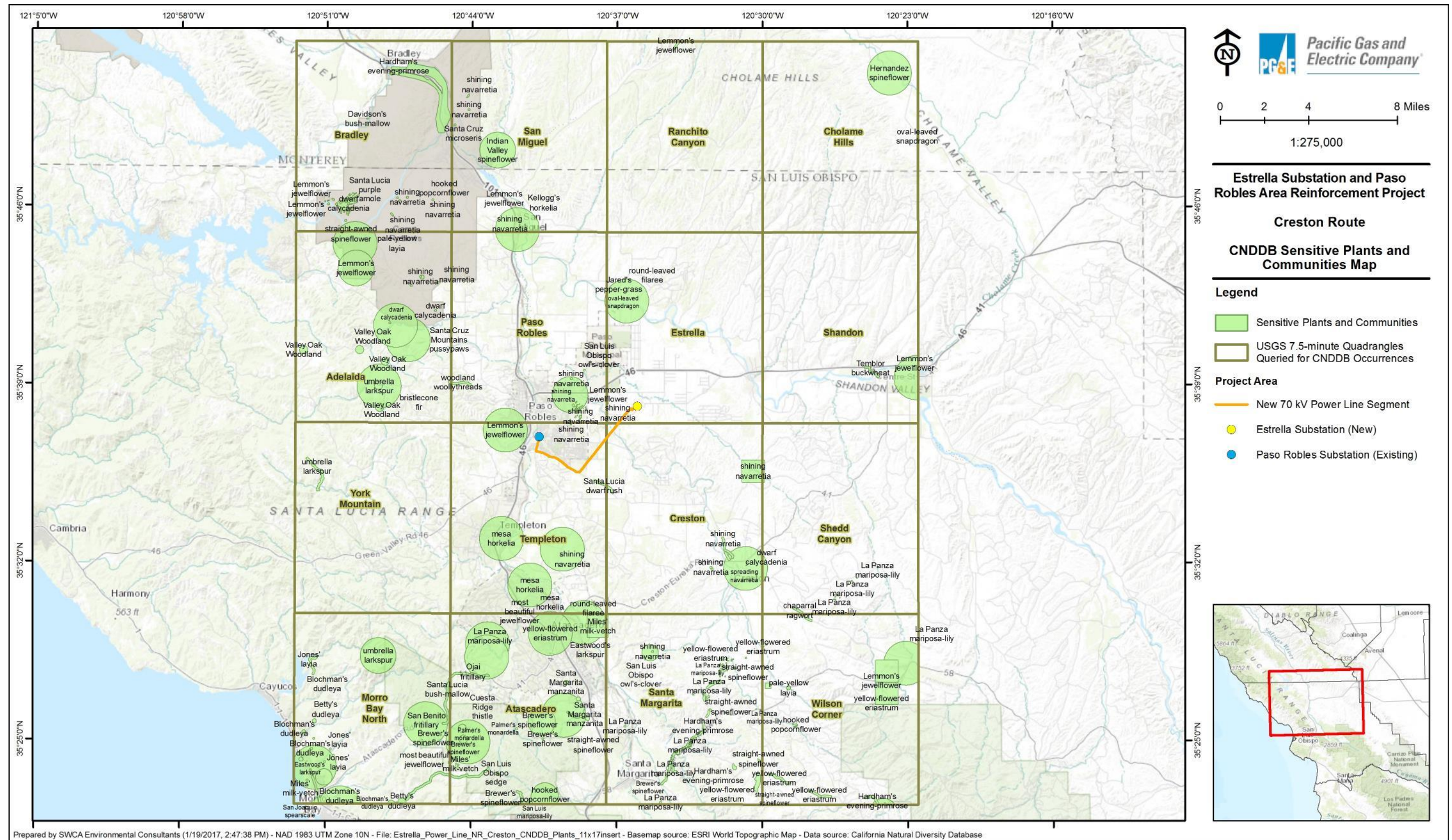
Lemmon's Jewelflower

Lemmon's jewelflower (*Caulanthus lemmonii*; CRPR 1B.2) occurs in grassland, chaparral, and scrub habitat. This habitat was observed throughout the BSA; therefore, it was determined this species has the potential to occur. Two CNDDDB occurrences have been recorded within 5 miles of the project; however, these records date back to 1957 and 1960. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Straight-Awned spineflower

Straight-awned spineflower (*Chorizanthe rectispina*; CRPR 1B.3) occurs in sandy or gravel soils in chaparral, cismontane woodlands and coastal scrub. This soil type was observed most prominently along the south side of Creston Road, Huerhuero Creek, and intermittent drainages; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Figure 5. CNDDDB Records of Sensitive Plants in the Project Vicinity



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Yellow-Flowered Eriastrum

Yellow-flowered eriastrum (*Eriastrum luteum*; CRPR 1B.2) occurs in sandy or gravel soils in chaparral and cismontane woodland on drying slopes. Suitable habitat for this species is present; therefore, it was determined this species has the potential to occur. This soil type was observed most prominently along the south side of Creston Road, Huerhuero Creek, and intermittent drainages. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted outside of the appropriate bloom season did not identify this species in the BSA.

Temblor Buckwheat

Temblor buckwheat (*Eriogonum temblorense*; CRPR 1B.2) occurs in sandy soils in valley grasslands. This soil type was observed most prominently along the south side of Creston Road, Huerhuero Creek, and intermittent drainages; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Santa Lucia Dwarf Rush

Santa Lucia dwarf rush (*Juncus luciensis*; CRPR 1B.2) occurs in seeps, meadows, vernal pools, streams, and roadsides. These habitats were observed in the BSA; therefore, it was determined this species has the potential to occur. One CNDDDB occurrence was recorded 0.72 mile southeast of the project. A more recent CNDDDB occurrence was recorded in 2001 approximately 8.82 miles northwest of the project in a vernal pool at Camp Roberts. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Pale-Yellow Layia

Pale-yellow layia (*Layia heterotricha*; CRPR 1B.1) is an annual herb that occurs in a variety of habitats, including cismontane, pinyon and juniper woodlands, coastal scrub, and valley and foothill grasslands. These habitats were observed in the BSA; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Woodland Woollythreads

Woodland woollythreads (*Monolopia gracilens*; CRPR 1B.2) occurs in grasslands, open chaparral, and oak woodlands, and is known to occasionally occur in serpentine soils. While no serpentine soils were detected in the BSA, suitable grassland and woodlands are present; therefore, it was determined this species has the potential to occur. One CNDDDB occurrence was recorded 3.83 miles to the northwest, but this record dates back to 1957. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Shining Navarretia

Shining navarretia (*Navarretia nigelliformis* ssp. *radians*; CRPR 1B.2) occurs in vernal pools and clay depressions. These habitats were observed in the BSA; therefore, it was determined this species has the potential to occur. Four CNDDDB occurrences have been recorded within 5 miles of the project between 1937 and 2014, with the most recent occurrence recorded 0.86 mile northwest of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Prostrate Vernal Pool Navarretia

Prostrate vernal pool navarretia (*Navarretia prostrata*; CRPR 1B.1) occurs in alkaline floodplains vernal pools and clay depressions. These habitats were observed in the BSA; therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

Most Beautiful Jewelflower

Most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*; CRPR 1B.2) occurs in serpentine or metamorphic, rocky barren slopes in chaparral openings, cismontane woodland, and valley and foothill grassland. While no serpentine soils were detected in the BSA, cert and rocky slopes in grassland and woodlands are present. Therefore, it was determined this species has the potential to occur. No CNDDDB occurrences have been recorded within 5 miles of the project. Suitable habitat for this species is present; however, botanical surveys conducted during the appropriate bloom season did not identify this species in the BSA.

4.4.2 Special-Status Animals

Biologists conducted reconnaissance-level surveys in the BSA to assess the potential for special-status wildlife, including those listed by federal and state agencies among others, based on available data. The data evaluated included USFWS and CNDDDB Species List databases, as well as published and unpublished technical reports and peer-reviewed literature. Reconnaissance-level surveys included documentation of animals, vegetation communities, and land cover types. Habitat was evaluated for potential to support those special-status species identified during the desktop review, and detailed notes and photographs (Appendix C) were taken to support determinations of the likelihood for those species to occur within the BSA. The BSA was examined for presence or signs of occupation by special-status species (e.g., footprints, scat, feathers, or burrows) and auditory information (e.g., specific vocalizations of birds). Binoculars were also used to facilitate identification of species.

No special-status animals were observed in the BSA. A complete list of wildlife identified during the surveys is located in Appendix B, Fauna Compendium. Forty-four special-status animals have occurrence records within the 16 USGS 7.5-minute topographic quadrangles at and surrounding the project. After site-specific conditions and literature sources were evaluated, it was determined that 11 animals are likely to occur and 11 animals have potential to occur within the BSA (Table 2). The remaining 22 animals were determined to be unlikely to occur or were absent from the BSA based on either the lack of suitable habitat and features that are required to satisfy the life history requirements of the species, or because the BSA is located outside of the species range. Species that were determined to be unlikely to occur (California tiger salamander [*Ambystoma californiense*], western pond turtle [*Emys marmorata*], Swainson's hawk [*Buteo swainsoni*], California condor [*Gymnogyps californianus*], Townsend's big-eared bat [*Corynorhinus townsendii*], and Tulare grasshopper mouse [*Onychomys torridus tularensis*]) or absent from the BSA are not discussed further in this report.

Species that were determined to be present, are likely to occur, or have potential to occur within the BSA are discussed below. Special-status wildlife species occurrences recorded in the CNDDDB (CDFW 2016a) are depicted in Figure 6.

Table 2. Sensitive Wildlife Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence
INVERTEBRATES			
vernal pool fairy shrimp* <i>Branchinecta lynchi</i>	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 species habitat observed in the BSA. Three recent CNDDDB occurrences (2001, 2001, and 2005) were recorded within 2 miles of the project.
AMPHIBIANS			
California red-legged frog* <i>Rana draytonii</i>	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. Suitable aquatic breeding, non-breeding, and upland habitat observed in the BSA. Two CNDDDB occurrences were recorded in 2003 approximately 5 miles south-southwest of the project.
western spadefoot * <i>Spea hammondi</i>	--/--/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 observed in the BSA. Four CNDDDB occurrences have been recorded within 5 miles of the project between 2002 and 2006, with the nearest occurrence recorded within the BSA near Meadowlark Drive in 2005.
REPTILES			
silvery legless lizard <i>Anniella pulchra pulchra</i>	--/--/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.	Potential to occur. Suitable habitat observed in the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.
San Joaquin whipsnake <i>Coluber flagellum ruddocki</i> [= <i>Masticophis flagellum ruddocki</i>]	--/--/SSC	Chaparral and scrub habitats but will also use adjacent grassland, oak savanna, and woodland habitats; will inhabit abundant rodent burrows.	Potential to occur. Suitable habitat observed in the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.

Table 2. Sensitive Wildlife Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence
coast horned lizard* <i>Phrynosoma blainvillii</i>	--/--/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. One coast horned lizard was observed by biologists in March 2016, approximately 0.5 mile northeast of Estrella Substation site in Dry Creek. Sandy creek beds in the BSA may provide suitable habitat for this species.
BIRDS			
tricolored blackbird <i>Agelaius tricolor</i>	--/--/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 winter and foraging habitat observed at the freshwater pond within LCSLO adjacent to the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.
grasshopper sparrow <i>Ammodramus savannarum</i>	--/--/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 observed in the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.
golden eagle* <i>Aquila chrysaetos</i>	--/--/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.	Likely to occur. Suitable nesting and foraging habitat observed in the BSA. CNDDDB reports an active nest 2.78 miles northwest of the project in 2006.
burrowing owl <i>Athene cunicularia</i>	--/--/SSC; MBTA	Open, dry, annual, or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Uses rodent or other burrow for roosting and nesting cover.	Potential to occur. Suitable habitat observed throughout the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.
northern harrier <i>Circus cyaneus</i>	--/--/SSC; MBTA	Frequents meadows, grasslands, open rangeland, desert sinks, and fresh and saltwater emergent wetlands; seldom found in wooded areas. Widespread winter resident and migrant in suitable habitat.	Likely to occur. Suitable foraging habitat observed in the BSA. Multiple sightings have been recorded between 2007 and 2016 within 2 miles of the project, with one observation recorded at Franklin Hot Springs, 0.15 mile east of the project.

Table 2. Sensitive Wildlife Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence
white-tailed kite <i>Elanus leucurus</i>	--/--/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 observed in the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project; however, multiple sightings have been recorded between 1988 and 2006 within 2 miles of the project (eBird 2016).
bald eagle <i>Haliaeetus leucocephalus</i>	DL/SE/FP; MBTA; BGEPA	Roosts communally in winter in dense, sheltered, remote conifer stands. Nests in large, old growth, or dominant live trees close to lakes and large rivers.	Likely to occur. Suitable nesting and foraging habitat observed in the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project; however, eight bald eagle sightings were recorded between 2006 and 2016, with the nearest observed (2015) approximately 0.35 mile west of the project (eBird 2016).
loggerhead shrike <i>Lanius ludovicianus</i>	--/--/SSC; MBTA	Generally occurs in open country with scattered shrubs and trees. Sit on low perches to scan for prey (rodents, lizards, birds, and insects).	Likely to occur. Suitable migration habitat observed within and adjacent to the project. While no CNDDDB occurrences were returned in the 16-quadrangle CNDDDB search, species was added as consideration due to known occurrences within 2 miles of the BSA, along Union Road (SWCA 2016).
purple martin <i>Progne subis</i>	--/--/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 observed in the BSA. One CNDDDB occurrence (2006) No CNDDDB occurrences have been recorded within 5 miles of the project.
yellow warbler <i>Setophaga petechia</i>	--/--/SSC; MBTA	Breed in shrubby thickets and woods near riparian areas and wetlands. Migrates south to Central and South America for the winter.	Potential to occur. Suitable migration habitat observed within and adjacent to the project. No CNDDDB occurrences have been recorded within 5 miles of the project; however, one sighting was recorded in 1991 within the BSA between the Creston Road and Charolais Road split (eBird 2016).

