5 BIOLOGICAL RESOURCES

5.1 Introduction

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the proposed project site. This chapter describes potential impacts to those resources and identifies measures to avoid or substantially reduce those impacts to less-than-significant levels. Issue areas addressed within the chapter include the following: special-status plant and wildlife species; oak woodland conversion; removal and retention of trees; sensitive natural communities; and federal- and State-protected wetlands. The information contained in this analysis is primarily based on documents prepared for the proposed project by Environmental Science Associates (ESA): A Biological Resources Study Report (see Appendix E),[1] an Arborist Report (see Appendix F),[2] an Aquatic Resources Delineation Report (see Appendix G),[3] the Jurisdictional Determination Letter,[4] the CRLF Request Letter and USFWS correspondence,[5] and the Rare Plant Report.[6] In addition, this chapter incorporates information from the Placer County General Plan[7] the associated EIR,[8] and the Horseshoe Bar/Penryn Community Plan.[9]

5.2 Existing Environmental Setting

The following sections describe the existing environmental setting and biological resources occurring in the proposed project area.

Regional Setting

The approximate 45-acre proposed project site is located in unincorporated Placer County, within the planning area of the Horseshoe Bar/Penryn Community Plan. The Horseshoe Bar/Penryn Community Plan includes an area of approximately 25 square miles in the foothills of the Sierra Nevada, located south of Newcastle and the City of Auburn, north of the Granite Bay community,

---

1 Environmental Science Associates. *UAIC Tribal School Project, Revised Biological Resources Study Report*. July 2018.

2 Environmental Science Associates. *UAIC Tribal School Project, Revised Arborist Report. October 2017*.

3 Environmental Science Associates. *UAIC Tribal School Project, Aquatic Resources Delineation Report.* April 2017.

4 U.S. Army Corps of Engineers. *UAIC Tribal School Project. Jurisdictional Determination Letter*. August 23, 2017.

5 Environmental Science Associates. *Request to Conduct Protocol-Level California Red-Legged Frog Surveys for the United Auburn Indian Community Tribal School Project, Placer County, California*. October 9, 201;
Sarah Markegard, Biologist, U.S. Fish and Wildlife Service. Personal communication [email] with Kelly Bayne, M.S., Senior Wildlife Biologist, Environmental Science Associates. October 11, 2017.

6 Environmental Science Associates. *Focused Botanical Survey Results for the United Auburn Indian Community Tribal School Project, Placer County, California.* April 11, 2018.

7 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).

8 Placer County. *Countywide General Plan EIR*. July 1994.

9 Placer County. *Horseshoe Bar/Penryn Community Plan*. Revised December 2005.

west of Folsom Lake, and east of the Town of Loomis. I-80 traverses the southwest corner of the planning area.

Within the Horseshoe Bar/Penryn Community Plan area, the terrain varies from relatively flat areas, gently-rolling hills, and relatively steep hillsides. Elevations range from 200 to 1,200 feet above mean sea level (msl); however, the majority of the planning area is situated between 500 and 800 feet msl. Antelope Creek, Miner's Ravine, and Secret Ravine are the primary watercourses that collect surface runoff and groundwater from the area. According to the Horseshoe Bar/Penryn Community Plan, the area's most sensitive vegetative resources include oak woodlands, riparian and stream habitats, and wetlands. Such resources provide important ecological functions, including water quality maintenance, stream bank stabilization, and provision of essential habitat for wildlife and fisheries resources.

Project Setting

The proposed project site consists of open grassland, oak woodlands, and existing development. The project site was previously used as an orchard before being partially developed for use as a bed and breakfast, as well as an event center. In general, the northern third of the project site has been subject to a relatively high level of disturbance, while the southern two-thirds is primarily undeveloped. Existing development on the site includes five structures, an associated water supply well and septic system, 65 parking spaces, and two man-made ponds. The existing parking lot and associated structures are located in the northwest portion of the site, directly south of Taylor Road. The larger of the two ponds (Pond 1) is situated near the eastern site boundary. Pond 1 is separated from the eastern site boundary by a narrow strip of oak woodland, which extends to the north and south of the pond along the length of the site. The second, smaller pond (Pond 2) is located at the far southeast portion of the site. A discussion of existing on-site biological communities and aquatic features is provided below.

