7. BIOLOGICAL RESOURCES

7.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the project site and surrounding environs. The chapter describes the proposed project's potential impacts to biological resources and identifies measures to eliminate or substantially reduce impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project region. The information contained in the analysis is primarily based on a Biological Resources Assessment (BRA) prepared by Madrone Ecological Consulting (Madrone) (see Appendix D of this EIR).[1] Further information was sourced from the Placer County General Plan,[2] the Placer County General Plan EIR,[3] the Dry Creek-West Placer Community Plan (DCWPCP),[4] and the Placer County Conservation Program (PCCP).[5]

7.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the regional biological setting in which the project site is located, the biological setting of the project site, and the special-status species and sensitive natural communities known to occur within the project site and surrounding environs.

Regional Setting

The project site is comprised of the Schellhous and Placer Greens parcels, which are located north and south of PFE Road, respectively, within the DCWPCP, in an unincorporated portion of western Placer County, southwest of the City of Roseville. The DCWPCP experiences a Mediterranean type climate with cool, wet winters, and hot, dry summers. Temperatures in the project region fluctuate from average highs in July of 96 degrees Fahrenheit, with average lows in December and January of 39 degrees Fahrenheit.[6] Nearly all precipitation occurs between October and April in the form of rainfall, with February typically the wettest month, averaging 4.6 inches.

The DCWPCP area is located within the Sacramento Valley portion of Placer County. The Sacramento Valley is a broad valley characterized by predominantly agricultural uses and open space, with interspersed urban centers and rural towns. To the east and northeast of the DCWPCP area, the terrain transitions from the relatively flat Sacramento Valley to the foothill region of Placer County, followed by the increasingly steep and rugged Sierra Nevada Mountains. Habitat types within the Sacramento Valley portion of Placer County generally include oak woodland, riparian woodland, annual brome grasslands, and agricultural land.

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1 Madrone Ecological Consulting. *Biological Resources Assessment, Creekview Ranch, Placer County, California*. May 2022.
2 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Dry Creek-West Placer Community Plan*. Amended May 12, 2009.
5 Placer County. *Placer County Conservation Program*. September 1, 2020.
6 Weather Spark. *Climate and Average Weather Year Round in Roseville*. Available at: https://weatherspark.com/y/1156/Average-Weather-in-Roseville-California-United-States-Year-Round. Accessed February 2022.

The DCWPCP, itself, is unique in that the plan area contains vast tracts of undeveloped land interspersed with rural single-family lots and residential subdivisions. A portion of the DCWPCP, the Dry Creek floodplain, remains in its natural state and generally flows in a west-to-east direction. A variety of ecotypes are located within the DCWPCP boundaries, including valley grasslands, riparian woodlands, valley woodlands, and cultivated or grazed agricultural lands. Within such biological communities, unique and sensitive habitats are also present, including vernal pools, riparian areas, salmon-spawning grounds, and groves of mature native oaks. Many of the foregoing habitats are associated with Dry Creek and its tributaries. Due to the expanse of its watershed, Dry Creek flows year-round.

Project Setting

In total, the 239-acre study area evaluated by the BRA consists of the following components: (1) the 186-acre project site; (2) three off-site sewer pipeline alignment options (see Figure 7-1); and (3) two potential trail alignments, the East Trail and West Trail, which would not be developed as part of the project but are still evaluated in this chapter for potential environmental impacts. As detailed throughout the various technical chapters of this EIR, the project site is comprised of the 141.07-acre Schellhous parcel, north of PFE Road, and the 44.53-acre Placer Greens parcel, southeast of the PFE Road/Antelope Road intersection. Both parcels are located outside the southwestern limits of the City of Roseville. As shown in Figure 3-8 of the Project Description chapter of this EIR, the off-site sewer alignment options (Options 1A, 1B, and 1C) each extend toward the City of Roseville. Options 1A and 1B would be located adjacent to the Dry Creek Wastewater Treatment Plant (WWTP) site, located within Roseville to the northeast of the Schellhous parcel. The study area is primarily located in unincorporated Placer County; however, portions are located in other jurisdictions (see Figure 7-2). The eastern portion, associated with the off-site sewer alignment alternatives, extends into the City of Roseville. The southern portion extends into northern unincorporated Sacramento County. In addition, the northern portion of the study area, consisting primarily of the Schellhous parcel, is located within the PCCP plan area. The PCCP will be discussed in further detail in the Regulatory Context section of this chapter. Additionally, this chapter evaluates potential impacts in accordance with applicable regulations that would apply to the project based on the jurisdiction in which each project component would be located.

The study area is largely comprised of annual brome grasslands, which are interspersed with blue oak (*Quercus douglassii*) woodlands. Dry Creek and its associated broad Valley oak (*Quercus lobata*) riparian corridor occur in the northern portion of the study area, specifically, within the Schellhous parcel. A pair of intermittent Dry Creek tributaries meander through the study area within both the Schellhous and Placer Greens parcels. Small ephemeral drainages and seasonal wetland swales branch off of the segment of the intermittent tributary that flows within the central and southern portions of the Schellhous parcel. Additionally, seasonal wetlands and vernal pools are scattered within the study area's annual brome grassland, primarily within the Schellhous parcel, and a number of roadside ditches occur along the paved roadways. The Schellhous residence and several associated sheds are located within the annual brome grassland in the Schellhous parcel, and an old orchard is located just to the west of the homestead. Inclusions of disturbed areas are scattered throughout the study area, along roadways, in residential areas, and in parking areas that encroach upon the study area's periphery from adjacent properties. The terrain within the study area is gently rolling, and generally slopes towards Dry Creek. Elevations range from approximately 110 feet above mean sea level (MSL) to approximately 140 feet above MSL.

Figure 7-1
Study Area and Project Components

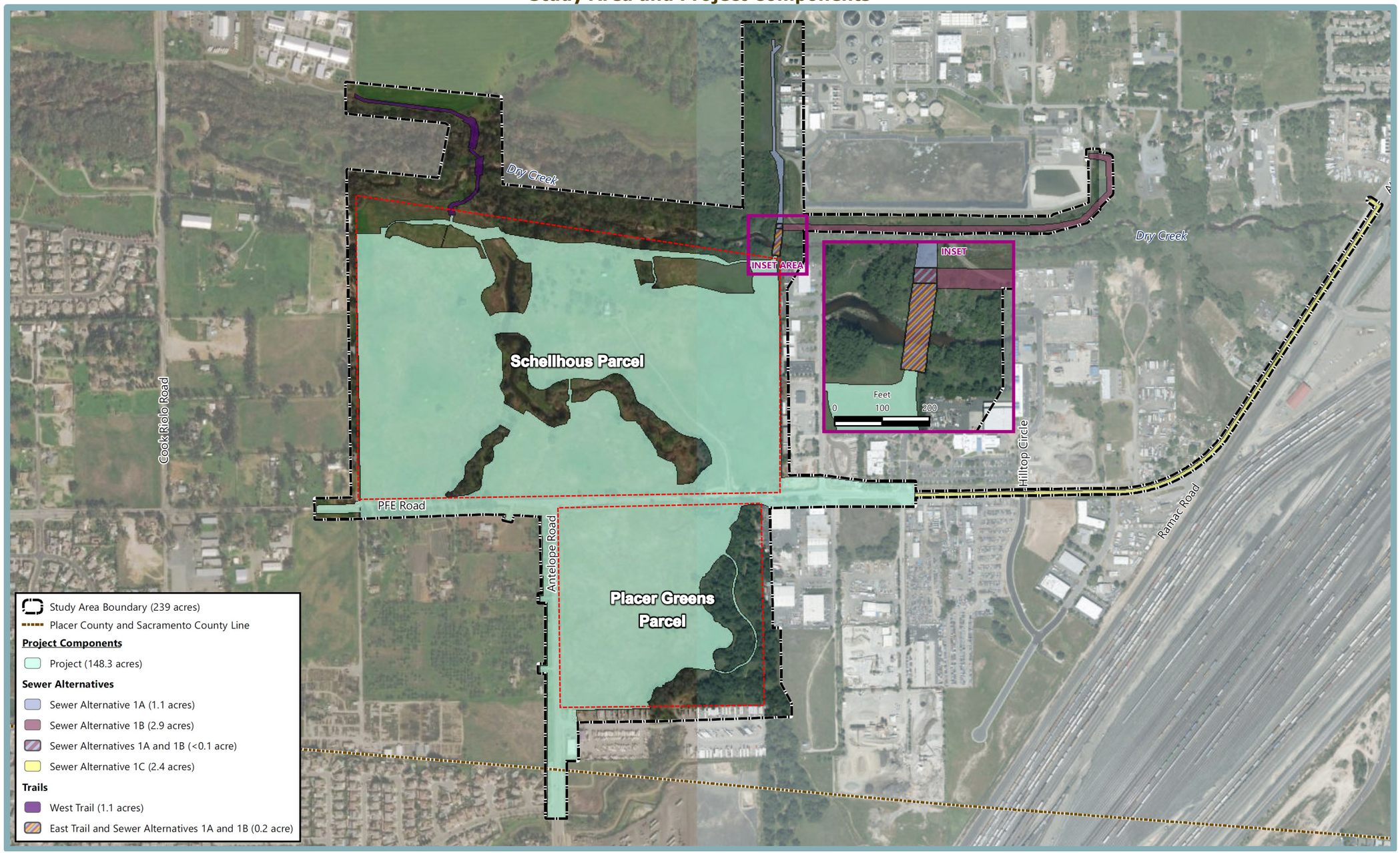
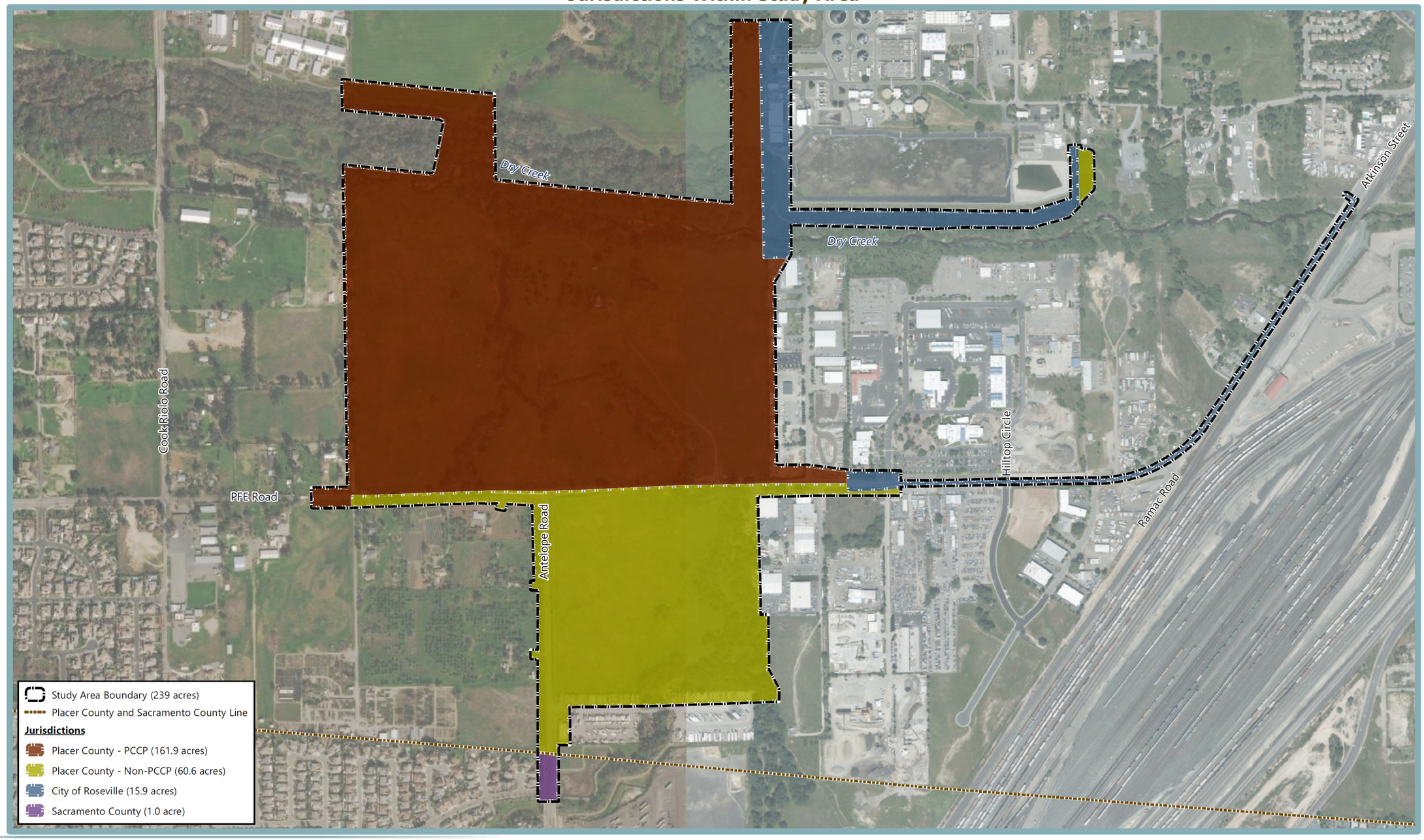


Figure 7-2
Jurisdictions Within Study Area



Terrestrial Vegetation Communities

Madrone identified the following six habitat types within the study area: annual brome grassland, blue oak woodland, riparian woodland, valley needlegrass grassland, abandoned almond orchard, and rural residential/urban areas. The study area's vegetation communities are shown in Figure 7-3, summarized in Table 7-1, and discussed in further detail below.

Table 7-1
PCCP Land Covers/Vegetation Communities Within the Study Area

Land Covers/Vegetation Communities	PCCP	Non-PCCP	Total
Grasslands			
Annual Brome Grassland	-	40.8	40.8
Vernal Pool Complex High	6.5	-	6.5
Vernal Pool Complex Intermediate	60.4	-	60.4
Vernal Pool Complex Low	43.1	-	43.1
Valley Needlegrass Grassland	-	<0.1	<0.1
Oak Woodlands			
Blue Oak Woodland	7.6	13.9	21.5
Orchards			
Orchard	2.8	-	2.8
Abandoned Almond Orchard	-	1.7	1.7
Riparian Habitat			
Riparian	17.9	-	17.9
Riparian Woodland	-	3.2	3.2
Urban Areas			
Rural Residential	3.0	-	3.0
Urban	5.3	15.8	21.1
Total	**146.6**	**75.4**	**222.0**

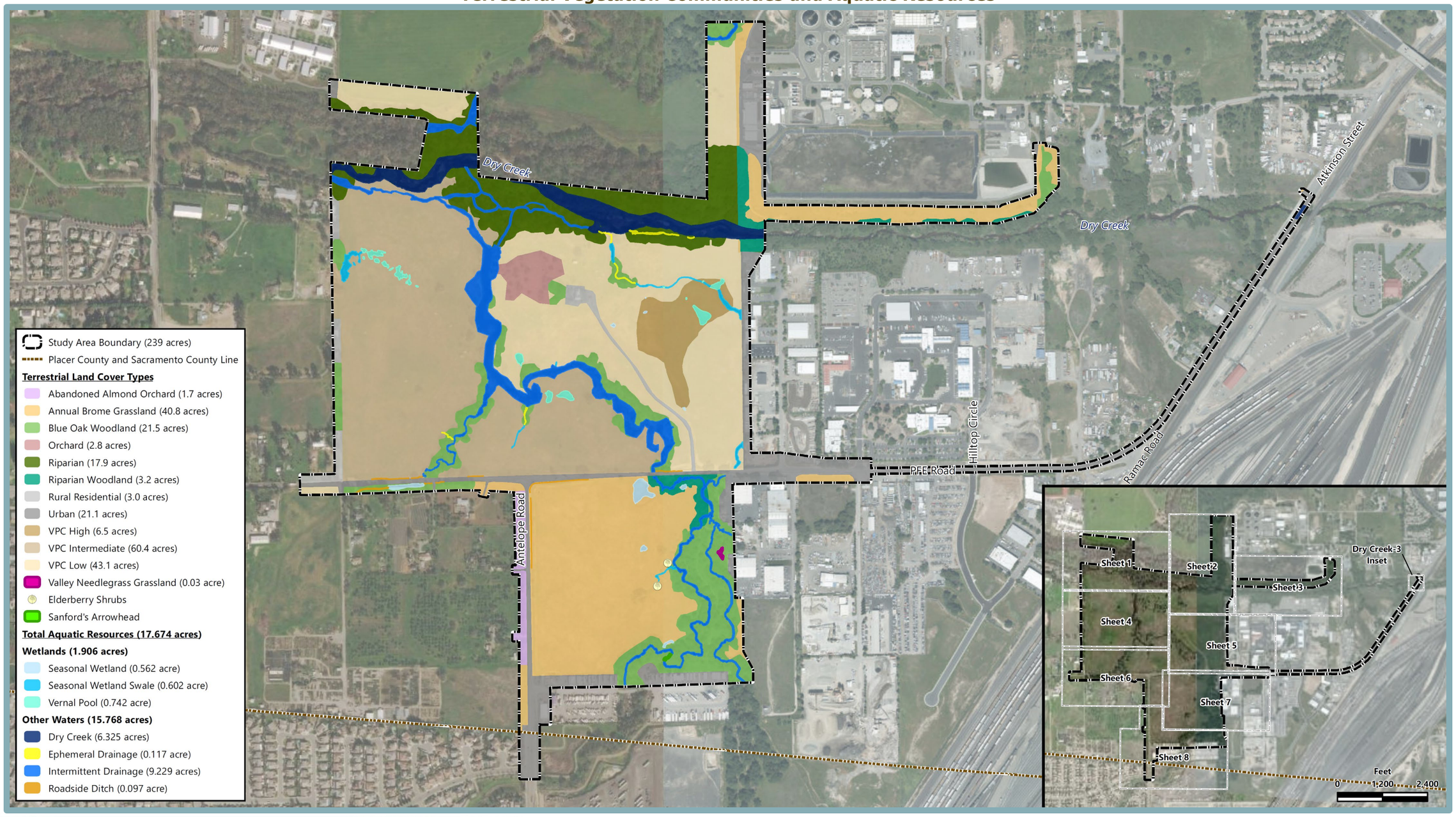
Source: Madrone Ecological Consulting, 2022.

Annual Brome Grassland/Vernal Pool Complex Low, Intermediate, and High

The annual brome grassland within the study area is dominated by ripgut brome (*Bromus diandrus*), soft brome (*B. hordeaceus*), wild oat (*Avena fatua*), medusahead (*Elymus caput-medusae*), barbed goatgrass (*Aegilops triuncialis*), and Italian ryegrass (*Festuca perennis*). In addition, the community also includes English plantain (*Plantago lanceolata*), turkey mullein (*Croton setiger*), vinegar weed (*Trichostema lanceolatum*), curly dock (*Rumex crispus*), prickly lettuce (*Lactuca serriola*), Fitch's spikeweed (*Centromadia fitchii*), slender tarweed (*Holocarpha virgata*), yellow star-thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), Canadian horseweed (*Erigeron canadensis*), black mustard (*Brassica nigra*), chicory (*Cichorium intybus*), common fiddleneck (*Amsinckia menziesii*), harvest brodiaea (*Brodiaea elegans*), Miniature lupine (*Lupinus bicolor*), filaree (*Erodium botrys*), cut-leaf geranium (*Geranium dissectum*), hairy hawkbit (*Leontodon saxatilis*), rose clover (*Trifolium hirtum*), winter vetch (*Vicia villosa*), and stinkwort (*Dittrichia graveolens*). Seasonal wetlands and swales occur sporadically throughout the community, as well as isolated trees, which are scattered throughout and comprised of interior live oak (*Quercus wislizeni*) and Valley oak (*Quercus lobata*).

It should be noted that the annual brome grasslands located primarily north of PFE Road consist of Vernal Pool Complex (VPC) Low, VPC Intermediate, and VPC High land covers, as designated by the PCCP (see Figure 3-13 of the PCCP).

Figure 7-3
Terrestrial Vegetation Communities and Aquatic Resources



Valley Needlegrass Grassland

A small patch of valley needlegrass (*Stipa pulchra*) grassland was mapped within an opening in the blue oak woodland south of PFE Road. The area supports approximately 30 percent cover of valley needlegrass. Co-dominants are typical of the herbaceous plant species, which are found throughout the surrounding blue oak woodland.

Blue Oak Woodland

Blue oak woodland occurs along the intermittent and ephemeral drainages within the study area, as well as within a strip of land parallel to the south of PFE Road, west of Antelope Road. The blue oak woodland canopy is predominantly closed and dominated by blue oak. Valley oak, interior live oak (*Quercus wislizenii*), Chinese tallow tree (*Triadica sebifera*), olive (*Olea europaea*), and common fig (*Ficus carica*) also occur within the canopy. The shrub layer is lacking in most areas, but where present, the layer is comprised of poison-oak (*Toxicodendron diversilobum*) and Himalayan blackberry (*Rubus armeniacus*). The canopy's herbaceous understory is composed of species typical of the annual brome grassland described above. As shown in Table 7-1, the PCCP portion of the study area includes 7.6 acres of Blue Oak Woodland land cover. The non-PCCP portion of the study area consists of 13.7 acres of blue oak woodlands.

Abandoned Almond Orchard/Orchard

Abandoned almond (*Prunus dulcis*) orchards occur just west of the Schellhous residence and along the west of Antelope Road. The orchards have not been maintained since the 1950s or 1960s. The few remaining almond trees are quite large and do not appear to be irrigated. The understory of the almond orchard is comprised of herbaceous species typical of the annual brome grassland described above.

It should be noted that the abandoned almond orchards within the Schellhous parcel are designated as Orchard land cover by the PCCP (see Figure 3-16 of the PCCP).

Riparian Woodland/Riparian

Riparian woodland occurs along Dry Creek and its northern tributary adjacent to the WWTP, as well as along the southern Dry Creek tributary, just south of PFE Road. The riparian woodland canopy is dense and diverse. Common trees include Valley oak, Goodding's black willow (*Salix gooddingii*), arroyo willow (*S. lasiolepis*), Fremont's cottonwood (*Populus fremontii*), box elder (*Acer negundo*), cigar tree (*Catalpa bignonioides*), common fig, sycamore (*Platanus racemosa*), white alder (*Alnus rhombifolia*), Oregon ash (*Fraxinus latifolia*), blue oak, interior live oak, and black walnut (*Juglans hindsii*).

The understory is dense in locations, featuring thickets of Himalayan blackberry, wild reed (*Arundo donax*), wild rose (*Rosa californica*), poison-oak, sandbar willow (*Salix exigua*), and California wild grape (*Vitis californica*). Herbaceous species within the understory include western ragweed (*Ambrosia psilostachya*), mugwort (*Artemisia douglasiana*), Italian thistle (*Carduus pycnocephalus*), miner's lettuce (*Claytonia perfoliata*), poison hemlock (*Conium maculatum*), hedgehog grass (*Cynosurus echinatus*), panicled willow-herb (*Epilobium brachycarpum*), fennel (*Foeniculum vulgare*), sticky willy (*Galium aparine*), white horehound (*Marrubium vulgare*), manyflower tobacco (*Nicotiana acuminata*), dallisgrass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), rice cutgrass (*Leersia oryzoides*), tall flatsedge (*Cyperus eragrostis*), curly dock (*Rumex crispus*), cocklebur (*Xanthium strumariu*m), soft rush (*Juncus effusus*), and Bermuda grass (*Cynodon dactylon*).

It should be noted that areas mapped as Riparian land cover for PCCP purposes are consistent with the riparian woodlands (see Figure 3-14 of the PCCP).

Rural Residential/Urban and Suburban

A number of areas within the PCCP portion of the study area are designated as Rural Residential or Urban and Suburban land covers by the PCCP (see Figure 3-17 of the PCCP). Such areas include paved roadways; portions of rural residential parcels comprised of houses or landscaping; industrial commercial areas; and the WWTP.

Most of the areas are paved or otherwise unvegetated; however, some areas support maintained landscaping or ruderal vegetation, including stinkwort, bindweed (*Convolvulus arvensis*), purple sand-spurrey (*Spergularia rubra*), yellow star-thistle, and turkey mullein.

Aquatic Resources

Pursuant to the BRA, a total of 17.674 acres of aquatic resources have been mapped within the study area in accordance with the U.S. Army Corps of Engineers (USACE) Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations* (see Figure 7-3). The aquatic resources shown within the study area have been submitted to the USACE with a request for a Preliminary Jurisdictional Determination.

Table 7-2 below provides the acreage of each aquatic resource located within the study area, which is then followed by a detailed description of each.

Table 7-2
Aquatic Resources Within the Study Area

Resource Type	Acreage
Wetlands	
Seasonal Wetland	0.562
Seasonal Wetland Swale	0.602
Vernal Pool	0.742
Other Waters	
Dry Creek	6.325
Ephemeral Drainage	0.117
Intermittent Drainage	9.229
Roadside Ditch	0.097
Total	**17.674**

Source: Madrone Ecological Consulting, 2022.

Seasonal Wetland

Seasonal wetlands are depressional wetlands that pond water seasonally. The features are often topographically and hydrologically similar to vernal pools, but have a short hydroperiod. As a result, seasonal wetlands support a slightly different plant community that is not characterized by a dominance of vernal pool endemics. Vegetation within the features is generally sparse, consisting of perennial ryegrass and Mediterranean barley, with other ruderal vegetation, such as curly dock, slender tarweed, hairy hawkbit, soft chess, and Medusa-head grass. Numerous wetland-oriented species are present in low-to-moderate quantities, including Great Valley popcornflower, coyote thistle, hyssop loosestrife, Carter's buttercup (*Ranunculus bonariensis*), smooth goldfields (*Lasthenia glaberrima*), Oregon woolly marbles (*Psilocarphus oregonus*), and toad rush (*Juncus bufonius*).

Seasonal Wetland Swale

Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff and may detain it for short periods of time. Vegetation within the swales varies, but is generally dominated by perennial ryegrass, and includes an array of wetland and ruderal vegetation, such as tall flatsedge, Baltic rush (*Juncus balticus*), Bermuda grass, turkey tangle frogfruit (*Phyla nodiflora*), creeping spikerush, coyote thistle, Carter's buttercup, rabbitsfoot grass, Mediterranean barley, curly dock, English plantain, slender tarweed, hairy hawkbit, rough cocklebur, poison hemlock, Himalayan blackberry, soft chess, and sticky willy. Hydrology within the swales is driven predominantly by precipitation runoff within the annual grassland and from adjacent development, as well as by draining water from several vernal pools and seasonal wetlands.

Vernal Pool

Vernal pools are topographic basins that are underlain with an impermeable or semi-permeable hardpan or duripan layer. They are inundated during the wet season, and typically dry by late spring, remaining dry through the summer months. Vernal pools are differentiated from depressional seasonal wetlands based upon the predominance of vernal pool endemic plant species. The vernal pools on-site are largely dominated by coyote thistle (*Eryngium castrense*) and creeping spikerush (*Eleocharis macrostachya*). Other vegetation present within the vernal pools includes Great Valley popcornflower (*Plagiobothrys stipitatus*), hyssop loosestrife (*Lythrum hyssopifolia*), white headed navarretia (*Navarretia leucocephala subsp. leucocephala*), Torrey's willow-herb (*Epilobium torreyi*), rabbitsfoot grass (*Polypogon monspeliensis*), curly dock, Mediterranean barley (*Hordeum marinum*), perennial ryegrass, hairy hawkbit, and harvest brodiaea.

Dry Creek

Dry Creek runs through the northern portion of the study area. Dry Creek is a broad, perennial creek with a gravel/cobble substrate. The creek is almost entirely unvegetated within the channel, due to the scouring effects of high winter flows, but a few islands and sand bars are present, where a few plants have managed to become established. The creek is incised, with steep, eroded banks on outer bends, and deep sand deposits on inner bends. The banks support a dense, well-developed riparian woodland (described above). Emergent wetland vegetation is present along the edges of the low-water channel, including tall flatsedge, redroot flatsedge (*Cyperus erythrorhizos*), water primrose (*Ludwigia peploides*), smartweed (*Persicaria sp.*), barnyard grass, rough cocklebur, panicled willow-herb, and curly dock.

Ephemeral Drainage

Ephemeral drainages convey stormwater runoff for short periods of time directly after precipitation events. The drainages are generally unvegetated, due to the scouring effects of water, but upland species such as Italian thistle, white horehound, and hedgehog grass occur sparsely. The features drain into intermittent drainages and Dry Creek.

Intermittent Drainage

Several intermittent drainages run through the study area. Two portions of one intermittent tributary to Dry Creek occur north of Dry Creek, and a number of branches of an intermittent tributary to Dry Creek run through the portion of the study area south of Dry Creek. The features range from approximately 3.5 feet wide in some very narrow reaches to over 175 feet wide adjacent to and south of the abandoned almond orchard. Water ponds for an extended period of time in the drainages, but appears to completely dry every year. The drainages are unvegetated throughout much of its channel, due to the depth and scouring effects of water, but they support

a well-developed fringe of hydrophytes along the banks, including rice cutgrass, spotted lady's-thumb (*Persicaria punctata*), stick-tight (*Bidens frondosa*), tall nutsedge, rough cocklebur, and northern water plantain (*Alisma triviale*). Blue oak woodland occurs adjacent to many segments of intermittent drainage throughout the study area.

Roadside Ditch

Several roadside ditches are located within the study area along PFE Road and Antelope Road. The roadside ditches serve to convey stormwater runoff from the road into the storm drain system and intermittent drainages. The features are primarily unvegetated, due to ditch maintenance, but some ruderal vegetation has become established in portions of the features. Plant species observed in and adjacent to the roadside drainages include perennial ryegrass, wild radish (*Raphanus sativus*), tall nutsedge, and Bermuda grass.

Placer County Conservation Program Special Habitats and County Aquatic Resources Program Setbacks

The following PCCP special habitats and County Aquatic Resources Program (CARP) setbacks have been mapped, consistent with applicable guidelines and are shown in Figure 7-4.