Table 2. Sensitive Wildlife Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence
least Bell's vireo* <i>Vireo bellii pusillus</i>	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.	Potential to occur. Suitable nesting and foraging habitat exist outside of the BSA along Salinas River adjacent to the western portion of the project. One CNDDDB occurrence was recorded in 2005, approximately 3.63 miles north-northwest from the project along Salinas River.
MAMMALS			
pallid bat <i>Antrozous pallidus</i>	--/--/SSC	True desert areas, moister oak woodlands, and redwood forests of coastal regions. At lower elevations, highly associated with oak woodlands and oak savanna.	Potential to occur. Potential day and night roost sites observed within the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project.
Monterey dusky-footed woodrat <i>Neotoma macrotis luciana</i>	--/--/SSC	Dense chaparral, coastal sage-scrub, pinyon-juniper, oak and riparian woodlands, and mixed coniferous forest habitat with well-developed understory to nest.	Likely to occur. Suitable habitat observed within the BSA. No CNDDDB occurrences have been recorded within 5 miles of the project. One midden was observed outside of BSA, approximately 0.5 mile north of Estrella Substation (SWCA 2016).
Salinas pocket mouse* <i>Perognathus inornatus psammophilus</i>	--/--/SSC	Habitat relations are not well known but literature reported habitat for <i>P. inornatus</i> on the Carrizo Plain (previously considered to include <i>psammophilus</i>) as sandy loam flats dominated by herbs and grasses.	Potential to occur. Suitable habitat observed within and adjacent to Huerhuero Creek. No CNDDDB occurrences have been recorded within 5 miles of the project.
American badger* <i>Taxidea taxus</i>	--/--/SSC	Open grassland, chaparral, and oak woodland with friable soils. Needs sufficient food and open, uncultivated ground.	Likely to occur. Suitable habitat present within the BSA. One CNDDDB occurrence was recorded approximately 2.57 miles southwest of the project in 2003.
San Joaquin kit fox* <i>Vulpes macrotis mutica</i>	FE/ST/--	Open, level areas with loose-textured soils supporting scattered, shrubby vegetation with little human disturbance represent suitable habitat; some agricultural areas.	Potential to occur. Suitable habitat observed within the BSA. The nearest CNDDDB occurrences were recorded 1.04 miles northwest and 5.13 miles east of the project in 1990.

Table 2. Sensitive Wildlife Species Potential for Occurrence within the BSA¹

Common Name Scientific Name	Status Federal/ State/Other²	Habitat Associations	Likelihood of Occurrence
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¹ List of animal species based on CNDDDB searches of USGS 7.5-minute quadrangles—Bradley, San Miguel, Ranchito Canyon, Cholame Hills, Adelaida, Paso Robles, Estrella, Shandon, York Mountain, Templeton, Creston, Shedd Canyon, Morro Bay North, Atascadero, Santa Margarita, Wilson Corner.

² Listing status based on CDFW CNDDDB State & Federally Listed Endangered & Threatened Animals of California List, April 2016.

³ The California tiger salamander Santa Barbara County and Sonoma County Distinct Vertebrate Population (DPS) is listed as Federally Endangered. The Central Valley Population is designated as Threatened.

*CNDDDB occurrences recorded within 5 miles of the project.

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

Vernal Pool Fairy Shrimp

As mentioned in Section 4.2.1, critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) occurs along the northeastern portion of the project, between Estrella Substation and Huerhuero Creek within the designated area known as Unit 29C, Central Coast Range Region (Figure 3). Habitat constituents that are required to support this species, including mound and inter-mound topography or vernal pool wetland features within a matrix of upland habitat, was observed in three different areas of the BSA: (1) in a detention pond located on the southeastern edge of a vineyard on Creston Road across from the LCSLO parcel, with associated swale complexes located on PG&E’s property, approximately 300 feet east of the pond; (2) in an ephemeral cattle pond located within and surrounded by drainage swales in a field of annual grassland, near Meadowlark Road at the southeast corner of a residential neighborhood; and (3) in an ephemeral cattle pond located approximately 620 feet southwest of Huerhuero Creek, surrounded by annual grassland and blue oak woodland (Appendix E).

Three CNDDDB occurrences have been recorded between 2001 and 2005 within 2 miles of the project. The nearest and most recent occurrence was recorded approximately 0.47 mile west of the project near the intersection of Niblick Road and Spring Street in small depressions and pools along a gravel access road. Because of the presence of suitable habitat and proximity to documented occurrences, vernal pool fairy shrimp are likely to occur in the BSA.

California Red-Legged Frog

Two California red-legged frog (*Rana draytonii*) CNDDDB occurrences were recorded approximately 5 miles south-southwest of the project in Paso Robles and Graves Creeks, both tributaries to Salinas River, just north of Templeton. The large freshwater pond located within the LCSLO parcel on Creston Road, contains dense emergent vegetation along the edges that extends out just 60 feet southwest of the BSA, and the detention pond located across from the LCSLO parcel on the southeastern edge of the vineyard, as mentioned above, may provide suitable aquatic breeding habitat for California red-legged frog (Appendix E). In addition, Huerhuero Creek and other intermittent drainages observed in and adjacent to the BSA may provide suitable dispersal habitat for this species. The species could also be present in upland areas during rain events due to dispersal from water bodies within and near the BSA. While this species was not observed

during the survey period, it is likely to occur because suitable breeding and upland habitat exist in the BSA and the project is within the species' range.

Western Spadefoot Toad

Four western spadefoot toad (*Spea hammondi*) CNDDDB occurrences have been recorded between 2002 and 2006 within 5 miles of the project, with the nearest occurrence recorded within the BSA near Meadowlark Drive in 2005. According to CNDDDB general notes, six large (up to 2 inches in length) spadefoot tadpoles were caught and released at this location. In addition, the other two ponds located on Creston Road and southwest of Huerhuero Creek previously described 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 exist in the BSA.

Silvery Legless Lizard

No silvery legless lizard (*Anniella pulchra pulchra*) CNDDDB occurrences have been recorded within 5 miles of the project. Grassland with leafy debris and loose soil, including the sandbars of Huerhuero Creek and other intermittent drainages, were observed in the BSA. While this species was not observed during the survey period, it has the potential to occur because suitable habitat exists in the BSA and the project is within the species' range.

San Joaquin Whipsnake (Coachwhip)

No San Joaquin whipsnake (*Coluber flagellum ruddocki* [= *Masticophis flagellum ruddocki*]) CNDDDB occurrences have been recorded within 5 miles of the project. Although this species was not observed during the survey periods, the project site is within the species' range and an abundance of squirrel and other small mammal burrows were observed throughout the BSA. While this species was not observed during the survey period, it has the potential to occur because suitable habitat exists in the BSA.

Coast Horned Lizard

No coast horned lizard (*Phrynosoma blainvillii*) CNDDDB occurrences have been recorded within 5 miles of the project; however, one individual was observed by biologists in March 2016 outside of the BSA, approximately 0.5 mile northeast of Estrella Substation in Dry Creek. Sandy creek beds in the BSA, such as those observed in Huerhuero Creek and other intermittent drainages, were observed within the BSA, as well as soft sandy soils along the south side of Creston Road. While this species was not observed during the survey period, it is likely to occur because suitable habitat exists in the BSA, and the project is within the species' range.

Tricolored blackbird

No tricolored blackbird (*Agelaius tricolor*) CNDDDB occurrences have been recorded within 5 miles of the project. The majority of the large freshwater pond located within LCSLO is outside of the BSA; however, dense emergent vegetation of cattails and tules were observed along the entire edge that extend out just 60 feet southwest of one of the project's proposed staging areas. In addition, expansive grassland and agricultural habitat exist within and adjacent to the BSA. While this species was not observed during the survey period, it has the potential to occur as a winter migrant because suitable habitat exists in the BSA and the project is within the species' range.

Grasshopper Sparrow

No grasshopper sparrow (*Ammodramus savannarum*) CNDDDB occurrences have been recorded within 5 miles of the project. Although this species was not observed during the 2016 field surveys, suitable grassland and agricultural fields were observed throughout the BSA. While this species was not observed during the survey period, it has the potential to occur as a summer migrant because suitable foraging habitat exists in the BSA and the project is within the species' range.

Golden Eagle

One golden eagle (*Aquila chrysaetos*) CNDDDB occurrence has been recorded 2.78 miles northwest of the project in 2006, on the west side of Huerhuero Creek in a blue oak tree between Golden Hill Road and Airport Road. According to the CNDDDB 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. In addition, multiple sightings were recorded within Paso Robles city limits between 1982 and 2015, with the closest observation to the project site along Salinas River, approximately 0.55 mile northwest of Paso Robles Substation in 2015 (eBird 2016). Suitable nesting habitat is present within the BSA, including blue and valley oak trees as well as electrical transmission towers. No golden eagle individuals or nests were observed during the survey period; however, expansive spreads of grassland and oak woodlands within the BSA may provide quality foraging and nesting 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 BSA and a known nesting site is in the vicinity of the project.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is a CDFW SSC and protected under the MBTA. This species is a yearlong resident in California that prefers open, dry grasslands, rangelands, agricultural lands, deserts, and scrublands. This species occupies abandoned small mammal burrows such as those dug by squirrels. No burrowing owl CNDDDB occurrences have been recorded within 5 miles of the project. Although this species was not observed during the 2016 field surveys, oak woodland and an abundance of suitable burrows in open grassland communities were observed in the BSA. While this species was not observed during the survey period, it has the potential to occur because suitable habitat exists in the BSA and the project is within the species' range.

Northern Harrier

While no CNDDDB records were listed in the 16-quadrangle CNDDDB search, multiple northern harrier (*Circus cyaneus*) sightings have been recorded between 2007 and 2016 within 2 miles of the project, with the closest and most recent (2014) observation located at Franklin Hot Springs on Creston Road, approximately 650 feet east of the project (eBird 2016). While this species was not observed during the survey period, it is likely to occur because suitable nesting and foraging habitat exists in the BSA and occurrences have been recorded in the area.

White-Tailed Kite

No white-tailed kite (*Elanus leucurus*) CNDDDB occurrences have been recorded within 5 miles of the project; however, multiple sightings have been recorded on eBird between 1988 and 2006 within 2 miles of the project. While this species was not observed during the survey period, it is likely to occur because suitable nesting and foraging habitat exists in the BSA and occurrences have been recorded in the area.

Bald Eagle

Eight bald eagle (*Haliaeetus leucocephalus*) sightings have been recorded within the vicinity of the project between 2006 and 2016, with the nearest observed (2015) approximately 0.35 mile west of the project near South River Road, at Lawrence Moore Park (eBird 2016). While this species was not observed during the survey period, it is likely to occur because suitable foraging habitat exists in the BSA, and occurrences have been recorded in the area.

Loggerhead Shrike

No loggerhead shrike (*Lanius ludovicianus*) CNDDDB occurrences have been recorded within 5 miles of the project; however, biologists observed several individuals in April 2016 in grassland and agricultural areas within 2 miles of the BSA. This species is likely to occur because suitable nesting and foraging habitat exists in the BSA and occurrences have been recorded in the area.

Purple Martin

There are no purple martin (*Progne subis*) CNDDDB occurrences recorded within 5 miles of the project. However, numerous sightings were recorded between 1990 and 2016 in Atascadero, with the nearest observation of two males within 5 miles northwest of the project near Wellsona Road and Jardine Road in 1991. Natural and urban landscapes in the BSA 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 habitat exists in the BSA, and the project is within the species' range.

Yellow Warbler

Twenty-one sightings of yellow warbler (*Dendroica petechial*) were recorded in 2014 at River Oaks Pond, approximately 2.5 miles north of Paso Robles Substation (eBird 2016). In addition, one sighting was recorded in 1991 within the BSA between the Creston Road and Charolais Road split (eBird 2016). Yellow warbler usually arrive in California in April to breed along watercourses and wetlands from mid-April into early August with a peak in June, and leave by October (CDFW 2016d). Freshwater ponds, hot springs, and watercourses located outside but adjacent to the BSA along Creston Road may provide suitable nesting habitat for this species. Habitat observed within the BSA at Huerhuero Creek lacks suitable nesting habitat due to absence of willows, wet thickets, and other small trees, but summer migrants may use woodland habitat during foraging activity. Suitable nesting and foraging habitat exists along Salinas River that parallels the western portion of the project along South River Road; however, the project is outside of the riparian corridor. Because of the presence of suitable nesting and foraging habitat and proximity to documented occurrences, yellow warblers have potential to occur in the BSA while foraging between April and October.

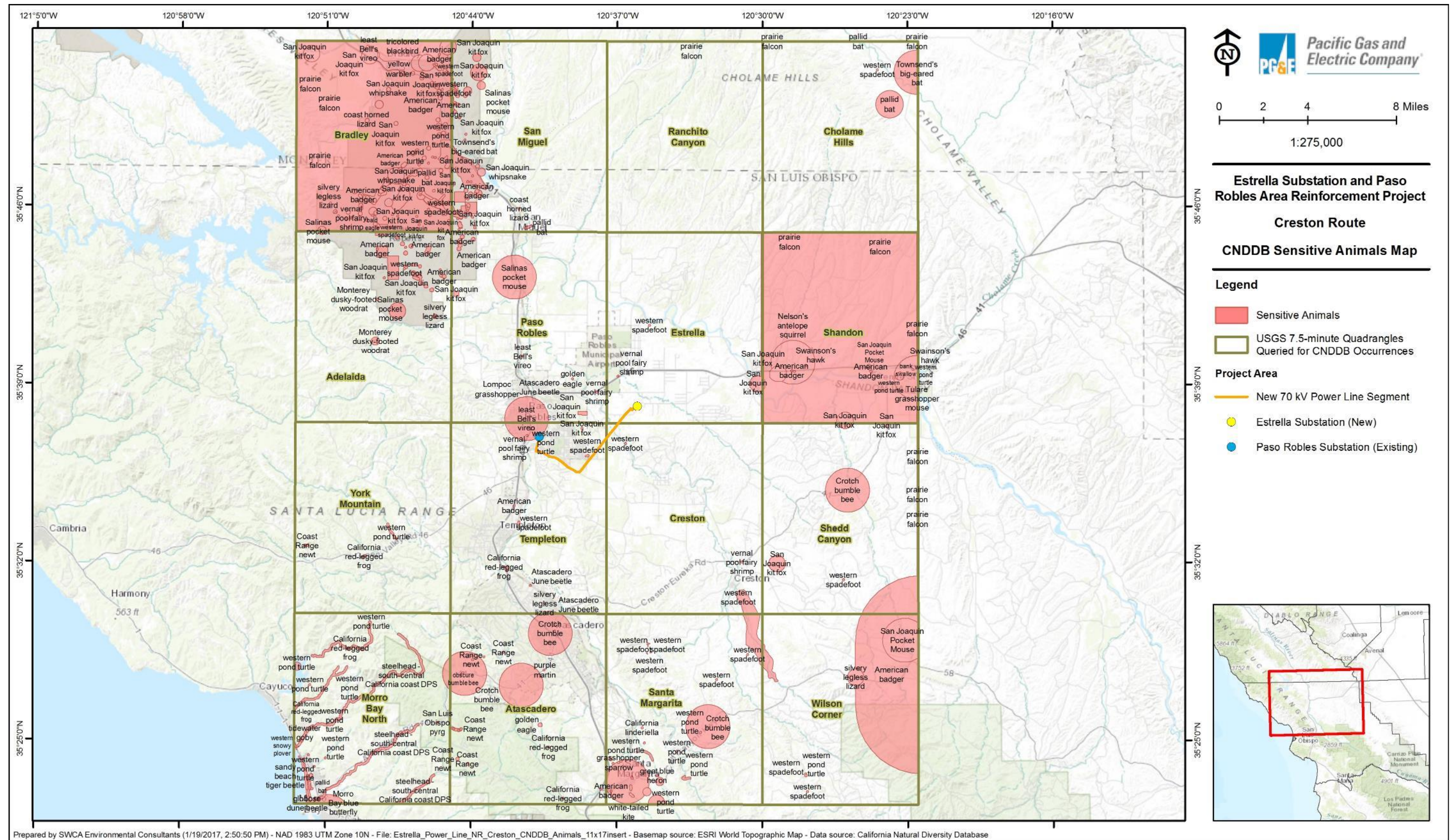
Least Bell's Vireo

One least Bell's vireo (*Vireo bellii pusillus*) CNDDDB occurrence was recorded approximately 3.63 miles north-northwest from the project in 2005 along Salinas River. No other sightings have been recorded in eBird, and this species was not observed during the survey period. Least Bell's vireo typically arrive in California during mid- to late-March and remain in their breeding grounds until September, at which time they migrate south (CDFW 2016d). Habitat observed in the BSA at Huerhuero Creek lacks suitable nesting habitat due to the absence of riparian strata composition required for breeding. Suitable nesting and foraging habitat exists along Salinas River that parallels the western portion of the project along South River Road; however, the project is outside of the riparian corridor. While this species was not observed during the survey period, it has the potential to occur between March and September because suitable foraging habitat exists in the BSA along the western portion of the project along South River Road, adjacent to Salinas River.