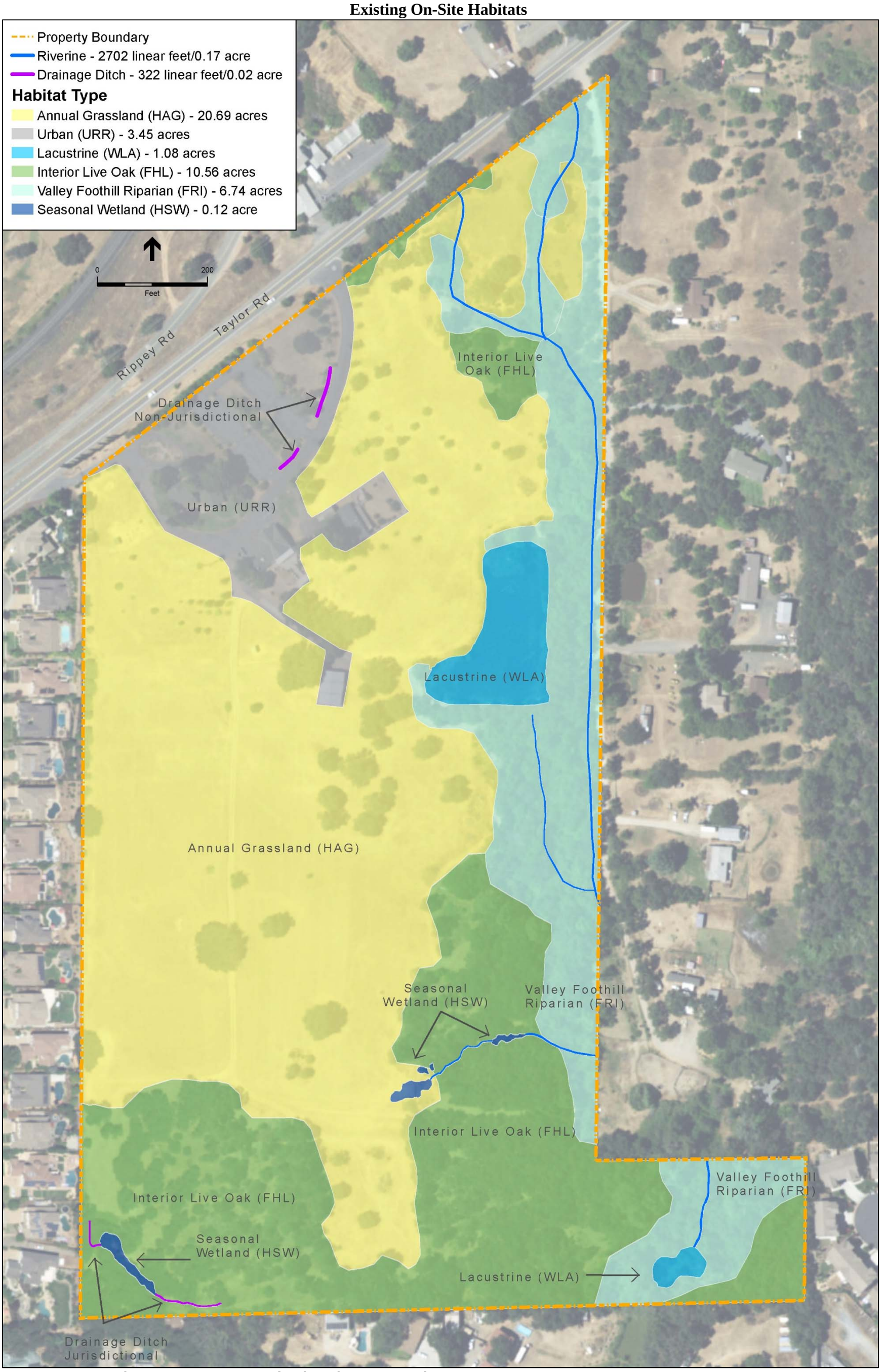
<u>On-Site Biological Communities</u>

According to the Biological Resources Study Report, the proposed project site contains the following habitat types: annual grassland, urban, interior live oak, valley foothill riparian, seasonal wetland, lacustrine, riverine, and drainage ditch (see Table 5-1). Of the habitat types, annual grassland, interior live oak, valley foothill riparian, seasonal wetland, lacustrine, and riverine are considered natural communities. Figure 5-1, Existing On-Site Habitats, shows a map of the project site and associated habitat locations.

Annual Grassland

Annual grassland is the largest habitat type within the project site. Dominant vegetation within the habitat includes slender wild oat (*Avena barbata*), soft chess (*Bromus hordaceous*), ripgut grass (*Bromus. diandrus*), winter vetch (*Vicia villosa*), and broadleaf filaree (*Erodium botrys*). Isolated interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), and ornamental landscape trees occur within the annual grassland. Commonly occurring wildlife associated with the annual grassland habitat includes mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), and black-tailed jackrabbit (*Lepus californicus*).

Figure 5-1
Existing On-Site Habitats



Source: Environmental Science Associates, Revised Biological Resources Study Report, 2018.

Table 5-1 Existing On-Site Habitat Types	
Habitat Type	**Acreage**
Annual Grassland	20.69
Urban	3.45
Interior Live Oak	10.56
Valley Foothill Riparian	6.74
Seasonal Wetland	0.12
Lacustrine	1.08
Riverine	0.17
Drainage Ditch	0.02
Total	**42.83**
Source: Environmental Science Associates, Revised Biological Resources Study Report, 2018.	