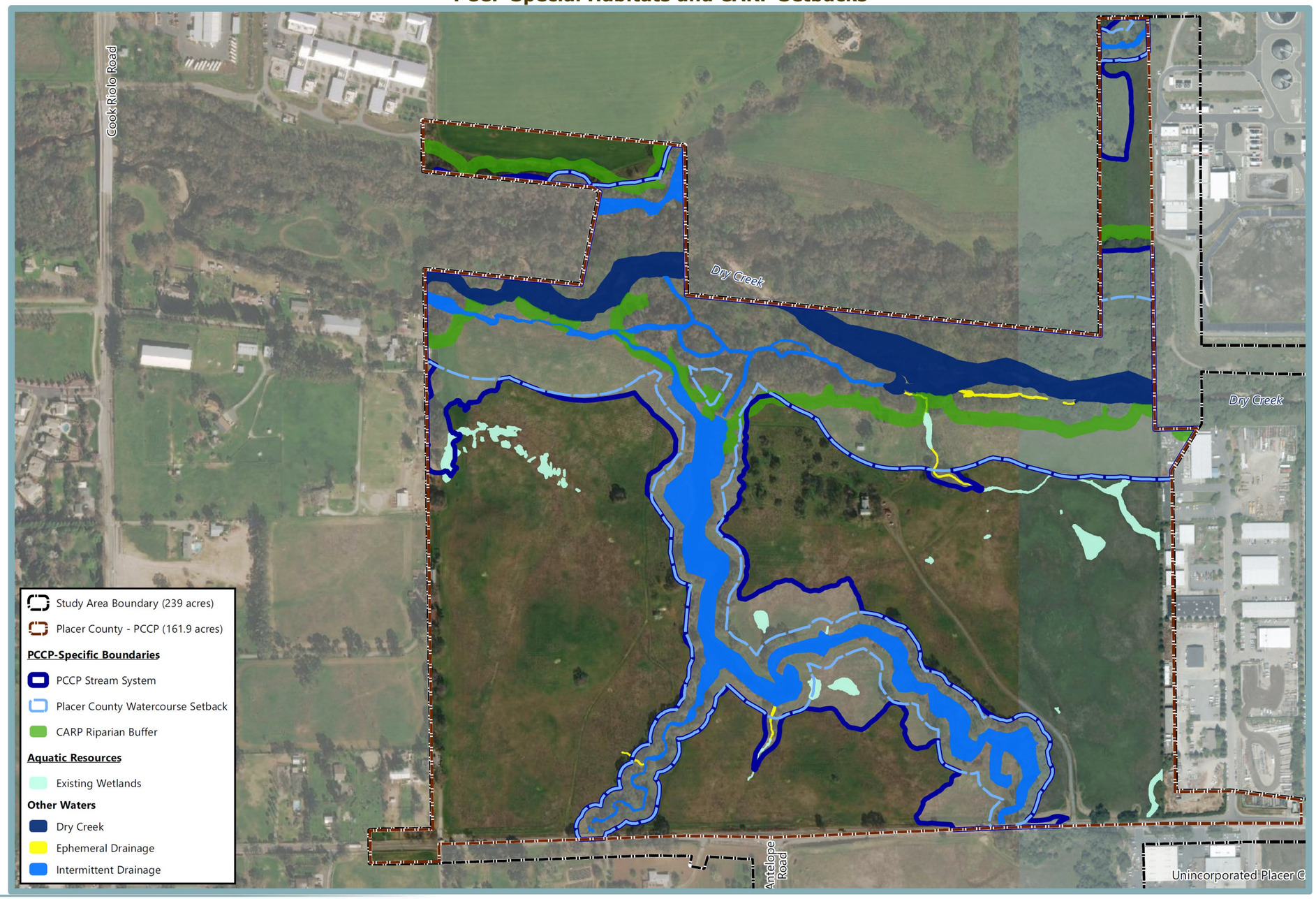
- PCCP Stream System, along Dry Creek and its tributary drainages;
- CARP Riparian Buffers, which are any areas within 50 feet of riparian habitat that are outside of the Stream System; and
- Placer County Watercourse Setback, along Dry Creek and its tributary drainages.

Special-Status Species

Special-status species are species that have been listed as threatened or endangered under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered to have special status due to declining populations, vulnerability to habitat change, or restricted distributions. A general description of the criteria and laws pertaining to special-status classifications is described below. Special-status plant and wildlife species may meet one or more of the following criteria:

1. Listed as threatened or endangered, or proposed or candidates for listing by the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS);
2. Listed as threatened or endangered and candidates for listing by the California Department of Fish and Wildlife (CDFW);
3. Identified as Fully Protected species or Species of Special Concern by CDFW;
4. Identified as Medium or High priority species by the Western Bat Working Group (WBWG); and
5. Plant species considered to be rare, threatened, or endangered in California by the California Native Plant Society (CNPS) and CDFW (California Rare Plant Rank [CRPR] 1, 2, and 3):
    a. CRPR 1A: Plants presumed extinct.
    b. CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
    c. CRPR 2A: Plants extirpated in California, but common elsewhere.
    d. CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
    e. CRPR 3: Plants about which the CNPS needs more information – a review list.

Figure 7-4
PCCP Special Habitats and CARP Setbacks



Listed and Special-Status Plant Species

According to the records of the California Natural Diversity Database (CNDDB), maintained by the CDFW, 10 special-status plant species have the potential to occur on or within five miles of the study area. Table 7-3 lists all 10 special-status plant species with potential to occur in the vicinity of the study area. As shown in the table, based on protocol-level plant surveys and literature review (detailed further in this chapter under the Method of Analysis subsection), six special-status plant species were determined to have the potential to occur in the project study area. The species that is present in the study area is Sanford's arrowhead. Species that are considered to have a *low* potential to occur in the study area include dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, Legenere, and pincushion navarretia.

The following discussions provide further details of the six special-status plant species with potential to occur within the study area. The following set of criteria was used to determine the potential for special-status plant and wildlife species to occur within the study area:

- Present: Species occurs within the study area based on CNDDB records and/or was observed within the study area during the field surveys;
- High: The study area is within the known range of the species and suitable habitat exists within the study area;
- Moderate: The study area is within the known range of the species and very limited suitable habitat within the study area;
- Low: The study area is within the known range of the species and marginally suitable habitat exists within the study area or the species was not observed during protocol-level surveys conducted within the study area; or
- Absent/Habitat Not Present: The study area does not contain suitable habitat for the species, the species was not observed during protocol-level floristic surveys conducted within the study area, or the study area is outside the known range of the species.

Sanford's Arrowhead

Sanford's arrowhead (*Sagittaria sanfordii*) is not federally or State listed. The species is a CRPR List 1B.2 plant. Sanford's arrowhead generally occurs in shallow freshwater habitats associated with drainages, canals, and larger ditches that sustain inundation and/or slow-moving water into early summer. The perennial rhizomatous species blooms from May to October and occurs at elevations ranging from sea level to approximately 2,000 feet above MSL.

The species was documented within the intermittent drainage in the southern portion of the study area during the 2021 biological field survey conducted as part of the BRA. The nearest documented occurrence of Sanford's arrowhead outside of the study area is CNDDB Occurrence #49, located approximately 0.5-mile to the southeast in a ditch just west of Roseville Road (see Figure 7-5). Based on the above, Sanford's arrowhead is *present* within the study area.

Dwarf Downingia

Dwarf downingia (*Downingia pusilla*) is not federally or State listed. The species is classified as CRPR List 1B.2. The plant is a diminutive annual herb that is strongly associated with vernal pools and other seasonally inundated features at elevations ranging from sea level to approximately 1,500 feet above MSL. Dwarf downingia is typically associated with areas that experience a moderate degree of disturbance and blooms from March to May.

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Plants					
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2	No	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	**Absent**. Marginally suitable habitat is present in the annual brome grassland. Protocol-level surveys did not detect this species.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	CRPR 1B.1	No	Prefers seasonally flooded, saline-alkali soils at elevations below 500 feet.	**Habitat Not Present**. Saline-alkali soils are not present within the study area.
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	No	Occurs in vernal pools and other depressional wetlands.	**Low**. The vernal pools, seasonal wetlands, and seasonal wetland swales within the study area provide suitable habitat for the species. Protocol-level surveys did not detect the species.
Gratiola heterosepala Bogg's Lake hedge-hyssop	--	CE, CRPR 1B.2	No	Occurs in vernal pools and along the margins of lakes/ponds.	**Low**. The vernal pools and seasonal wetlands within the study area provide marginal habitat for the species. Protocol-level surveys did not detect the species.
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--	CRPR 1B.2	No	Occurs along the edges of vernal pools and other seasonally ponded features.	**Low**. The vernal pools and seasonal wetlands within the study area provide suitable habitat for the species. Protocol-level surveys did not detect the species.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--	CRPR 1B.1	No	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100 feet and 4,100 feet elevation.	**Habitat Not Present**. The only documented occurrence in Placer County is, according to the notes on the occurrence, considered to be erroneous.

(Continues on next page)

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Legenere limosa Legenere	--	CRPR 1B.1	No	Occurs in vernal pools.	**Low**. The vernal pools and seasonal wetlands within the study area provide marginal habitat for the species. Protocol-level surveys did not detect the species.
Navarretia myersii ssp. *myersii* Pincushion navarretia	--	CRPR 1B.1	No	Occurs in vernal pools.	**Low**. The vernal pools and seasonal wetlands within the study area provide suitable habitat for the species. Protocol-level surveys did not detect the species.
Orcuttia tenuis Slender Orcutt grass	FT	CE, CRPR 1B.1	No	Occurs in vernal pools and other seasonally ponded features.	**Habitat Not Present**. The vernal pools within the study area do not have sufficient hydrology for the species.
Orcuttia viscida Sacramento Orcutt grass	FE	CE, CRPR 1B.1	No	Occurs in vernal pools.	**Habitat Not Present**. The vernal pools within the study area do not have sufficient hydrology for the species.
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	No	Occurs in emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	**Present**. Sanford's arrowhead is present in the intermittent drainage near the southern boundary of the study area.
Invertebrates					
Branchinecta conservation Conservancy fairy shrimp	FE	--	Yes	Occurs in very large, turbid vernal pools.	**Habitat Not Present**. The vernal pools within the study area are too small to support the species.
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Yes	Occurs in vernal pools.	**High**. Suitable habitat for the species is present in the seasonal wetlands and vernal pools within the study area.

(Continues on next page)

Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Danaus plexippus Monarch butterfly	FC	--	No	A migratory species that is most prevalent in the Central Valley in summer and early fall. Dependent upon milkweed (*Asclepias* species) plants as their exclusive larval host.	**Habitat Not Present**. A few scattered milkweed plants are present in the southern portion of the study area, but not substantially enough to support the species.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Yes	Dependent upon elderberry (*Sambucus* species) shrubs as primary host species.	**Absent.** Several elderberry shrubs are present in the eastern portion of the Placer Greens parcel. Valley elderberry longhorn beetle exit holes were not observed on the shrubs.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Yes	Occurs in vernal pools.	**Low**. Most of the seasonal wetlands and vernal pools within the study area are too small to support the species, but the largest of such aquatic features provides marginally suitable habitat for vernal pool tadpole shrimp.
Fish					
Hypomesus transpacificus Delta smelt	FT	CE	No	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though never observed, spawning is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	**Habitat Not Present.** Tidally influenced sloughs or drainages are not present within the study area.
Oncorhynchus mykiss irideus Central Valley steelhead	FE	--	Yes	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**High**. Dry Creek within the study area is designated Critical Habitat for Central Valley Steelhead, and the intermittent drainage within the study area represent marginally suitable habitat for the species.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Oncorhynchus tshawytscha Central Valley fall-run chinook Salmon	--	CSC	Yes	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**High**. Dry Creek serves as a migration corridor to spawning habitat upstream of the study area, and the intermittent drainages within the study area represent marginally suitable habitat for the species.
Amphibians					
Ambystoma californiense California tiger salamander	FT	CT, CSC	No	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	**Habitat Not Present.** The study area is outside of the known range of the species.
Rana draytonii California red-legged frog	FT	CSC	Yes	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	**Habitat Not Present.** The study area is outside of the known range of the species.
Spea hammondii Western spadefoot toad	--	CSC	No	Breeds in vernal pools, seasonal wetlands, and associated swales. Forages and hibernates in adjacent grasslands.	**High**. The seasonal wetlands and vernal pools within the study area provide suitable habitat for the species.
Reptiles					
Actinemys marmorata Western pond turtle	--	CSC	Yes	Occurs in ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**High**. Suitable habitat for the species is present in Dry Creek, and marginally suitable habitat is present in the intermittent drainages.
Thamnophis gigas Giant garter snake	FT	CT	Yes	Occurs in rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow-moving water and heavy emergent vegetation.	**Habitat Not Present.** The study area is outside of the known range of the species.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Birds					
Agelaius tricolor Tricolored blackbird	--	CE, CSC	Yes	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	**Low**. Blackberry brambles scattered throughout the study area provide marginally suitable nesting habitat for the species. The adjacent annual grasslands provide potential foraging habitat.
Ammodramus savannarum Grasshopper sparrow	--	CSC	No	Typically found in expansive short- to middle-height, moderately open grasslands with scattered shrubs or other song perches.	**Habitat Not Present**. The annual brome grasslands within the study area are not sufficiently expansive to support the species.
Aquila chrysaetos Golden eagle	--	CFP	No	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	**Habitat Not Present**. The annual brome grasslands within the study area are not sufficiently expansive to support the species.
Athene cunicularia Burrowing owl	--	CSC	Yes	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	**Moderate**. Although few ground squirrel burrows were observed, occasional burrows and debris scattered throughout the study area could provide artificial burrows. The annual brome grasslands provide suitable foraging habitat.
Buteo swainsoni Swainson's hawk	--	CT	Yes	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**Present**. The annual brome grasslands throughout the study area provide suitable foraging habitat for Swainson's hawk, and the trees within the study area provide suitable nesting habitat. The species was observed foraging on-site during a field survey.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Circus cyaneus Northern harrier	--	CSC	No	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	**High**. The annual brome grassland provides suitable nesting and foraging habitat for the species.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT	CE	No	Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, adjacent to slow-moving waterways, backwaters, or seeps.	**Habitat Not Present**. The riparian woodland on-site supports only patchy understory, and as such, does not provide suitable habitat for the species. In addition, the species is only known from woodlands adjacent to major rivers in northern California.
Elanus leucurus White-tailed kite	--	CFP	No	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Present**. The annual brome grasslands throughout the study area provide suitable foraging habitat for white-tailed kite, and the trees throughout the study area provide suitable nesting habitat. The species was observed foraging on-site during a field survey.
Lanius ludovicianus Loggerhead shrike	--	CSC	No	Occurs in open areas with sparse trees, shrubs, and other perches.	**High**. The annual brome grasslands throughout the study area provide suitable foraging habitat for loggerhead shrike, and the trees and shrubs within the study area provide suitable nesting habitat.
Laterallus jamaicensis coturniculus California black rail	--	CT	Yes	Nests and forages in salt, brackish, and fresh marshes with abundant vegetative cover.	**Habitat Not Present**. The only marsh vegetation is along the edges of Dry Creek, which lacks the cover the species requires.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Melospiza melodia mailliardi Song sparrow "Modesto" population	--	CSC	No	Nests in emergent freshwater marshes dominated by tules and cattails, as well as riparian willow thickets. The species also nests in riparian forests of valley oak with a blackberry understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	**Habitat Not Present**. Although the riparian woodland would otherwise represent suitable nesting habitat for the species, it has not been documented nesting in Placer County, and only nests in extensive marshes in the Sacramento Valley area, which are not present.
Progne subis Purple martin	--	CSC	No	Nests in tall bridges and overpasses near water and open areas.	**Habitat Not Present**. The bridge over Dry Creek is the only tall bridge in the study area, and the bridge does not provide suitable substrate for the species.
Seophaga petechia Yellow warbler	--	CSC	No	Occupies riparian vegetation in close proximity to water along streams and in wet meadows. The species does not breed in the Central Valley, but occurs as a common migrant in the fall and winter months.	**High**. Although the study area is outside of the species' breeding range, it has been documented along Dry Creek just downstream of the study area, and suitable winter foraging habitat is present in the riparian woodlands within the study area.
Riparia riparia Bank swallow	--	CT	No	Colonial nester preferring vertical cliffs and banks with fine-textured/sandy soils associated with riparian zones along streams, rivers, and lakes.	**Habitat Not Present**. Tall, vertical cliffs with sandy soils occur along Dry Creek; however, the species has only rarely been observed in Placer County, is not known to nest in Placer County, and has high nest fidelity. In addition, nest holes were not observed on the cliffs in the study area.

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Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Mammals					
Antrozous pallidus Pallid bat	--	CSC, WBWG H	No	Roosts in crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), bridges, barns, porches, bat boxes, and buildings.	**High**. Suitable roosting habitat for the species is present in tree hollows and under exfoliating bark on trees scattered throughout the study area.
Corynorhinus townsendii Townsend's big-eared bat	--	CC, WBWG H	No	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance.	**Low**. Some of the buildings associated with the Schellhous residence could provide marginally suitable roosting habitat for the species.
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	No	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The silver-haired bat forages in open wooded areas near water features.	**High**. Suitable roosting habitat for the species is present in tree hollows and under exfoliating bark on trees scattered throughout the study area.
Lasiurus blossevillii Western red bat	--	CSC, WBWG H	No	Roosts primarily in the foliage of trees or in shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. The species may associate with intact riparian habitat, particularly willows, cottonwoods, and sycamores.	**High**. Trees scattered throughout the study area provide suitable roosting habitat for the species.
Lasiurus cinereus Hoary bat	--	WBWG M	No	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	**High**. Trees scattered throughout the study area provide suitable roosting habitat for the species.

(Continues on next page)

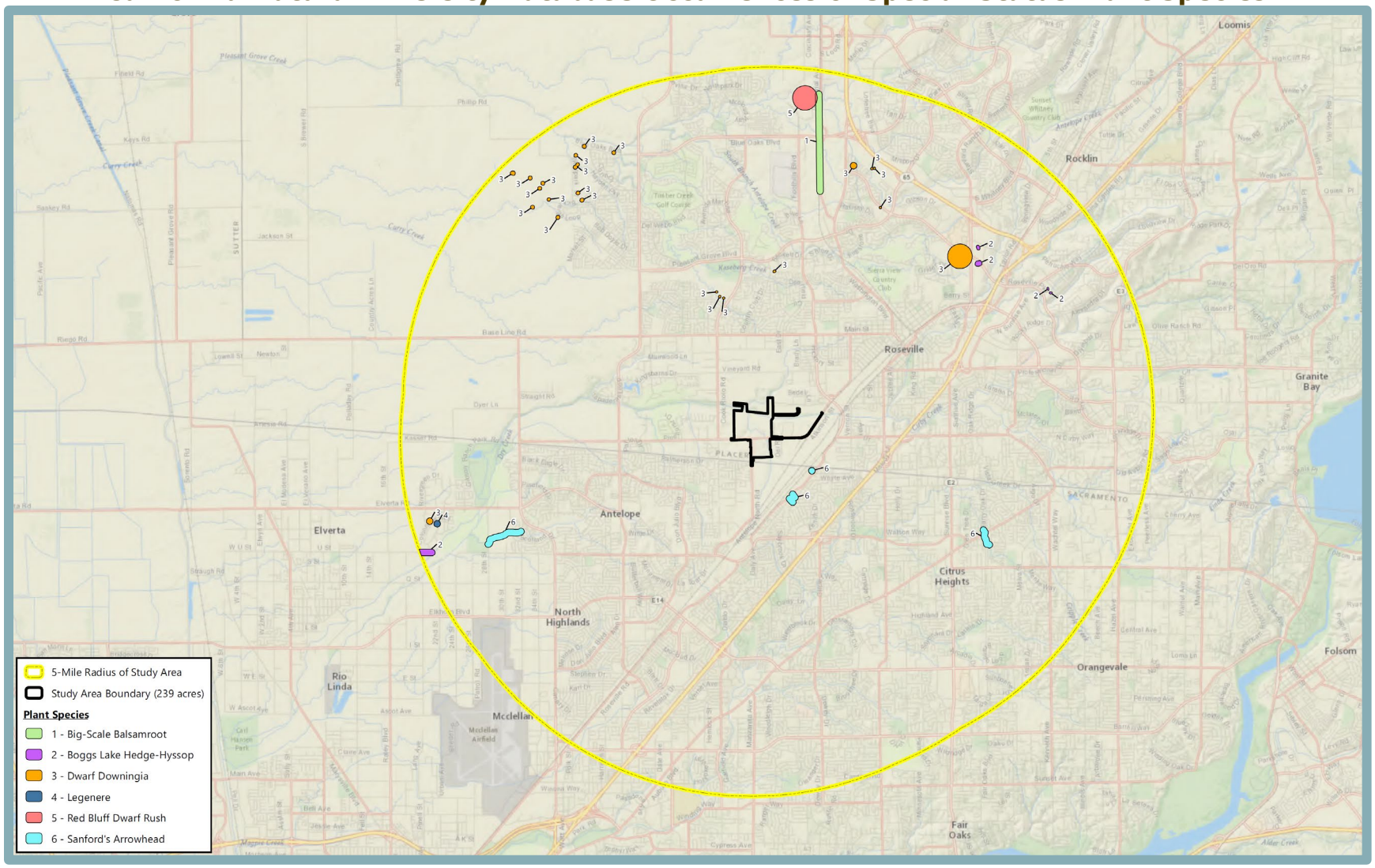
Table 7-3
Special-Status Species with Potential to Occur Within the Study Area

Scientific Name (Common Name)	Federal Status	State Status	PCCP Covered Species	Habitat Requirements	Potential for Occurrence
Taxidea taxus American badger	--	CSC	No	The species prefers dry open fields, grasslands, and pastures.	**Habitat Not Present**. The annual brome grasslands within the study area are not sufficiently expansive enough to support the species.

Status Codes:
CC: CDFW Candidate for Listing
CE: CDFW Endangered
CFP: CDFW Fully Protected
CRPR: California Rare Plant Rank
CSC: CDFW Species of Concern
CT: CDFW Threatened
FE: Federally Endangered
FT: Federally Threatened
WBWG M: Western Bat Working Group Medium Threat Rank
WBWG H: Western Bat Working Group High Threat Rank

Source: Madrone Ecological Consulting, 2022.

Figure 7-5
California Natural Diversity Database Occurrences of Special-Status Plant Species



The vernal pools, seasonal wetlands, and seasonal wetland swales within the study area provide suitable habitat for the species. However, the species was not observed during the 2021 special-status plant survey of the study area, which was conducted in April when the species was observed in bloom at other nearby locations. Pursuant to the CNDDB, 10 records of dwarf downingia are within five miles of the study area. The nearest occurrence, CNDDB Occurrence #142, is located approximately 1.5 miles to the north in the Silverado Oaks Wetland Preserve (see Figure 7-5). Based on the above, dwarf downingia has *low* potential for occurrence within the study area.

Bogg's Lake Hedge-Hyssop

Bogg's Lake hedge-hyssop (*Gratiola heterosepala*) is not federally listed. The species is a California endangered species and a CRPR List 1B.2 plant. Bogg's Lake hedge-hyssop grows in vernal pools and around the perimeter of lakes and ponds, between elevations of 30 feet and 7,800 feet. The small annual herb favors clay soils, and blooms from April to August.

The larger vernal pools and seasonal wetlands within the study area provide suitable habitat for Bogg's Lake hedge-hyssop. The species was not observed during the 2021 field survey. The species did not bloom at most of the reference locations in the region in 2021, and as a result, all suitable habitat was resurveyed in April 2022 after the species had been observed at a nearby reference location. Three CNDDB records of Bogg's Lake hedge-hyssop occurrences are within five miles of the study area, two of which are extirpated, and the last of which is potentially extirpated (see Figure 7-5). The nearest of the records (CNDDB Occurrence #16) is located approximately 3.5 miles northeast of the study area, what is now the location of the Roseville Galleria shopping center. Based on the above, Bogg's Lake hedge-hyssop has *low* potential for occurrence within the study area.

Ahart's Dwarf Rush

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not federally or State listed. The species is a CRPR List 1B.2 plant. Ahart's dwarf rush grows along the edges of seasonal wet habitats, such as vernal pools and swales within valley and foothill grasslands, between elevations of approximately 100 feet and 750 feet. The annual herb blooms from March to May.

The larger vernal pools and seasonal wetlands within the study area provide suitable habitat for Ahart's dwarf rush. The species was not observed during the 2021 or 2022 field surveys of the study area, which were conducted in April. The species has not been documented within five miles of the study area, pursuant to the CNDDB. Based on the above, Ahart's dwarf rush has *low* potential for occurrence within the study area.

Legenere

Legenere (*Legenere limosa*) is not federally or State listed. The species is a CRPR List 1B.1 species. The annual herb is primarily associated with seasonal wetlands with a long hydroperiod, such as vernal pools and marsh and pond edges. Legenere occurs at elevations between sea level and 2,600 feet, and blooms from April to June.

The larger vernal pools and seasonal wetlands within the study area represent suitable habitat for the species. Legenere was not observed during the 2021 or 2022 field surveys of the study area, which were conducted in April, when the species was identifiable at a nearby location. Only one CNDDB record of Legenere is within five miles of the study area, and the record is considered extirpated (see Figure 7-5). The occurrence (CNDDB Occurrence #32) is located approximately

4.5 miles west of the site in the community of Rio Linda. Based on the above, Legenere has *low* potential for occurrence within the study area.

Pincushion Navarretia

Pincushion navarretia (*Navarretia myersii* ssp. *myersii*) is not federally or State listed. The species is a CRPR List 1B.1 plant. The species is found in vernal pools and other mesic areas in annual grasslands, often on acidic soils. Pincushion navarretia is found between elevations of approximately 65 feet and 1,100 feet and blooms in April and May.

The vernal pools, seasonal wetlands, and seasonal wetland swales within the study area provide suitable habitat for the species. Pincushion navarretia was not observed during the 2021 or 2022 field surveys of the study area, which were conducted in April, when other wetland *Navarretia* species were in bloom on the site. The species has not been documented within five miles of the study area in the CNDDB. Based on the above, pincushion navarretia has *low* potential for occurrence within the study area.

Listed and Special-Status Wildlife Species

According to the records search conducted as part of the BRA, 33 special-status wildlife species have the potential to occur on-site or within five miles of the study area. Based on field observations and literature review (detailed further in this chapter under the Method of Analysis subsection), 18 of the 33 special-status wildlife species were determined to have the potential to occur within the study area. Species that are considered to be present include Swainson's hawk and white-tailed kite. Species that are considered to have *high* potential to occur include vernal pool fairy shrimp, Central Valley steelhead, Central Valley fall-run chinook salmon, western spadefoot, western pond turtle, northern harrier, loggerhead shrike, yellow warbler, pallid bat, silver-haired bat, western red bat, and hoary bat. Species that are considered to have *moderate* potential to occur include burrowing owl. Species that are considered to have *low* potential to occur include vernal pool tadpole shrimp, tricolored blackbird, and Townsend's big-eared bat.

The following discussions provide further details of the 18 special-status wildlife species with potential to occur within the study area. Because elderberry shrubs are located on-site, a discussion is also included on Valley elderberry longhorn beetle (VELB). Table 7-3 above lists all 33 special-status wildlife species with potential to occur in the vicinity of the study area.

Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened, pursuant to the FESA. The species is also a PCCP Covered Species. Historically, the range of vernal pool fairy shrimp extended throughout the Central Valley. Vernal pool fairy shrimp populations have been found in several locations throughout California, with habitat extending from Stillwater Plain in Shasta County, through the Central Valley, to Pixley in Tulare County, and along the Central Coast range from northern Solano County to Pinnacles National Monument in San Benito County. Additional populations occur in San Luis Obispo, Santa Barbara, and Riverside counties. The historic and current ranges of vernal pool fairy shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times. The lifecycle of vernal pool fairy shrimp is adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales. Fairy shrimp embryos survive the dry season in cyst form. Cysts "hatch" soon after pools become inundated during the wet season. Fairy shrimp complete their life cycle quickly and feed on small particles of detritus, algae, and bacteria.

Fifteen CNDDB occurrences of vernal pool fairy shrimp have been recorded within five miles of the study area, the nearest of which is located approximately 0.5-mile north of the study area, just north of Dry Creek Elementary School (see Figure 7-6). The vernal pools and seasonal wetland swales throughout the study area provide suitable habitat for the species. Protocol-level wet-season and dry-season surveys of the wetlands in the Placer Greens parcel and along PFE Road were negative. The surveys were conducted in accordance with the 2017 USFWS *Survey Guidelines for the Listed Large Branchiopods*. Therefore, vernal pool fairy shrimp is considered absent from these areas. Surveys have not been conducted within the Schellhous parcel. Thus, the species could be present in the parcel, and vernal pool fairy shrimp has *high* potential for occurrence within the northern portion of the study area.

Valley Elderberry Longhorn Beetle

VELB is listed as threatened, pursuant to the FESA, and is a PCCP Covered Species. The historic range of VELB is limited to moist Valley oak woodlands, along margins of rivers and streams in the lower Sacramento and lower San Joaquin valleys. At the time of its listing, the beetle was known from less than 10 localities in Merced, Sacramento, and Yolo counties. VELB's current distribution is patchy throughout the Central Valley and associated foothills.