Pallid Bat

No pallid bat (*Antrozous pallidus*) CNDDDB occurrences have been recorded within 5 miles of the project. Oak woodland habitat with hollow trees, rural buildings, and barns with surrounding grassland were observed throughout the BSA, and may provide suitable roosting and foraging habitat for this species. While this species was not observed during the survey period, it has the potential to occur because suitable night roosts and foraging habitat exists in the BSA.

Figure 6. CNDDDB Records of Sensitive Animals in the Project Vicinity



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Monterey Dusky-Footed Woodrat

No Monterey dusky-footed woodrat (*Neotoma macrotis luciana*) CNDDDB occurrences have been recorded within 5 miles of the project. Biologists observed one woodrat midden in March 2016 while conducting surveys for Estrella Substation. The midden was observed outside of the BSA, approximately 0.5 mile north of Estrella Substation along Dry Creek. Dense woodlands located along the drainage north of Huerhuero Creek may provide suitable habitat for this species. While this species was not observed within the BSA during the survey period, it is likely to occur because suitable habitat exists in the BSA and the project is within the species' range.

Salinas Pocket Mouse

No Salinas pocket mouse (*Perognathus inornatus psammophilus*) CNDDDB occurrences have been recorded within 5 miles of the project. Oak woodland and grassland communities were observed throughout the BSA. While this species was not observed during the survey period, it has the potential to occur because suitable habitat exists in the BSA and the project is within the species' range.

American Badger

While several dozen American badger (*Taxidea taxus*) records were listed in the 16-quadrangle CNDDDB search, the nearest and most recent occurrence (2003) was recorded 2.57 miles south-southwest of the project. Expansive, open grassland and oak woodlands were observed throughout the BSA, as well as an abundance of prey species such as California ground squirrels (*Otospermophilus beecheyi*) and other small rodent species. While this species was not observed during the survey period, it is likely to occur because suitable foraging and refuge habitat exists in the BSA and occurrences have been recorded in the area.

San Joaquin Kit Fox

Over 40 San Joaquin kit fox (*Vulpes macrotis mutica*) CNDDDB occurrences were recorded in the 16-quadrangle search between 1971 and 2012, most of which have been recorded at Camp Roberts more than 8 miles to the north. One kit fox is known to have moved from Camp Roberts, approximately 12 miles northwest of the project, to the Carrizo Plain, located 40 miles southeast of the project (California State University, Stanislaus 2016). The last recorded San Joaquin kit fox occurrence in Camp Roberts was in 2004. 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. Salinas River, which bisects the Salinas River Valley and parallels the reconductoring segment of the project, is contiguous with off-site open space areas to the north and south. Huerhuero Creek, which bisects the project near its intersection with SR-46, is also connecting off-site natural open space areas to the northwest and southeast. These features may function as corridors, allowing free movement of kit fox. Deer fences observed throughout the BSA may provide migration barriers for San Joaquin kit fox throughout the BSA, especially in agricultural areas; however, there are no known significant barriers to dispersal or migration between the documented populations of San Joaquin kit fox in the Shandon Valley and Camp Roberts. The nearest kit fox occurrence to the BSA was recorded approximately 1 mile northwest of the project in 1991, approximately 0.9 mile southeast of the intersection of Union Road and Golden Hill Road.

Suitable habitat for San Joaquin kit fox was observed throughout the BSA. Grassland areas and blue oak woodlands observed within the BSA contained an abundance of prey species (e.g., California ground squirrel, small mammals, ground-nesting birds, and insects) and have the potential to provide foraging habitat or natal or nonnatal den sites for San Joaquin kit fox. This species may also occur in riparian areas throughout the BSA, such as ephemeral drainages, Salinas River, and Huerhuero Creek, while migrating through the area. Orchards and vineyards, similar to those observed in the BSA, have been reported to provide marginal habitat for this species due to their open structure and their underlying layer of herbaceous vegetation to support a prey base (Clark 2001; Warrick et al. 2007). No San Joaquin kit fox dens or sign of

San Joaquin kit fox (e.g., tracks) were observed during the 2016 field surveys. However, because of the presence of suitable habitat and documented occurrences, San Joaquin kit fox have potential to occur in the BSA.

4.4.3 Nesting Migratory Passerine Birds and Raptors

Nesting habitat for migratory passerine birds and raptors protected by the MBTA and California Fish and Game Code Section 3500 et seq. is present throughout the BSA, including trees, shrubs, and freshwater emergent wetland vegetation. In addition, several owl boxes were observed throughout the agricultural areas in the BSA. There is high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). Nesting is unlikely outside of the typical nesting season, although some avian species may forage year-round near the work zone.

5 DISCUSSION

No special-status plants or animals were observed in the BSA during the April 2016 reconnaissance-level field surveys. Fifteen special-status plant species were determined to have the potential to occur in the BSA, and 22 special-status wildlife species were determined to be either likely to occur or have potential to occur. There is also high potential for avian species to nest in the BSA during the typical nesting season (February 1–August 31). The BSA is located in federally designated vernal pool fairy shrimp critical habitat and suitable habitat for this species was observed within the BSA.

Huerhuero Creek and four other unnamed ephemeral drainages were observed throughout the BSA. In addition, two seasonal wetlands with associated drainage swale features were preliminarily mapped within the BSA. These features may be subject to USACE, CDFW, and/or RWQCB jurisdiction. Drainage features may also serve as wildlife migration corridors for dispersal of species between local areas and at larger scales between regions.

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Appendix A. Flora Compendium

Table A-1. Flora Compendium

Scientific Name*	Common Name	Native	Species Status
ANGIOSPERMS (DICOTS)			
Anacardiaceae		Sumac family	
<i>Rhus aromatic</i>	skunkbrush	Yes	
<i>Rhus integrifolia</i>	lemonaid berry	Yes	
<i>Schinus molle</i>	Peruvian pepper tree	No	
<i>Toxicodendron diversilobum</i>	poison oak	Yes	
Apiaceae		Carrot family	
<i>Bowlesia incana</i>	bowlesia	Yes	
<i>Daucus pusillus</i>	rattle snake weed	Yes	
<i>Eryngium vaseyi</i>	Coyote thistle		
<i>Foeniculum vulgare</i>	sweet fennel	No	
<i>Lomatium californicum</i>	California lomatium	Yes	
<i>Sanicula arguta</i>	sharp toothed sanicle	Yes	
<i>Sanicula crassicaulis</i>	Pacific snakeroot	Yes	
<i>Torilis nodosa</i>	none	No	
<i>Torilis arvensis</i>	field hedge parsley	No	
Asclepiadaceae		Milkweed family	
<i>Asclepias eriocarpa</i>	Indian milkweed	Yes	
<i>Asclepias fascicularis</i>	narrow-leaf milkweed	Yes	
Asteraceae		Sunflower family	
<i>Achillea millefolium</i>	yarrow	Yes	
<i>Achyrachaena mollis</i>	blow-wives	Yes	
<i>Ambrosia psilostachya</i>	western ragweed	Yes	
<i>Baccharis pilularis</i> var. <i>consanguinea</i>	coyote brush	Yes	
<i>Carduus pycnocephalus</i>	Italian thistle	No	
<i>Centaurea melitensis</i>	tocolote	No	
<i>Centaurea solstitialis</i>	yellow star-thistle	No	
<i>Corethrogyne filaginifolia</i>	California aster	Yes	
<i>Cynara cardunculus</i>	artichoke thistle	No	
<i>Deinandra corymbosa</i>	coast tarweed	Yes	
<i>Erigeron bonariensis</i>	flax-leaved horseweed	No	
<i>Erigeron canadensis</i>	horseweed	Yes	
<i>Eriophyllum confertifolium</i>	golden yarrow	Yes	
<i>Helianthus gracilentus</i>	Slender sunflower	Yes	

Scientific Name*	Common Name	Native	Species Status
<i>Hesperevax sparsiflora</i>	erect dwarf cudweed	Yes	
<i>Heterotheca grandiflora</i>	telegraph weed	Yes	
<i>Hypochaeris glabra</i>	smooth cat's ear	No	
<i>Lactuca saligna</i>	slender lettuce	No	
<i>Lactuca serriola</i>	prickly lettuce	No	
<i>Logfia gallica</i>	narrow-leafed filago	No	
<i>Matricaria discoidea</i>	pineapple weed	Yes	
<i>Micropus californicus</i> var. <i>californicus</i>	slender cottonweed	Yes	
<i>Psilocarphus tenellus</i>	slender woolly heads	Yes	
<i>Silybum marianum</i>	milk thistle	No	
<i>Sonchus oleraceus</i>	sow thistle	No	
<i>Stephanomeria</i> sp.	Wire lettuce	na	
<i>Taraxacum officinale</i>	dandelion	No	
<i>Tragopogon porrifolius</i>	purple salsify	No	
<i>Xanthium spinosum</i>	spiny cocklebur	Yes	
Boraginaceae	Borage family		
<i>Amsinckia intermedia</i>	Common fiddleneck	Yes	
<i>Amsinckia menziesii</i>	Small flowered fiddleneck	Yes	
Brassicaceae	Mustard family		
<i>Brassica nigra</i>	black mustard	No	
<i>Capsella bursa-pastoris</i>	Shepherd's purse	No	
<i>Cardamine californica</i>	milk maids	Yes	
<i>Hirschfeldia incana</i>	summer mustard	No	
<i>Lepidium didymium</i>	Lesser swine grass	No	
<i>Sisymbrium officinale</i>	hedge mustard	No	
Caprifoliaceae	Honeysuckle family		
<i>Lonicera interrupta</i>	honeysuckle	Yes	
<i>Sambucus nigra</i>	black elderberry	Yes	
Caryophyllaceae	Pink family		
<i>Cerastium glomeratum</i>	mouseear chickweed	No	
<i>Stellaria media</i>	chickweed	No	
Chenopodiaceae	Goosefoot family		
<i>Atriplex prostrata</i>	fathen	No	
<i>Atriplex semibaccata</i>	Australian saltbush	No	
<i>Chenopodium album</i>	pigweed	No	

Scientific Name*	Common Name	Native	Species Status
<i>Chenopodium californicum</i>	California pigweed	Yes	
<i>Salsola tragus</i>	Russian thistle	No	
Cistaceae	Rock-rose family		
<i>Cistus monspeliensis</i>	resinous rockrose	No	
Convolvulaceae	Morning glory family		
<i>Convolvulus arvensis</i>	bindweed	No	
Crassulaceae	Stonecrop family		
<i>Crassula connata</i>	pygmy weed	Yes	
Cucurbitaceae	Gourd family		
<i>Marah fabaceus</i> var. <i>fabaceus</i>	wild cucumber	Yes	
Euphorbiaceae	Spurge family		
<i>Croton setiger</i>	doveweed/turkey mullein	Yes	
<i>Euphorbia ocellata</i> ssp. <i>ocellata</i>	valley spurge	Yes	
<i>Euphorbia peplus</i>	petty spurge	No	
Fabaceae	Pea family		
<i>Acmispon americanus</i>	Spanish lotus	Yes	
<i>Acmispon glaber</i>	deer weed	Yes	
<i>Cercis occidentalis</i>	Redbud	Yes	
<i>Lupinus bicolor</i>	miniature lupine	Yes	
<i>Lupinus microcarpus</i> var. <i>microcarpus</i>	Chick lupine	Yes	
<i>Lupinus nanus</i>	sky lupine	Yes	
<i>Melilotus indica</i>	sourclover	No	
<i>Medicago polymorpha</i>	bur clover	No	
<i>Trifolium hirtum</i>	rose clover	No	
<i>Trifolium microcephalum</i>	small headed clover	Yes	
<i>Trifolium wildenovii</i>	Tomcat clover	Yes	
<i>Vicia americana</i> var. <i>americana</i>	American vetch	Yes	
<i>Vicia villosa</i>	hairy vetch	No	
Fagaceae	Oak family		
<i>Quercus agrifolia</i>	coast live oak	Yes	
<i>Quercus douglasii</i>	blue oak	Yes	
<i>Quercus lobata</i>	valley oak	Yes	
Geraniaceae	Geranium family		
<i>Erodium cicutarium</i>	red-stemmed filaree	No	
<i>Erodium botrys</i>	filaree	No	
<i>Erodium moschatum</i>	White stemmed filaree	No	