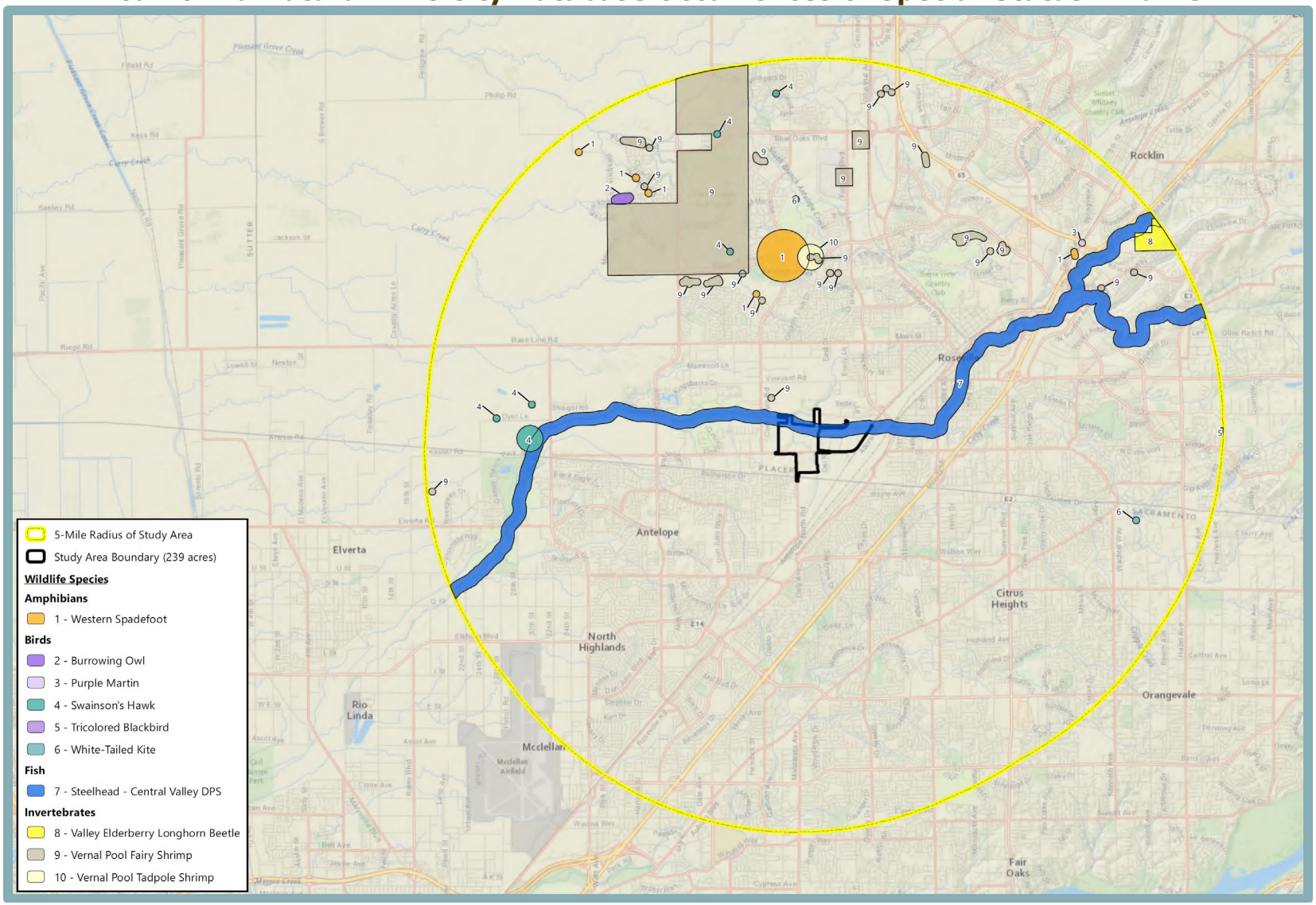
VELB is completely dependent on its host plant, the elderberry (*Sambucus* species), which occurs in riparian and other woodland communities in the Central Valley and associated foothills. Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation. Adults emerge through the emergence holes from late March through June. The short-lived adult beetles forage on leaves and flowers of elderberry shrubs.

Two clusters of elderberry shrubs are present in the southeastern portion of the study area (see Figure 7-3). Each of the clusters has numerous stems with a diameter of one inch or greater, but exit holes were not observed on any of the shrubs when surveyed by a qualified biologist in early February 2022. The survey was conducted to collect information for analysis of the shrubs consistent with USFWS *The Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*. The shrubs are not in a riparian location. One documented CNDDB occurrence of VELB is within five miles of the study area (see Figure 7-6). The occurrence (CNDDB Occurrence #270) is located approximately five miles northeast of the study area near Secret Ravine Parkway and is considered potentially extirpated. Given the lack of evidence of VELB presence and the long distance to the nearest occupied habitat, VELB are considered *absent* from the site.

Vernal Pool Tadpole Shrimp

The vernal pool tadpole shrimp (*Lepidurus packardi*) is listed as endangered, pursuant to the FESA, and is a PCCP Covered Species. The historic range of the vernal pool tadpole shrimp likely extended throughout the Central Valley and has been documented from east of Redding in Shasta County, south to Fresno County, and to the San Francisco Bay Wildlife Refuge in Alameda County. The historic and current ranges of vernal pool tadpole shrimp are very similar in extent; however, the remaining populations are more fragmented and isolated than during historical times. The species is associated with long-duration seasonal pools in grasslands throughout the northern and eastern portions of the Central Valley. Suitable vernal pools and seasonal swales are generally underlain by hardpan or sandstone. Much like vernal pool fairy shrimp, vernal pool tadpole shrimp are adapted to seasonally inundated features such as vernal pools, seasonal wetlands, and seasonal wetland swales.

Figure 7-6
California Natural Diversity Database Occurrences of Special-Status Wildlife



Large vernal pools within the project site provide marginally suitable habitat for the species. One documented CNDDB occurrence of vernal pool tadpole shrimp is within five miles of the study area (see Figure 7-6). The occurrence (CNDDB Occurrence #24) is located approximately 2.5 miles north of the study area in the Woodcreek Oaks Wetland Preserve and is considered potentially extirpated. Protocol-level wet-season and dry-season surveys of the wetlands in the Placer Greens parcel and along PFE Road were negative. The surveys were conducted in accordance with the 2017 USFWS *Survey Guidelines for the Listed Large Branchiopods*. Therefore, vernal pool tadpole shrimp is considered absent from the area. However, surveys have not been conducted within the Schellhous parcel. Based on the marginal suitability of habitat, the species has *low* potential for occurrence within the northern portion of the study area.

Central Valley Steelhead

Steelhead (*Oncorhynchus mykiss irideus*) populations in the Central Valley evolutionary significant unit (ESU) have been listed by the National Oceanic and Atmospheric Administration (NOAA) NMFS as threatened under the FESA. The species is also a PCCP Covered Species. Steelhead, the anadromous form of rainbow trout, historically inhabited most tributaries to the Sacramento River. Juvenile steelhead may spend up to three years in freshwater prior to migrating to the ocean as smolts. Typically, juvenile steelhead migrate as age class 1+ fish (one year in fresh water) through the Sacramento River and the Sacramento-San Joaquin Estuary from November through May. Spawning steelhead require gravel or cobble substrates 0.2-inch to 5.1 inches in diameter for egg laying. Fine sediments (e.g., silt, fine sand, and clay) may suffocate eggs by preventing the transport of dissolved oxygen from the water to the eggs. The range of water temperatures for optimal survival and growth of rainbow trout is between 59 degrees and 64 degrees Fahrenheit. Both fry and older juveniles require instream object cover, cobble or boulders, large woody debris, undercut banks, or submerged and overhanging vegetation for protection against predators.

The segment of Dry Creek within the study area is designated as Critical Habitat for Central Valley steelhead. The reach of the creek within the study area is considered too degraded to provide spawning and rearing habitat, but serves as a migration corridor to better habitat upstream in Secret Ravine and Miner's Ravine. The intermittent drainage is tributary to Dry Creek, but does not have appropriate substrate for spawning, and its intermittent nature renders it unsuitable for rearing habitat. Although steelhead could possibly swim through the drainage, the aquatic feature is not considered suitable habitat for the species. Based on the above, Central Valley steelhead has *high* potential for occurrence within the study area.

Central Valley Fall-Run Chinook Salmon

Chinook salmon are a PCCP Covered Species and an anadromous species, which spawn in freshwater rivers but migrate to the ocean to rear. Chinook salmon typically return to their natal stream to spawn. Within the Central Valley four races of Chinook salmon exist: fall run, late fall run, winter run, and spring run. Adult fall-run Chinook salmon migrate through the Delta and into Central Valley rivers from July through December and spawn from October through December. Chinook rely on suitable water temperature and substrate for successful spawning and incubation. Rearing habitat for juveniles includes riffles, runs, pools, and inundated floodplains. In streams, Chinook are opportunistic feeders. They eat aquatic insects, terrestrial insects, and bottom invertebrates. Juvenile Chinook are significantly affected by predatory nonnative fish.

The segment of Dry Creek within the study area is designated as Essential Fish Habitat for all Pacific Salmon, including the Central Valley fall-run Chinook. While the reach of the creek within

the study area is considered too degraded to provide spawning and rearing habitat for salmonids, the creek serves as a migration corridor to better habitat upstream in Secret Ravine and Miner's Ravine. The intermittent drainage is tributary to Dry Creek, but does not have appropriate substrate for spawning, and the drainage's intermittent nature renders the aquatic feature unsuitable for rearing habitat. Although Chinook could possibly swim through the intermittent drainage, the feature is not considered suitable habitat for the species. Based on the above, Chinook has *high* potential for occurrence within the study area.

Western Spadefoot

The western spadefoot (*Spea hammondii*) is not federally or State listed. The species is a CDFW Species of Special Concern. The amphibian is a nocturnal animal that forages in grassland, open chaparral, and pine-oak woodlands for a variety of invertebrates such as insects and worms. Western Spadefoot breeds from January through May in a variety of temporary wetlands, including creeks, pools in intermittent drainages, vernal pools, and seasonal wetlands, and other fish-free water features. The tadpoles develop over three to 11 weeks and must complete their metamorphosis before the temporary pools dry. Post-metamorphic juveniles feed and then immediately seek underground refugia. Following metamorphosis, adults are largely terrestrial in nature and will burrow into sandy or gravelly soils utilizing the "spades" on their hind feet. The majority of an adult's life is spent in underground burrows. In Placer County, western spadefoots are known to breed in relatively deep manmade features, such as ponded areas adjacent to railroad tracks, and in intermittent drainage plunge pools or similar pools that hold water through late spring.

Several of the vernal pools and seasonal wetlands within the study area provide suitable breeding habitat for western spadefoot. The surrounding annual brome grasslands/VPC land covers provide suitable dry-season habitat. Western spadefoot tadpoles were not observed during wet-season vernal pool branchiopod surveys in the portion of the study area south of PFE Road. Five documented CNDDB occurrences of western spadefoot are within five miles of the study area, the nearest of which (CNDDB Occurrence #171) is located approximately 2.25 miles to the north in the Woodcreek Oaks Open Space Preserve (see Figure 7-6). Based on the above, western spadefoot has *high* potential for occurrence within the study area.

Western Pond Turtle

The western pond turtle (*Emys marmorata*) is not federally or State listed. The species is a CDFW Species of Special Concern and a PCCP Covered Species. Western pond turtle's favored habitats include streams, large rivers, and canals with slow-moving water, aquatic vegetation, and open basking sites. Although the turtles must live near water, they can tolerate drought by burrowing into the muddy beds of dried drainages. The species feeds mainly on invertebrates such as insects and worms, but will also consume small fish, frogs, mammals, and some plants. Western pond turtle predators include raccoons, coyotes, raptors, weasels, large fish, and bullfrogs. The species breeds from mid to late spring in adjacent open grasslands or sandy banks.

Dry Creek and the intermittent drainages within the study area provide suitable habitat for western pond turtle. The species has not been documented, pursuant to the CNDDB, within five miles of the study area; however, an unprocessed CNDDB record of the species has been documented approximately four miles to the east in Upper Linda Creek, a tributary of Dry Creek. Based on the above, western pond turtle has *high* potential for occurrence within the study area.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) is not federally listed. The species is State listed as threatened, a CDFW Species of Special Concern, and a PCCP Covered Species. Tricolored blackbirds are colonial nesters, preferring to nest in dense stands of cattails, bulrush, or blackberry thickets associated with perennial water.

Isolated blackberry brambles and small cattail patches in and around the intermittent drainage running through the study area provide marginally suitable nesting habitat for tricolored blackbird. One documented CNDDB occurrence of tricolored blackbird is within five miles of the study area (see Figure 7-6). The occurrence (CNDDB Occurrence #330) is located approximately five miles east of the study area, along Wellington Way just north of East Roseville Parkway. Based on the above, tricolored blackbird has *low* potential for occurrence within the study area.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is not listed pursuant to either the FESA or CESA. The species is designated as a CDFW Species of Special Concern and is a PCCP Covered Species. Burrowing owls typically inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. The species typically uses burrows created by fossorial mammals, most notably the California ground squirrel, but may also use manmade structures such as culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. The species' breeding season extends from February 1 through August 31.

Although few ground squirrel burrows were observed during the field survey, debris scattered throughout the study area could provide artificial burrows for burrowing owl. The annual brome grasslands provide suitable foraging habitat for the species. One documented CNDDB occurrence of burrowing owl is within five miles of the Study Area (see Figure 7-6). The occurrence (CNDDB Occurrence #339) is located approximately five miles northwest of the study area, along Phillip Way. Based on the above, burrowing owl has *moderate* potential for occurrence within the study area.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed, but is listed as threatened by CDFW. The raptor is also a PCCP Covered Species. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents. The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter.

The annual brome grasslands throughout the study area provide suitable foraging habitat for Swainson's hawk, and the trees within the study area provide suitable nesting habitat. The species was observed foraging on-site during field surveys. Five occurrences of Swainson's hawk nests have been documented within the CNDDB (see Figure 7-6). In addition, numerous unprocessed records for the species exist. The nearest documented Swainson's hawk nest is an unprocessed record approximately 2.5 miles west of the study area, west of Walerga Road. Based on the above, Swainson's hawk is *present* within the study area.

Northern Harrier

The northern harrier *(Circus cyaneus)* is not listed, pursuant to either the FESA or CESA. The species is a CDFW Species of Special Concern. Northern harrier, a ground-nesting species, is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California,

typically nesting in emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands.

The annual brome grasslands throughout the study area provide suitable nesting and foraging habitat for the species. Northern harrier has not been documented in the CNDDB within five miles of the study area. Based on the above, northern harrier has *high* potential for occurrence within the study area.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or State listed. The raptor is a CDFW fully protected species. White-tailed kite is a yearlong resident of the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands. White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range.

The annual brome grasslands throughout the study area provide suitable foraging habitat for white-tailed kite, and the trees within the study area provide suitable nesting habitat. The species was observed foraging in the southern portion of the study area during the field survey. CNDDB includes five documented occurrences of white-tailed kite nests, the nearest of which is approximately 2.5 miles north of the study area, near the Woodcreek Golf Club (CNDDB Occurrence #56) (see Figure 7-6). Based on the above, white-tailed kite is *present* within the study area.

Loggerhead Shrike

The loggerhead shrike *(Lanius ludovicianus)* is not listed, pursuant to either the FESA or CESA. The species is a CDFW Species of Special Concern. Loggerhead shrikes nest in small trees and shrubs in woodland and savannah vegetation communities, and forage in open habitats throughout California. The nesting season ranges from March through June.

The trees and annual brome grassland within the study area provide suitable foraging and nesting habitat for loggerhead shrike. The species has not been documented in the CNDDB within five miles of the study area. Based on the above, loggerhead shrike has *high* potential for occurrence within the study area.

Yellow Warbler

The yellow warbler *(Setophaga petechia)* is not listed, pursuant to the FESA or CESA. The species is a CDFW Species of Special Concern. The yellow warbler is largely extirpated as a breeder in the Sacramento Valley, but the bird is a common migrant during the fall and winter months. Yellow warblers generally occupy riparian vegetation in close proximity to streams. The species' preferred habitat in northern California is dominated by willows (*Salix* spp.), cottonwoods (*Populus* spp.), and Oregon ash (*Fraxinus latifolia*).

Although the study area is outside the species' breeding range, a yellow warbler has been documented along Dry Creek just downstream of the study area, and suitable winter foraging habitat is present in the riparian woodlands within the study area. Based on the above, yellow warbler has *high* potential for occurrence within the study area.

Pallid Bat

Pallid bat (*Antrozous pallidus*) is not federally or State listed. The species is a CDFW Species of Special Concern and classified by the WBWG as a High priority species. Pallid bat favors roosting sites in crevices in rock outcrops, caves, abandoned mines, hollow trees, and manmade structures, such as barns, attics, and sheds. Though pallid bats are gregarious, they tend to group in smaller colonies of 10 to 100 individuals. The bat is a nocturnal hunter and captures prey in flight, but unlike most American bats, the species has been observed foraging for flightless insects, which the bat seizes after landing.

Tree hollows and exfoliating bark on trees throughout the study area and outbuildings associated with the homestead provide suitable day and maternity roosting habitat for pallid bat. Pallid bat has not been documented in the CNDDB within five miles of the study area. Based on the above, pallid bat has *high* potential for occurrence within the study area.

Townsend's Big-Eared Bat

Townsend's big-eared bat (*Corynorhinus townsendii townsendii*) is not federally listed; however, the species is a candidate for State listing and classified by the WBWG as a High priority species. Townsend's big-eared bat roosts primarily in caves and cave-like roosting habitat, including abandoned mines. The species' habit of roosting on open surfaces while resembling a pendant makes the bat readily detectable, and the species can be most readily observed when present (commonly in low numbers) in caves and abandoned mines throughout the bat's range. Townsend's big-eared bat has also been reported to utilize buildings, bridges, rock crevices, and hollow trees as roost sites. The bat forages in edge habitats along streams and adjacent to and within a variety of wooded habitats.

Assorted outbuildings associated with the Schellhous residence provide marginally suitable day and maternity roosting habitat for Townsend's big-eared bat. The species has not been documented in the CNDDB within five miles of the study area. Based on the above, Townsend's big-eared bat has *low* potential for occurrence within the study area.

Silver-Haired Bat

Silver-haired bat (*Lasionycteris noctivagans*) is not federally or State listed. The species is classified by the WBWG as a Medium priority species. Primarily considered a coastal and montane forest species, the silver-haired bat occurs in more xeric environments during winter and seasonal migrations. The bat roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The insectivore's favored foraging sites include open wooded areas near water features.

Tree hollows and exfoliating bark on trees throughout the study area provide suitable day and maternity roosting habitat for silver-haired bat. The species has not been documented in the CNDDB within five miles of the study area. Based on the above, silver-haired bat has *high* potential for occurrence within the study area.

Western Red Bat

Western red bat (*Lasiurus blossevillii*) is not federally or State listed. The species is a CDFW Species of Special Concern and classified by the WBWG as a High priority species. Western red bat is typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in

urban areas. The species may associate with intact riparian habitat, particularly willows, cottonwoods, and sycamores.

Trees within the riparian woodland provide suitable day and maternity roosting habitat for western red bat. The species has not been documented in the CNDDB within five miles of the study area. Based on the above, western red bat has *high* potential for occurrence within the study area.

Hoary Bat

The hoary bat (*Lasiurus cinereus*) is not federally or State listed. The species is classified by the WBWG as a Medium priority species. Hoary bat is considered to be one of the most widespread of all American bats, with a range extending from Canada to central Chile and Argentina, as well as Hawaii. Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches at the edge of a clearing. The species may also occasionally roost in caves, beneath a rock ledge, in a woodpecker hole, in a grey squirrel nest, under a wood plank, or clinging to the side of a building.

Trees within the study area's oak woodland and riparian woodland represent suitable day and maternity roosting habitat for hoary bat. The species has not been documented in the CNDDB within five miles of the study area. Based on the above, hoary bat has *high* potential for occurrence within the study area.

Trees

Because the project site, off-site sewer pipeline alignment options, and potential trail alignments encompass unincorporated Placer County and the City of Roseville, with portions of the foregoing areas located within the PCCP and other portions located outside of the PCCP, the discussion of the existing on-site trees are organized in accordance with the applicable regulations to which removal of the trees would be subject. The discussions below detail the existing trees within the PCCP portion of the study area, the City of Roseville (which does not participate in the PCCP), and the non-PCCP portion of the County.

Trees Within the Placer County Conservation Program

As discussed further in the Impacts and Mitigation Measures section of this chapter under Impact 7-14, potential project impacts to native trees and oak woodlands within the PCCP plan area are mitigated through payment of land cover conversion fees. The PCCP portion of the study area, which consists of the Schellhous parcel and the West Trail alignment includes such trees, but as potential impacts would be mitigated through the PCCP by way of payment of land conversion fees, the BRA did not quantify the number of native trees and oak woodlands within the PCCP portion of the study area.

Trees Within the City of Roseville

Portions of Options 1A, 1B, and 1C of the proposed off-site sewer pipeline alignment, as well as a portion of the East Trail alignment, are located outside of the PCCP within the City of Roseville. Chapter 19.66 of the Roseville Municipal Code, discussed further in the Regulatory Context section of this chapter, sets forth the City's requirements for tree preservation. Within the Option 1A sewer pipeline alignment are 56 valley oaks, an interior live oak, and an oracle oak. The Option 1B alignment consists of 46 valley oaks and five interior live oaks. The portion of the Option 1C alignment within the City of Roseville does not include native oak trees. Finally, the East Trail alignment contains seven valley oaks.

Trees Within the County, Outside of the Placer County Conservation Program

For trees that occur within Placer County outside of the PCCP plan area, the Placer County Tree Ordinance (Chapter 19.50 of the Placer County Code) (County Tree Ordinance) regulates the removal and preservation of individual, isolated native trees. In addition, where tree crown canopy coverage is 10 percent/acre or greater and the dominant tree species are native California oaks, the County regulates impacts to these areas as impact to oak woodland under the 2008 *Interim Guidelines for Evaluating Development Impacts on Oak Woodland* (Interim Guidelines). Furthermore, the Interim Guidelines provide protections for "significant trees" within the oak woodlands, which are defined as trees greater than 24 inches diameter at breast height (DBH) or clumps of trees greater than 72 inches in circumference measured at ground level.

Both the County Tree Ordinance and Interim Guidelines are discussed further in the Regulatory Context section of this chapter. Table 7-4 summarizes the existing individual trees within the non-PCCP portion of the study area in areas of potential disturbance that would be protected under the County Tree Ordinance. In addition, the non-PCCP portion of the study area contains existing "significant trees" within the oak woodlands, the potential impacts to which are discussed under Impact 7-14 in this chapter and detailed in Table 7-11.

Table 7-4
Study Area Individual Native Trees Within Non-PCCP Portions of Placer County

Species	Project Site (DBH)	Sewer Option 1B (DBH)
Blue Oak	21 (524.5)	0
Fremont Cottonwood	0	1 (55)
Interior Live Oak	9 (150)	1 (12.7)
Red Willow	0	1 (12)
Valley Oak	11 (129)	7 (187.9)
Total	**41 (803.5)**	**10 (267.6)**

Source: Madrone Ecological Consulting, 2022.

7.3 REGULATORY CONTEXT

A number of federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to biological resources.

Federal Endangered Species Act

The U.S. Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [3], [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 CFR Section 17.3). Harass is defined as actions that create the likelihood of injury to

listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

For federally listed species covered under the PCCP, the Biological Opinion issued by the USFWS for the PCCP provides take coverage for covered projects under the PCCP that may impact federally listed species that are covered species under the PCCP. No further consultation is required as long as the covered project complies with PCCP requirements. For federally listed species that are not covered species under the PCCP, take coverage is required as outlined below.

In the context of the proposed project, FESA consultation with USFWS or the NMFS would be initiated if development resulted in take of a threatened or endangered species not covered under the PCCP or if issuance of a Section 404 permit or other federal agency action could result in take of an endangered species not covered under the PCCP or adversely modify critical habitat of such a species.

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code (CFGC) states, “It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto.”

Clean Water Act

The USACE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). “Discharge of fill material” is defined as the addition of fill material into waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (Title 33 of U.S. Code [USC], Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR Section 328.3[b]).

Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil,

destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

For covered projects under the PCCP, impacts to Section 404 jurisdictional waters are addressed under the CARP, which allows a streamlined Section 404 permitting process for covered activities under the PCCP that will result in impacts to aquatic resources subject to Section 404 jurisdiction.

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the CFGC, such as CESA (CFGC Section 2050, et seq.), Fully Protected Species (CFGC Section 3511) and the Lake or Streambed Alteration Agreement Program (CFGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that "overriding considerations" exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

As with FESA, for covered projects that may impact State-listed species under CESA that are also covered species under the PCCP, direct consultation with CDFW for State-listed take authorization is not required as long as the covered project complies with PCCP requirements. For projects that may result in take of State-listed species that are not PCCP covered species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGC Section 2081).

California Fish and Game Codes

A number of species have been designated "fully protected" species under Sections 5515, 5050, 3511, and 4700 of the CFGC, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The CFGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Birds of prey are protected in California under provisions of the CFGC Section 3503.5 (1992), which states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction

disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the CFGC Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, State or local government agency, or public utility that proposes an activity that will:

- 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; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into a Lake or Streambed Alteration Agreement.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern" developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Quality Control Boards (RWQCBs) are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within waters of the U.S., and also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDR) for dredge or fill activities. The State Office of Administrative Law (OAL) approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

Placer County Conservation Program

On September 1, 2020, Placer County adopted the PCCP, which is a Habitat Conservation Plan (HCP) under the FESA and a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act. The PCCP applies to all Covered Activities within Placer County north of PFE Road, but outside of certain non-participating municipalities. The City of Roseville is not participating in the PCCP, so only the portions of the overall study area that are within Placer County north of PFE Road, but outside of the City of Roseville, would participate in the PCCP.

The PCCP includes the CARP to issue permits related to the CWA and the CFGC. The CARP has a number of additional conditions for work within the vicinity of drainages. Conditions that are relevant to the proposed project include:

- Disturbance within 50 feet of the edge of riparian vegetation shall be limited to exempt activities such as bridge crossings, recreational trails, and outfalls. The 50-foot restricted area is referred to throughout this chapter as the "Riparian Buffer".
- Structures are not permitted within 50 feet of intermittent streams or within 100 feet of perennial streams unless authorized through an approved variance processed by Placer County. In addition, Placer County Code (Chapter 17.54.145) identifies a Watercourse

Setback within which no structures are permitted except as approved by the Planning Director. The "Placer County Watercourse Setback" is defined as designated buffers for various named drainages, and 50-foot buffers for all other drainages in National Hydrology Dataset (NHD). Within the overall project site, this is a 300-foot setback from Dry Creek, and a 50-foot setback from all other drainages.

As a permittee under the PCCP, Placer County can transfer take authorization to private entities conducting activities covered by the plan and under their jurisdiction. Covered Activities are generally any actions undertaken in the PCCP plan area by or under the authority of the Permittees that may affect Covered Species or covered natural communities. The area for permit coverage under the HCP/NCCP has two main parts and associated subcomponents: (1) Plan Area A, comprised of Valley and Foothill areas; and (2) Plan Area B, which consists of subcomponent areas B1 through B5. The project site is within Plan Area A, which is the main focus of the HCP/NCCP and where all future growth and most of the Covered Activities will take place. Plan Area A is covered by a comprehensive permit and is comprised of the City of Lincoln plus all unincorporated lands within western Placer County: approximately 210,000 acres, or roughly five-sixths of western Placer County.

The Valley portion of Plan Area A, within which the project site is located, comprises the City of Lincoln and unincorporated western Placer County below roughly 200 feet in elevation. VPCs and annual grasslands are the primary natural communities in the Valley

The PCCP addresses 14 Covered Species and several Covered Natural Communities, and includes conservation measures to protect all 14 Covered Species and their habitats. Avoidance and minimization measures (AMMs) are set forth in Chapter 6 of the PCCP, and are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized.

Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees include Land Conversion fees and may also include Aquatic/Wetland Special Habitat fees. To address disturbances to vegetation communities/land covers within the PCCP, including disturbances to oak woodland acreages and impacts to individual trees, development fees are applied for a development project's vegetation community impacts, in accordance with PCCP guidelines.

Placer County General Plan

The Placer County General Plan biological resource policies that are applicable to the proposed project are presented below:

Water Resources

Goal 6.A To protect and enhance the natural qualities of Placer County's rivers, streams, creeks and groundwater.

Policy 6.A.1 The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old growth woodlands,

and the habitat of special status, threatened or endangered species (see discussion of sensitive habitat buffers in Part I of this Policy Document). Based on more detailed information supplied as a part of the review for a specific project or input from state or federal regulatory agency, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:

1. Reasonable use of the property would otherwise be denied;
2. The location is necessary to avoid or mitigate hazards to the public;
3. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
4. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.

Policy 6.A.3 The County shall require development projects proposing to encroach into a stream zone or stream setback to do one or more of the following, in descending order of desirability:

a) Avoid the disturbance of riparian vegetation;
b) Replace all functions of the existing riparian vegetation (on-site, in-kind);
c) Restore another section of stream (in-kind);
d) Restore another section of stream (in-kind); and/or
e) Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).

Policy 6.A.4 Where stream protection is required or proposed, the County should require public and private development to:

a) Preserve stream zones and stream setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a stream is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
b) Designate such easement or dedication areas (as described in a. above) as open space;
c) Protect stream zones and their habitat value by actions such as: 1) providing an adequate stream setback, 2) maintaining creek corridors in an essentially natural state, 3) employing stream restoration techniques where restoration is needed to

achieve a natural stream zone, 4) utilizing riparian vegetation within stream zones, and where possible, within stream setback areas, 5) prohibiting the planting of invasive, non-native plants (such as Vinca major and eucalyptus) within stream zones or stream setbacks, and 6) avoiding tree removal within stream zones;

d) Provide recreation and public access near streams consistent with other General Plan policies;

e) Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.

f) Provide for long-term stream zone maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

Policy 6.A.5 The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

Wetland and Riparian Areas

Goal 6.B To protect wetland communities and related riparian areas throughout Placer County as valuable resources.

Policy 6.B.1 The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

Policy 6.B.2 The County shall require new development to mitigate wetland loss in both federal jurisdictional and non-jurisdictional wetlands to achieve "no net loss" through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation and conservation banking program that provides the opportunity to mitigate impacts to special status, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas. Non-jurisdictional wetlands may include riparian areas that are not

federal "waters of the United States" as defined by the Clean Water Act.

Policy 6.B.3 The County shall discourage direct runoff of pollutants and siltation into wetland areas from outfalls serving nearby urban development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.

Policy 6.B.4 The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.

Policy 6.B.5 The County shall require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. Consideration shall be given to out-of-kind compensatory mitigation for wetland impacts when larger landscape-level goals and objectives may be met by doing so. The County shall continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than significant impact under CEQA.

Fish and Wildlife Habitat

Goal 6.C To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 6.C.1 The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened, or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, and vernal pool/grassland complexes.

f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
g) Important spawning and rearing areas for anadromous fish.
h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.C.2 The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

Policy 6.C.3 The County shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, fish, and wildlife.

Policy 6.C.4 The County shall encourage private landowners to adopt sound fish and wildlife habitat management practices, as recommended by California Department of Fish and Wildlife officials, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, and the Placer County Resource Conservation District.

Policy 6.C.6 The County shall support programs that preserve the habitats of threatened, endangered, and/or other special status species including the implementation of the Placer County Conservation Program. Where County acquisition and maintenance is not practicable or feasible, federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.

Policy 6.C.7 The County shall support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or non-game species, through maintenance of habitat diversity.

Policy 6.C.9 The County shall require new private or public developments to preserve and enhance existing riparian habitat unless public safety concerns require removal of habitat for flood control or other essential public purposes (See Policy 6.A.1.). In cases where new private or public development results in modification or destruction of riparian habitat the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.

Policy 6.C.11 Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the County shall require, as part of the environmental review process, a biotic resources evaluation of the sites by a wildlife biologist, the

evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of special status, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the decision-making body shall determine the feasibility of the identified mitigation measures and whether the approval affects the viability of County, state or federal conservation programs that seek to protect the significant ecological resource areas.

Significant ecological resource areas shall, at a minimum, include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, vernal pool/grassland complexes habitat.
f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
g) Important spawning and rearing areas for anadromous fish.
h) Habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.C.12 The County shall cooperate with, encourage, and support the plans of other public agencies to acquire fee title or conservation easements to privately-owned lands in order to preserve important wildlife corridors and to provide habitat protection of California Species of Concern and state or federally listed threatened, or endangered plant and animal species, or any species listed in an implementing agreement for a habitat conservation plan and natural communities conservation plan such as the Placer County Conservation Program.

Policy 6.C.13 The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered or threatened species and their

habitats, wetland habitats, wildlife migration corridors, and locally important species/communities.

Vegetation

Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.

Policy 6.D.1 The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.

Policy 6.D.2 The County shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permits or for project mitigation.

Policy 6.D.3 The County shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, vernal pools, and habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.D.4 The County shall ensure that landmark trees and major groves of native trees are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.

Policy 6.D.5 The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.6 The County shall ensure the conservation of sufficiently large, continuous expanses of vegetation that provides suitable habitat for maintaining abundant and diverse wildlife including habitat necessary to protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.D.7 The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored or expanded, where possible.

Policy 6.D.8 The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.9 The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.

Policy 6.D.10 The County shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

Policy 6.D.11 The County shall support the continued use of prescribed burning, mastication, chipping, and other methods to mimic the effects of natural fires to reduce fuel loads and associated fire hazard to human residents and to enhance the health of biotic communities.

Policy 6.D.14 The County shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants, riparian areas). Where feasible, these areas should be protected through public acquisition of fee title or conservation easements to ensure protection.

Open Space for the Preservation of Natural Resources

Goal 6.E To preserve and enhance open space lands to maintain the natural resources of the County.

Policy 6.E.1 The County shall support the preservation and enhancement of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible. The County shall permanently protect, as open space, areas of natural resource value, including wetlands, riparian corridors, unfragmented woodlands, and floodplains.

Policy 6.E.2 The County shall require that new development be designed and constructed to preserve the following types of areas and features as open space to the maximum extent feasible:

- High erosion hazard areas;
- Scenic and trail corridors;
- Streams, riparian vegetation;
- Wetlands;
- Significant stands of vegetation;
- Wildlife corridors;
- Any areas of special ecological significance
- Habitat necessary to sustain protect and recover populations of the Covered Species identified in the Placer County Conservation Program.

Policy 6.E.3 The County shall support the conservation of open space and natural areas that are interconnected and of sufficient size to protect biodiversity, sustain viable populations, accommodate wildlife movement, and sustain ecosystems. In particular, lands within the Placer County Conservation Program Plan Area that meet these criteria are a priority for conservation.

Dry Creek-West Placer Community Plan

The following goals and policies from the DCWPCP related to biological resources are applicable to the proposed project.

Community Development: Land Use

Goal 2 To preserve outstanding visual features, natural resources, and landmarks.

Policy 3 The retention of important open space features is critical to the future quality of life in the Plan area.

Policy 26 Encourage development activities in areas of least environmental sensitivity, and similarly, restrict from development activities those lands which are environmentally sensitive.

Community Development: Community Design

Policy 14 Where possible preserve native trees and support the use of native drought tolerant plant materials in all revegetation/landscaping projects.

Environmental Resources Management: Natural Resources

Goal 1 Provide for the protection of rare, threatened and endangered species and the habitat which supports those species

Goal 2 Conserve the quality of all habitats which support the environment of fish and wildlife species so as to maintain populations at sustainable levels.

Goal 4 Safeguard and maintain natural waterways to ensure water quality, species diversity and unique habitat preservation.

Goal 6 Preserve outstanding areas of natural vegetation.

Policy 1 Any rare, significant, or endangered environmental features and conditions should be identified and programs designed to conserve or enhance their continued existence.

Policy 2 Preserve in their natural condition all stream environment zones, including flood plains, and riparian vegetation areas.

Policy 5 Identify all important fish and wildlife areas within the plan area and where feasible, protect these areas from urban/suburban encroachment.

Policy 6 Identify, preserve and protect areas of unique or significant natural vegetation, including but not limited to vernal pools, riparian areas and native oak groves.

Policy 8 Protect important spawning grounds, migratory routes, water-fowl resting areas, oak woodlands, and other unique wildlife habitats critical to protecting and sustaining wildlife populations.

Policy 12 Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any subdivision or land development project, paying particular attention to the protection and preservation of existing vegetation.

Policy 13 For landscaping which is part of site development where original vegetation has been removed or where additional plantings are included, the emphasis should be on drought tolerant, native species where possible.

Policy 16 Require site specific studies, from qualified consultants, for projects which impact unique or significant fish, wildlife or vegetative resources.

Policy 17 Incorporate a mitigation monitoring program for all projects subject to environmental review where detrimental impacts to an area's natural resources have been identified.

Policy 18 Require field studies as part of project review where vernal pools are noted on the property. These studies shall document the possible occurrence of special status plant and wildlife species and provide a method of protecting, monitoring, replacing or otherwise mitigating development in and around these sensitive habitats.

Policy 19 Support the "no net loss" policy for wetland areas administered by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service and the State Department of Fish and Game. Continue to coordinate with these agencies at all levels of project review to ensure that their concerns are adequately addressed.

Policy 24 Tracts of undisturbed oak woodlands and valley grasslands that have significant value as wildlife habitat shall be preserved as open space.

Environmental Resources Management: Open Space

Goal 1 To preserve and enhance open space lands to maintain the natural resources and rural characteristics of the area.

Goal 2 To protect and preserve open spaces vital for wildlife habitat and other areas of major or unique ecological significance.

Goal 3 To protect the natural beauty and minimize disturbance of the natural terrain and vegetation.

Goal 4 To conserve and enhance the unique natural environment and open space of the area and to minimize disturbance of the natural terrain because these are unique and valuable assets for the Dry Creek-West Placer Community Plan Area, Placer County and the counties that border the area.

Goal 5 Preserve outstanding areas of natural vegetation including, but not limited to, oak woodlands, riparian areas and vernal pools.

Goal 6 To conserve the visual resources of the community, including the important vistas and wooded area, and in particular, the riparian habitat of Dry Creek and its intermittent streams and natural drainage channels which are important in providing low cost natural flood control.

Goal 7 Provide for the protection of rare, threatened and endangered species and/or the habitat which supports these species.

Goal 10 To provide open space to shape and guide development and to enhance community identity.

Policy 1 Preserve in their natural condition all stream environment zones, including floodplains, and riparian vegetation areas.

Policy 3 Identify and, where possible, preserve all soils which are suitable for agricultural uses.

Policy 4 Encourage both private and public ownership and maintenance of open space.

Policy 5 Protect natural areas along creeks and canals through the use of non-development setback with setback distances varying according to the significance of the area to be protected.

Policy 12 Development on private lands should be planned and designed to provide for preservation of open space.

Policy 13 Because the dominant features of the Planning Area contributing to the open quality are the natural land forms and vegetation, structures should be subordinated thereto. Only in the confines of individual sites should structures be allowed to be dominant.

Policy 17 Stream corridors shall be left in an open, natural condition, except for structures or uses which are compatible with stream corridors.

Policy 18 In the design and development of new subdivisions the following types of areas and features shall be preserved as open spaces to the maximum extent feasible: high hazard areas, scenic and trail corridors, streams, streamside vegetation, other significant stands of beneficial native vegetation, and any areas of special ecological significance.

Policy 21 Where impacts to stream environment zones or wetland are unavoidable, project specific mitigation shall include the identification and quantification of vegetation impacted, the preparation or revegetation plans to assure no net loss of riparian

or wetland acreage or values, and the specific monitoring of pans to assure compliance and satisfactory results.

Placer County Tree Ordinance

The County Tree Ordinance (Chapter 19, Article 50 of the Placer County Code) regulates the removal and preservation of trees within the County in areas outside of the PCCP. "Trees" under the County Tree Ordinance include all tall woody plants native to California (except grey pines and "brush"), with a single main stem or trunk at least six inches DBH, or with multiple trunks with an aggregate of at least 10 inches DBH. For all oak species (*Quercus* sp.), the woody plant is considered a tree when the single main stem is five inches DBH or larger. Each tree has a "Protected Zone," which is a circle equal to the largest radius of a protected tree's dripline, plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's dripline. The County Tree Ordinance requires a Tree Permit for any activity within the Protected Zone of a tree related to a discretionary project. In addition, a Tree Permit is required for the removal of any Protected Tree, unless otherwise exempted.

Placer County Interim Guidelines for Evaluating Development Impacts on Oak Woodland

Placer County enforces the County Tree Ordinance for cases of impacts to individual, isolated native trees; however, where tree crown canopy coverage is 10 percent per acre or greater and the dominant tree species are native California oaks, the County regulates impacts to these areas outside of the PCCP as impact to oak woodland under the 2008 Interim Guidelines. Under the Interim Guidelines, impacts to oak woodlands include all areas within 50 feet of the development footprint, and for every acre of oak woodland impacted, two acres of the same woodland type must be preserved off-site. In addition, any "significant trees" (generally trees greater than 24 inches DBH or clumps greater than 72 inches in circumference measured at ground level) impacted within the oak woodland must also be mitigated separately in accordance with the County Tree Ordinance.

City of Roseville Tree Ordinance

The City of Roseville Tree Ordinance (Chapter 19.66 of the Roseville Municipal Code) (Roseville Tree Ordinance) regulates the removal and preservation of trees within the City of Roseville. "Protected Trees" under the Roseville Tree Ordinance include all native oak trees with a DBH equal to or greater than six inches measured as a total of a single trunk or multiple trunks. Each Protected Tree has a "Protected Zone," which is a circle equal to the largest radius of a protected tree's dripline plus one foot. The radius is measured from the trunk at the base of the tree to the greatest extent of the tree's dripline. The Roseville Tree Ordinance requires a Tree Permit for any activity within the Protected Zone of a protected tree where the encroachment exceeds 20 percent of the Protected Zone, or where the activity is related to a discretionary project. In addition, a Tree Permit is required for the removal of any Protected Tree, unless otherwise exempted.

7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan;
- Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of or restrict the range of an endangered, rare, or threatened species; or
- Have a substantial adverse effect on the environment by converting oak woodlands.

Method of Analysis

The information contained in the analysis is primarily based on the BRA and Arborist Report prepared by Madrone.

Biological Resource Assessment

The analyses within the BRA is based on a literature review and field surveys of the study area, which are detailed further below.

Literature Review

A list of special-status plant and wildlife species with potential to occur within the study area was developed as part of the BRA through queries of the following databases:

a) CNDDB query of the study area and all areas within five miles of the study area (see Figure 7-5 and Figure 7-6);
b) USFWS Information for Planning and Conservation (IPaC) query of the study area (included as Attachment B of the BRA);
c) CNPS Rare and Endangered Plant Inventory query of the "Citrus Heights, California" U.S. Geological Survey topographic quadrangle and the eight surrounding quadrangles (included as Attachment C of the BRA); and
d) WBWG Species Matrix.

In addition, any special-status species that are known to occur in the project region, but that were not identified in any of the above database searches were also analyzed for their potential to occur within the study area. The following documents were reviewed and incorporated into this document as appropriate:

- *Biological Resources Assessment for the 65-acre PFE Assemblage Study Area*;
- *Biological Resources Assessment for the 45-acre Placer Greens Study Area*;
- *Preliminary Arborist Report & Tree Inventory for PFE Road Widening Study*;
- *Arborist Report & Tree Inventory & Assessment for Placer Greens South East Corner of PFE Road & Antelope Road*;
- *Arborist Report & Tree Inventory & Assessment for PFE Road Project*;
- *Special-Status Plant Survey Report for Mill Creek*;[7]
- *2017-2018 Wet Season and Dry Season Branchiopod Surveys 90-Day Report - Mill Creek*;
- *Draft Biological Resources Assessment for Mill Creek*; and
- *Aquatic Resources Delineation Report for the Schellhous Property*.

Field Surveys

A Madrone biologist conducted field surveys of various portions of the study area on February 28, May 18, June 21, July 18, August 26, and October 27, 2017; November 4, 2020; March 11 and 26, October 27, and November 10, 2021; and January 21, 2022 to map vegetation communities/land covers, assess the suitability of habitats on-site to support special-status species, and to inventory trees in areas that data was required. Protocol-level special-status plant surveys were conducted on April 12, 14, and 20, July 6, July 7, 2021; and April 5, 2022. Protocol-level VELB surveys were conducted throughout the study area concurrent with the special-status plant surveys, and the identified clumps of elderberry shrubs were fully surveyed for exit holes on February 3, 2022 when the shrubs were dormant, and thus, leaves were not obscuring the stems. Aquatic resources delineations conducted in accordance with USACE protocol were conducted in sewer and trail alignment areas on March 11 and 26, October 27, and November 10, 2021; and January 21, 2022. Meandering pedestrian surveys were performed on foot throughout the study area. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition*, and plant taxonomy was based on the nomenclature in the *Jepson eFlora*. PCCP land covers were mapped within the portions of the study area within the PCCP plan area. A list of all wildlife species observed during the field surveys is included as Attachment E in the BRA (see Appendix D of this EIR).

The results of the following additional surveys were also incorporated into the BRA:

- *Preliminary Arborist Report & Tree Inventory for PFE Road Widening Study*;
- *Arborist Report & Tree Inventory & Assessment for Placer Greens South East Corner of PFE Road & Antelope Road*;
- *Arborist Report & Tree Inventory & Assessment for PFE Road Project*;

[7] The referenced "Mill Creek" documents refer to a previous project that was proposed in Placer County. The project site for the Mill Creek Project encompassed multiple parcels, including the Placer Greens parcel. As such, the BRA prepared for the proposed project reviewed and incorporated applicable information from the biological resources documents for Mill Creek.

- A 2021 Aquatic Resources Delineation conducted by Madrone in portions of the site for which a verified wetland delineation was not available;
- Special-status plant surveys conducted by Madrone in 2022 throughout the study area; and
- Tree inventory data from California Tree and Landscape (CalTLC).

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

7-1 Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As detailed in Table 7-3, the special-status plant species with potential to occur within the study area include Sanford's arrowhead, dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, Legenere, and pincushion navarretia. Pursuant to the protocol-level special-status plant surveys conducted as part of the BRA, only Sanford's arrowhead was identified as being present within the study area. However, the Sanford's arrowhead population is located in the avoidance area in the southern portion of the Placer Greens parcel (see Figure 7-7).

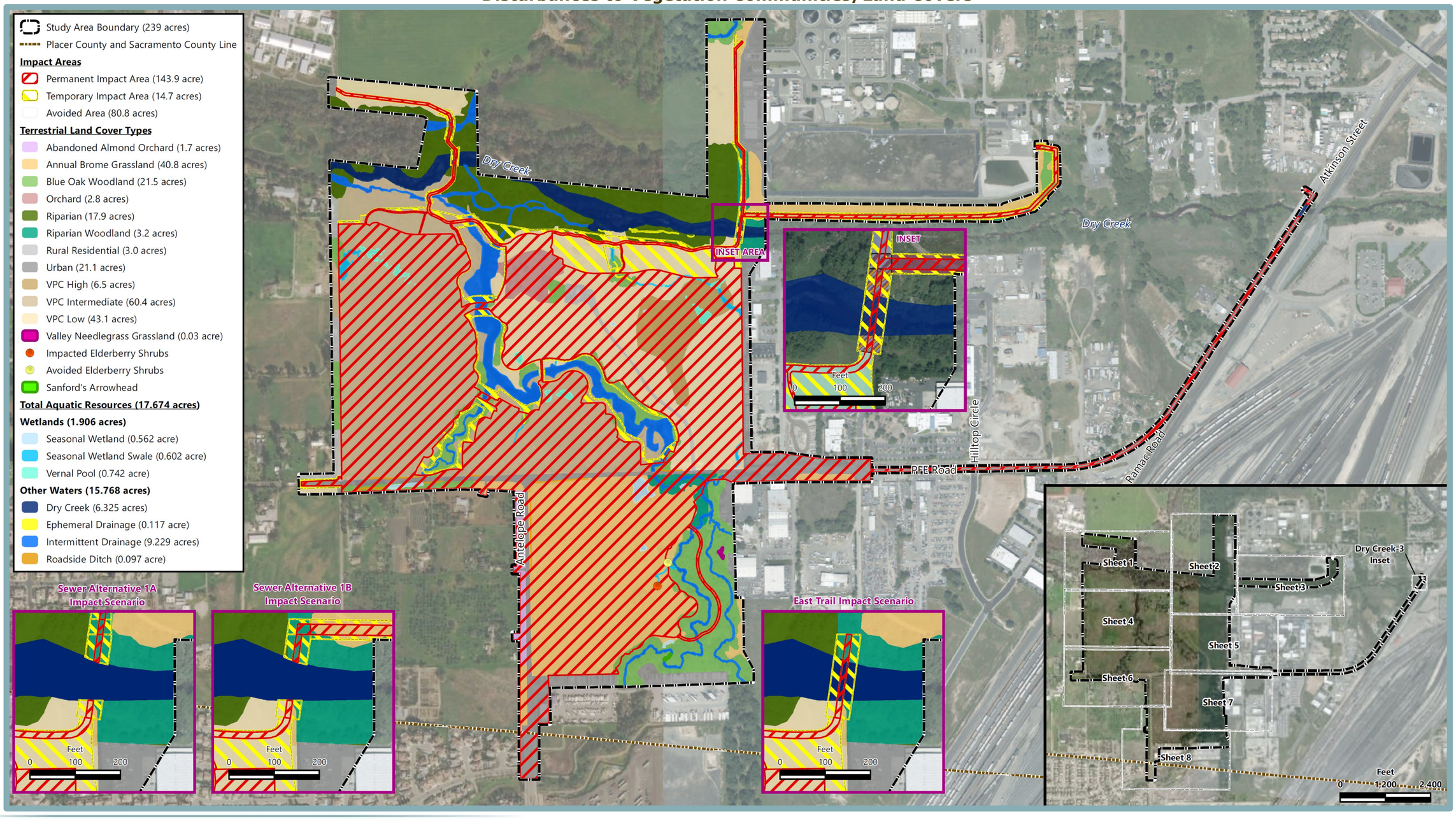
The special-status plant surveys conducted throughout the study area in 2021 and 2022 were negative for all other species that could occur within the proposed impact area; however, given enough time, plants may become established in areas where suitable habitat exists. Various on-site vegetation communities and PCCP land covers proposed for disturbance, such as the Riparian and VPC Low, Intermediate, and High land covers, provide suitable habitat for a variety of special-status plant species. Therefore, special-status plants could become established within the foregoing vegetation communities and land covers in the interim between surveys/analysis and construction, which could result in potential impacts during construction of the proposed project.

Based on the above, should construction commence during or following the spring of 2024, without additional field surveys, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level. Special-status plants are not covered under the PCCP; thus, the following mitigation measure applies to both the PCCP and non-PCCP portions of the project site.

Figure 7-7
Disturbances to Vegetation Communities/Land Covers



7-1 *If construction has not commenced prior to the first day of spring 2024 (March 19, 2024), a new round of special-status plant surveys shall be conducted in areas proposed for disturbance, prior to the commencement of construction.*

The surveys shall be conducted in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants, the CNPS Botanical Survey Guidelines of the California Native Plant Society, and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. If special-status plant species are not found, further mitigation shall not be required.

If special-status plants are found within the proposed impact area and they are perennials such as Sanford's arrowhead or big-scale balsamroot, then mitigation shall consist of digging up the plants and transplanting them into a suitable avoided area on-site prior to construction. If the plant found is an annual such as dwarf downingia, then mitigation shall consist of collecting seed-bearing soil and spreading it into a suitable constructed wetland at a mitigation site. If special-status plants are impacted, a mitigation plan shall be developed and approved by the Placer County Community Development Resource Agency. The Mitigation Plan shall describe the proposed mitigation for impacts to the plant species, and include (at minimum) details regarding success criteria, monitoring, reporting, and contingency in case of failure. Mitigation for the transplantation/establishment of rare plants shall not result in the net loss of individual plants after a five-year monitoring period.

7-2 Impacts to special-status branchiopods either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed in the Existing Setting section of this chapter, the identified special-status branchiopod species that have potential to occur within the study area include vernal pool fairy shrimp and vernal pool tadpole shrimp, which are each PCCP Covered Species. Protocol-level surveys have documented the absence of vernal pool fairy shrimp and vernal pool tadpole shrimp in all suitable habitat in the non-PCCP portions of the study area. However, such surveys have not been conducted within the study area's PCCP portions. The Schellhous parcel contains vernal pools in the parcel's northeast, northwest, and central portions, which total 0.742-acre and are considered potential habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp (see Figure 7-7). This vernal pool habitat will be impacted by development of the proposed project. Therefore, absent confirmation of the species' presence/absence by way of protocol-level surveys of the PCCP portion of the project site, the proposed project could result in a significant impact to either species. Pursuant to the BRA, vernal pool branchiopod

habitat is not located within the footprint of any of the sewer pipeline alignment alternatives or the potential trail alignments. As such, the proposed project would not result in off-site impacts to special-status branchiopods.

Based on the above, without protocol-level surveys for vernal pool fairy shrimp and vernal pool tadpole shrimp within suitable habitat in the PCCP portion of the study area, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a branchiopod species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure within the PCCP portion of the project site would reduce the above potential impact to a *less-than-significant* level.

7-2 *PCCP Species Condition 10: Wet-season surveys to determine occupancy of vernal pools by vernal pool fairy shrimp and vernal pool tadpole shrimp shall be required if the proposed project is implemented while the PCCP is still in the Initial Survey Phase. The Placer Conservation Authority (PCA) shall inform the applicant if the PCCP is in the Initial Survey Phase and surveys are required. If required, wet season surveys shall be conducted for vernal pool fairy shrimp and vernal pool tadpole shrimp in vernal pools, as determined by wetland delineation. A qualified biologist shall conduct protocol-level wet season surveys, using modified Survey Guidelines for the Listed Large Branchiopods (Guidelines), as approved by USFWS. Modifications include requiring that all vernal pools at a site be surveyed, rather than allowing for the survey to be terminated when presence on a project site is confirmed. This modification is necessary to obtain data on presence and absence in all the available vernal pools, to facilitate the determination of the Occupancy Rate Standards. This, and other exceptions and additions to the Guidelines, are as follows:*

1. *If presence is confirmed for vernal pool fairy shrimp and/or vernal pool tadpole shrimp in an individual vernal pool, surveys may be stopped for that vernal pool.*
2. *All vernal pools on the project site must be surveyed. Surveys cannot be suspended prior to completion, as allowed by the Guidelines, if one or more of the six listed large branchiopods, identified in the Guidelines is determined to be present.*
3. *The Guidelines define a complete survey as consisting of one wet-season and one dry-season survey conducted and completed in accordance with the Guidelines within a three-year period. For the purposes of the PCCP, only one wet-season survey is required; dry-season surveys are not required. Applicants must plan ahead to allow sufficient time to complete the surveys.*
4. *Data that will be collected at each vernal pool surveyed during the wet-season survey shall include the presence or absence of*

vernal pool fairy shrimp and vernal pool tadpole shrimp, species identity and the estimated abundance (10s, 100s, 1,000s) of immature and mature vernal pool fairy shrimp and vernal pool tadpole shrimp present and estimated maximum surface area of the vernal pool. Other information on the USFWS data sheet is not required to be collected (i.e., air and water temperature, average and estimated maximum depth of the vernal pool, presence of non-target crustaceans, insects, and platyhelminths, and habitat condition). This will allow surveys to be conducted more efficiently, while providing the essential information necessary to calculate the Pool-based Occupancy Rate Standard and the Area-based Occupancy Rate Standard. Because the vernal pools will be affected by Covered Activities, collection of additional information is not necessary.

5. *Information shall be recorded on the PCA-provided data sheet, which will be the USFWS data sheet (included as Appendix A to the Guidelines), modified to include the above information.*
6. *Voucher specimens shall not be collected during wet season surveys unless the identity of the mature shrimp is uncertain and cannot be identified in the field. The Guidelines allow for a limited number of voucher specimens to be collected for each vernal pool. For the purpose of the PCCP, the modified survey protocol further limits the collection of voucher specimens to instances where identity is uncertain.*
7. *The surveys must be conducted far enough in advance of development that the pools can dry out sufficiently for inoculum to be salvaged.*

The biologist conducting a survey for vernal pool fairy shrimp and vernal pool tadpole shrimp shall participate in the wetland delineation to map the area of each vernal pool. If the biologist cannot participate in the wetland delineation, and the wetland delineation does not provide area for each vernal pool, the biologist shall conduct follow-up surveys to map the perimeter of each vernal pool with a global positioning system (GPS). Each vernal pool shall be given a unique identification number that will be used to track survey data collected during wet-season surveys.

The results of the wet-season surveys shall be submitted to the Placer County Community Development Resource Agency and PCA.

7-3 Impacts to VELB either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Pursuant to the BRA, the on-site biological surveys identified two clusters of elderberry shrubs within the project site, each within the Placer Greens parcel, which could indicate the presence of VELB (see Figure 7-7). As discussed above, VELB is completely dependent on its host plant, the elderberry shrub, which occurs in riparian and other woodland communities in the Central Valley and associated foothills. Female beetles lay their eggs in crevices on the stems or on the leaves of living elderberry plants. When the eggs hatch, larvae bore into the stems. The larval stages last for one to two years. The fifth instar larvae create emergence holes in the stems and then plug the holes and remain in the stems through pupation.

With respect to the two confirmed clusters of on-site elderberry shrubs, exit holes were not observed on any of the shrubs during field surveys conducted in early February 2022. In addition, the elderberry shrubs are not located within the site's riparian areas, and the easternmost cluster is located in an area that would be avoided by project components. Furthermore, the nearest previous VELB occurrence within five miles of the study area, as documented in the CNDDB, is considered extirpated. As such, the field surveys concluded VELB to be absent from the project site. In regard to the off-site sewer pipeline alignment and potential trail alternatives, elderberry shrubs do not occur within 165 feet of such areas. Thus, the BRA concluded that VELB are not currently present in the proposed off-site areas that could be disturbed through development of the proposed project.

The proposed project would include the removal of the westernmost cluster of shrubs, which would be transplanted to an appropriate open space area(s) on-site, prior to the start of site grading activities. However, prior to transplantation, VELB surveys will be required out of an abundance of caution (see Mitigation Measure 7-3) because in the interim between the field surveys and the commencement of project construction, VELB could colonize the existing elderberry shrubs. Additionally, new on-site shrubs could become established. Therefore, VELB could become present on-site in areas proposed for disturbance, resulting in the potential for significant impacts.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on an invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

7-3 *Potential impacts that could occur to VELB in portions of the project site and off-site areas within the PCCP shall be addressed through compliance with applicable requirements set forth by the PCCP, including AMMs set forth in Chapter 6 of the PCCP and payment of impact fees.*

If construction does not commence prior to February 2025 within non-PCCP areas, then prior to the commencement of construction activities, a qualified biologist shall conduct comprehensive VELB surveys within

the areas proposed for disturbance, no more than three years prior to commencement of construction. Surveys may be conducted at any time of the year, but elderberry shrubs tend to be most visible in spring. Surveys shall be conducted in accordance with the USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle, or the most recent USFWS VELB guidance at the time. The results of the survey shall be submitted to the Placer County Community Development Resource Agency.