Scientific Name*	Common Name	Native	Species Status
Lamiaceae	Mint Family		
<i>Marrubium vulgare</i>	horehound	No	
Malvaceae	Mallow family		
<i>Malva parviflora</i>	cheeseweed	No	
Montiaceae	Minor's lettuce family		
<i>Claytonia perfoliata</i>	miners lettuce	Yes	
Onagraceae	Evening primrose family		
<i>Clarkia bottsae</i>	punch bowl clarkia	Yes	
<i>Clarkia purpurea</i> ssp <i>quadrivulnera</i>	purple clarkia	Yes	
<i>Clarkia unguiculata</i>	elegant clarkia	Yes	
Orobanchaceae	Broomrape family		
<i>Castilleja</i> sp.	Owl's clover	Yes	
<i>Cordylanthus rigidus</i>	Rigid bird's beak	Yes	
Papaveraceae	Poppy family		
<i>Eschscholzia californica</i>	California poppy	Yes	
Phrymaceae	lopseed family		
<i>Mimulus aurantiacus</i>	sticky monkey flower	Yes	
Plantaginaceae	Plantain family		
<i>Collinsia heterophylla</i>	Chinese houses	Yes	
<i>Plantago erecta</i>	California plantain	Yes	
<i>Plantago lanceolata</i>	English plantain	No	
<i>Plantago coronopus</i>	cut leaf plantain	No	
Plantanaceae	Sycamore family		
<i>Platanus racemosa</i>	western sycamore	Yes	
Polemoniaceae	Phlox family		
<i>Gilia clivorum</i>	Purple spot gilia	Yes	
<i>Navarretia atractyloides</i>	holly leaf navarretia	Yes	
<i>Navarretia pubescens</i>	downy navarretia	Yes	
Polygonaceae	Buckwheat family		
<i>Eriogonum elegans</i>	elegant buckwheat	Yes	Rank 4.3
<i>Eriogonum gracilianum</i>	slender-stemmed buckwheat	Yes	
<i>Polygonum aviculare</i>	prostrate knotweed	No	
<i>Rumex acetosella</i>	sheep sorrel	No	
<i>Rumex crispus</i>	curly dock	No	
<i>Rumex pulcher</i>	fiddle dock	No	

Scientific Name*	Common Name	Native	Species Status
Ranunculaceae	Buttercup family		
<i>Delphinium parryi</i>	San Bernardino larkspur	Yes	
<i>Ranunculus californica</i>	California buttercup	Yes	
Rhamnaceae	Buckthorn family		
<i>Ceanothus cuneatus</i> var. <i>cuneatus</i>	wedgeleaf ceanothus	Yes	
<i>Frangula californica</i>	coffeeberry	Yes	
<i>Rhamnus crocea</i>	spiny redberry	Yes	
Rosaceae	Rose family		
<i>Prunus ilicifolia</i>	Holly leaf cherry	Yes	
Rubiaceae	Madder family		
<i>Galium andrewsii</i>	phlox-leaved bedstraw	Yes	
<i>Galium aparine</i>	goose grass	Yes	
Scrophulariaceae	Figwort family		
<i>Verbascum virgatum</i>	wand mullein	No	
Solanaceae	Nightshade family		
<i>Datura stramonium</i>	jimson weed	No	
Tamaricaceae	Tamarix family		
<i>Tamarix ramosissima</i>	Tamarisk	No	
Urticaceae	Nettle family		
<i>Urtica urens</i>	dwarf nettle	No	
Verbenaceae	Verbena family		
<i>Verbena lasiostachys</i>	common vervain	No	
Violaceae	Violet family		
<i>Viola pedunculata</i>	Johnny jump-up	Yes	
Zygophyllaceae	Caltrop family		
<i>Tribulus terrestris</i>	puncture vine	No	
ANGIOSPERMS (MONOCOTS)			
Cyperaceae	Sedge family		
<i>Cyperus eragrostis</i>	tall flat sedge	Yes	
Liliaceae	Lily family		
<i>Bloomeria crocea</i>	common goldenstar	Yes	
<i>Brodiaea elegans</i> ssp. <i>elegans</i>	harvest brodiaea	Yes	
<i>Calochortus luteus</i>	Yellow mariposa lily	Yes	
<i>Calochortus splendens</i>	Splendid mariposa lily	Yes	
<i>Calochortus venustus</i>	Butterfly mariposa lilly	Yes	

Scientific Name*	Common Name	Native	Species Status
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	soap plant	Yes	
Melanthiaceae	False Hellebore family		
<i>Toxicoscordion fremontii</i>	Fremont's star lily	Yes	
Poaceae	Grass family		
<i>Avena barbata</i>	slender wild oats	No	
<i>Avena fatua</i>	wild oats	No	
<i>Bromus arenarius</i>	Australian chess	No	
<i>Bromus carinatus</i>	California brome	Yes	
<i>Bromus diandrus</i>	ripgut brome	No	
<i>Bromus hordeaceus</i>	soft chess brome	No	
<i>Bromus madritensis</i>	Spanish brome	No	
<i>Bromus rubens</i>	red brome	No	
<i>Cordaderia jubata</i>	pampas grass	No	
<i>Cynodon dactylon</i>	Bermuda grass	No	
<i>Elymus glaucus</i>	blue wild rye	yes	
<i>Elymus caput-medusae</i>	medusahead	No	
<i>Elymus triticoides</i>	creeping wild-rye	Yes	
<i>Festuca bromoides</i>	brome fescue	No	
<i>Festuca microstachys</i>	small fescue	Yes	
<i>Festuca myuros</i>	rattail fescue	No	
<i>Festuca perennis</i>	Italian ryegrass	No	
<i>Gastridium phleoides</i>	nit grass	No	
<i>Hordeum brachyantherum</i>	meadow barley	Yes	
<i>Hordeum murinum</i> ssp. <i>leporinum</i>	foxtail	No	
<i>Hordeum vulgare</i> .	barley (crop)	No	
<i>Stipa pulchra</i>	purple needle-grass	Yes	
<i>Stipa cernua</i>	nodding needle grass	Yes	
Typhaceae	Cattail family		
<i>Typha latifolia</i>	cattail	Yes	

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

Appendix B. Fauna Compendium

Table B-1. Fauna Compendium

Scientific Name	Common Name
BIRDS	
Dabbling Ducks	
<i>Anus platyrhynchos</i>	mallard duck
Diurnal Raptors	
<i>Cathartes aura</i>	turkey vulture
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Falco sparverius</i>	American kestrel
Upland Game Birds	
<i>Callipela californica</i>	California quail
Pigeons and Doves	
<i>Zenaida macroura</i>	mourning dove
<i>Streptopelia decaocto</i>	Eurasian colored dove
<i>Columba livia</i>	rock pigeon
Hummingbirds	
<i>Calypte anna</i>	Anna's hummingbird
Woodpeckers	
<i>Colaptes auratus</i>	northern red-shafted flicker
<i>Melanerpes formicivorus</i>	acorn woodpecker
<i>Picoides nuttallii</i>	Nuttall's woodpecker
<i>Picoides pubescens</i>	downy woodpecker
Tyrant Flycatchers	
<i>Contopus sordidulus</i>	western wood-pewee
<i>Sayornis nigricans</i>	black phoebe
<i>Tyrannus verticalis</i>	western kingbird
Jays, Crows, and Allies	
<i>Aphelocoma californica</i>	western scrub jay
<i>Corvus brachyrhynchos</i>	American crow
Larks	
<i>Eremophila alpestris</i>	horned lark
Swallows	
<i>Hirundo rustica</i>	barn swallow
<i>Petrochelidon pyrrhonota</i>	cliff swallow
Chickadees, Nuthatches, and Allies	
<i>Baeolophus inornatus</i>	oak titmouse
<i>Psaltriparus minimus</i>	bush tit

Scientific Name	Common Name
Wrens	
<i>Thryomanes bewickii</i>	Bewick's wren
Dipper and Wrentit	
<i>Chamaea fasciata</i>	wrentit
Thrushes	
<i>Sialia currucoides</i>	mountain bluebird
<i>Sialia mexicana</i>	western bluebird
<i>Turdus migratorius</i>	American robin
<i>Toxostoma redivivum</i>	California thrasher
Mimids	
<i>Mimus polyglottos</i>	northern mockingbird
Waxwings, silky-flycatchers, and Starlings	
<i>Sternus vulgaris</i>	European starling
<i>Bombycilla cedrorum</i>	cedar waxwing
Emberizine Sparrows and Allies	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
<i>Passer domesticus</i>	house sparrow
<i>Pipilo crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
<i>Junco hyemalis</i>	dark-eyed junco
Icterids	
<i>Sturnella neglecta</i>	western meadowlark
<i>Agelaius phoeniceus</i>	red-winged blackbird
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Quiscalus quiscula</i>	great-tailed grackle
Finches, and Old World Sparrows	
<i>Carpodacus mexicanus</i>	house finch
<i>Carduelis tristis</i>	American goldfinch
<i>Carpodacus purpureus</i>	purple finch
<i>Spinus psaltria</i>	lesser goldfinch
MAMMALS	
Lagomorphs	
<i>Sylvilagus bachmanii</i>	brush rabbit
Rodents	
<i>Sciurus griseus</i>	western gray squirrel
<i>Spermophilus beecheyii</i>	California ground squirrel

Scientific Name	Common Name
Ruminantia	
<i>Odocoileus hemionus californicus</i>	black-tailed deer
Reptiles	
<i>Elgaria multicarinata multicarinata</i>	California alligator lizard
<i>Sceloporus occidentalis</i>	western fence lizard

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Appendix C. Photo Documentation



Photo 1: View facing west on the south side of Creston Road within the 70 kV reconductoring segment buffer. Intermittent housing surrounded by open areas and blue oak woodlands.



Photo 2: View facing east on Creston Road toward the eastern portion of the project. Dense housing on the north side of Creston Road, intermittent space on the south side.



Photo 3: View facing northeast where the new 70 kV power line will span Creston Road. Also, view showing portion of the approximately 800-foot by 1,000-foot proposed staging area on the eastern portion of the route within nonnative grassland. Drainage and swales were observed within this area.



Photo 4: View showing detention pond located on Creston Road across from the LCSLO parcel. Potential aquatic habitat for vernal pool species, western spadefoot toad, and California red-legged frog.



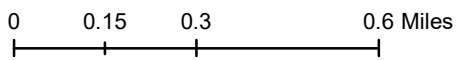
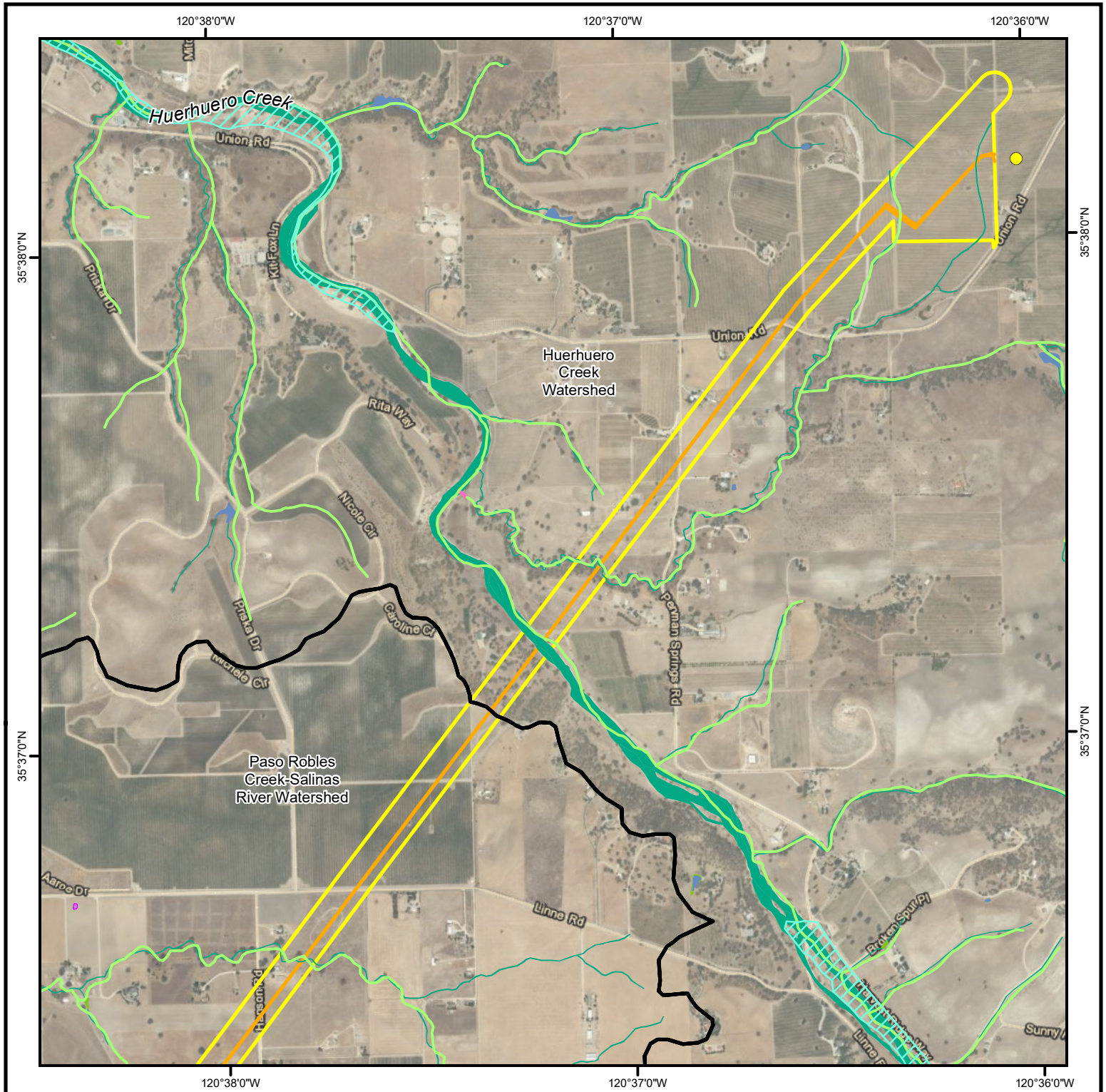
Photo 5: View facing southwest of a cattle pond (red arrow) near Meadowlark Road. CNDDDB occurrence for western spadefoot toad at this location. Note, swale topography and upland habitat. Potential habitat for vernal pool species, and western spadefoot toad..



Photo 6: View facing northeast of a cattle pond just south of Huerhuero Creek. Potential habitat for vernal pool species, and western spadefoot toad.