If VELB are not identified, further mitigation shall not be required. If VELB are located, prior to the start of construction, the following provisions shall be implemented:

1. *All occupied elderberry shrubs (which are defined for the purposes of this section as those with stems greater than one inch in diameter at ground level) shall be avoided completely during construction with a buffer of at least 20 feet, except as permitted under paragraph 2 below, and the following avoidance and minimization measures during construction (as outlined in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle) shall be implemented for all work within 165 feet of a shrub:*

    - *All areas to be avoided during construction activities shall be fenced and/or flagged as close to construction limits, as feasible;*
    - *Activities that could damage or kill an elderberry shrub (e.g., trenching, paving, etc.) shall receive an avoidance area of at least 20 feet from the dripline;*
    - *A qualified biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance;*
    - *A qualified biologist shall monitor the work area at project appropriate intervals to assure that all avoidance and minimization measures are implemented;*
    - *As much as feasible, all activities within 165 feet of an elderberry shrub shall be conducted between August and February;*
    - *Elderberry shrubs shall not be trimmed;*
    - *Herbicides shall not be used within the dripline of the shrub. Insecticides shall not be used within 100 feet of an elderberry shrub; and*
    - *Mechanical weed removal within the dripline of the shrub shall be limited to the season when adults are not active (August to February) and shall avoid damaging the elderberry.*

2. *If an elderberry shrub occupied with VELB must be removed to accommodate construction, then the applicant shall notify the Placer County Community Development Resource Agency and consult with USFWS, which could issue a Biological Opinion. At a minimum, the removal of elderberry shrubs found to be occupied with VELB shall be mitigated through the purchase of one (1) VELB mitigation credit from an agency-approved mitigation bank for each occupied shrub removed or through the planting of five (5) elderberry seedlings and five (5) native California trees or shrubs at a USFWS-approved location for each shrub removed. If the latter option is selected, then the seedlings and associated natives shall achieve an 80 percent survival rate measured at the end of a five-year monitoring period.*

7-4 Impacts to special-status salmonids either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Dry Creek, which consists of a segment that flows through the project site, is designated as Critical Habitat for Central Valley steelhead and Essential Habitat for Central Valley fall-run Chinook salmon. The creek serves as a migration corridor for both fish species to suitable spawning and rearing habitat, located upstream in Secret Ravine and Miner's Ravine. The intermittent drainages that connect to Dry Creek do not provide habitat for salmonids (see Figure 7-7).

DCWPCP Policy 5 requires the identification of all important fish and wildlife areas within the DCWPCP plan area and protection of such areas from urban/suburban encroachment, where feasible. As discussed in the Project Description chapter of this EIR, consistent with Policy 5, the parks developed as part of the proposed project would be located along the Dry Creek tributaries and the project's open space corridor, minimizing the placement of any structures within the 100-year floodplain associated with the creek. In addition, approximately 33 acres of the Schellhous parcel, along Dry Creek, is anticipated to be received by the PCCP preserve system. Furthermore, as discussed in the Hydrology and Water Quality chapter of this EIR, because the proposed project would disturb more than one acre, the project would be subject to the provisions of the NPDES Construction General Permit, codified within Articles 8.28 and 15.48 of the Placer County Code. As part of compliance with the Construction General Permit, the project would be required to develop a Storm Water Pollution Prevention Plan (SWPPP) and implement BMPs to control erosion during project construction. Final BMPs for the proposed project construction would be chosen in consultation with the applicable *California Stormwater Quality Association Stormwater Best Management Practices Handbooks* and implemented by the project contractor. Additionally, as necessitated by the Construction General Permit, the project site would be inspected during construction, before and after storm events and every 24 hours during extended storm events, in order to identify maintenance requirements for

the implemented BMPs and to determine the effectiveness of the implemented BMPs. Through compliance with DCWPCP Policy 5 and the NPDES Construction General Permit, the project, as proposed, entirely avoids Dry Creek within the Schellhous parcel.

With respect to the proposed off-site sewer pipeline alignment alternatives, Options 1A and 1B would be bored under Dry Creek, which would not result in direct impacts to salmonid habitat, but the jack and bore process could result in an accidental release of rock and sand or drilling mud through a process known as a frac-out. Frac-out occurs during drilling operations, and is defined as the inadvertent release of drilling fluids or slurry into materials other than its intended entry and exit points. Therefore, should Options 1A or 1B ultimately be selected, construction associated with the proposed project could result in an adverse impact to Dry Creek. Under Option 1C, the sewer line would be hung on an existing bridge to cross Dry Creek, resulting in no direct impacts, but potential indirect effects to water quality could occur if appropriate erosion control measures are not implemented. Therefore, the proposed off-site sewer pipeline alignment could result in significant impacts to special-status salmonids from erosion of soil and/or pollutants into Dry Creek.

With respect to the potential trail alignments, if the West Trail were constructed at a future date by another party, a bridge would be built across Dry Creek. The potential fill within the creek associated with the bridge would consist of approximately eight concrete piles measuring approximately 25 square feet (sf) total. In addition, the West Trail would result in the permanent removal of herbaceous and woody riparian vegetation and minor bankside impacts above the OHWM. Furthermore, the structure would result in permanent shading of 0.031-acre of the creek within the PCCP plan area and direct temporary disturbance of 0.07-acre of Dry Creek within the PCCP plan area. If the East Trail were constructed at a future date by another party, the bridge built across Dry Creek would similarly result in potential fill within the creek, permanent removal of herbaceous and woody riparian vegetation and minor bankside impacts above the OHWM, and permanent shading of 0.002-acre of the creek within the PCCP and 0.022-acre of the creek outside of the PCCP. In addition, direct temporary disturbance to salmonid habitat in 0.036-acre of Dry Creek within the PCCP and 0.044-acre of the creek outside of the PCCP would occur. On the whole, the East Trail would result in 0.024-acre of permanent indirect impacts and 0.080-acre of temporary direct impacts to Dry Creek. Therefore, the potential trail alignments could result in significant impacts to special-status salmonids.

Overall, the proposed project combined with the required sewer pipeline alignment and potential future trails would result in the following impacts. The ranges below represent the range of impacts, depending on whether the trails are built.

- Within the PCCP portion of the study area, permanent shading of 0.000 to 0.033-acre (zero to 18 linear feet) of Dry Creek and 0.000 to 0.178-acre (zero to 96 linear feet) of temporary impacts to salmonid habitat in Dry Creek;
- Within the non-PCCP portion of the study area, permanent shading of 0.000 to 0.022-acre (zero to 12 linear feet) of Dry Creek, and 0.000 to 0.310-acre (zero to 171 linear feet) of temporary impacts to salmonid habitat in Dry Creek; and

- A combined total of 0.000 to 0.055-acre (zero to 30 linear feet) of permanent indirect shading impacts and 0.000 to 0.310-acre (zero to 171 linear feet) of temporary impacts to salmonid habitat in Dry Creek.

It should be noted that in-water work is not proposed as part of the project in non-PCCP areas of the project site or off-site improvement areas. During the Section 404 permit process, the USACE would request concurrence from NMFS that potentially significant impacts to listed salmonids would not occur in non-PCCP areas. Pursuant to Madrone's experience with similar projects, the NMFS would be expected to concur. Thus, the proposed project is not anticipated to require Section 7 consultation or a Biological Opinion to address potential impacts to listed salmonids in non-PCCP areas.

Based on the above, the proposed sewer pipeline alignment and potential trail alignments could have a substantial adverse effect, either directly or through habitat modifications, on a salmonid species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-4(a) *PCCP General Condition 1: Prior to improvement plan approval, the proposed project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP) and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.*

The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following BMPs. This list shall be included on the notes page of the improvement/grading plans and shall be shown on the plans:

1. *When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).*
2. *Trash generated by Covered Activities shall be promptly and properly removed from the site.*

3. *Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.*

    (a) *Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.*
    (b) *Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.*
    (c) *Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.*
    (d) *Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (http://www.cal-ipc.org/paf/) but shall be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.*

4. *If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.*

7-4(b) *<u>PCCP Stream System Condition 1</u>: The project shall be designed to minimize development activities within the stream system to the maximum extent possible.*

7-4(c) *Work adjacent to Dry Creek associated with the sewer alternatives or the potential future East trail could result in water quality impacts if appropriate runoff, erosion, and sediment control Best Management Practices (BMPs) are not implemented. Therefore, the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) for the proposed project prior to issuance of the grading permit and implement the SWPPP during construction. Examples of BMPs that may be specified by the Certified Professional in Erosion and Sediment Control*

(CPESC) that prepares the SWPPP include silt fencing between any areas of ground disturbance and Dry Creek, straw wattles or straw bales around drop inlets, compaction and hydroseeding of bare soil following construction, and locating concrete washouts, refueling areas, and materials storage, etc., a minimum of 300 feet from Dry Creek. The SWPPP shall be submitted for review and approval to the Placer County Department of Public Works.

If off-site sewer pipeline alignment Options 1A or 1B are selected, the jack and bore or horizontal directional drilling (HDD) under Dry Creek has a very small potential to result in a "frac-out". Frac-out, or inadvertent return of drilling lubricant, is a potential concern when the HDD is used under sensitive habitats and waterways. If one of the foregoing alternatives is selected, then prior to construction, the contractor shall be required to develop a Frac-Out Contingency Plan. The Frac-Out Contingency Plan shall be prepared to ensure that preventive and responsive measures can be implemented by the contractor. To minimize the potential for a frac-out, the Frac-Out Contingency Plan shall include design protocols to be implemented for the protection of sensitive biological resources and design protocols to require a geotechnical engineer or qualified geologist to make recommendations regarding the suitability of the formations to be bored to minimize the potential for frac-out conditions. In addition, the jack and bore may only be conducted between June 15 and October 15 to avoid any impacts to salmonid upstream or downstream migration in the unlikely event that a frac-out should occur. The Frac-Out Contingency Plan shall be submitted for review and approval to the Placer County Department of Public Works.

7-5 Impacts to western spadefoot either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Western spadefoot is a nocturnal amphibian that forages in grassland, open chaparral, and pine-oak woodlands for a variety of invertebrates such as insects and worms and breeds in a variety of temporary wetlands, including creeks, pools in intermittent drainages, vernal pools, and seasonal wetlands, and other fish-free water features. As such, the seasonal wetlands and vernal pools that would be disturbed by the proposed project provide suitable breeding habitat for western spadefoot and the surrounding annual brome grasslands/VPC land covers provide suitable dry-season habitat.

Project construction would permanently disturb a total of approximately 1.279 acres of suitable breeding habitat, approximately 58.53 acres of suitable upland habitat, and temporarily disturb approximately 8.12 acres of suitable upland habitat within the overall project site. With respect to the proposed off-site sewer pipeline alignment alternatives and potential trails, suitable habitat for western spadefoot is not present

within any of the potential locations. Therefore, the foregoing project components would not result in impacts to the species.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a wildlife species (western spadefoot) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level. The western spadefoot is not a covered species under the PCCP; thus, the following mitigation measure applies to both the PCCP and non-PCCP portions of the project site.

7-5 *During the spring prior to the commencement of construction activities, the project applicant shall ensure that a qualified biologist surveys all suitable aquatic habitat within the project site (including features proposed for avoidance) by sampling the features thoroughly with dipnets during March or early April, when spadefoot tadpoles could be present. In addition, one nocturnal acoustic survey of all areas within 300 feet of vernal pools and seasonal wetlands shall be conducted. Acoustic surveys shall consist of walking through the area and listening for the distinctive snore-like call of the species. Timing and methodology for the aquatic and acoustic surveys shall be based on those described in Distribution of the Western Spadefoot (Spea hammondii) in the Northern Sacramento Valley of California, with Comments on Status and Survey Methodology. The results of the surveys shall be submitted to the Placer County Community Development Resource Agency.*

If both the aquatic survey and the nocturnal acoustic survey are negative, further mitigation shall not be necessary. If western spadefoots are observed within aquatic habitat proposed for impact, the tadpoles shall be captured and relocated to an off-site open space preserve with suitable habitat in the vicinity of the overall project site. If western spadefoots are observed within aquatic habitat proposed for avoidance, then the project applicant may either relocate the tadpoles to an off-site open space preserve with habitat of equivalent or greater value (e.g., vernal pools and seasonal wetlands in a grassland/woodland matrix) in the vicinity of the overall project site, or install silt fence along the edge of the proposed area of disturbance within 300 feet of the occupied aquatic habitat to prevent metamorphosed individuals from dispersing into the construction area.

7-6 Impacts to western pond turtle either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

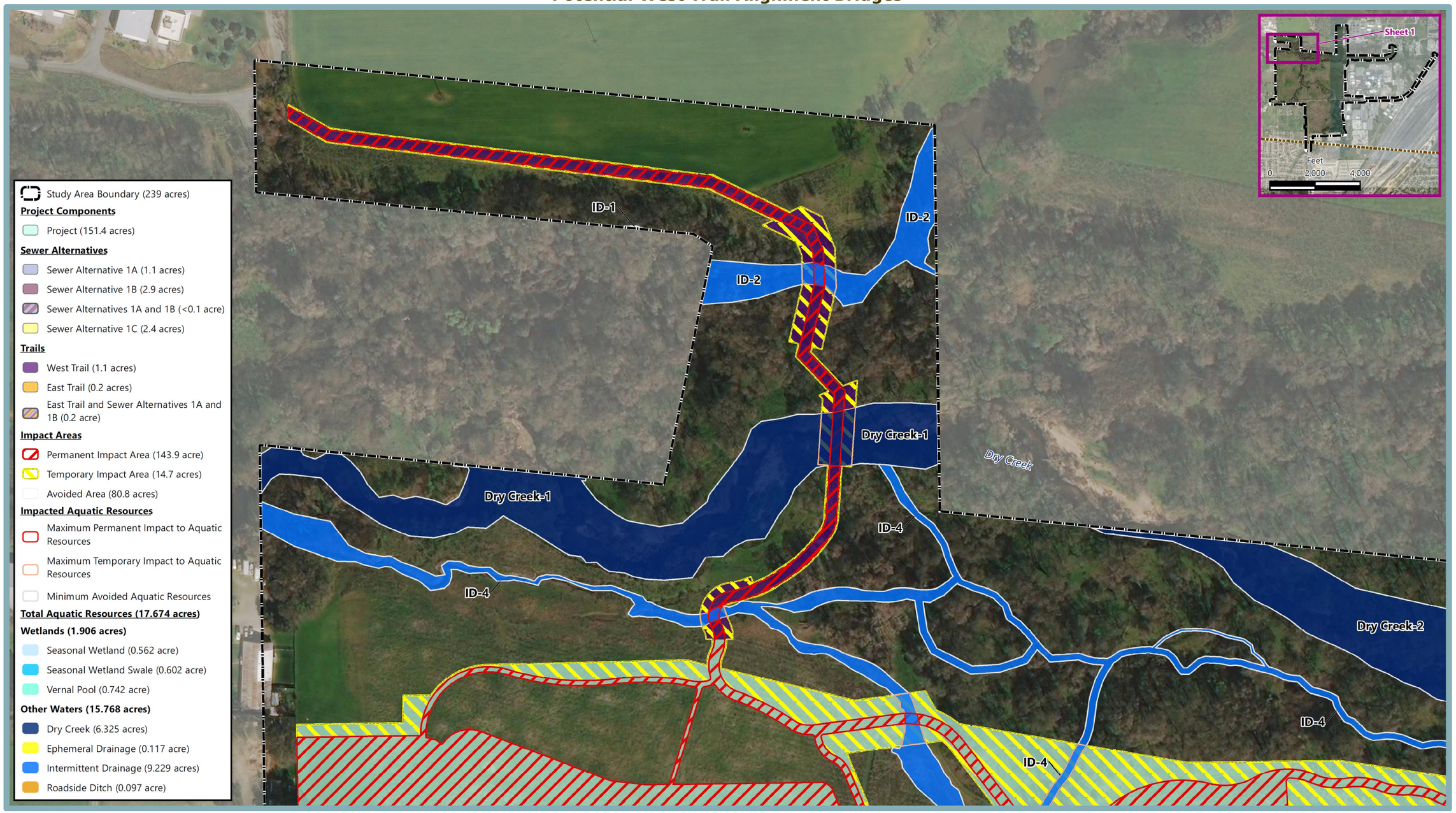
Dry Creek and its intermittent drainages within the study area provide suitable aquatic habitat for western pond turtle. In addition, the adjacent oak and riparian woodlands within 150 feet of Dry Creek and its intermittent drainages provide potential movement habitat. As shown in Figure 7-7, several segments of intermittent drainages and adjacent woodlands would be temporarily or permanently disturbed during project construction. In the event that western pond turtles or their nests are present in such areas during construction activities, individual turtles could be injured or killed, or nests could be destroyed.

Within the PCCP portion of the site, approximately 0.196-acre of western pond turtle habitat within the intermittent drainages, and approximately 0.86-acre of movement habitat in adjacent woodlands, would be permanently disturbed by the proposed project. Additionally, approximately 0.55-acre of habitat within the intermittent drainages and 0.81-acre of movement habitat in adjacent woodlands would be temporarily disturbed. Within the non-PCCP portion of the site, approximately 0.209-acre of western pond turtle habitat in the intermittent drainages and approximately 1.99 acres of movement habitat in adjacent woodlands would be permanently affected; however, western pond turtle habitat within intermittent drainages or adjacent woodlands would not be temporarily affected. Altogether, the project would permanently disturb a total of approximately 0.405-acre of habitat within intermittent drainages and temporarily disturb a total of 0.550-acre in intermittent drainages within the project site.

With respect to off-site project components, the proposed project would result in similar impacts related to the sewer pipeline alignment alternatives as those discussed under Impact 7-4 for special-status salmonids. Options 1A, 1B, and 1C would not result in direct impacts to Dry Creek; however, Options 1A and 1B could indirectly result in water quality impacts to the creek during jack-and-bore operations if appropriate erosion control measures are not implemented during work on either side of the creek. In addition, Options 1A and 1B would temporarily disturb approximately 0.19-acre of adjacent woodlands (e.g., movement habitat) within the non-PCCP portion of the project site. Option 1C could similarly result in indirect water quality impacts during construction, when hanging the pipeline under the existing bridge, should proper erosion control measures not be implemented.

With respect to the potential trail alignments, the West Trail would include construction of a bridge across Dry Creek and two bridges would be built across intermittent tributaries to the creek, as shown in Figure 7-8. The potential fill within the creek associated with the bridge would consist of the aforementioned eight concrete piles discussed under Impact 7-4, as well as six piles (approximately 19 sf) in the intermittent tributary north of Dry Creek and four piles (approximately 13 sf) in the intermittent tributary south of Dry Creek.

Figure 7-8
Potential West Trail Alignment Bridges



The West Trail alignment would result in the following permanent and temporary impacts:

1. The bridges would result in permanent indirect impacts to approximately 0.031-acre of Dry Creek and 0.213-acre of intermittent drainages that serve as western pond turtle aquatic habitat;
2. The bridges would also result in approximately 0.14-acre of permanent direct impacts to movement habitat in adjacent woodlands within the PCCP;
3. The West Trail alignment could also result in direct temporary impacts to approximately 0.070-acre of Dry Creek and 0.587-acre of intermittent drainages that serve as western pond turtle aquatic habitat, as well as 0.16-acre of movement habitat in adjacent woodlands within the PCCP; and
4. Combined, the potential West Trail alignment would result in permanent indirect impacts to a total of approximately 0.244-acre of aquatic habitat, permanent direct impacts to a total of 0.14-acre to upland movement habitat, and temporary direct impacts to a total of 0.673-acre associated with the West Trail.

In regard to the potential East Trail, the trail would also include a bridge constructed across Dry Creek as shown in Figure 7-9, which would result in the aforementioned eight concrete piles of fill within the creek. The East Trail alignment would result in the following permanent and temporary impacts:

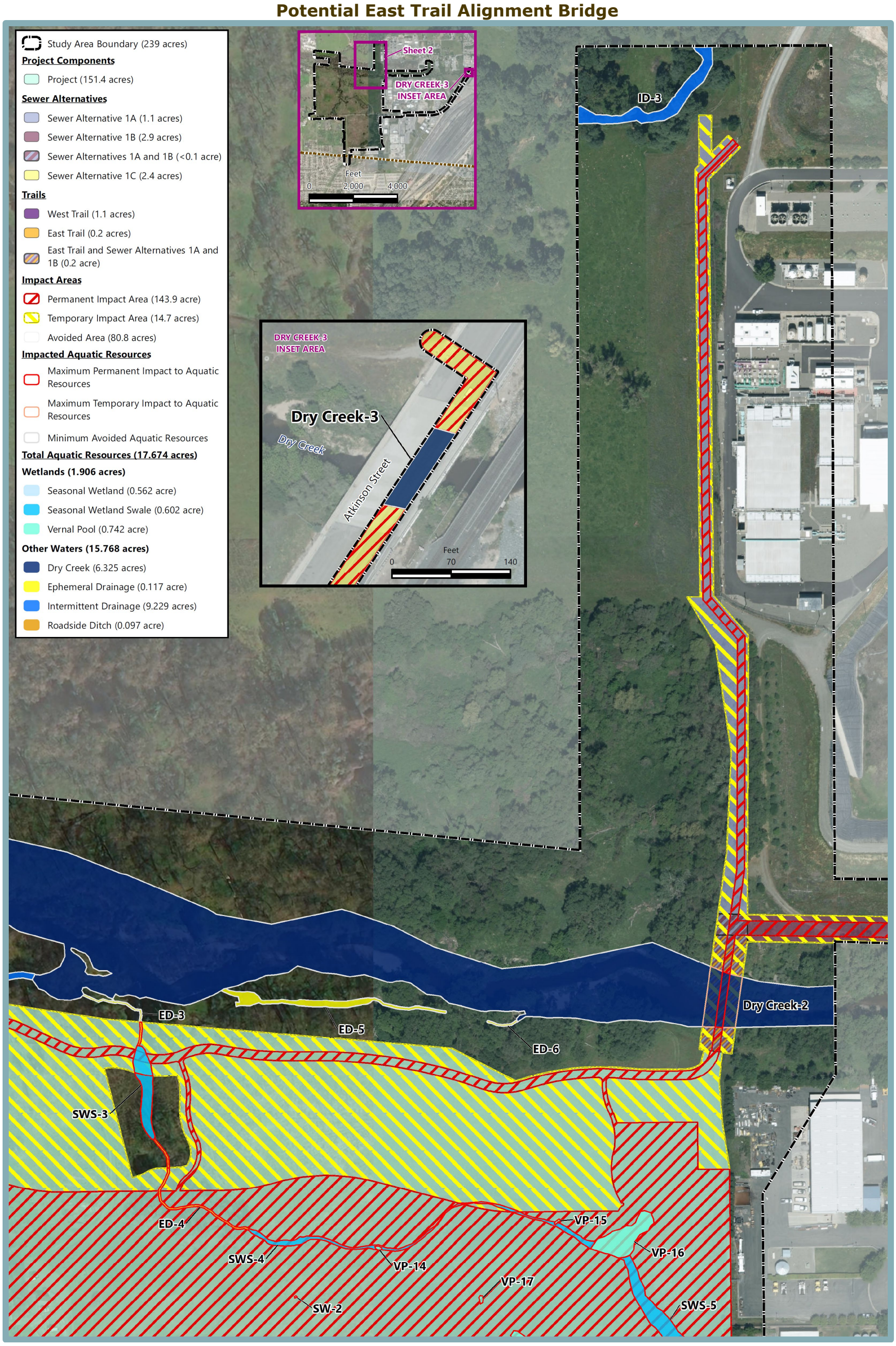
1. The bridge could result in permanent indirect impacts to approximately 0.002-acre of habitat within Dry Creek in the PCCP portion of the site and 0.022-acre of the creek outside of the PCCP plan area;
2. The East Trail alignment would result in direct temporary impacts to approximately 0.036-acre of habitat in Dry Creek within the PCCP plan area;
3. The East Trail alignment would also result in approximately 0.044-acre of direct temporary impacts to aquatic habitat provided by Dry Creek and 0.19-acre of movement habitat provided by adjacent woodlands, each of which would be outside of the PCCP plan area; and
4. Overall, the East Trail alignment would result in a total of approximately 0.024-acre of permanent indirect impacts and 0.27-acre of temporary direct impacts.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a wildlife species (western pond turtle) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Figure 7-9
Potential East Trail Alignment Bridge



Note: A portion of the trail shown along the south side of the Creek may be eliminated from the project design; thus, this impact analysis is conservative.

Placer County Conservation Program Plan Area

7-6(a) Implement the following Mitigation Measures set forth in this EIR:

- *<u>7-4(a) [PCCP General Condition 1]:</u> Prior to improvement plan approval, the proposed project shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), including requirements to develop a project-based Storm Water Pollution Prevention Plan (SWPPP) and applicable NPDES program requirements as implemented by the County. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.*

  The project shall comply with the West Placer Storm Water Quality Design Manual (Design Manual). The project shall implement the following BMPs. This list shall be included on the notes page of the improvement/grading plans and shall be shown on the plans:

  1. *When possible, vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas. When vehicle parking areas are to be established as a temporary facility, the site shall be recovered to pre-project or ecologically improved conditions within one year of start of groundbreaking to ensure effects are temporary (refer to Section 6.3.1.4, General Condition 4, Temporary Effects, for the process to demonstrate temporary effects).*
  2. *Trash generated by Covered Activities shall be promptly and properly removed from the site.*
  3. *Appropriate erosion control measures (e.g., fiber rolls, filter fences, vegetative buffer strips) shall be used on site to reduce siltation and runoff of contaminants into avoided wetlands, ponds, streams, or riparian vegetation.*

     a. *Erosion control measures shall be of material that will not entrap wildlife (i.e., no plastic monofilament). Erosion control blankets shall be used as a last resort because of their tendency to biodegrade slowly and trap reptiles and amphibians.*
     b. *Erosion control measures shall be placed between the area of disturbance and any avoided aquatic feature, within an area identified with highly visible markers (e.g., construction and erosion-control fencing, flagging, silt barriers) prior to commencement of construction*

activities. Such identification will be properly maintained until construction is completed and the soils have been stabilized.

c. Fiber rolls used for erosion control shall be certified by the California Department of Food and Agriculture or any agency that is a successor or receives delegated authority during the permit term as weed free.

d. Seed mixtures applied for erosion control shall not contain California Invasive Plant Council–designated invasive species (http://www.cal-ipc.org/paf/) but shall be composed of native species appropriate for the site or sterile non-native species. If sterile non-native species are used for temporary erosion control, native seed mixtures must be used in subsequent treatments to provide long-term erosion control and slow colonization by invasive non-natives.

If the runoff from the development will flow within 100 feet of a wetland or pond, vegetated storm water filtration features, such as rain gardens, grass swales, tree box filters, infiltration basins, or similar LID features to capture and treat flows, shall be installed consistent with local programs and ordinances.

- *7-12(c) [PCCP Community Condition 1.1]: Prior to land conversion authorization approval, the unavoidable effects to 1.334 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.*

- *7-11(b) [PCCP Community Condition 2.1]: To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.*

- *7-11(c) [PCCP Community Condition 2.2]: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.*

  Prior to land conversion authorization approval, the unavoidable effects to 1.00 to 1.48 acres0.50 to 1.65 acres riverine and

riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.

- *7-4(b) [PCCP Stream System Condition 1]: The project shall be designed to minimize development activities within the stream system to the maximum extent possible.*

- *7-10(a) [PCCP Species Condition 4]: Prior to initiation of PCCP Covered Activities associated with the proposed project, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies for each phase of the project. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.*

  Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the USFWS and CDFW based on site-specific conditions.

  If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.

  If an active colony is known to occur within three miles of the project site, a qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.

  Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified

biologist, shall be prohibited during the nesting season (March 15 through July 31) or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer shall be applied to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the USFWS and CDFW, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the USFWS and CDFW where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the USFWS, CDFW, and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.

Active nesting colonies that occur within the non-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority

to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.

Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and USFWS and CDFW within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the USFWS and CDFW to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and USFWS and CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.

Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may

include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.

No additional avoidance and minimization measures specific to this species are required by the PCCP. If individual western pond turtles are identified on-site, the project proponent shall obtain an incidental take permit from CDFW and/or USFWS before relocating or otherwise impacting the species.

Areas Outside of the Placer County Conservation Program

7-6(b) *A western pond turtle survey shall be conducted by a qualified biologist no more than 48 hours prior to construction in the non-PCCP portion of the Overall Project where construction activities overlap with Dry Creek, intermittent drainages, and woodlands within 150 feet of these aquatic resources.*

The results of the survey shall be submitted to the Placer County Community Development Resource Agency.

If western pond turtles or nests are not found, further mitigation is not necessary. If a western pond turtle is observed within the proposed impact area, a qualified biologist shall relocate the individual to habitat of equivalent or greater value (e.g., riparian wetlands or riparian woodlands adjacent to a perennial creek or intermittent drainage) outside of the proposed impact area prior to construction. If a western pond turtle nest is observed within the proposed impact area, the nest shall be fenced off and avoided until the eggs hatch. The exclusion fencing shall be placed no less than 25 feet from the nest. A qualified biologist shall monitor the nest daily during construction to ensure that hatchlings do not disperse into the construction area. Relocation of hatchlings shall occur as stipulated above, if necessary.

7-7 Impacts to roosting bats either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Pursuant to the BRA, pallid bat, silver-haired bat, western red bat, and hoary bat all have high potential to occur within the study area, and Townsend's big-eared bat has low potential to occur. More specifically, the abandoned buildings and trees throughout the study area provide habitat for the foregoing special-status bats species. As such, if special-status bats were roosting in trees or buildings proposed for removal during project construction, including structures associated with the Schellhous residence, or areas within the footprints of the chosen sewer pipeline alignment or potential trail alternatives, the bats could be injured or killed.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a bat species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level. Bats are not a covered species under the PCCP; thus, the following mitigation measure applies to both the PCCP and non-PCCP portions of the project site.

7-7 *Prior to the commencement of construction activities, a qualified biologist shall conduct a bat habitat assessment of all potential roosting habitat features, including trees and structures within the proposed impact footprint within the project vicinity. The habitat assessment shall identify all potentially suitable roosting habitat and may be conducted up to one year prior to the start of construction. The results of the assessment shall be submitted to the Placer County Community Development Resource Agency.*

- *If potential roosting habitat is identified (cavities in trees or potential roosts within structures) within the areas proposed for impact, the biologist shall survey the potential roosting habitat during the active season (generally April through October or from January through March on days with temperatures in excess of 50 degrees Fahrenheit) to determine the presence of roosting bats. The surveys are recommended to be conducted utilizing methods that are considered acceptable by CDFW and bat experts. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with fiberoptic cameras, or a combination thereof.*
- *If roosting bats are identified within any of the trees planned for removal, or if presence is assumed, the trees shall be removed outside of pup season, only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree.*
- *Additionally, it is recommended that all other tree removal shall be conducted from January through March on days with temperatures in excess of 50 degrees Fahrenheit to avoid potential impacts to foliage-roosting bat species.*
- *If roosting bats are identified within any structures planned for removal, a bat exclusion plan shall be prepared by a qualified bat biologist describing the methods to be used to humanely exclude bats prior to disturbance. The plan shall be approved*

by the Placer County Community Development Resource Agency and CDFW and shall be implemented prior to the start of construction.

7-8 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on Swainson's hawk. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The annual brome grassland/VPC land cover areas within the project site and off-site areas provide suitable foraging habitat for Swainson's hawk, a PCCP covered species. As such, removal of the foraging habitat could indirectly impact the species by reducing the availability of prey.

Within the PCCP portion of the project site, approximately 6.48 acres of VPC High land cover, 48.98 acres of VPC Intermediate land cover, and 27.86 acres of VPC Low land cover that currently provides Swainson's hawk foraging habitat would be permanently impacted by the proposed project (see Figure 7-7). Within the non-PCCP portion, approximately 33.57 acres of annual brome grassland that currently provides Swainson's hawk foraging habitat would be permanently impacted. Overall, a total of 116.89 acres of hawk foraging habitat would be permanently impacted.

With respect to the proposed off-site sewer pipeline alignment alternatives, if Option 1A is selected, approximately 0.19-acre of VPC Low land cover within the PCCP portion of the alternative and 0.03-acre of annual brome grassland within the non-PCCP portion, both of which currently provide raptor foraging habitat, would be permanently impacted, for a total of 0.22-acre. If Option 1B is selected, approximately 0.01-acre of VPC Low land cover in the PCCP and 1.26 acres of annual brome grassland outside of the PCCP would be permanently impacted, representing a total of 1.27 acres of raptor foraging habitat. The footprint of Option 1C does not include raptor foraging habitat.

In regard to the potential future trail alignments, development of the West Trail would permanently impact approximately 0.08-acre of VPC Intermediate land cover and 0.32-acre of VPC Low land cover in the PCCP portion of the alternative, representing a total of 0.40-acre of raptor foraging habitat. If the East Trail were constructed, approximately 0.01-acre of VPC Low land cover within the PCCP portion of the trail would be permanently impacted.

Additionally, the vegetation communities within the project site and proposed off-site areas provide suitable nesting habitat to accommodate Swainson's hawk. Should Swainson's hawk and other nesting raptors occur in areas proposed for disturbance, development of such locations could result in a significant impact to the aforementioned raptor species.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a raptor species (Swainson's hawk)

identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-8(a) *PCCP Species Condition 1: If construction must occur during the nesting season (approximately February 1 to September 15), planning-level Swainson's hawk surveys shall be required a year in advance of construction using the survey guidelines developed for the PCCP. Planning-level surveys are intended to identify nest trees to guide avoidance during project tree removal and construction.*

Additionally, year of construction (starting in February) and pre-construction (no more than 15 days prior to ground disturbance) surveys shall be conducted within a 1,320-foot radius of the project. Surveys shall be conducted consistent with PCCP guidelines (based on Swainson's Hawk Technical Advisory Committee 2000). In instances where an adjacent parcel is not accessible to a survey, the qualified biologist shall scan all potential nest trees from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope. Surveys are typically required from February 1 to September 15 (or sooner if it is determined that birds are nesting earlier in the year). The applicant shall contact the PCA for assistance with survey timing. If a Swainson's hawk nest is located and presence confirmed, only one follow-up visit is required.

During the nesting season (approximately February 1 to September 15 or sooner if it is determined that birds are nesting earlier in the year), ground-disturbing activities within 1,320 feet of occupied nests or nests under construction shall be prohibited to minimize the potential for nest abandonment. While the nest is occupied, activities outside the buffer can take place provided they do not stress the breeding pair.

If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the PCA for a reduction in the buffer distance or waiver. A qualified biologist shall be required to monitor the nest and determine that the reduced buffer does not cause nest abandonment. If a qualified biologist determines nestlings have fledged, PCCP Covered Activities can proceed normally.

Construction monitoring shall be conducted by a qualified biologist if work is to continue outside of the nest buffer, and shall focus on ensuring that activities do not occur within the buffer zone. The qualified

biologist performing the construction monitoring shall ensure that effects on Swainson's hawks are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, all construction activities shall cease until the young have fledged from the nest (as confirmed by a qualified biologist).

The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring shall occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on Swainson's hawks are minimized. The qualified biologist shall train construction personnel on the avoidance procedures and buffer zones.

Areas Outside of the Placer County Conservation Program

7-8(b) *A targeted Swainson's hawk nest survey shall be conducted throughout the non-PCCP portion of the overall project area and all accessible areas within a 0.25-mile radius of the proposed construction area, at most,15 days prior to construction activities. If active Swainson's hawk nests are found within 0.25-mile of a construction area, construction shall cease within 0.25-mile of the nest until the project biologist determines that the young have fledged or it is determined that the nesting attempt has failed. The 0.25-mile buffer may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County after taking into consideration the natural history of the Swainson's hawk, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest), and what (if any) nest monitoring is proposed. The results of the Swainson's hawk nest survey shall be submitted to the Placer County Community Development Resource Agency.*

7-8(c) *Approximately 33.57 acres of annual brome grassland that represents suitable foraging habitat for Swainson's hawks will be permanently impacted during construction of the portion of the proposed project outside of the PCCP plan area, and as much as an additional 1.27 acres could be impacted, depending on which sewer alternative is selected. Swainson's hawk foraging habitat outside of the PCCP does not exist for either of the potential future trails. The aforementioned impacts shall be mitigated through purchase and conservation of similar habitat as follows:*

Two Swainson's hawk nests have been documented approximately 2.5 miles west of the study area; one south of PFE Road, and one west of Walerga Road. Prior to project construction, a qualified biologist shall conduct a review of Swainson's hawk nest data available, including the

California Natural Diversity Database (CNDDB), unprocessed CNDDB records, and contacting CDFW to determine if they have any additional nest data. If desired by the project applicant, the biologist may conduct a survey of the aforementioned nests to determine if they are still present. The biologist shall provide the Placer County Community Development Resource Agency with a summary of the findings.

If it has been determined that a portion of the overall project site is within 10 miles of an active Swainson's hawk nest (an active nest is defined as a nest with documented Swainson's hawk use within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing the following measures:

- *One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is within one mile of an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- *0.75-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between one and five miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- *0.5-acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat that is proposed to be developed that is between five and 10 miles from an active nest. Protection shall be by way of purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- *If the proposed project is built in phases, the purchase of this foraging habitat mitigation may be phased as well, such that all areas are mitigated prior to impact.*

7-9 Impacts to burrowing owl either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The annual brome grassland and VPC land cover areas within the project site and proposed off-site areas provide suitable foraging habitat for burrowing owl. In addition, ground-squirrel burrows and debris located throughout the study area provide marginally suitable burrow habitat. If ground disturbance occurs while burrowing owls are in burrows in such areas, individuals could be directly impacted and a significant impact would occur.

Within the PCCP portion of the project site, approximately 6.48 acres of VPC High land cover, 48.98 acres of VPC Intermediate land cover, and 27.86 acres of VPC Low land cover, all of which currently provide burrowing owl habitat, would be permanently impacted by the proposed project (see Figure 7-7). Within the non-PCCP portion, approximately 33.57 acres of annual brome grassland, which currently provides burrowing owl habitat, would be permanently impacted. Together, a total of approximately 116.89 acres would be permanently impacted by the project.

With respect to the proposed off-site sewer pipeline alignment alternatives, the footprint of Option 1A consists of approximately 0.19-acre of VPC Low land cover within the PCCP and 0.03-acre of annual brome grassland outside of the PCCP, representing a total of 0.21-acre of burrowing owl habitat that would be permanently impacted. The Option 1B footprint is comprised of approximately 0.01-acre of VPC Low land cover within the PCCP and 1.26 acres of annual brome grassland outside of the PCCP, representing a total of 1.27 acres of burrowing owl habitat that would be permanently impacted. The footprint for Option 1C does not include burrowing owl habitat.

Finally, the potential West Trail alignment consists of approximately 0.08-acre of VPC Intermediate land cover and 0.32-acre of VPC Low land cover within the PCCP, representing a total of 0.40 acre of burrowing owl habitat that would be permanently impacted. The East Trail alignment is comprised of approximately 0.01-acre of VPC Low land cover within the PCCP portion of the trail's footprint that would be permanently impacted.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a raptor species (burrowing owl) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-9(a) *PCCP Species Condition 3: Two surveys shall be conducted within 15 days prior to ground disturbance to establish the presence or absence of burrowing owls. The surveys shall be conducted at least seven days apart (if burrowing owls are detected on the first survey, a second survey is not needed) for both breeding and non-breeding season surveys. All burrowing owls observed shall be counted and mapped.*

During the breeding season (February 1 to August 31), surveys shall document whether burrowing owls are nesting in or within 250 feet of the project area.

During the non-breeding season (September 1 to January 31), surveys shall document whether burrowing owls are using habitat in or directly

adjacent to any area to be disturbed. Survey results will be valid only for the season (breeding or non-breeding) during which the survey was conducted. The results of the burrowing owl surveys shall be submitted to the Placer County Community Development Resource Agency and PCA.

The qualified biologist shall survey the proposed footprint of disturbance and a 250-foot radius from the perimeter of the proposed footprint to determine the presence or absence of burrowing owls. The site shall be surveyed by walking line transects, spaced 20 to 60 feet apart, adjusting for vegetation height and density. At the start of each transect and, at least, every 300 feet, the surveyor, with use of binoculars, shall scan the entire visible project area for burrowing owls. During walking surveys, the surveyor shall record all potential burrows used by burrowing owls, as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls; therefore, observers shall also listen for burrowing owls while conducting the survey. Adjacent parcels under different land ownership shall be surveyed only if access is granted. If portions of the survey area are on adjacent sites for which access has not been granted, the qualified biologist shall get as close to the non-accessible area as possible, and use binoculars to look for burrowing owls.

The presence of burrowing owls or their sign anywhere on the site or within the 250-foot accessible radius around the site shall be recorded and mapped. Surveys shall map all burrows and occurrence of sign of burrowing owl on the project site. Surveys must begin one hour before sunrise and continue until two hours after sunrise (three hours total) or begin two hours before sunset and continue until one hour after sunset. Additional time may be required for large project sites.

If burrowing owls are found during the breeding season (approximately February 1 to August 31, the project applicant shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups foraging on or near the site following fledging). The applicant shall establish a 250-foot non-disturbance buffer zone around nests. The buffer zone shall be flagged or otherwise clearly marked. Should construction activities cause the nesting bird to vocalize, make defensive flights at intruders, or otherwise display agitated behavior, then the exclusionary buffer shall be increased such that activities are far enough from the nest so that the bird(s) no longer display this agitated behavior. The exclusionary buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. Construction may only occur within the 250-foot buffer zone during the breeding season if a qualified raptor biologist monitors the nest and determines that the activities do not disturb nesting behavior, or the birds have not begun egg-laying and incubation, or that the juveniles from the occupied burrows have

fledged and moved off site. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a biological monitor confirms that such measures do not cause agitated behavior.

If burrowing owls are found during the non-breeding season (approximately September 1 to January 31), the project applicant shall establish a 160-foot buffer zone around active burrows. The buffer zone shall be flagged or otherwise clearly marked. Measures such as visual screens may be used to further reduce the buffer with CDFW approval and provided a biological monitor confirms that such measures do not cause agitated behavior.

After all alternative avoidance and minimization measures are exhausted as confirmed by CDFW, a qualified biologist may passively exclude birds from those burrows during the non-breeding season. A burrowing owl exclusion plan shall be developed by a qualified biologist consistent with the most recent guidance from the USFWS and/or CDFW and submitted to and approved by the PCA and the USFWS and CDFW. Burrow exclusion shall be conducted for burrows located in the project footprint and within a 160-foot buffer zone as necessary.

A biological monitor shall be present on site daily to ensure that no Covered Activities occur within the buffer zone. The qualified biologist performing the construction monitoring shall ensure that effects on burrowing owls are minimized. If monitoring indicates that construction outside of the buffer is affecting nesting, the buffer shall be increased if space allows (e.g., move staging areas farther away). If space does not allow, construction shall cease until the young have fledged from all the nests in the colony (as confirmed by a qualified biologist) or until the end of the breeding season, whichever occurs first.

A biological monitor shall conduct training of construction personnel on the avoidance procedures, buffer zones, and protocols in the event a burrowing owl flies into an active construction zone.

Areas Outside of the Placer County Conservation Program

7-9(b) *If project construction begins during the nesting season (February 15 to August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the non-PCCP portion of the proposed construction footprint within 14 days prior to construction activities, utilizing 60-foot transects as outlined in the Staff Report on Burrowing Owl Mitigation (Staff Report). The results of the survey shall be submitted to the Placer County Community Development Resource Agency.*

If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the nest

burrow until a qualified biologist determines that the young have fledged or the biologist determines that the nesting attempt has failed. If the project applicant desires to work within 250 feet of the nest burrow, the applicant shall consult with CDFW and the Placer County Community Development Resource Agency to determine if the nest buffer can be reduced.

If construction begins during the non-nesting season, (September 1 through the 14 February), a qualified biologist shall conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance. The results of the survey shall be submitted to the Placer County Community Development Resource Agency. If overwintering owls are located, the biologist may exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined in the Staff Report.

7-9(c) *If any nesting burrowing owls are found during the breeding season preconstruction survey, mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active nest burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the Staff Report and may be accomplished within the Swainson's Hawk Foraging Habitat mitigation area (as detailed in Mitigation Measure 7-8[c]), if burrowing owls have been documented utilizing that area, or if the qualified biologist and the Placer County Community Development Resource Agency determine that the area is suitable. The Staff Report recommendations for mitigation land for burrowing owls are as follows:*

1. *Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including de-compacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.*
2. *Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.*
3. *Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland,*

scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).

4. *Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.*
5. *Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).*
6. *Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.*
7. *Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.*
8. *Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.*

9. *Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.*
10. *Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).*
11. *Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weed eaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls (Wesemann and Rowe 1985, Millsap and Bear 2000, Lincer and Bloom 2007). Items 4, 5 and 6 also still apply to this mitigation approach.*
12. *If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.*

7-10 Impacts to other nesting birds and raptors protected under the MBTA and CFGC either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Similar to the analysis under Impact 7-8 regarding Swainson's hawk, the vegetation communities within the project site and proposed off-site areas provide suitable nesting habitat to accommodate nesting songbirds and raptors protected under the MBTA and CGFC. For example, the annual brome grasslands throughout the Study

Area represent suitable foraging habitat for white-tailed kite, and the trees within the Study Area provide suitable nesting habitat. This species was observed foraging in the southern portion of the Study Area during a field survey. The annual brome grasslands throughout the Study Area also provide suitable nesting and foraging habitat for norther harrier and loggerhead shrike, both CDFW Species of Special Concern. The isolated blackberry brambles and small cattail patches in and around the intermittent drainage running through the study area represents marginally suitable nesting habitat for tricolored blackbird, a state threatened species covered under the PCCP Should such species be nesting in areas proposed for disturbance as part of the proposed project, development of such locations could result in a significant impact to the species.

With respect to yellow warbler, which is protected under the MBTA and considered a CDFW Species of Special Concern, this species has the potential to forage in the riparian woodland habitat in the study area during the winter. Given the large amount of riparian woodland within the study area and in adjacent areas, the relatively small extent of proposed disturbance to available habitat, the scientific evidence that the species does not breed in the Sacramento Valley, but rather is a common migrant during winter, and considering that most construction activities would occur outside of the winter foraging season, the project would not result in significant effects to foraging yellow warbler.

Based on the above, although the proposed project would not significantly impact yellow warbler, the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and raptor species protected under the MBTA and CFGC. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-10(a) *PCCP Species Condition 4 (Tricolored Blackbird): Prior to initiation of PCCP Covered Activities associated with the proposed project, the qualified biologist(s) shall conduct preconstruction surveys to evaluate the presence of tricolored blackbird nesting colonies for each phase of the project. In instances where an adjacent parcel is not accessible to survey because the qualified biologist was not granted permission to enter, the qualified biologist shall scan all potential nest colony site(s) from the adjacent property, roadsides, or other safe, publicly accessible viewpoints, without trespassing, using binoculars and/or a spotting scope to look for tricolored blackbird nesting activity.*

Surveys shall be conducted at least twice, with at least one month between surveys, during the nesting season one year prior to initial ground disturbance for the Covered Activity (if feasible), and the year of ground disturbance for the Covered Activity (required). If Covered Activities will occur in the project work area during the nesting season, three surveys shall be conducted within 15 days prior to the Covered

Activity, with one of the surveys occurring within five days prior to the start of the Covered Activity. The survey methods will be based on Kelsey (2008) or a similar protocol approved by the PCA and the USFWS and CDFW based on site-specific conditions.

If the first survey indicates that suitable nesting habitat is not present on the project site or within 1,300 feet of the project work area, additional surveys for nest colonies are not required.

If an active colony is known to occur within three miles of the project site, a qualified biologist shall conduct two surveys of foraging habitat within the project site and within a 1,300-foot radius around the project site to determine whether foraging habitat is being actively used by foraging tricolored blackbirds. The qualified biologist shall map foraging habitat, as defined by the land cover types listed above, within a 1,300-foot radius around the project site to delineate foraging habitat that will be surveyed. The surveys shall be conducted approximately one week apart, with the second survey occurring no more than five calendar days prior to ground-disturbing activities.

Construction activity or other covered activities that may disturb an occupied nest colony site, as determined by a qualified biologist, shall be prohibited during the nesting season (March 15 through July 31) or until the chicks have fledged or the colony has been abandoned on its own) within a 1,300-foot buffer zone around the nest colony, to the extent practicable. The intent of this condition is to prevent disturbance to occupied nest colony sites on or near project sites so they can complete their nesting cycle. This condition is not intended to preserve suitable breeding habitat on project sites but to ensure impacts to active colony sites only take place once the site is no longer occupied by the nesting colony. The buffer shall be applied to extend beyond the nest colony site as follows: 1) if the colony is nesting in a wetland, the buffer must be established from the outer edge of all hydric vegetation associated with the colony, or 2) if the colony is nesting in non-wetland vegetation (e.g., Himalayan blackberry), the buffer must be established from the edge of the colony substrate. This buffer may be modified to a minimum of 300 feet, with written approval from the USFWS and CDFW, in areas with dense forest, buildings, or other features between the Covered Activities and the occupied active nest colony; where there is sufficient topographic relief to protect the colony from excessive noise or visual disturbance; where sound curtains have been installed; or other methods developed in consultation with the USFWS and CDFW where conditions warrant reduction of the buffer distance. If tricolored blackbirds colonize habitat adjacent to Covered Activities after the activities have been initiated, the project applicant shall reduce disturbance through establishment of buffers or noise reduction techniques or visual screens, as determined in consultation with the USFWS, CDFW, and PCA. The buffer must be clearly marked to prevent project-related activities from occurring within the buffer zone.

Active nesting colonies that occur within the non-disturbance buffer shall be monitored by the qualified biologist(s) to verify the Covered Activity is not disrupting the nesting behavior of the colony. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of the active nest. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that direct effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting nesting and/or foraging behavior, the qualified biologist(s) shall notify the project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and nesting behavior of tricolored blackbird returns to normal.

Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), delaying Covered Activities (or the portion of Covered Activities causing the disruption) until the colony is finished breeding and chicks have left the nest site, temporarily relocating staging areas, or temporarily rerouting access to the project work area. The project proponent shall notify the PCA and USFWS and CDFW within 24 hours if nests or nestlings are abandoned. If the nestlings are still alive, the qualified biologist(s) shall work with the USFWS and CDFW to determine appropriate actions for salvaging the eggs or nestlings. Notification to PCA and USFWS and CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.

Foraging habitat within the buffer shall be monitored by the qualified biologist(s) to verify that the Covered Activity is not disrupting tricolored blackbird foraging behavior. The frequency of monitoring shall be approved by the PCA and based on the frequency and intensity of construction activities and the likelihood of disturbance of foraging tricolored blackbirds. In most cases, monitoring will occur at least every other day, but in some cases, daily monitoring may be appropriate to ensure that effects on tricolored blackbird are minimized. The biologist shall train construction personnel on the avoidance procedures and buffer zones.

If the qualified biologist(s) determines that the Covered Activity is disrupting foraging behavior, the qualified biologist(s) shall notify project applicant immediately, and the project applicant shall notify the PCA within 24 hours to determine additional protective measures that can be implemented. The qualified biologist(s) shall have the authority to stop Covered Activities until additional protective measures are implemented. Additional protective measures shall remain in place until the qualified biologist(s) determine(s) tricolored blackbird behavior has normalized. If additional protective measures are ineffective, the qualified biologist(s) shall have the authority to stop Covered Activities as needed until the additional protective measures are modified and foraging behavior of tricolored blackbird returns to normal. Additional protective measures may include increasing the size of the buffer (within the constraints of the project site), temporarily relocating staging areas, or temporarily rerouting access to the project work area.

7-10(b) *A preconstruction nesting bird survey shall be conducted by the qualified biologist (project biologist) throughout the portion of the project proposed for construction and all accessible areas within a 500-foot radius of proposed construction areas for each phase, no more than three days prior to the initiation of construction. If there is a break in construction activity of more than three days, then subsequent surveys shall be conducted.*

A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency and the PCA within 30 days of the completed survey and is valid for one construction season, assuming that a break in construction activities of more than three days does not occur. If nests are not found, further mitigation is not required.

If an active raptor nest is found, construction activities shall not take place within 500 feet of the nest until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The project biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

7-10(c) *When it is determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest, that monitoring shall include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result*

of construction activities, then the exclusionary buffer shall be increased such that activities are far enough from the nest to stop the following agitated behavior: vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) is no longer active, and that no new nests have been identified.

Areas Outside of the Placer County Conservation Program

7-10(d) *A preconstruction nesting bird survey shall be conducted by the project biologist throughout the project area and all accessible areas within a 500-foot radius of proposed construction areas for each phase, at most, three days prior to the initiation of construction. If there is a break in construction activity of more than three days, then subsequent surveys shall be conducted.*

A report summarizing the survey(s) shall be provided to the Placer County Community Development Resource Agency within 30 days of the completed survey and is valid for one construction season, assuming that a break in construction activities of more than three days does not occur. If nests are not found, further mitigation is not required.

If active raptor or a tricolored blackbird nesting colony are found, construction activities shall not take place within 500 feet of the nest/colony until the young have fledged. If active songbird nests are found, a 100-foot non-disturbance buffer shall be established. The non-disturbance buffers may be reduced if a smaller, sufficiently protective buffer is proposed by the project biologist and approved by the County (and CDFW if it is a tricolored blackbird nesting colony) after taking into consideration the natural history of the species of bird nesting, the proposed activity level adjacent to the nest, the nest occupants' habituation to existing or ongoing activity, and nest concealment (i.e., whether there are visual or acoustic barriers between the proposed activity and the nest). The project biologist can visit the nest as needed to determine when the young have fledged the nest and are independent of the site or the nest can be left undisturbed until the end of the nesting season.

7-10(e) *When it has been determined that the size of the non-disturbance buffer requires the project biologist to monitor the nest, that monitoring shall include observations about the bird's behaviors relative to the construction activities. Should construction activities cause a nesting bird to do any of the following in a way that would be considered a result of construction activities, then the exclusionary buffer shall be*

increased such that activities are far enough from the nest to stop the following agitated behavior(s): vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest. The revised non-disturbance buffer shall remain in place until the chicks have fledged or as otherwise determined by a qualified biologist in consultation with the County.

Construction activities may only resume within the non-disturbance buffer after a follow-up survey by the project biologist has been conducted and a report has been prepared indicating that the nest (or nests) is no longer active, and that new nests have not been identified.

7-11 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Two vegetation communities/PCCP land cover types that are considered to be sensitive natural communities by CDFW are mapped within the study area, including 21.1 acres of Riparian/Riparian Woodlands and 0.03-acre of valley needlegrass grassland. As shown in Figure 7-7, the small area of valley needlegrass grassland located within the eastern portion of the Placer Greens parcel east of an intermittent tributary would not be impacted by the proposed project.

The proposed on-site and off-site project components, in combination with the potential off-site trail alignments, could result in permanent impacts to up to 1.33 acres of Riparian/Riparian Woodland. Specifically, within the PCCP portion of the project site, 0.06-acre of Riparian land cover would be permanently impacted by the project. In the non-PCCP portion of the site, 0.94-acre of riparian woodlands would be permanently impacted. In addition, 0.17-acre of riparian woodlands in the non-PCCP portion of the study area would be permanently impacted if sewer pipeline alignment Option 1A were selected, 0.12-acre of riparian woodlands outside of the PCCP would be permanently impacted if Option 1B were chosen, 0.14-acre of Riparian land cover within the PCCP would be permanently impacted if the West Trail alignment is constructed, and 0.02-acre of riparian woodlands outside the PCCP would be permanently impacted if the East Trail alignment were constructed.

Overall, the proposed on-site components, the off-site sewer pipeline alignment, and the potential trail alignments could result in the following ranges of permanent impacts to Riparian/Riparian Woodland:

- Within the PCCP portion of the study area, 0.06 to 0.20-acre of permanent impacts to Riparian land cover;
- Within the non-PCCP portion of the study area, 0.94 to 1.13 acres of permanent impacts to riparian woodlands; and
- A combined total of 1.00 to 1.33 acres of permanent impacts to Riparian/Riparian Woodland.

Based on the above, development of the proposed on-site and off-site project components would result in potential impacts to Riparian/Riparian Woodland. Impacts to Riparian land cover within the PCCP requires payment of special habitat fees to mitigate impacts. The PCCP's Special Habitat Fee Schedule (Table 9-7 of the PCCP) sets fees for impacts to Riparian areas at a rate of $107,637 for each acre. In areas outside of the PCCP, impacts to riparian woodlands are regulated under CFGC 1600 et seq. Specifically, CFGC Section 1602 requires notification to CDFW before a project commences "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW then reviews the proposed action(s). If CDFW determines that the proposed activity would substantially affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) containing measures to protect affected fish and wildlife resources would be required. The Lake and Streambed Alteration Agreement program is not fully integrated into the PCCP and must be applied for separate and apart from the PCCP. The LSAA would be comprised of the final mitigation measure(s) and condition(s) mutually agreed upon by CDFW and the project applicant. Additionally, projects that require a LSAA often additionally require a permit from the USACE under Section 404 of the CWA. In such instances, the conditions of the Section 404 permit and the LSAA may overlap. Because the proposed project would result in disturbances to the riparian woodland within the study area in both PCCP and non-PCCP areas, the project would be required to comply with the provisions of the CARP and CFGC Section 1600, et seq. Without compliance, a significant impact could occur.

Based on the above, without compliance with the provisions of the CARP and CFGC Section 1600, et seq., the proposed project could have a substantial adverse effect on riparian habitat identified in local or regional plans, policies, regulations or by the CDFW or USFWS, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-11(a) *Implement Mitigation Measures 7-12(a) and (b).*

7-11(b) *PCCP Community Condition 2.1: To the maximum extent possible, the proposed project shall not modify any area within a buffer that extends 50 feet outward from the outermost bounds of the riparian vegetation. The improvement or grading plans shall show the location of the riverine/riparian buffer.*

7-11(c) *PCCP Community Condition 2.2: Prior to land conversion authorization, the applicant shall coordinate with the PCA to determine which In-Stream and Stream System Best Management Practices (BMPs) from Table 7-1 of the User's Guide apply to the proposed project. The applicant shall identify the applicable BMPs on the project's improvement or grading plans. The selected BMPs shall be incorporated into the project's Land Conversion Authorization letter.*

Prior to land conversion authorization approval, the unavoidable effects to 1.00 to 1.48 acres riverine and riparian habitat or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid shall be those in effect at the time of land conversion authorization.

7-11(d) *Prior to the commencement of ground-disturbing activities, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW for the entire Project or by phase as needed. The Lake and Streambed Alteration Agreement program is not fully integrated into the PCCP and must be applied for separate and apart from the PCCP. The information provided shall include a description of all activities associated with the Project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this document. Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding Project-specific drainage and hydrology changes resulting from project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. Mitigation shall be determined by CDFW and result in no net loss of riparian habitat.*

Areas Outside of the Placer County Conservation Program

7-11(e) *Prior to the commencement of ground-disturbing activities, the applicant shall apply for a Section 1600 LSAA from CDFW. The information provided shall include a description of all activities associated with the proposed project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in the BRA prepared for the Creekview Ranch Project by Madrone Ecological Consulting. Impacts for each activity shall be broken down by temporary and permanent impacts, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity, and then by temporary and permanent impacts. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided, as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and*

installation of project-specific storm water BMPs. Mitigation for impacts to riparian woodland may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank, off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. Mitigation shall not result in a net loss of riparian woodland. Written verification of the Section 1600 LSAA shall be submitted to the Placer County Community Development Resource Agency.

7-12 Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions.

The USACE, CDFW, and RWQCB have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. The USACE's jurisdiction is established through the provisions of Section 404 of the CWA, which prohibits the discharge of dredged or fill material into waters of the U.S. without a permit, including certain wetlands and unvegetated "other waters of the U.S." The jurisdictional authority of the RWQCB is established pursuant to Section 401 of the CWA, which typically requires a water quality certification when an individual or nationwide permit is issued by the USACE. The RWQCB also has jurisdiction over waters of the State under the Porter-Cologne Water Quality Control Act. Within the PCCP plan area, the CARP is a component of the PCCP that identifies, classifies, and protects County aquatic resources. The CARP requires implementation of avoidance, minimization, and compensatory mitigation measures for work in waters of the County, including discharges of fill material and alterations to the bed, bank, shoreline, or channel of County streams, lakes, and ponds.