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



1:20,000

Estrella Substation and Paso Robles Area Reinforcement Project

**Creston Route
NWI/NHD Map**

Project Area

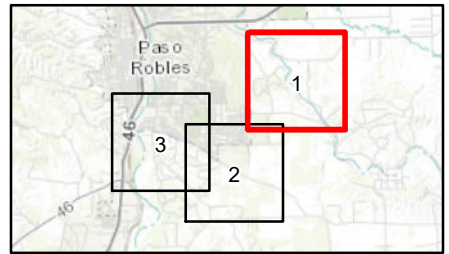
- New 70 kV Power Line Segment
- Estrella Substation (New)

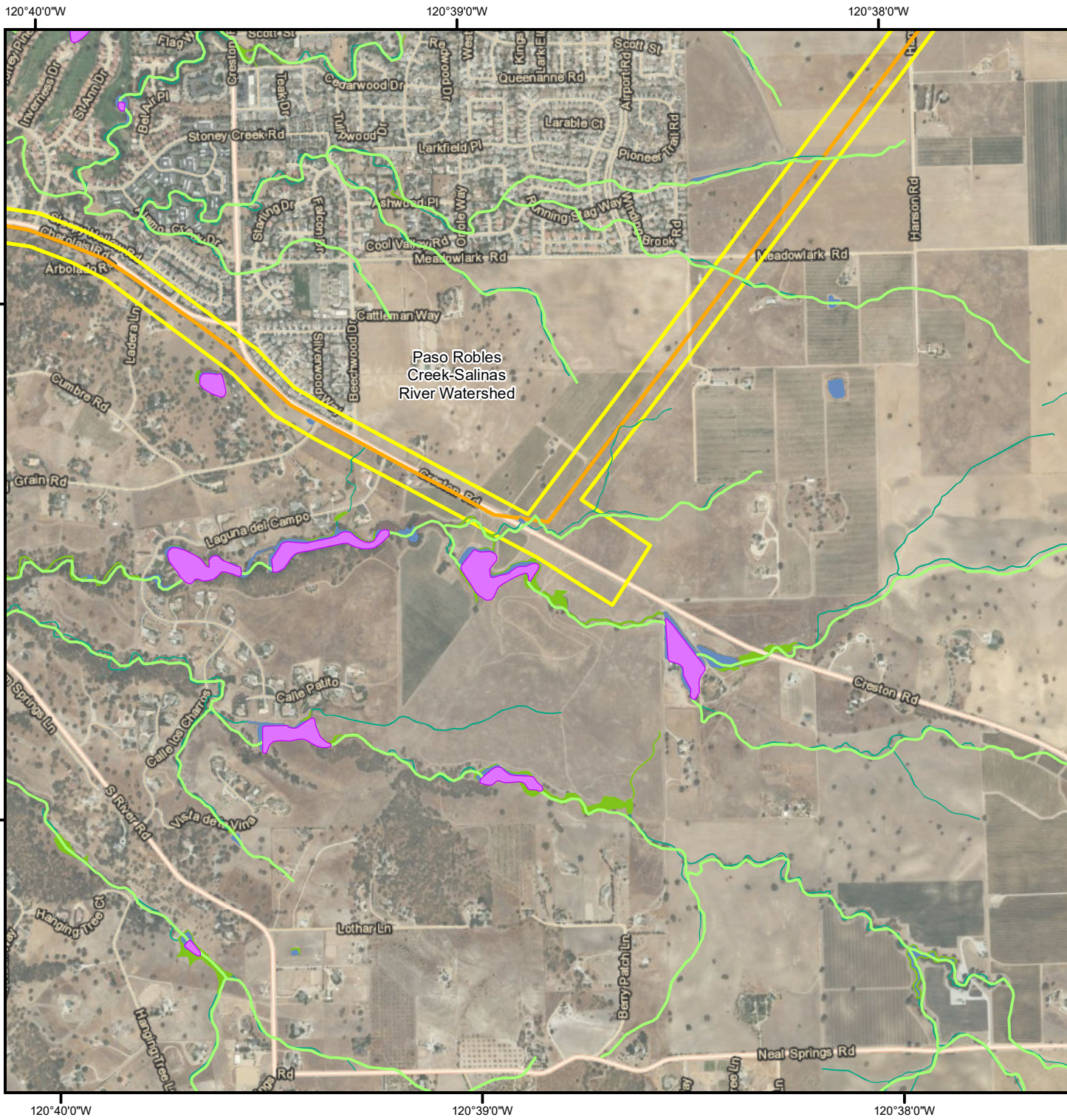
National Hydrography Dataset

- Lake/Pond
- Wash
- Connector
- Stream/River
- Watershed Boundary (Hydrologic Unit 10)

National Wetlands Inventory

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





120°40'0"W 120°39'0"W 120°38'0"W

0 0.15 0.3 0.6 Miles

1:20,000

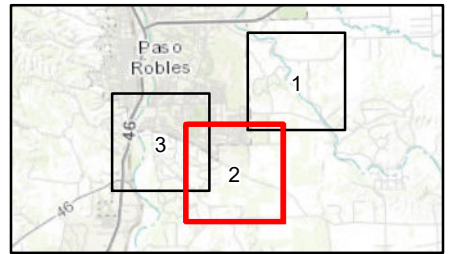
Estrella Substation and Paso Robles Area Reinforcement Project

Creston Route

NWI/NHD Map

- Project Area**
- New 70 kV Power Line Segment
- National Hydrography Dataset**
- Lake/Pond
 - - - Artificial Path
 - Stream/River
 - Watershed Boundary (Hydrologic Unit 10)

- National Wetlands Inventory**
- Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Riverine



120°41'0"W

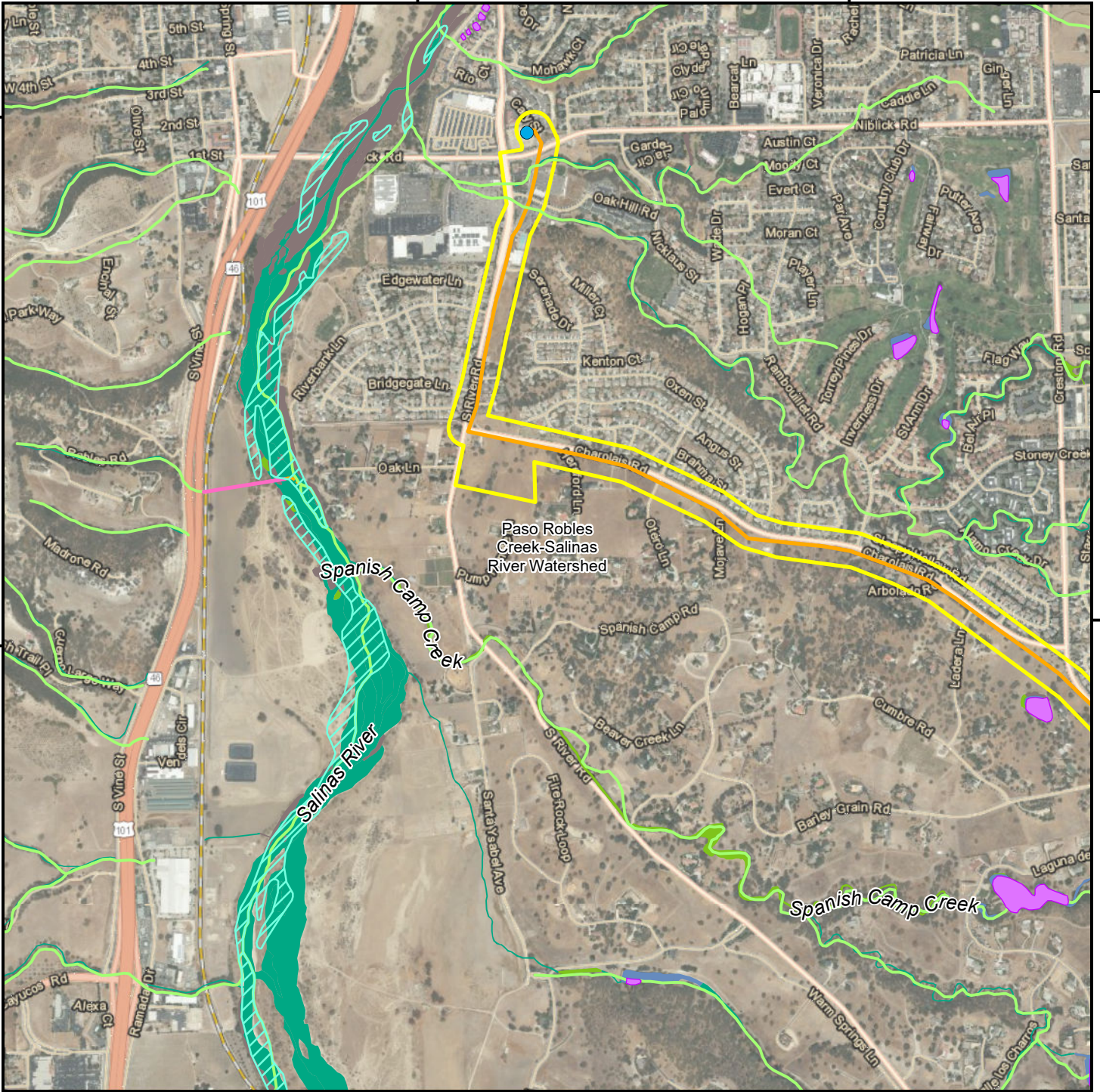
120°40'0"W

35°37'0"N

35°37'0"N

35°36'0"N

35°36'0"N



120°42'0"W

120°41'0"W

120°40'0"W





0 0.15 0.3 0.6 Miles

1:20,000







Estrella Substation and Paso Robles Area Reinforcement Project

**Creston Route
NWI/NHD Map**





Project Area

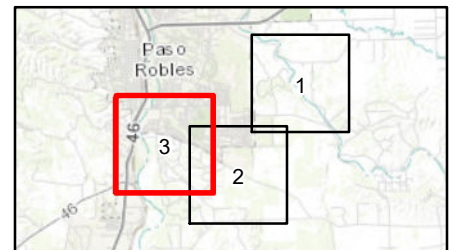
-  New 70 kV Power Line Segment
-  Paso Robles Substation (Existing)

National Hydrography Dataset

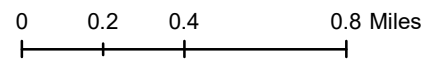
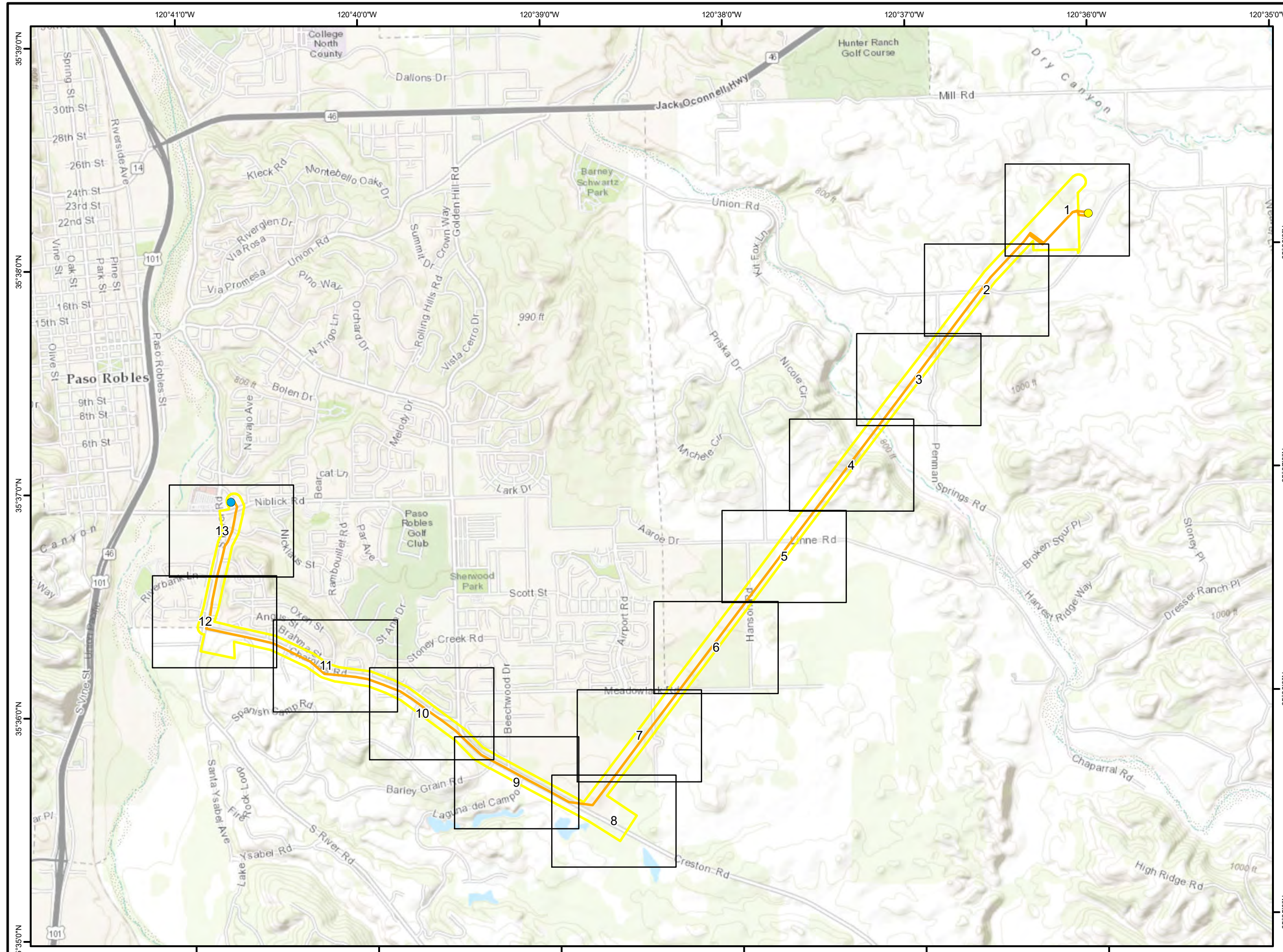
-  Lake/Pond
-  Wash
-  Artificial Path
-  Connector
-  Stream/River
-  Watershed Boundary (Hydrologic Unit 10)

National Wetlands Inventory

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



Appendix E. Biological Resource Map








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Estrella Substation and Paso Robles Area Reinforcement Project