A total of approximately 17.674 acres of aquatic resources have been mapped within the study area in accordance with the USACE Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetlands Delineations*. The aquatic resources within the study area that could be potentially affected as result of the proposed project are shown in Figure 7-10 and detailed in Table 7-5 and Table 7-6. Table 7-6 provides the range of acres that would be impacted by the proposed on-site and off-site project components, with the lower end estimate assuming the least impactful sewer pipeline alignment alternative and neither of the trails constructed, and the upper end assuming the most impactful sewer alternative and both trails constructed.

As detailed in the tables and shown on Figure 7-10, within the PCCP portion of the project site, which is primarily located north of PFE Road, approximately 15.302 acres of aquatic resources have been mapped, 1.597 acres of which would be permanently disturbed and 0.550-acre of which would be temporarily disturbed by the proposed project.

Within the non-PCCP portion of the site, primarily south of PFE Road, approximately 2.372 acres of aquatic resources have been mapped, 0.806-acre would be permanently disturbed by the project. None of the on-site aquatic resources in the non-PCCP portions of the site would be temporarily affected by the project. Overall, of the total acres of mapped aquatic resources, the project would permanently disturb approximately 2.403 acres, temporarily disturb 0.550-acre, and avoid 14.720 acres.

With respect to the proposed off-site components of the project, Options 1A and 1B would not result in impacts to the mapped aquatic resources, as the proposed sewer pipeline under each scenario would be bored under Dry Creek. Similarly, Option 1C would not result in impacts, as the sewer line would be hung below an existing bridge to cross the creek.

With respect to the two potential trail alternatives, combined, the trails would result in permanent impacts to approximately 0.033-acre of Dry Creek within the PCCP plan area and 0.022-acre of Dry Creek outside of the PCCP, and temporary impacts to 0.178-acre of Dry Creek within the PCCP and 0.132-acre of Dry Creek outside of the PCCP. Overall, combined trail construction would result in a total of approximately 0.055-acre of permanent impacts and 0.310-acre of temporary impacts.

Overall, development of the proposed project with the required sewer pipeline and potential future trails would result in the following impacts:

- Within the PCCP portion of the study area, 1.549 to 1.843 acres of aquatic resources would be permanently disturbed, and 0.550 to 1.315 acres of aquatic resources would be temporarily disturbed;
- Within the non-PCCP portion of the study are a, 0.806 to 0.828 acre of aquatic resources would be permanently disturbed, and zero to 0.132 acre would be temporarily disturbed; and
- Overall, the proposed project, off-site sewer pipeline, and potential trails would result in permanent impacts to 2.403 to 2.671 acres of aquatic resources and 0.550 to 1.447 acres of temporary impacts.

The PCCP includes the CARP to issue permits related to the CWA and the CFGC. Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees can include Land Conversion fees and Aquatic/Wetland Special Habitat fees. Special habitat fees would apply to the proposed project to mitigate impacts to the aquatic resources in the study area, including wetlands, vernal pools, and other applicable resources. The PCCP's Special Habitat Fee Schedule (Table 9-7 of the PCCP) sets fees for impacts to wetlands at a rate of $121,025 for each acre.

Figure 7-10
Potential Impacts to Aquatic Resources

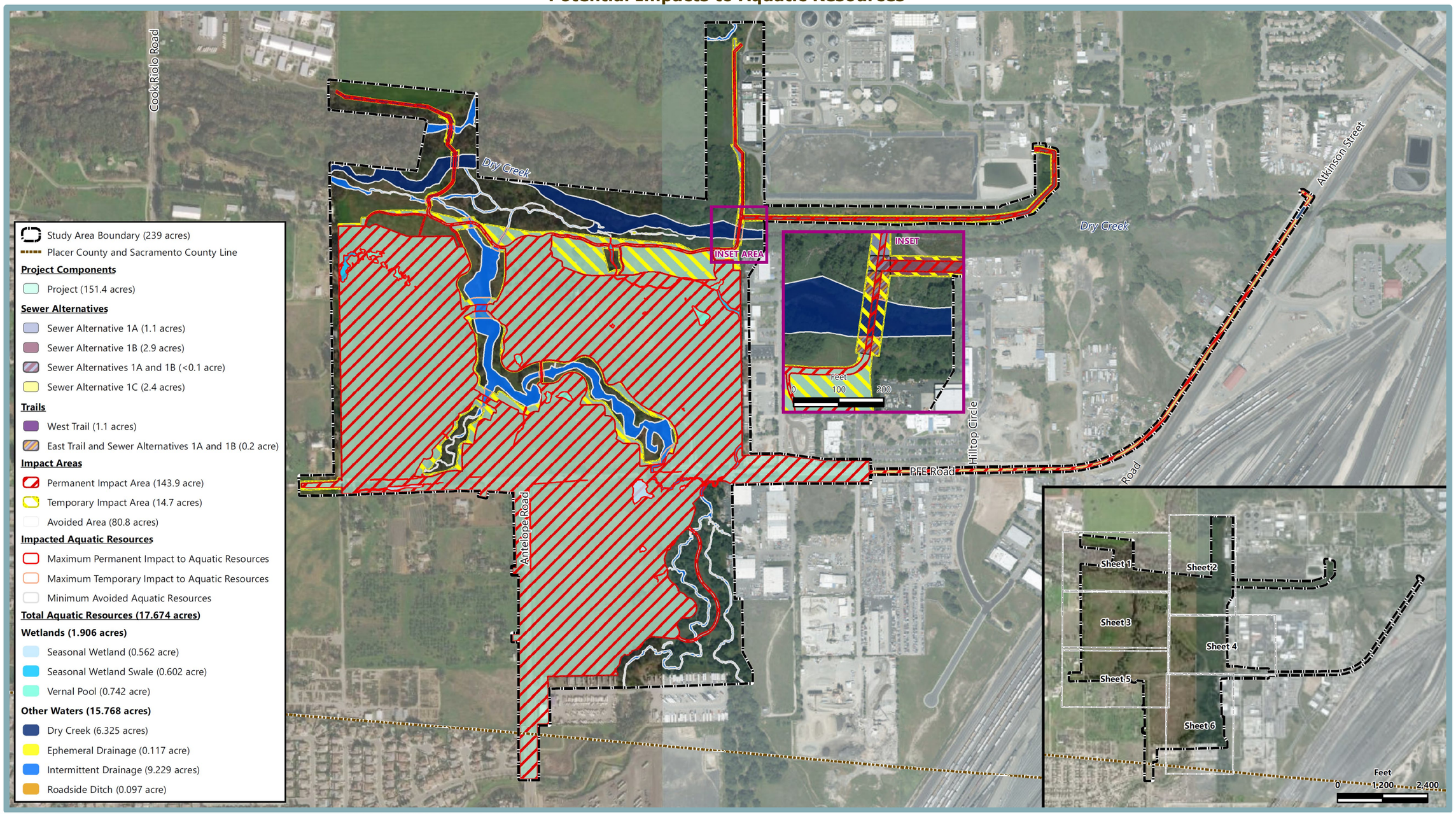


Table 7-5
Impacts to Aquatic Resources Associated with the Project

Aquatic Resources	Permanent Impacts						Temporary Impacts						Avoided						Total					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Seasonal Wetland	0.018	-	0.519	-	0.537	-	0	-	0	-	0	-	0	-	0.025	-	0.025	-	0.018	-	0.544	-	0.562	-
Seasonal Wetland Swale	0.572	-	0.013	-	0.585	-	0	-	0	-	0	-	0.004	-	0.012	-	0.016	-	0.576	-	0.025	-	0.601	-
Vernal Pool	0.742	-	0	-	0.742	-	0	-	0	-	0	-	0	-	0	-	0	-	0.742	-	0	-	0.742	-
Dry Creek	0	0	0	0	0	0	0	0	0	0	0	0	5.964	2,616	0.361	151	6.325	2,767	5.964	2,616	0.361	151	6.325	2,767
Ephemeral Drainage	0.037	513	0	0	0.037	513	0	0	0	0	0	0	0.081	466	0	0	0.08	466	0.118	979	0	-	0.118	979
Intermittent Drainage	0.196	338	0.209	779	0.405	1117	0.550	647	0	0	0.55	647	7.106	7,516	1.168	4,478	8.274	11,994	7.852	8,501	1.377	5,257	9.229	13,758
Roadside Ditch	0.032	654	0.065	1,341	0.097	1995	<0.001	4	0	0	<0.001	4	0	0	0	0	0	0	0.032	658	0.065	1,341	0.097	1,999
Total Aquatic Resources	**1.597**	**1,505**	**0.806**	**2,120**	**2.403**	**3,625**	**0.550**	**651**	**0**	**0**	**0.55**	**651**	**13.155**	**10,598**	**1.566**	**4629**	**14.720**	**15,227**	**15.302**	**12,754**	**2.372**	**6,749**	**17.674**	**19,503**

Note: Small summation errors may occur due to rounding.

Source: Madrone Ecological Consulting, 2022.

Table 7-6
Impacts to Aquatic Resources Associated with the Project Plus Sewer Alignment and Potential Future Trails

Aquatic Resources	Permanent Impacts						Temporary Impacts						Total Impacts					
	PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total		PCCP		Non-PCCP		Total	
	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet	Acres	Linear Feet
Seasonal Wetland	0.018	-	0.519	-	0.537	-	0.000	-	0.000	-	0.000	-	0.018	-	0.519	-	0.537	-
Seasonal Wetland Swale	0.572	-	0.013	-	0.585	-	0.000	-	0.000	-	0.000	-	0.572	-	0.013	-	0.585	-
Vernal Pool	0.742	-	0.000	-	0.742	-	0.000	-	0.000	-	0.000	-	0.742	-	0.000	-	0.742	-
Dry Creek	0.000-0.033	0-18	0.000-0.022	0-12	0.000-0.055	0-30	0.000-0.178	0-96	0.000-0.132	0-75	0.000-0.310	0-171	0.000-0.211	0-114	0.000-0.154	0-87	0.000-0.365	0-201
Ephemeral Drainage	0.037	513	0.000	0	0.037	513	0.000	0	0.000	0	0.000	0	0.037	513	0.000	0	0.037	513
Intermittent Drainage	0.196-0.409	338-668	0.209	779	0.405-0.618	1,117-1,447	0.550-1.137	647-1,356	0.000	0	0.550-1.137	647-1,356	0.746-1.546	985-2,024	0.209	779	0.955-1.755	1,764-2,803
Roadside Ditch	0.032	654	0.065	1,341	0.097	1995	<0.001	4	0.000	0	<0.001	4	0.032	658	0.065	1341	0.097	1999
Total Aquatic Resources	**1.597-1.843**	**1,505-1,853**	**0.806-0.828**	**2,120-2,132**	**2.403-2.671**	**3,625-3,985**	**0.550-1.315**	**651-1,456**	**0.000-0.132**	**0-75**	**0.550-1.447**	**651-1,531**	**2.147-3.158**	**2,156-3,309**	**0.806-0.960**	**2,120-2,207**	**2.953-4.118**	**4,276-5,516**

Note: Small summation errors may occur due to rounding. The lower end of the impact ranges assumes the least impactful sewer alternative and neither of the trails are implemented. The upper end of the impact ranges assumes the most impactful sewer alternative and both trails are implemented.

Source: Madrone Ecological Consulting, 2022.

For potential impacts to federally or State-protected wetlands outside of the PCCP plan area, the project would require a Section 404 permit from the USACE and a Section 401 permit from the RWQCB and would be subject to all the conditions set forth by said permits. The project would also be subject to the regulations set forth under CFGC Section 1600, et seq., discussed above under Impact 7-11. Without compliance with the CARP and CFGC, the proposed project could result in a significant impact related to federally or State-protected wetlands.

Based on the above, without compliance with the CARP and CFGC, the proposed project could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-12(a) *The Permittee shall apply for coverage under the PCCP to mitigate for all impacts to Covered Species, land cover, and sensitive natural communities. Prior to application approval, additional species surveys may be necessary, and prior to construction land cover and special habitat fees shall be paid. The Permittee shall comply with the terms of the PCCP Coverage Certificate, including compliance with all avoidance and minimization measures, which may include pre-construction surveys, construction monitoring, and BMPs.*

PCCP General Condition 3: The proposed project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of 0.322-acre of Riparian/Riverine land cover (an additional 0.215-acre if the East Trail and West Trail are developed). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per-acre fee based on the amount of land disturbance resulting from the activity.

In addition to land conversion, the project would result in permanent direct effects and temporary effects to PCCP Special Habitats as detailed in Table 11 of the Biological Resources Assessment (BRA) prepared for the proposed project. The total special habitat fee obligation including temporary effect fees shall be paid prior to issuance of a land conversion authorization that allows ground disturbance of a special habitat.

7-12(b) *PCCP General Condition 4: The applicant shall restore all temporarily disturbed areas and, one year after project groundbreaking, provide the County with a written assessment of how the performance standards were met. The project would result in 10.90 to 12.08 acres of temporary*

effects to special habitats. Prior to issuance of land conversion authorization, the project shall pay a fee based on the acres of impact. The fee to be paid shall be that in effect at the time of land conversion authorization issuance. If it is determined by the County or the PCCP biologist that the effects remain one year after groundbreaking activities have commenced, the effects shall be considered permanent and the County project lead shall reassess fees based on those effects.

7-12(c) *PCCP Community Condition 1.1: Prior to land conversion authorization approval, the unavoidable effects to 1.334 acres of vernal pool type wetlands or their buffers shall be mitigated through payment of special habitat fees. The fees to be paid to the PCA shall be that in effect at the time of land conversion authorization issuance.*

7-12(d) *PCCP Community Condition 1.4: Prior to ground disturbance, the applicant shall schedule grading and construction in coordination with the PCA to provide the PCA the opportunity to salvage topsoil from the vernal pool wetland if they choose to do so. The applicant shall notify the PCA of their construction schedule within 30 days of the construction start date to allow the PCA the opportunity to salvage soils while the pools are completely dry (generally July through September) and the PCA must make salvage plans sufficiently far in advance so as to not unreasonably impair construction.*

7-12(e) *PCCP Stream System Condition 2: The project's development footprint is directly impacting the Stream System. The area of encroachment (9.88 to 10.18 acres of permanent impact and 10.88 to 11.32 acres of temporary impact) is subject to the Stream System Encroachment Special Habitats Fee as described in Chapter 5 of the PCCP User's Guide. Fees shall be paid to the PCA prior to the issuance of any permit or authorization that results in ground disturbance within the Stream System.*

7-12(f) *Implement Mitigation Measure 7-11(d) regarding LSAA.*

7-12(g) *The Project applicant shall apply for coverage under the streamlined PCCP Letter of Permission (LOP) process directly with the USACE using avoidance and minimization guidance from the CARP, a component of the PCCP.*

7-12(h) *The applicant shall submit an application to the RWQCB for water quality certification of the PCCP LOP, and adhere to the certification conditions.*

7-12(i) *PCCP CARP Authorization Conditions: The project applicant shall comply with the PCCP CARP Authorization Conditions, which are as follows:*

All work within the PCCP plan area that impacts Aquatic Resources of Placer County shall be completed according to the plans and

documents included in the CARP application, Water Quality Certification, and, if applicable, WDRs. All changes to those plans shall be reported to Placer County. Minor changes may require an amendment to the CARP Authorization, Water Quality Certification, and, if applicable, Waste Discharge Requirements (WDRs). Substantial changes may render the authorization, Water Quality Certification, and, if applicable, WDRs, void, and a new application may be required.

A copy of the CARP conditions and Water Quality Certification and WDRs shall be given to individuals responsible for activities on the site. Site personnel, (employees, contractors, and subcontractors) shall be adequately informed and trained to implement all permit, Water Quality Certification, and WDR conditions and shall have a copy of all permits available on-site at all times for review by site personnel and agencies.

Any construction within the Stream System shall be implemented in a way to avoid and minimize impacts to vegetation outside the construction area. All preserved wetlands, other Aquatic Resources of Placer County, and the Stream Zone shall be protected with bright construction fencing. Temporary fencing shall be removed immediately upon completion of the project.

Before beginning construction, the project applicant shall have a valid CARP authorization or waiver notice. In order to obtain a permit, the project applicant shall pay all mitigation fees or purchase appropriate credits from an agency-approved mitigation bank.

All deviations from plans and documents provided with the application and approved by Placer County Community Development Resource Agency shall be reported to Placer County Community Development Resource Agency immediately.

Erosion control measures shall be specified as part of the CARP application, and the application shall not be complete without them. All erosion control specified in the permit application shall be in place and functional before the beginning of the rainy season and shall remain in place until the end of the season. Site supervisors shall be aware of weather forecasts year-round and shall be prepared to establish erosion control on short notice for unusual rain events. Erosion control features shall be inspected and maintained after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and the replacement of damaged barriers and other features.

All required setbacks shall be implemented according to the HCP/NCCP Condition 4 (HCP/NCCP Section 6.1.2).

All work in aquatic resources within the Stream System shall be restricted to periods of low flow and dry weather between April 15 and October 15, unless otherwise permitted by the Placer County Community Development Resource Agency and approved by the

appropriate State and federal regulatory agency. Work within aquatic resources in the Stream System outside of the specified periods may be permitted under some circumstances. The project applicant shall provide Placer County Community Development Resource Agency with the following information: a) the extent of work already completed; b) specific details about the work yet to be completed; and c) an estimate of the time needed to complete the work in the Stream System.

Following work in a stream channel, the low flow channel shall be returned to its natural state to the extent possible. The shape and gradient of the streambed shall be restored to the same gradient that existed before the work to the extent possible.

Work shall not disturb active bird nests until young birds have fledged. To avoid impacts to nesting birds, any disturbance shall occur between September 1 and February 1 prior to the nesting season. Tree removal, earthmoving or other disturbance at other times is at the Placer County Community Development Resource Agency's discretion and shall require surveys by a qualified biologist to determine the absence of nesting birds prior to the activity.

All trees marked for removal within the Stream System must be shown on maps included with the Application. Native trees over five inches diameter at breast height (DBH) shall not be removed without the consent of the Placer County Community Development Resource Agency.

Except for site preparation for the installation and removal of dewatering structures, no excavation is allowed in flowing streams unless dredging WDRs are issued by the RWQCB. Detailed plans for dewatering must be part of the application.

Temporary crossings as described in the application shall be installed no earlier than April 15 and shall be removed no later than October 15, unless otherwise permitted by the Placer County Community Development Resource Agency and approved by the appropriate State and federal regulatory agency. This work window could be modified at the discretion of Placer County and the CDFW.

Vehicles other than necessary earthmoving and construction equipment shall not be allowed within the Stream System after the section of stream where work is performed is dewatered. The equipment and vehicles used in the Stream System shall be described in the application.

Staging areas for equipment, materials, fuels, lubricants, and solvents shall be located outside the stream channel and banks and away from all preserved aquatic resources. All stationary equipment operated within the Stream System shall be positioned over drip-pans. Equipment entering the Stream System shall be inspected daily for

leaks that could introduce deleterious materials into aquatic resources. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency. The Placer County Community Development Resource Agency shall then immediately notify the appropriate state and federal agencies.

Cement, concrete, washings, asphalt, paint, coating materials, oil, other petroleum products, and other materials that could be hazardous to aquatic life shall be prevented from reaching streams, lakes, or other water bodies. These materials shall be placed a minimum of 50 feet away from aquatic environments. All discharges, unintentional or otherwise, shall be reported immediately to the Placer County Community Development Resource Agency. The Placer County Community Development Resource Agency shall then immediately notify the appropriate State and federal agencies.

During construction, litter or construction debris shall not be dumped into water bodies or other aquatic resources, nor shall it be placed in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.

Only herbicides registered with the California Department of Pesticide Regulation shall be used in streams, ponds, and lakes, and shall be applied in accordance with label instructions. A list of all pesticides that may be used in the project area shall be submitted to the Placer County Community Development Resource Agency before use. The PCCP does not authorize the use of herbicides; herbicide application is not a Covered Activity.

The Placer County Community Development Resource Agency shall be notified immediately if threatened or endangered species that are not Covered Species are discovered during construction activities. Placer County Community Development Resource Agency shall suspend work and notify the USFWS, National Marine Fisheries Service (NMFS), and the CDFW for guidance.

Wildlife entering the construction site shall be allowed to leave the area unharmed or shall be flushed or herded humanely in a safe direction away from the site.

All pipe sections shall be capped or inspected for wildlife before being placed in a trench. Pipes within a trench shall be capped at the end of each day to prevent entry by wildlife, except for those pipes that are being used to divert stream flow.

At the end of each workday, all open trenches will be provided with a ramp of dirt or wood to allow trapped animals to escape.

If human remains or cultural artifacts are discovered during construction, the applicant shall stop work in the area and notify the Placer County Community Development Resource Agency immediately. Work shall not continue in the area until the County Coroner and a qualified archaeologist have evaluated the remains, conducted a survey, prepared an assessment, and required consultations are completed.

Areas Outside of the Placer County Conservation Program

7-12(j) *To address potential impacts to federally or State-protected wetlands in non-PCCP portions of the study area, prior to the issuance of grading permits, the project applicant shall complete the following requirements:*

- *The project applicant shall apply for a Section 404 permit from the USACE. Waters that would be impacted shall be replaced or rehabilitated on a "no-net-loss" basis. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods acceptable to the USACE;*
- *The applicant shall apply for a Section 401 water quality certification from the RWQCB and adhere to the certification conditions therein; and*
- *Implement Mitigation Measure 7.11-(e) regarding LSAA.*

7-13 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Based on the analysis below, the impact is *less than significant*.

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation also occurs when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance, such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thereby reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The broad riparian woodland along either side of Dry Creek within the study area serves as a wildlife corridor for a wide variety of terrestrial wildlife, including Central Valley steelhead, Central Valley fall-run Chinook salmon, and western pond turtle. As detailed under Impact 7-4, the corridor would be preserved within a broad avoidance

area that includes a substantial number of adjacent grasslands. The main intermittent drainage tributary to Dry Creek with adjacent oak woodlands could also serve as a wildlife corridor. However, the drainage, as well as almost all of the surrounding oak woodlands, would also be avoided as part of the proposed project (see Figure 7-7). The only potential impediment to wildlife movement along the intermittent drainage that would occur as a result of the proposed project would be the installation of a relatively long (over 300 feet long) box culvert under PFE Road to allow for road widening. However, the box culvert has been designed large enough to accommodate terrestrial wildlife movement. As such, the box culvert would not result in an impact to wildlife corridors.

Based on the above, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

7-14 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands or impacting individual trees. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The proposed project would subdivide the 186-acre project site to develop a total of 597 single-family lots. The residential lots would be located across four neighborhoods, comprised of 10 villages that would result in an overall density of 3.3 dwelling units per acre (du/ac). Various associated improvements would be included as part of the project, including parks, trails, landscaping, new utility infrastructure, and various on- and off-site roadway improvements. The off-site roadway improvements would include installation of a 65-foot, free right-turn lane onto Cook Riolo Road from westbound PFE Road, including the installation of a separate free right-turn lane from the westbound through lane along PFE Road (see Figure 3-8 in the Project Description chapter of this EIR). The proposed parks, open space, and trails components would include a total of 79.7 acres of green space preserved on-site. In addition, as previously discussed, while not currently proposed, the East Trail, West Trail, or both, could be constructed in the future.

The proposed utility improvements would be located primarily on-site, with the project's new water lines connecting to the existing water lines in Antelope Road and PFE Road and a new on-site sewer lift station sited within the Schellhous parcel. Three alternative locations have been proposed for the lift station within the Schellhous parcel and each alternative location would convey wastewater by way of one of three off-site sewer pipeline alignment options (Options 1A, 1B, and 1C). Finally, the proposed project would include landscape buffers along the PFE Road and Antelope

Road frontages, which would collectively consist of sidewalks; large, medium, and small canopy street trees; native screening shrubs; decorative split rail fencing along riparian areas; and six-foot-tall concrete masonry sound walls.

As detailed in the Existing Setting section of this chapter, the study area is comprised of a variety of vegetation communities/PCCP land covers, including annual brome grassland/VPC land cover; blue oak woodland; riparian woodland/Riparian land cover, valley needlegrass grassland; abandoned almond orchards/Orchard land cover; and Rural Residential and Urban and Suburban land covers. The specific acreages of each vegetation community/land cover are detailed in Table 7-1. Table 7-7 provides the acreages of land covers/vegetation communities that would be permanently disturbed, temporarily disturbed, or avoided, as a result of the proposed project's on-site components.

Table 7-7
Disturbances to Land Covers/Vegetation Communities From On-Site Project Components (acres)

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
Permanently Disturbed			
Annual Brome Grassland	-	33.22	33.22
VPC High	6.48	-	6.48
VPC Intermediate	48.98	-	48.98
VPC Low	27.86	-	27.86
Blue Oak Woodland	1.60	1.84	3.44
Orchard/Abandoned Almond Orchard	2.69	1.66	4.35
Riparian/Riparian Woodland	0.06	0.94	1.00
Rural Residential	1.63	-	1.63
Urban	3.19	6.71	9.90
Valley Needlegrass Grassland	0.00	0.00	0.00
Total	**92.49**	**44.37**	**136.86**
Temporarily Disturbed			
Annual Brome Grassland	-	0.00	0.00
VPC High	0.01	-	0.01
VPC Intermediate	2.93	-	2.93
VPC Low	6.25	-	6.25
Blue Oak Woodland	1.52	0.00	1.52
Orchard/Abandoned Almond Orchard	0.03	0.00	0.03
Riparian/Riparian Woodland	0.82	0.00	0.82
Rural Residential	0.08	-	0.08
Urban	0.04	0.01	0.05
Valley Needlegrass Grassland	0.00	0.00	0.00
Total	**11.68**	**0.01**	**11.69**
Avoided			
Annual Brome Grassland	-	5.26	5.26
VPC High	0.00	-	0.00
VPC Intermediate	8.38	-	8.38
VPC Low	8.21	-	8.21
Blue Oak Woodland	4.45	11.86	16.31
Orchard/Abandoned Almond Orchard	0.12	0.00	0.12

(Continues on next page)

Table 7-7
Disturbances to Land Covers/Vegetation Communities From On-Site Project Components (acres)

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
Riparian/Riparian Woodland	16.67	1.49	18.16
Rural Residential	1.29	-	1.29
Urban	2.03	6.67	8.71
Valley Needlegrass Grassland	0.00	0.03	0.03
Total	**41.15**	**25.31**	**66.46**
Overall Total			
Annual Brome Grassland	-	38.48	38.48
VPC High	6.49	-	6.49
VPC Intermediate	60.29	-	60.29
VPC Low	42.32	-	42.32
Blue Oak Woodland	7.57	13.70	21.27
Orchard/Abandoned Almond Orchard	2.84	1.66	4.50
Riparian/Riparian Woodland	17.55	2.43	19.98
Rural Residential	3.00	-	3.00
Urban	5.26	13.39	18.66
Valley Needlegrass Grassland	0.00	0.03	0.03
Total	**145.32**	**69.69**	**215.01**

Source: Madrone Ecological Consulting, 2022.

Table 7-8 provides the acreages that would be disturbed by the on-site and off-site project components, as well as the potential trail alignments. The ranges in Table 7-8 represent the full range of disturbed and avoided acreages, with the lower end assuming development of the least impactful sewer alternative and none of the potential trails and the upper end assuming the most impactful sewer alternative and construction of both the East Trail and West Trail.

Table 7-8
Range of Disturbances to Land Covers/Vegetation Communities From On-Site and Off-Site Project Components and Potential Trails (acres)

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
Permanently Disturbed			
Annual Brome Grassland	-	33.22-34.49	33.22-34.49
VPC High	6.48	-	6.48
VPC Intermediate	48.98-49.05	-	48.98-49.05
VPC Low	27.86-28.37	-	27.86-28.37
Blue Oak Woodland	1.60	1.84-1.90	3.44-3.50
Orchard/Abandoned Almond Orchard	2.69	1.66	4.35
Riparian/Riparian Woodland	0.06-0.20	0.94-1.13	1.00-1.33
Rural Residential	1.63	-	1.63
Urban	3.19	6.71-9.06	9.90-12.25
Valley Needlegrass Grassland	-	0.00	0.00
Total	**92.49-93.21**	**44.37-48.24**	**136.86-141.45**

(Continues on next page)

Table 7-8
Range of Disturbances to Land Covers/Vegetation Communities From On-Site and Off-Site Project Components and Potential Trails (acres)

Land Cover/Vegetation Community	PCCP	Non-PCCP	Total
Temporarily Disturbed			
Annual Brome Grassland	-	0.00-0.98	0.00-0.98
VPC High	0.01	-	0.01
VPC Intermediate	2.93-2.99	-	2.93-2.99
VPC Low	6.25-6.58	-	6.25-6.58
Blue Oak Woodland	1.51	0.00-0.06	1.51-1.57
Orchard/Abandoned Almond Orchard	0.03	0.00	0.03
Riparian/Riparian Woodland	0.82-1.02	0.00-0.42	0.82-1.44
Rural Residential	0.08	-	0.08
Urban	0.04	0.01-0.02	0.05-0.06
Valley Needlegrass Grassland	-	0.00	0.00
Total	**11.67-12.26**	**0.01-1.48**	**11.68-13.74**
Total			
Annual Brome Grassland	-	33.22-34.49	33.22-34.49
VPC High	6.49	-	6.49
VPC Intermediate	51.91-52.04	-	51.91-52.04
VPC Low	34.11-34.95	-	34.11-34.95
Blue Oak Woodland	3.11	1.84-1.96	4.95–5.07
Orchard/Abandoned Almond Orchard	2.72	1.66	4.38
Riparian/Riparian Woodland	0.88-1.22	0.94-1.55	1.82-2.77
Rural Residential	1.70	-	1.70
Urban	3.23	6.72-9.08	9.95-12.31
Valley Needlegrass Grassland	-	0.00	0.00
Total	**104.15-105.46**	**44.38-48.74**	**148.53-154.20**

Source: Madrone Ecological Consulting, 2022.

As detailed in the tables, within the PCCP portion of the study area, development of the on-site and off-site components, as well as the potential trails, would result in permanent disturbances of 92.49 to 93.21 acres to vegetation communities/land covers and temporary disturbances of 11.67 to 12.26 acres. Within the non-PCCP portions of the study area, such activities would result in permanent disturbances of 44.37 to 48.24 acres to vegetation communities/land covers and temporary disturbances of 0.01 to 1.48 acres. Overall, the project would permanently disturb 136.86 to 141.45 acres and temporarily disturb 11.68 to 13.74 acres of vegetation communities/land covers within the study area.

Mitigation Measures 7-11(d) and 7-11(e) under Impact 7-11 address potential impacts to riparian woodlands within the non-PCCP portion of the project site and off-site areas. Impacts to native trees and oak woodlands in the non-PCCP portion of the site and off-site areas are discussed below. Valley needlegrass grassland is the only other protected sensitive natural community that is present on-site and could require mitigation. However, as shown in the tables above, the small area of valley needlegrass grassland within the non-PCCP portion of the study area would not be

impacted by the proposed project. With respect to the proposed off-site Cook Riolo Road/PFE Road intersection improvements, less than 0.1-acre of Rural Residential land cover would be impacted within the PCCP as part of construction of the free right-turn lane onto Cook Riolo Road.

To address disturbances to vegetation communities/land covers within the PCCP portion of the study area, development fees would be applied for the proposed project's vegetation community impacts, in accordance with PCCP guidelines. According to the PCCP's Land Conversion Fee Schedule (Table 9-6 of the PCCP), fees applied under Plan Area A – Valley, 1c for "All other development" are $26,473 per acre, as well as any applicable special habitat fees.

With respect to potential impacts to native trees and oak woodlands, as discussed above, native tree and oak woodland impacts and mitigation are analyzed differently for the three jurisdictions within which activities are proposed to occur. Impacts to vegetation communities and land covers are shown in Figure 7-7, which includes the impacted oak woodland acreages within the PCCP portion of the project site as well as non-PCCP off-site areas. In addition, Figure 7-11 shows the locations of native oak trees within the City of Roseville that could be impacted by the project and Figure 7-12 shows the oak woodlands and individual native trees within the non-PCCP portion of the County that would be impacted by the project.

As shown in Figure 7-7, native trees and oak woodlands are located within the PCCP portion of the project site and potential West Trail alignment. Project impacts to such resources would require payment of land cover conversion fees to the PCA, which would be used to set aside similar or better lands elsewhere. Depending on the off-site sewer pipeline alignment option approved, as well as if the potential East Trail alignment is ultimately developed, as many as 58 trees could be impacted with a cumulative DBH of 753.6.

Table 7-9, Table 7-10, and Table 7-11 summarize the individual trees and "significant trees" within the City of Roseville and non-PCCP study area portion of the County that would be impacted by the proposed project and potential East Trail alignment.

Table 7-9
Summary of Tree Impacts Within the City of Roseville (DBH)

Component	Valley Oak	Interior Live Oak	Oracle Oak	Total Trees	Cumulative DBH
Sewer Option 1A	56 (739.6)	1 (6)	1 (8)	58	753.6
Sewer Option 1B	35 (316.7)	3 (26.8)	0	38	343.5
Sewer Option 1C	0	0	0	0	0
East Trail	7 (106)	0	0	7	106
Sewer Plus East Trail	**0-56 (739.6)**	**0-1 (6)**	**0-1 (8)**	**0-58**	**0-753.6**

Note: Options 1A and 1B each encompass the East Trail alignment. Therefore, the existing trees within the Option 1A and Options 1B alignments each include the existing trees that occur within the East Trail alignment. The lower end of the impact range assumes the least impactful sewer alternative. The upper end of the impact range assumes the most impactful sewer alternative.

Source: Madrone Ecological Consulting, 2022.

Figure 7-11
Impacted Native Oak Trees in the City of Roseville

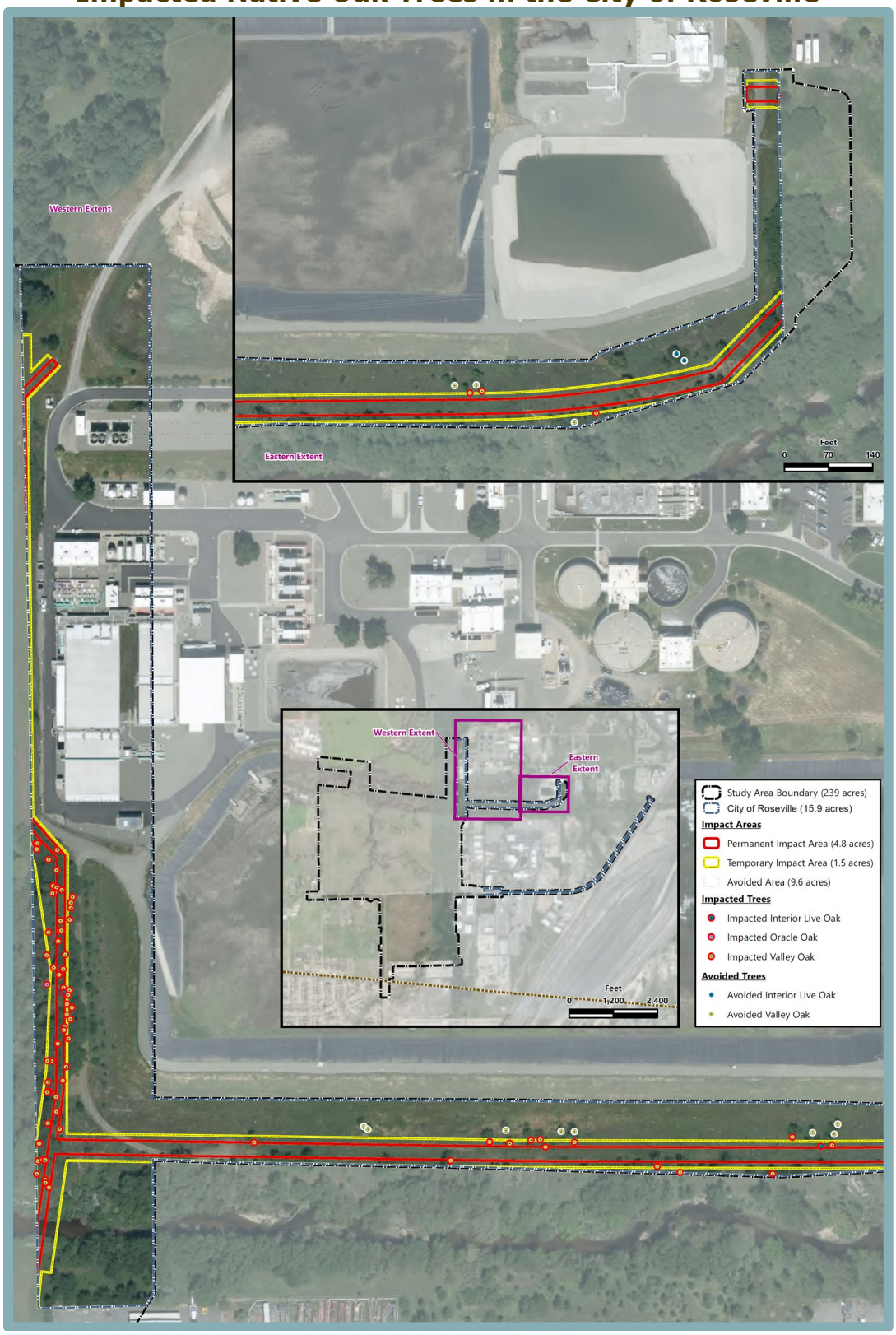


Figure 7-12
Impacts to Oak Woodlands and Individual Native Trees in Non-PCCP Placer County

Note: The portion of the trail shown along the east side of the Placer Greens property may be eliminated from the project design; thus, this impact analysis is conservative.

Table 7-10
Summary of Individual Native Tree Impacts Within Non-PCCP Study Area Portions of Placer County and Outside of Oak Woodland

Tree Species	Component		
	Project Site Number of Trees	Sewer Option 1B Number of Trees	Project Plus Sewer Alignment Number of Trees
Blue Oak	21 (524.5)	0	21 (524.5)
Fremont Cottonwood	0	1(55)	0-1 (0-55)
Interior Live Oak	9 (150)	1(12.7)	9 (150)-10 (162.7)
Red Willow	0	1 (12)	0-1 (12)
Valley Oak	11 (129)	7 (187.9)	11 (129)-18 (316.9)
Total	**41 (803.5)**	**10 (267.6)**	**41 (803.5)-51 (1,071.1)**

Note: The lower end of the impact range assumes the least impactful sewer alignment alternative. The upper end of the impact range assumes the most impactful sewer alternative.

Source: Madrone Ecological Consulting, 2022.

Table 7-11
Summary of Significant Tree Impacts Within Oak Woodland in Non-PCCP Study Area Portions of Placer County

Species	Number of Trees	DBH
Blue Oak	6	202.0
Interior Live Oak	4	130.0
Total	**10**	**332.0**

Source: Madrone Ecological Consulting, 2022.

The Roseville Tree Ordinance requires mitigation for all native oak trees that would be removed, or that would experience impacts within 20 percent or more of the trees' Protected Zone (which is equivalent to a circle with a radius one foot greater than a tree's dripline). As shown in Figure 7-11, should off-site sewer pipeline alignment Option 1A be selected, 58 total trees with a cumulative DBH of 753.6 would be impacted. If Option 1B were selected, 38 total trees with a cumulative DBH of 343.5 would be impacted. To address such potential impacts, the project would be required to obtain a Tree Permit in accordance with the requirements set forth in Chapter 19.66 of the Roseville Municipal Code, pay all applicable fees, and comply with the provisions set forth therein by said permit.

As shown in Table 7-10, within the non-PCCP County portions of the project site and off-site areas that could be developed, and outside of the County's defined oak woodland areas, between 41 and 51 native trees would be impacted with a cumulative DBH between 803.5 and 1,071.1. In addition, as shown in Table 7-11, the non-PCCP portion of the site contains 10 "significant trees" with a cumulative DBH of 332. Such trees are protected under the County Tree Ordinance and Interim Guidelines. Finally, within the large stand of blue oak woodland and riparian woodland south of PFE Road, the proposed project would impact 0.9-acre of blue oak woodland, and 0.9-acre of

riparian woodland, for a combined total of 1.8 acres of direct impacts. In addition, 0.3-acre of oak woodland (including riparian woodland) within 10 feet of the edge of direct development-related project impacts could be indirectly impacted. Such areas would be subject to mitigation requirements set forth by the County's Interim Guidelines.

Based on the above, without compliance with requirements set forth by the PCCP, City of Roseville, and Placer County to address tree impacts, the proposed project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Placer County Conservation Program Plan Area

7-14(a) *PCCP General Condition 2: The project shall minimize effects on adjacent conservation lands through implementation of the following design requirements:*

1. *Signage shall be posted to notify of any usage restrictions and to educate the public on the sensitivity of the area and usage restrictions.*
2. *Fencing shall be installed at the boundary between developed areas and reserves to prevent illegal access by people and pets, unless the conditions on the reserve make trespass unlikely (i.e., surrounded by canals that are difficult to cross). Fences shall be suitable to the conditions in the adjacent reserve. The type of fence required shall be at the discretion of the County or City, as permitted by County and City codes. Fences shall have limited gates and be designed with consideration to not allowing movement of people and their pets. Access shall be limited to maintenance and monitoring activities unless a habitat management plan specifies otherwise.*
3. *Natural or artificial barriers or other access restrictions may be installed around development to protect sensitive land-cover types and Covered Species in the reserves. If used, barriers shall be designed so they are appropriate for site conditions and the resources being protected. Some barriers should keep domestic pets outside the reserve, other barriers should keep Covered Species inside the reserve. Before installation of a barrier, consideration shall be given to freedom of movement by Covered Species. If the barrier would prevent movement, or if the barrier would encourage species to use other, less-favorable crossings, alternative solutions shall be considered.*
4. *Roads constructed adjacent to reserves shall be fenced to restrict unauthorized public access. Through the conditional approval process, the permittee shall only approve fencing that*

is appropriate (e.g., chain link, post and cable, barbwire) to allow movement of wildlife between reserves.

5. *Development shall be designed to minimize the length of the shared boundary between development and the reserves (i.e., minimize the urban edge, perimeter).*
6. *Incorporation of high-intensity lighting (e.g., floodlights used for recreational facilities and commercial parking lots) into site improvement standards near reserves shall be avoided. Low-glare, no-glare, or shielded lighting shall be installed in developed areas adjacent to reserves to minimize artificial lighting of reserve lands at night. The height and intensity of lights shall be kept to a minimum. Resources providing technical support include publications of the Illuminating Engineering Society of North America and its Lighting Handbook, Reference & Application, Ninth Edition, and Recommended Practices. The intent of this avoidance and minimization measure is to design a lighting system, where determined necessary, that maintains public safety and security in the project area while curtailing the degradation of the nighttime visual environment on the reserve property by limiting nighttime light radiation and/or light spill.*
7. *Public facilities, such as ballparks and fields that require high-intensity night lighting (i.e., floodlights), shall be sited at least 0.5-mile from the reserve boundary to minimize light pollution. Facilities may be sited closer to the Reserve System if the PCA determines the lighting system will not be intrusive to wildlife within the Reserve System (e.g., hills block the lighting).*
8. *For any landscaping adjacent to reserve properties, non-invasive plants shall be required, and the use of native plants will be highly encouraged, consistent with County Landscape Design Guidelines or similar standards for the City of Lincoln.*

Any of the above design requirements, or similar requirements developed over time, that are incorporated into projects shall be located within the development footprint. The foregoing project features shall be maintained by the property owners. Conditions of approval on projects are monitored by County or City staff during the construction and development phase and are enforced over time through the efforts of professional land development staff familiar with the project or a code enforcement division. If projects are found to be out of compliance, standard remedial actions shall be applied and may include code enforcement, use of securities, revocation or modification of entitlement. Violations will be reported to the PCA, USFWS, NMFS, CDFW, and applicable local jurisdiction for potential enforcement.

7-14(b) *<u>PCCP General Condition 3</u>: The project shall pay a land conversion fee or dedicate land in lieu of fee or a combination thereof for the permanent conversion of 89.24 acres of the following natural land cover types: VPC Low, VPC Intermediate, VPC High, Blue Oak Woodland, Orchard, and Rural Residential (an additional 0.58-acre if both potential trails are developed and the most impactful sewer alternative) (for*

Riparian/Riverine, see Mitigation Measure 7-12(a)). If fees are paid, they shall be those in effect at the time of ground disturbance authorization for each project phase and shall be the per acre fee based on the amount of land disturbance resulting from the activity.

7-14(c) *PCCP General Condition 5: Prior to initiation of construction activities, all project construction personnel shall participate in a Worker Environmental Training Program that will educate workers regarding the Covered Species and their habitats, the need to avoid impacts, state and federal protection, and the legal implications of violating environmental laws and regulations. At a minimum this training may be accomplished through tailgate presentations at the project site and the distribution of informational brochures, with descriptions of sensitive biological resources and regulatory protections, to construction personnel prior to initiation of construction work. The signed documentation of training completion by all construction workers shall be submitted to the Placer County Resource Development Agency and the PCA.*

City of Roseville

7-14(d) *If Sewer Pipeline Alignment Option 1A, 1B, and/or the East Trail alignment are chosen, the project applicant shall obtain a Tree Permit in accordance with the requirements set forth in Chapter 19.66 of the Roseville Municipal Code. The City of Roseville Tree Ordinance requires a Tree Permit for any activity affecting 20 percent or more of the Protected Zone of a Protected Tree related to a discretionary project. A number of items must be submitted with the permit application, including an Arborist Report. The Arborist Report must be prepared by an arborist or registered professional forester and include specific information on the tree locations, condition, potential impacts of development, recommended actions and mitigation measures.*

1. *If Option 1A is selected, the non-PCCP portion of Option 1A within the City of Roseville would result in impacts to a total of 58 Protected Trees with a combined DBH of 753.6 inches.*
2. *If Option 1B is selected, the non-PCCP portion of Option 1B within the City would result in impacts to a total of 38 Protected Trees with a combined DBH of 343.5 inches.*
3. *If the East Trail is constructed, the non-PCCP portion of the potential future East Trail within the City of Roseville would result in impacts to a total of seven Protected Trees with a combined DBH of 106 inches.*

To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Roseville Planning Department prior to improvement plan approval. The Planning Department shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time.

Removal of Protected Trees shall be mitigated by planting of new trees (replacement) or by payment of an in-lieu fee of $118 per inch of DBH. If the applicant chooses replacement, the replacement requirement shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where a 15-gallon tree would replace one inch DBH of the removed tree; a 24-inch box tree would replace two inches, and a 36-inch box tree would replace three inches. The replacement trees shall have a combined diameter equivalent to not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement shall be met by native oaks. Up to 50 percent may be met by non-native species.

Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by the City Planning Department at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

Development of the sewer pipeline and East Trail, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the foregoing areas, including Protected Zones of trees to be saved, shall first be approved by the City Planning Department. Temporary fencing shall not be altered during construction without written approval of the City Planning Department. Grading, clearing, storage of equipment or machinery, etc., shall not occur until a representative of the City Planning Department has inspected and approved all temporary construction fencing.

County Areas Outside of the Placer County Conservation Program

7-14(e) *<u>Individual Tree Mitigation:</u> The non-PCCP portion of the project site within unincorporated Placer County would result in impacts to a total of 41 Protected Trees with a combined DBH of 803.5 inches. An additional nine "significant trees" in oak woodlands mitigated in accordance with the Interim Guidelines would be impacted with a combined DBH of 332.0 inches. Cumulatively, this totals 50 individual trees with a combined DBH of 1,135.5 inches.*

To mitigate for the loss of Protected Trees, the project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval. The Planning Services Division

shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. The fee shall be paid into the Placer County Tree Preservation Fund at $125 per DBH removed or impacted (or the applicable fee at that time).

Efforts shall be made to save trees where feasible. This may include the use of retaining walls, planter islands, pavers, or other techniques commonly associated with tree preservation. The improvement plans shall include a note and show placement of temporary construction fencing around trees to be saved: The applicant shall install a four-foot-tall, brightly colored (typically orange), synthetic mesh material fence (or an equivalent) approved by Placer County at the following locations prior to any construction equipment being moved on-site or any construction activities taking place: at the limits of construction; outside the Protected Zone of all single-trunk trees six inches DBH or greater, or 10 inches DBH aggregate for multi-trunk trees; within 50 feet of any grading, road improvements, underground utilities, or other development activity; or as otherwise shown on the Tentative Subdivision Map.

Development of the project, including grading, shall not be allowed until this requirement is satisfied. Any encroachment within the aforementioned areas, including Protected Zones of trees to be saved, shall first be approved by Placer County. Temporary fencing shall not be altered during construction without written approval of Placer County. No grading, clearing, storage of equipment or machinery, etc., may occur until a representative of Placer County has inspected and approved all temporary construction fencing.

7-14(f) *<u>Oak Woodland Mitigation</u>: The project applicant shall obtain a Tree Permit from the Placer County Planning Services Division prior to improvement plan approval for impacted native oak trees and comply with all requirements of the Tree Permit. The Planning Services Division shall review the Tree Permit application as well as the final site improvement plans and determine the precise mitigation requirement at that time. To support the approval process, an exhibit shall be submitted showing the extent of the proposed activity within oak woodlands (as defined by the Interim Guidelines), and the resulting acreage of impacts to oak woodlands. If that impact acreage is one acre or greater, the project applicant may choose to mitigate for oak woodlands as follows:*

- *Compensatory mitigation shall occur off-site and may consist of one of the following, based on the acreage of oak woodland impacted:*
    - *Submit payment of fees for oak woodland conservation at a 2:1 ratio consistent with Chapter 19.50 of the Placer County Code: Woodland Conservation. The fees shall be calculated based upon the current market value of*

similar oak woodland acreage preservation and an endowment to maintain the land in perpetuity.

- *Purchase off-site conservation easements at a location approved by Placer County to mitigate the loss of oak woodlands at a 2:1 ratio.*
- *Provide for a combination of payment to the Tree Preservation Fund and creation of an off-site Oak Preservation Easement.*

Removal of significant trees (greater than 24 inches DBH or clumps greater than 72 inches in circumference measured at ground level) within oak woodlands requires additional mitigation on a per-inch DBH removed ($125 per DBH inch).

As an example, oak woodland direct and indirect impacts proposed within the large stand of blue oak and riparian woodlands south of PFE Road total 2.1 acres. As mitigation for those impacts, the project applicant would be required to purchase off-site conservation easements, pay fees for oak woodland conservation, or a combination of the two for 4.2 acres of oak woodland. In addition, nine significant trees occur within this oak woodland area, and must be mitigated on a per-inch DBH removed. The trees have been included in the individual native tree mitigation discussion above.

7-14(g) *<u>Sewer Option 1B:</u> Implementation of Sewer Option 1B would result in impacts to 10 Protected Trees with a combined DBH of 269.6 inches. To mitigate for the loss of Protected Trees, the project applicant shall implement the Individual Tree Mitigation requirements set forth in Mitigation Measure 7-14(e).*

7-15 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed above under the various analyses within this chapter, as the PCCP has been adopted, development fees would be applied for the proposed project's vegetation community impacts and aquatic resources impacts, in accordance with PCCP guidelines. The project site is within Plan Area A (A.1 Valley Potential Future Growth), which is covered by a comprehensive permit. AMMs, set forth in Chapter 6 of the PCCP, are intended to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. Applicants are required to obtain a signed Certificate of PCCP Authorization form from Placer County for potential impacts to terrestrial and aquatic habitats. During the local impact authorization process, impact fees are calculated utilizing land cover data. Fees include Land Conversion fees and Aquatic/Wetland Special Habitat fees, both of which are applicable to the project. The proposed project would participate in the PCCP for incidental take coverage and mitigation for effects to waters of the U.S. and State. Payment of all

applicable development fees would ensure the proposed project is in compliance with the provisions of the PCCP. However, without compliance with all applicable provisions of the PCCP, the project would result in a significant impact.

Based on the above, without compliance with all applicable requirements set forth by the PCCP, the proposed project would conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

7-15(a) *Implement Mitigation Measures 7-2, 7-4(a), 7-4(b), 7-4(c), 7-6(a), 7-8(a), 7-9(a), 7-10(a), 7-10(b), 7-10(c), 7-11(a), 7-11(b), 7-11(c), 7-11(d), 7-12(a), 7-12(b), 7-12(c), 7-12(d), 7-12(e), 7-12(f), 7-12(g), 7-12(h), 7-12(i), 7-14(a), 7-14(b), and 7-14(c).*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The geographic scope for the cumulative biological resources analysis generally includes buildout of the proposed project in conjunction with the DCWPCP. For more details regarding the cumulative setting, refer to Chapter 20, Statutorily Required Sections, of this EIR.

7-16 Cumulative loss of habitat for special-status species. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The DCWPCP includes several approved developments, including the Brady Vineyard Subdivision Project, approximately 0.72-mile to the northeast of the project site, the Riolo Vineyards Specific Plan, approximately 1.7 miles to the west of the project site, and the Placer Vineyards Specific Plan, approximately 2.1 miles to the west of the project site. All three areas are separated from the project site by intervening residential and agricultural uses. Implementation of the proposed project, in combination with other development within the DCWPCP area, would result in a significant cumulative impact related to the loss of special-status species habitat.

As discussed above, the study area contains a variety of vegetation communities/land covers, including annual brome grassland/VPC land covers; blue oak woodland; riparian woodland/Riverine/Riparian land cover; valley needlegrass grassland; and Rural Residential and Urban and Suburban land covers. In addition, the study area is comprised of aquatic resources, including vernal pools, seasonal wetlands, seasonal

wetland swales, intermittent drainages, roadside ditches, ephemeral drainages, and Dry Creek. Development of the proposed on-site and off-site project components would result in potential impacts to portions of the foregoing areas. Such potential impacts are detailed in Table 7-5 through Table 7-8, above. As discussed throughout this chapter, the above areas represent potential habitat for various special-status species listed in Table 7-3.

This chapter provides a wide range of mitigation to minimize potential adverse effects to habitat for special-status species. For potential project impacts that could occur within the PCCP portion of the study area, mitigation measures have been set forth in this chapter to ensure that the proposed project complies with all applicable PCCP AMMs, including, but not limited to, AMMs to address potential impacts to PCCP Covered Species, such as special-status branchiopods, western pond turtle, Swainson's hawk, and burrowing owl, as well as AMMs for potential impacts to riparian woodlands and on-site wetlands. For potential project impacts that could occur within the non-PCCP portion of the study area, this chapter sets forth mitigation measures in accordance with the requirements set forth by applicable regulatory agencies. For instance, Mitigation Measure 7-12(j) would require that the proposed project conforms with the USACE's "no-net-loss" policy for wetland mitigation. Thus, any wetlands lost within the study area would be compensated through the protection of existing wetlands, avoidance of wetland impacts, or creation of new wetland habitat elsewhere. Similar compensatory mitigation is included for Swainson's hawk, should they be actively nesting within 10 miles of the project footprint, prior to commencement of construction.

It should be noted that while the proposed project would result in the loss of a portion of the existing on-site habitat, the proposed parks, open space, and trails components would include a total of 79.7 acres of green space preserved on-site, consistent with DCWPCP Policy 5, which requires the identification of all important fish and wildlife areas within the DCWPCP plan area and protection of such areas from urban/suburban encroachment, where feasible. Such preservation would ensure that portions of the existing habitat within the project site remain undisturbed, following implementation of the proposed project.

The proposed project would not include the conversion of any lands not previously identified for development and would include protection of portions of the project site within designated open space, as discussed above. Also notable is the PCCP's identification of the Schellhous Parcel as an area of Valley Potential Future Growth Area (A1) (PCCP Volume 1, pg. 2-34), as well as the majority of the DCWPCP, including the large adopted Specific Plan projects, namely Placer Vineyards and Riolo Vineyards. The PCCP EIR/EIS concluded that impacts to biological resources related to future growth identified in the PCCP would be less-than-significant with implementation of the Plan's conservation strategy.[8] To ensure the preservation of special-status plant and wildlife species, sensitive habitats, and State and federally protected wetlands, the PCCP includes the establishment of a Reserve Acquisition Area (RAA), an area designated in the PCCP within which a connected Reserve

[8] Placer County. *Placer County Conservation Program Final Environmental Impact Statement/Environmental Impact Report* [pg. 4.3-47]. May 2020.

System will be assembled. The conservation strategy would establish most of the Reserve System in the RAA.

The Placer Conservation Authority (PCA), created to implement the HCP/NCCP and the CARP, will acquire approximately 47,300 acres for natural and semi-natural community protection and restoration over the 50-year permit term for the HCP/NCCP.

With respect to the non-PCCP portion of the study area, the proposed project would result in the conversion of the Placer Greens parcel to urban uses. However, this EIR sets forth mitigation measures to ensure all potential impacts that would occur to biological resources outside of the PCCP are reduced to a less-than-significant level. For instance, Mitigation Measure 7-1 requires special-status plant surveys in areas proposed for disturbance prior to the commencement of construction, if construction activities have not commenced prior to the spring of 2024. If special-status plants are identified within areas proposed for disturbance, further provisions are required to ensure the proposed project would not result in the loss of individual special-status plant species. Similar requirements are established by the mitigation measures in this chapter to address potential project impacts in the non-PCCP portion of the study area to VELB, western spadefoot (within the overall project site and off-site areas), western pond turtle, special-status bats (within the overall project site and off-site areas), Swainson's hawk, burrowing owl, and migratory birds and raptors protected under the MBTA and CFGC. Furthermore, Mitigation Measures 7-11(e) and 7-12(j) require the project applicant to obtain a Section 1600 LSAA from CDFW, a Section 404 permit from USACE, and a Section 401 water quality certification from the RWQCB, respectively, to address potential impacts to sensitive natural communities and federally and/or State-protected wetlands within the non-PCCP portion of the study area. Finally, although the project would result in potential impacts to native trees and oak woodlands in the non-PCCP portion of the study area, Mitigation Measures 7-14(d) through 7-14(g) require the project applicant to obtain Tree Permits from the City of Roseville and Placer County and pay all applicable fees to address all potential impacts to protected trees in such locations.

Overall, with incorporation of the mitigation measures set forth herein, the proposed project would be required to comply with all applicable AMMs and pay all applicable fees to address potential impacts to biological resources within the PCCP portion of the study area. The mitigation measures set forth herein additionally address potential impact to biological resources in the non-PCCP portion of the study area. As such, the proposed project would not result in substantial adverse effects to biological resources protected by CEQA.

As further discussed in Chapter 20 of this EIR, CEQA Guidelines Section 15064, Subdivision (h)(5) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

In addition, the courts have explicitly rejected the notion that a finding of significance is required simply because a proposed project would result in a net loss of habitat. "[M]itigation need not account for every square foot of impacted habitat to be adequate.

What matters is that the unmitigated impact is no longer significant," (*Save Panoche Valley v. San Benito County* [2013] 217 Cal.App.4th 503, 528, quoting *Banning Ranch Conservancy v. City of Newport Beach* [2012] 211 Cal.App.4th 1209, 1233).

The above discussion provides substantial evidence that, while the combined effects on biological resources resulting from approved/planned development throughout the DCWPCP would be considered significant, the proposed project's incremental contribution to the significant cumulative effect would be reduced with implementation of the mitigation measures required in this EIR.

Based on the above, although cumulative buildout of the DCWPCP plan area would result in a significant cumulative impact related to the loss of special-status species habitat, the proposed project's contribution to the significant impact, through incorporation of the mitigation measures set forth herein, would be ***less than cumulatively considerable***.

Mitigation Measure(s)

Non required.