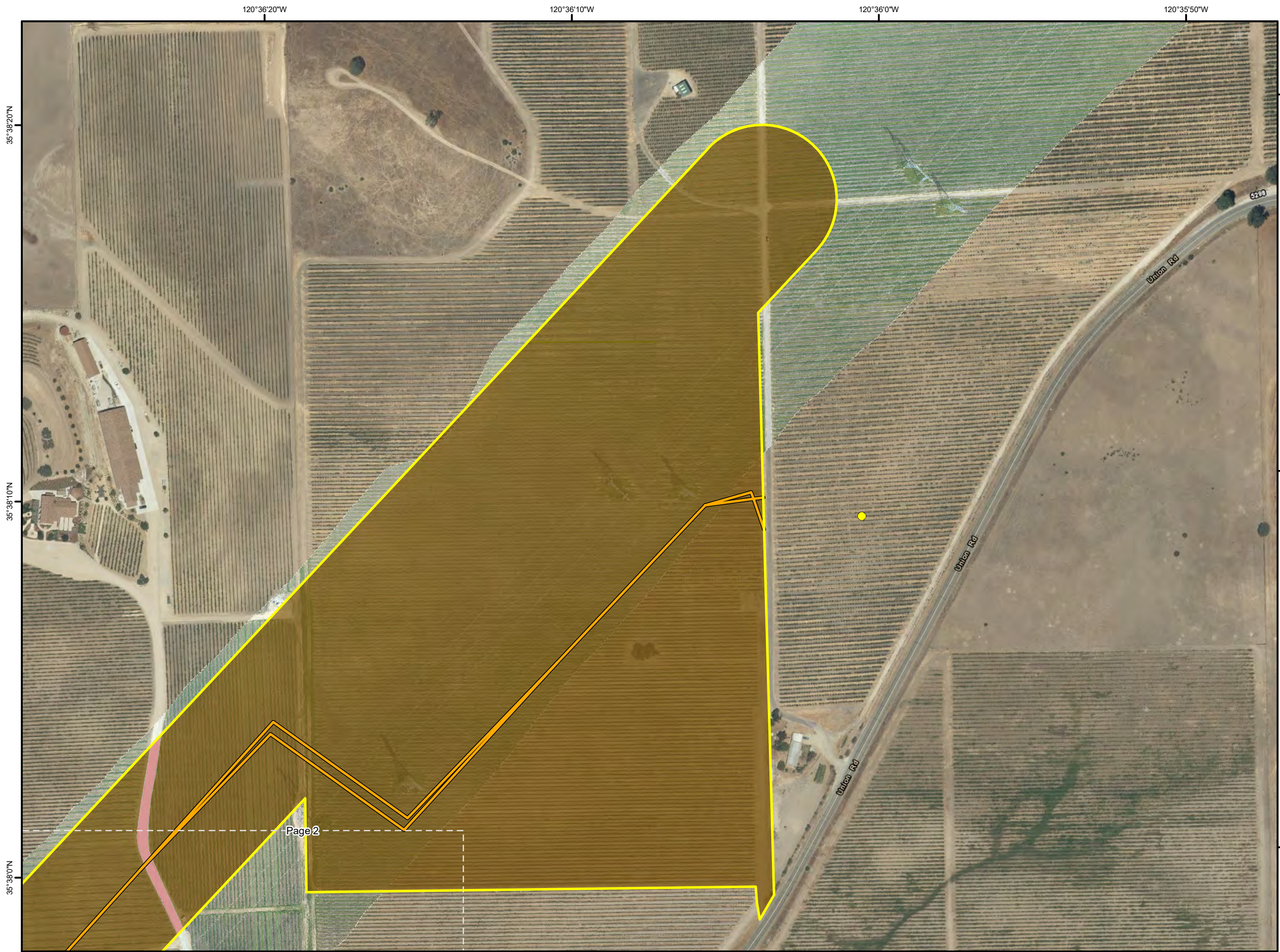
Creston Route



Biological Resources Map Index Sheet

Legend

-  Mapbook Page
-  Biological Study Area
- Project Area**
-  New 70 kV Power Line Segment
-  Estrella Substation (New)
-  Paso Robles Substation (Existing)










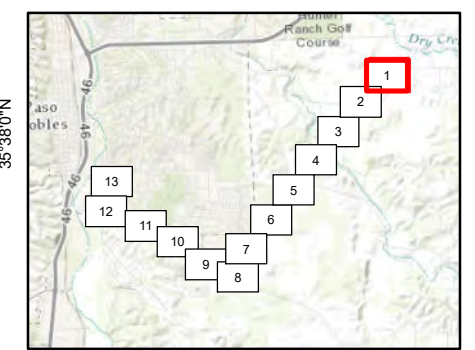



0 100 200 400 Feet
 1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
 Page 1 of 13

- Legend**
-  Biological Study Area
 - Project Area**
 -  New 70 kV Power Line Segment
 -  Estrella Substation (New)
 - Vegetation Communities**
 -  Agricultural
 -  Urban/developed

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



120°36'50"W 120°36'40"W 120°36'30"W 120°36'20"W

35°38'0"N

35°37'50"N

35°37'40"N

35°38'0"N

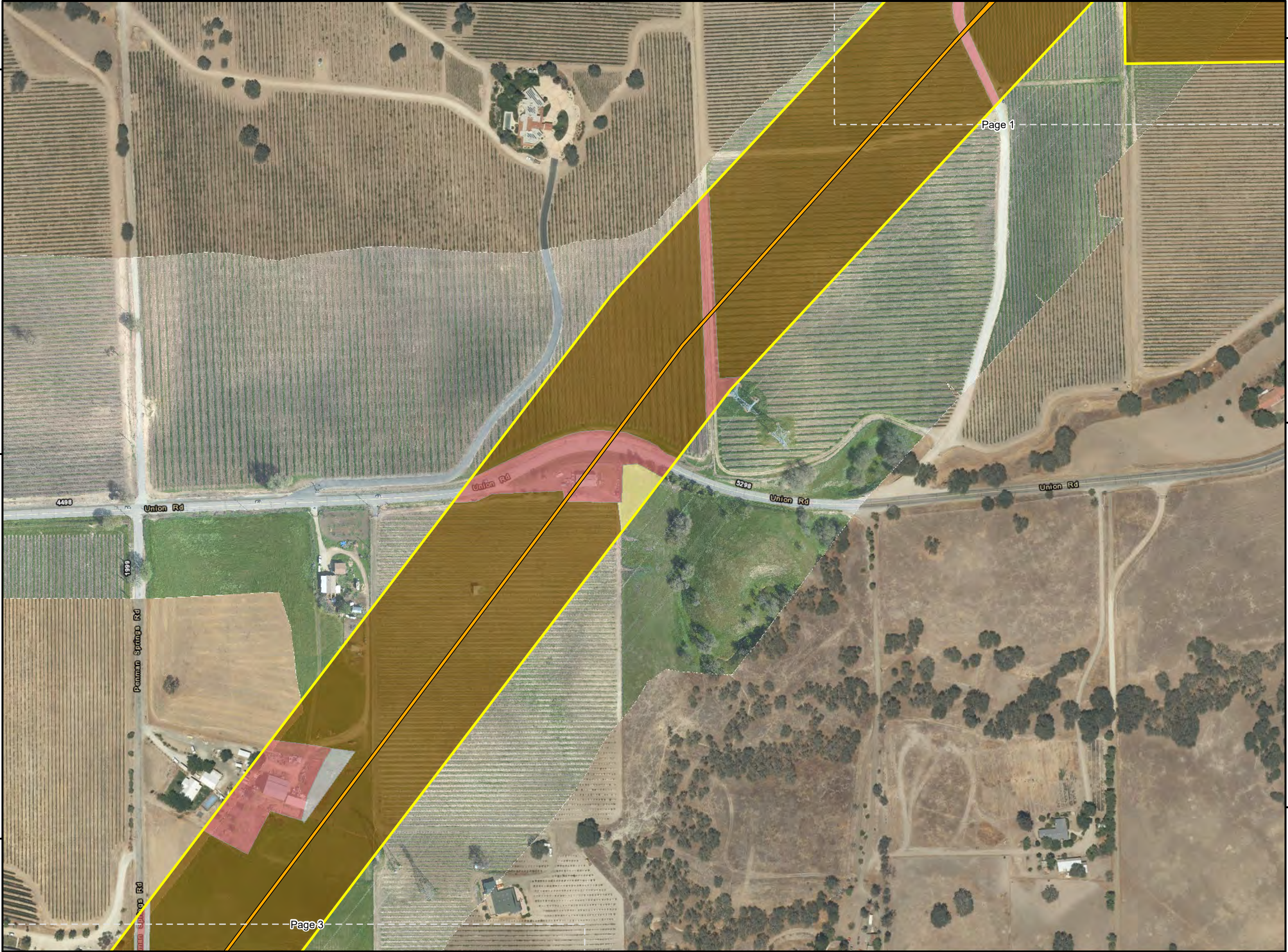
35°37'50"N

35°37'40"N

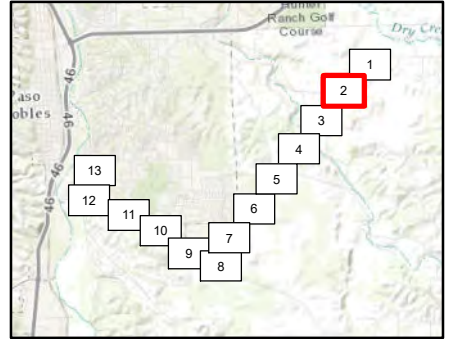
0 100 200 400 Feet
1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
Page 2 of 13

- Legend**
- Biological Study Area
 - Project Area**
 - New 70 kV Power Line Segment
 - Vegetation Communities**
 - Agricultural
 - Nonnative grassland
 - Ruderal
 - Urban/developed



Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



120°37'10"W

120°37'0"W

120°36'50"W

120°36'40"W



0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
 Page 3 of 13

Legend

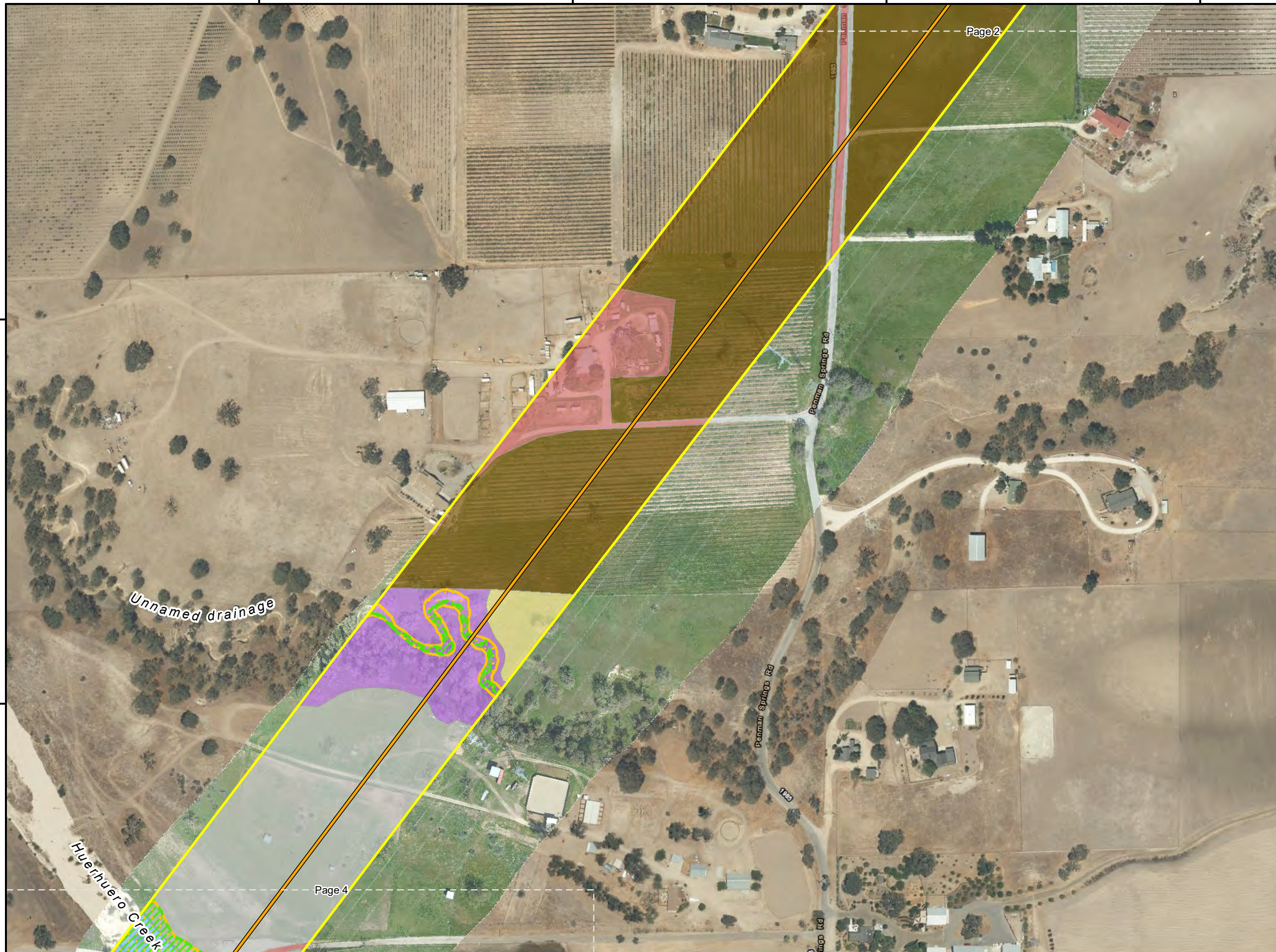
- Biological Study Area
- Project Area**
- New 70 kV Power Line Segment
- Vegetation Communities**
- Agricultural
- Blue oak woodland
- Nonnative grassland
- Ruderal
- Sandy wash
- Urban/developed
- Potential Jurisdictional Waters**
- Potential CDFW Jurisdiction
- Potential USACE Jurisdiction
- Potential USACE/CDFW Jurisdiction

35°37'30"N

35°37'30"N

35°37'20"N

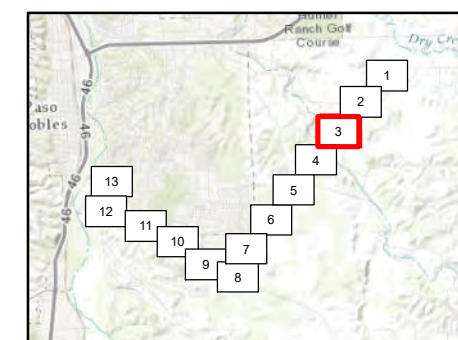
35°37'20"N



Page 2

Page 4

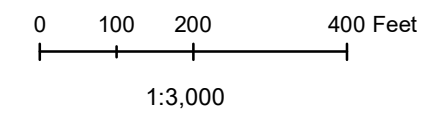
Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



120°37'40"W 120°37'30"W 120°37'20"W 120°37'10"W


35°37'10"N

35°37'0"N

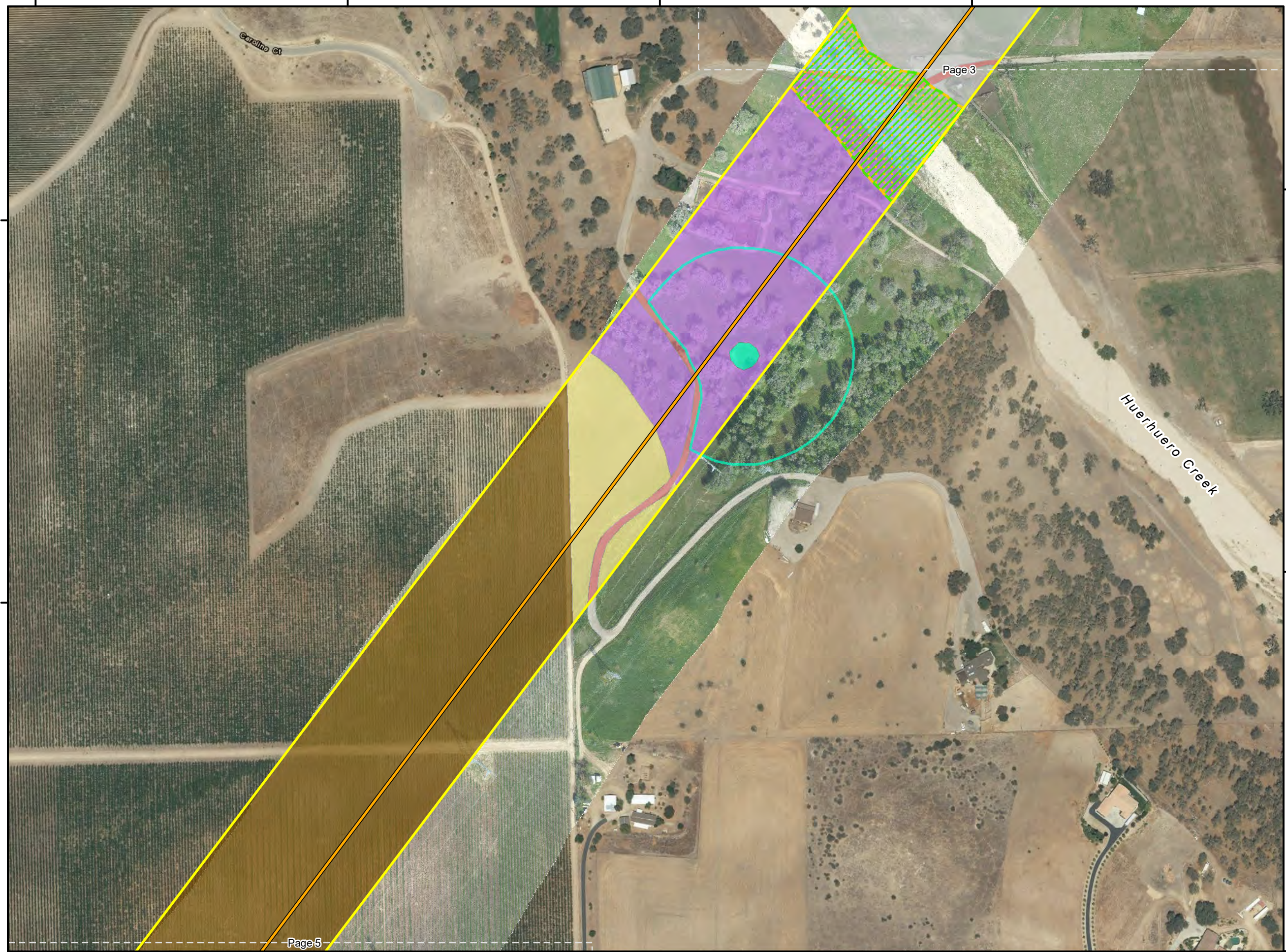
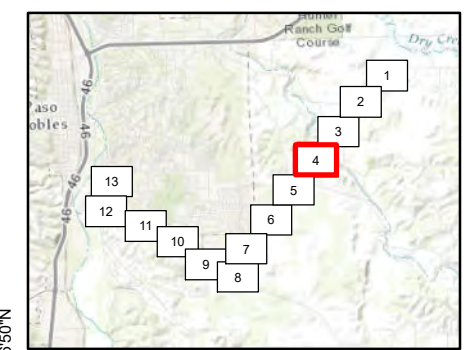


Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
Page 4 of 13

Legend

-  Biological Study Area
- Project Area**
-  New 70 kV Power Line Segment
- Vegetation Communities**
-  Agricultural
-  Blue oak woodland
-  Nonnative grassland
-  Ruderal
-  Sandy wash
-  Urban/developed
- Other Features**
-  Cattle pond - Potential vernal pool/vernal pool species habitat
-  Potential vernal pool species habitat buffer
- Potential Jurisdictional Waters**
-  Potential USACE/CDFW Jurisdiction

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



35°36'50"N

120°38'0"W

120°37'50"W

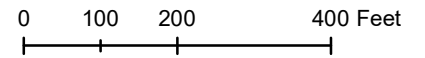
120°37'40"W

120°37'30"W

35°36'50"N

35°36'40"N

35°36'30"N



1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
 Page 5 of 13

Legend

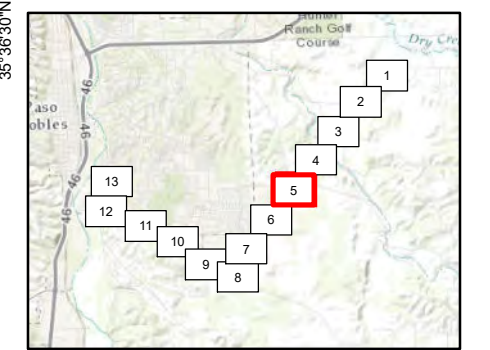
- Biological Study Area
- Project Area**
- New 70 kV Power Line Segment
- Vegetation Communities**
- Agricultural
- Nonnative grassland
- Ruderal
- Urban/developed
- Potential Jurisdictional Waters**
- Potential USACE/CDFW Jurisdiction



Page 4

Page 6

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



120°38'20"W

120°38'10"W

120°38'0"W

120°37'50"W



0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

Creston Route Biological Resources Map

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Legend

Biological Study Area

Project Area

New 70 kV Power Line Segment

Vegetation Communities

Agricultural

Nonnative grassland

Ruderal

Urban/developed

Other Features

Potential vernal pool species habitat buffer

35°36'20"N

35°36'10"N

35°36'20"N

35°36'10"N

Page 5

Page 7

Meadowlark Rd

Hanson Rd

Hanson Rd

Hanson Rd

Hanson Rd

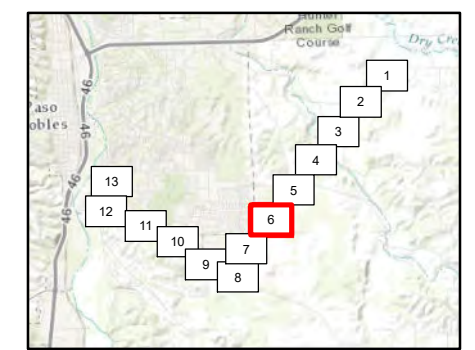
Hanson Rd

Hanson Rd

Hanson Rd

Meadowlark Rd

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



120°38'50"W 120°38'40"W 120°38'30"W 120°38'20"W

Meadowlark Rd

Meadowlark Rd

Page 6

3398

Meadowlark Rd

Meadowlark Rd

Page 8

Page 9



0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
Page 7 of 13

Legend

Biological Study Area

Project Area

New 70 kV Power Line Segment

Vegetation Communities

Agricultural

Nonnative grassland

Urban/developed

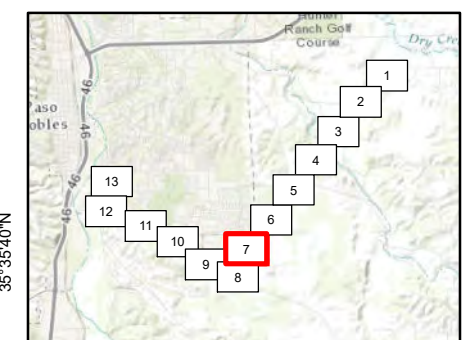
Other Features

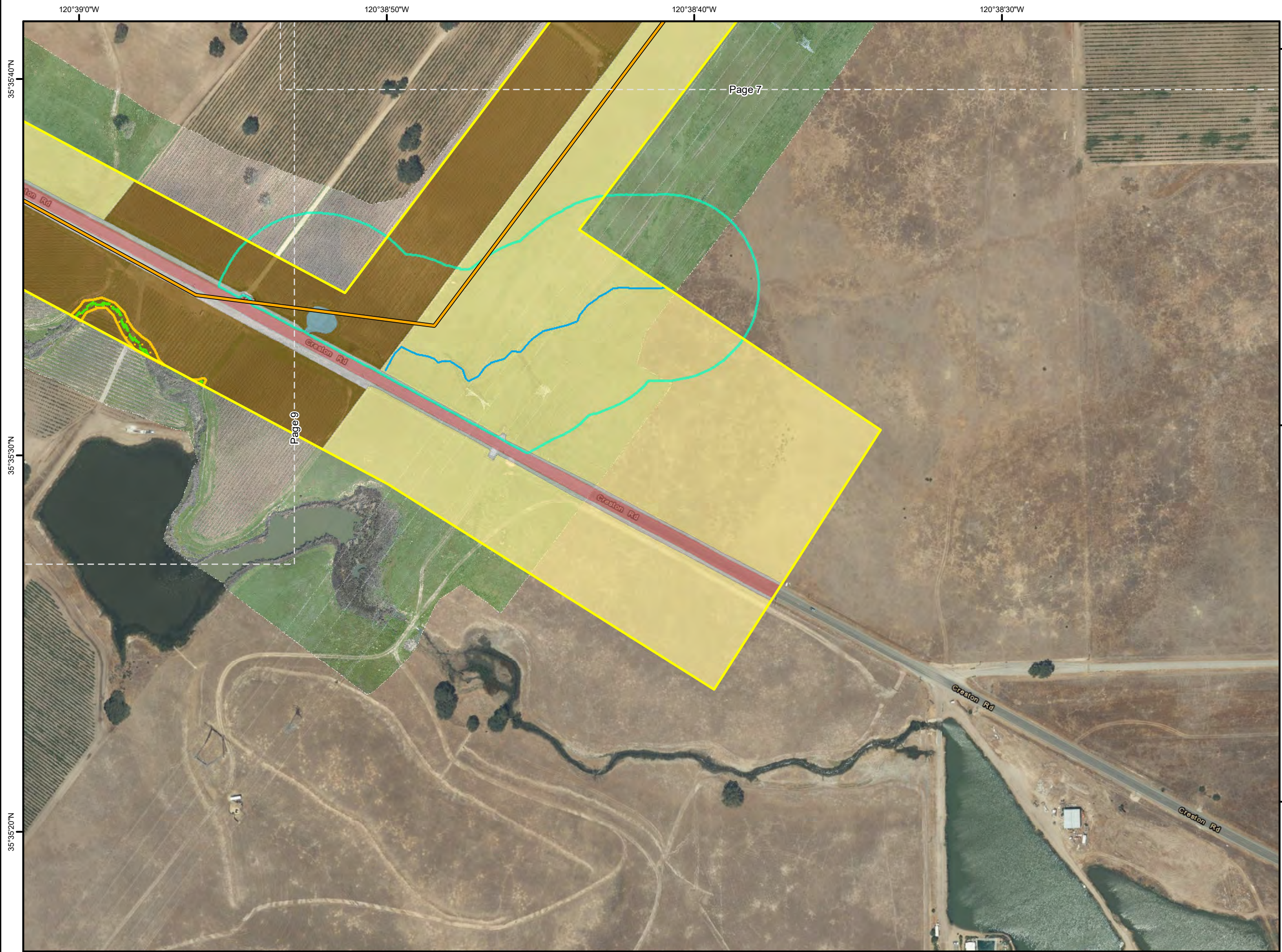
Cattle pond - Potential vernal pool/vernal pool species habitat

Potential vernal pool species habitat buffer

Drainage swale - Potential vernal pool fairy shrimp habitat

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).





0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project

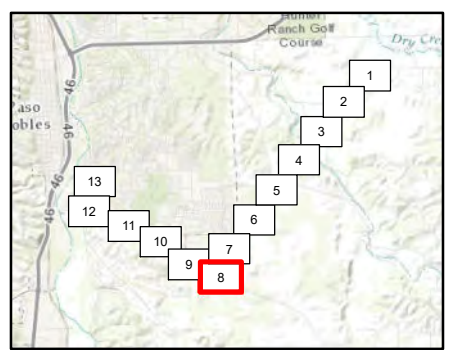
Creston Route

Biological Resources Map

Page 8 of 13

- Legend**
- Biological Study Area
 - Project Area**
 - New 70 kV Power Line Segment
 - Vegetation Communities**
 - Agricultural
 - Nonnative grassland
 - Ruderal
 - Urban/developed
 - Other Features**
 - Detention pond - Potential vernal pool/vernal pool species habitat
 - Potential vernal pool species habitat buffer
 - Drainage swale - Potential vernal pool species habitat
 - Potential Jurisdictional Waters**
 - Potential CDFW Jurisdiction
 - Potential USACE Jurisdiction

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



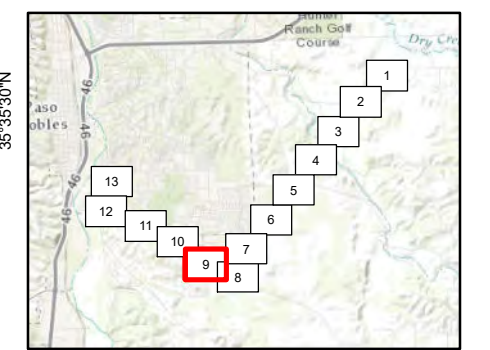
120°39'30"W 120°39'20"W 120°39'10"W 120°39'0"W

0 100 200 400 Feet
1:3,000

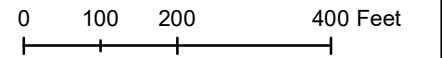
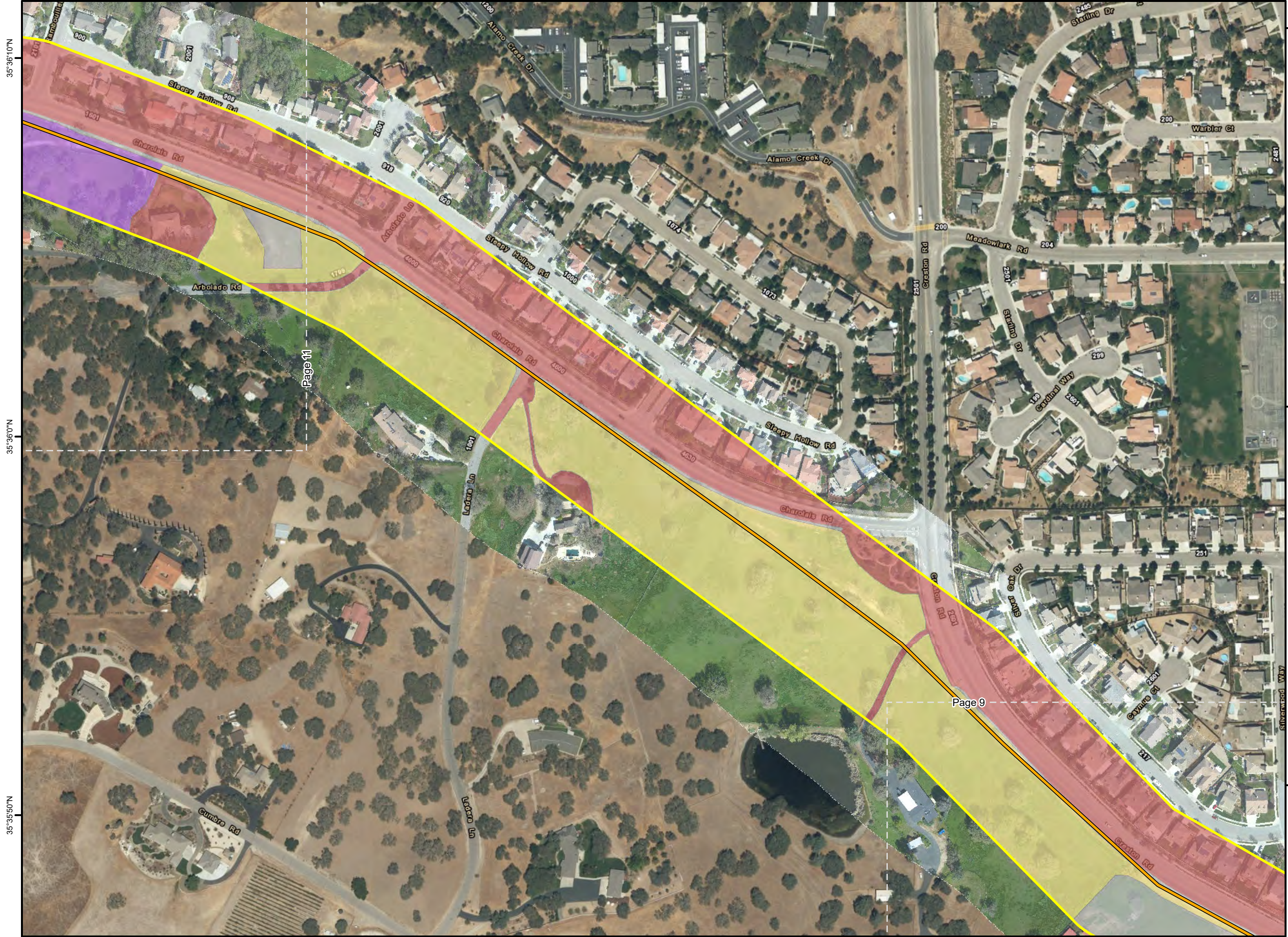
Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
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- Legend**
- Biological Study Area
 - Project Area**
 - New 70 kV Power Line Segment
 - Vegetation Communities**
 - Agricultural
 - Nonnative grassland
 - Ruderal
 - Urban/developed
 - Other Features**
 - Fountain pond
 - Detention pond
 - Potential vernal pool species habitat buffer
 - Potential Jurisdictional Waters**
 - Potential CDFW Jurisdiction
 - Potential USACE Jurisdiction
 - Culverts**
 - ⊗ Culvert inlet
 - ⊗ Culvert outlet

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



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



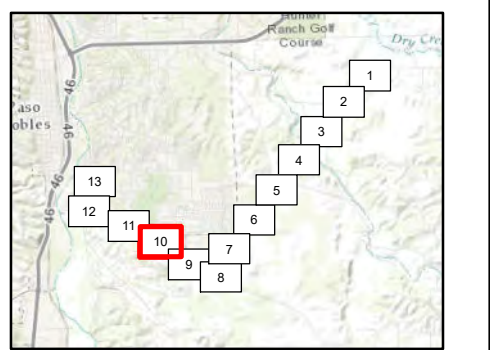
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Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
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Legend

- Biological Study Area
- Project Area**
- New 70 kV Power Line Segment
- Vegetation Communities**
- Blue oak woodland
- Nonnative grassland
- Ruderal
- Urban/developed

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



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

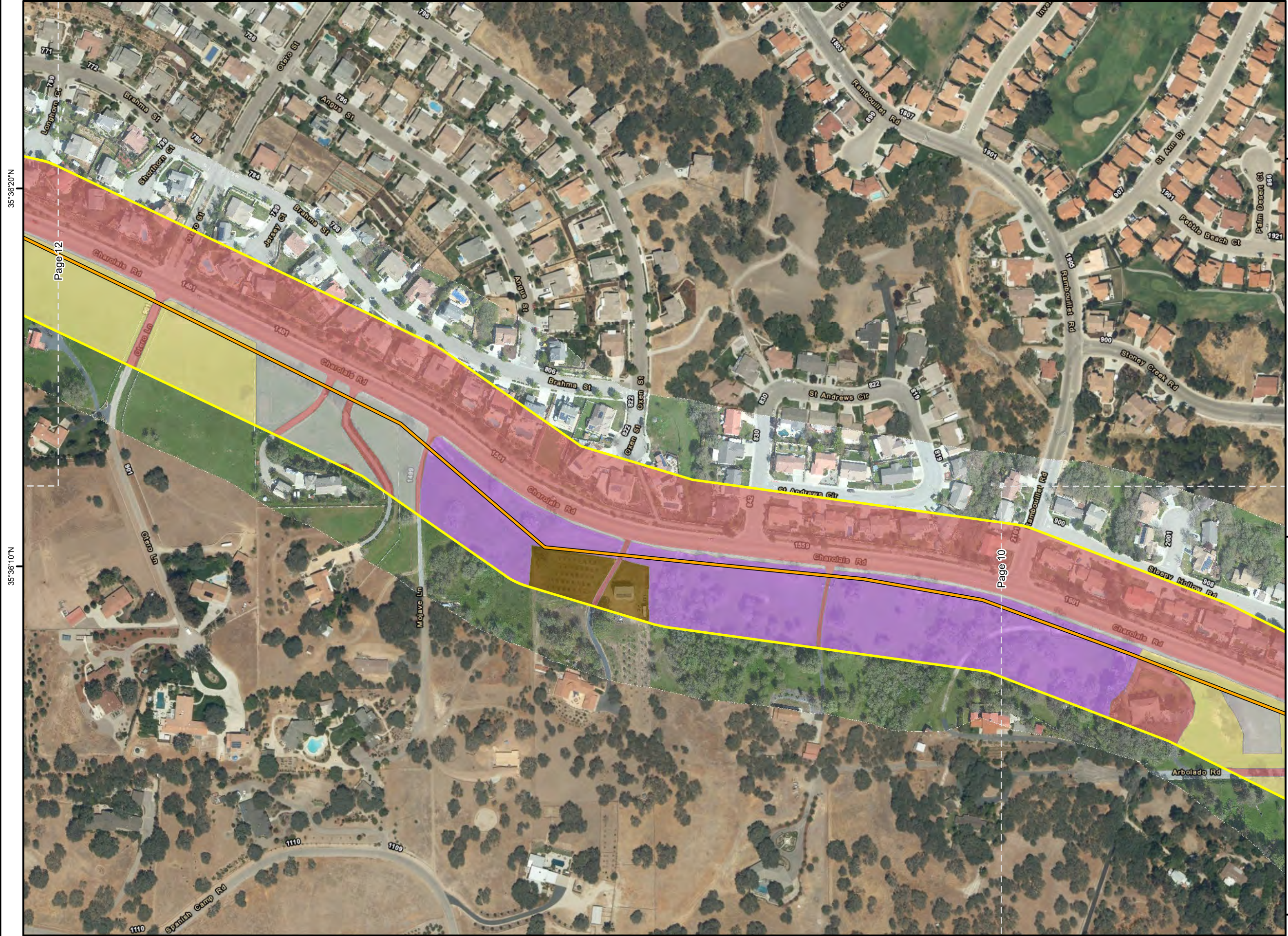


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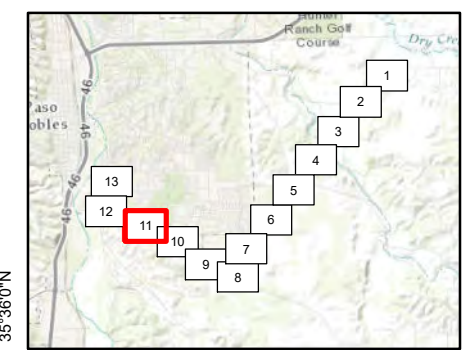
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Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
Page 11 of 13







- Legend**
- Biological Study Area
 - Project Area**
 - New 70 kV Power Line Segment
 - Vegetation Communities**
 - Agricultural
 - Blue oak woodland
 - Nonnative grassland
 - Ruderal
 - Urban/developed

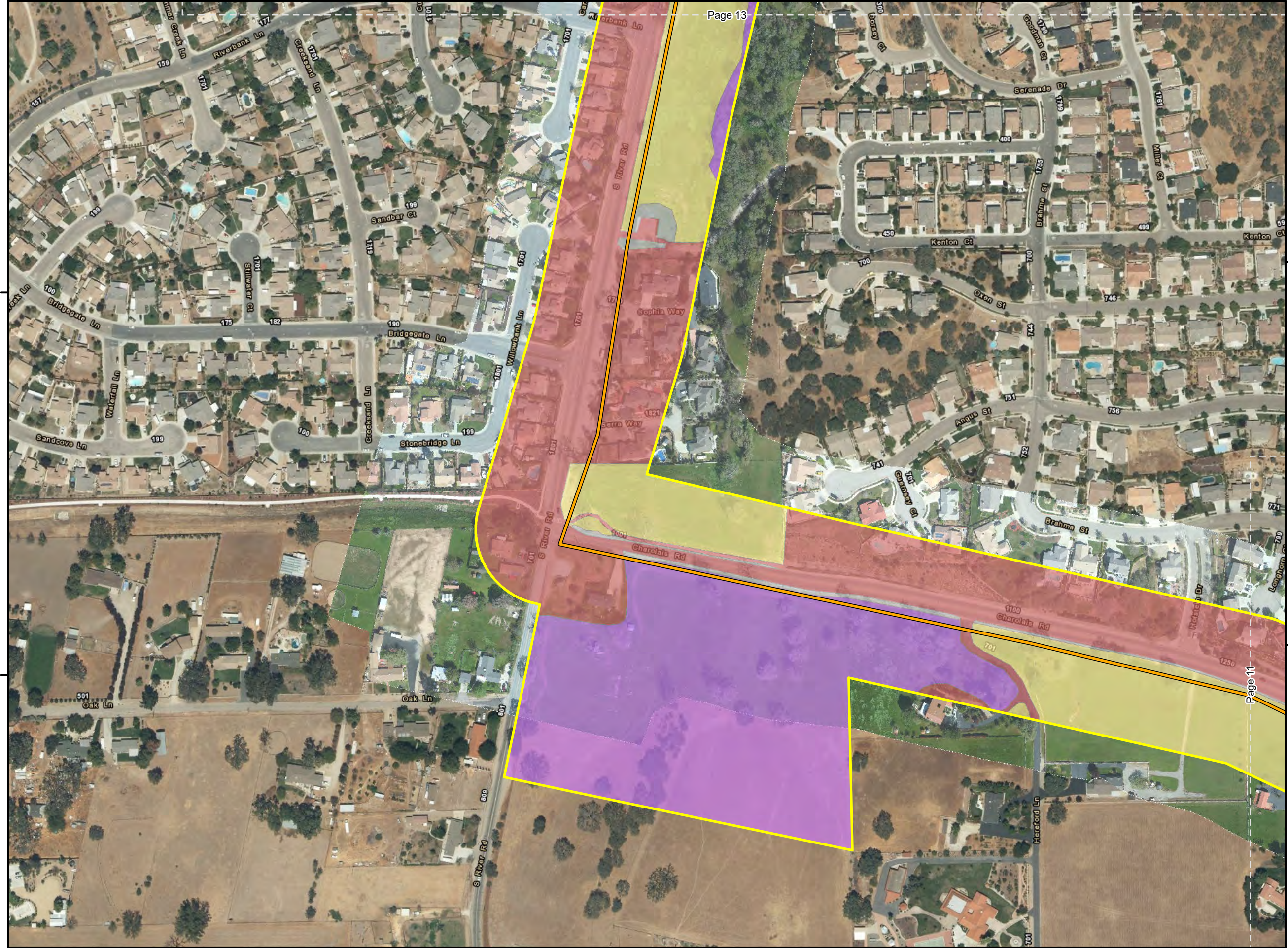


Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).

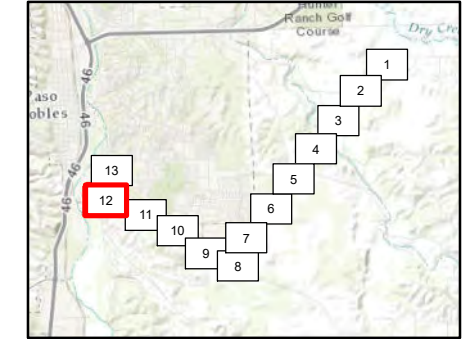


Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
Page 12 of 13

- Legend**
-  Biological Study Area
 - Project Area**
 -  New 70 kV Power Line Segment
 - Vegetation Communities**
 -  Blue oak woodland
 -  Nonnative grassland
 -  Ruderal
 -  Urban/developed





Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).



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














  Pacific Gas and Electric Company

0 100 200 400 Feet

1:3,000

Estrella Substation and Paso Robles Area Reinforcement Project
Creston Route
Biological Resources Map
 Page 13 of 13

- Legend**
-  Biological Study Area
 - Project Area**
 -  New 70 kV Power Line Segment
 -  Paso Robles Substation (Existing)
 - Vegetation Communities**
 -  Blue oak woodland
 -  Nonnative grassland
 -  Ruderal
 -  Urban/developed
 - Other Features**
 -  Potential least Bell's vireo habitat
 - Potential Jurisdictional Waters**
 -  Potential CDFW Jurisdiction
 -  Potential USACE Jurisdiction
 - Culverts**
 -  Culvert inlet
 -  Culvert outlet

Note: To accommodate pole site work areas, assume a 50-foot buffer around all potential jurisdictional waterways (buffer not shown). For active nest avoidance, assume a 500-foot buffer around potential least Bell's vireo suitable habitat (buffer not shown).