Urban

Urban areas occur within the northwestern portion of the project site. The urban area includes five buildings, a parking lot, roadways, and various other associated improvements. Ornamental landscape trees include coast redwood (*Sequoia sempervirens*), ornamental cedar (*Cedrus* sp.), white mulberry (*Morus alba*), citrus (*Citrus* sp.), and plum (*Pyrus* sp.). Commonly occurring wildlife associated with the urban areas includes cedar waxwing (*Bombycilla cedrorum*), California towhee (*Melozone crissalis*), golden-crowned sparrow (*Zonotrichia atricapilla*), and house wren (*Troglodytes aedon*).

Interior Live Oak

Interior live oak occurs within the northeastern and southern portions of the project site. The majority of overstory vegetation includes interior live oak, with valley oak, blue oak (*Quercus douglasii*), and California buckeye (*Aesculus californicus*) interspersed throughout.

Dominant understory vegetation includes Himalayan blackberry (*Rubus armeniacus*), western poison oak (*Toxicodendron diversilobum*), soft chess, rip-gut brome, and wild oat. Commonly occurring wildlife associated with the interior live oak habitat includes brown-headed cowbird (*Molothrus ater*), American goldfinch (*Spinus tristis*), porcupine (*Erethizon dorsatum*), and western spotted skunk (*Spilogale gracilis*).

Valley Foothill Riparian

Valley foothill riparian occurs within the eastern portion of the project site. Dominant overstory vegetation includes Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), willow (*Salix* sp.), and big-leaf maple (*Acer macrophyllum*). Dominant understory vegetation includes Himalayan blackberry, cattail (*Typha* sp.), grape (*Vitis* sp.), and duckweed (*Lemna* sp.). Commonly occurring wildlife associated with the valley foothill riparian habitat includes California vole (*Microtus californicus*), black-headed grosbeak (*Pheucticus melanocephalus*), lesser goldfinch (*Spinus psaltria*), and American goldfinch.

Seasonal Wetland

Seasonal wetlands occur within the southern portion of the project site. Dominant vegetation includes iris leaved rush (*Juncus xiphioides*), curly dock (*Rumex crispus*), and buttercup (*Ranunculus muricatus*). Commonly occurring wildlife associated with seasonal wetlands includes common yellowthroat (*Geothlypis trichas*), California toad (*Anaxyrus boreas halophylus*), Sierran tree frog (*Pseudacris sierra*), and common garter snake (*Thamnophis sirtalis*).

Lacustrine

Lacustrine ponds occur within two areas of the project site: the northeast and the southeast. Dominant vegetation within the lacustrine ponds includes duckweed (*Lemna* sp.) and Himalayan blackberry. Dominant vegetation along the banks of the lacustrine ponds includes those identified under the valley foothill riparian habitat type. Commonly occurring wildlife associated with the lacustrine ponds includes red-winged blackbird (*Agelaius phoeniceus*), barn swallow (*Hirundo rustica*), mallard (*Anas platyrhynchos*), and wood duck (*Aix sponsa*).

Riverine

Riverine drainages occur in the eastern and southeastern portions of the project site. Dominant vegetation along the banks of the riverine drainages includes those identified within the valley foothill riparian habitat type. Commonly occurring wildlife associated with riverine drainages includes black phoebe (*Sayornis nigricans*), belted kingfisher (*Megaceryle alcyon*), and beaver (*Castor canadensis*).

Drainage Ditches

Drainage ditches occur within the project site. One drainage ditch located within the northern portion of the project site is a manmade cobble-lined feature that lacks vegetation and lacks a defined bed and bank. The two drainage ditches occur within the southwestern portion of the study area. Dominant vegetation is similar to the species identified for annual grassland. No commonly occurring wildlife species are associated with the drainage ditches.

Jurisdictional Waters of the United States and Other Waters

Waters of the United States, including wetlands, are broadly defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, tributaries of navigable waterways, and adjacent wetlands. State and federal agencies regulate these habitats, and Section 404 of the Clean Water Act (CWA) requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Both the California Department of Fish and Wildlife (CDFW) and the U.S. Army Corps of Engineers (USACE) have jurisdiction over modifications to riverbanks, lakes, stream channels, and other wetland features. In addition, 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 C.F.R. §328.3[e])

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface water or groundwater, supporting vegetation adapted to life in saturated soil. Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the USACE Wetlands Delineation Manual (USACE, 1987). Primarily, the USACE establishes two distinctions: wetland and non-wetland waters of the U.S. Non-wetland waters are commonly referred to as "other waters of the U.S." Waters of the U.S. are drainage features or water bodies as described in 33 CFR 328.4. The USACE holds sole authority to determine the jurisdictional status of waters of the U.S., including wetlands. Jurisdictional wetlands and waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water for a wide variety of wildlife species.

Potentially Jurisdictional Features

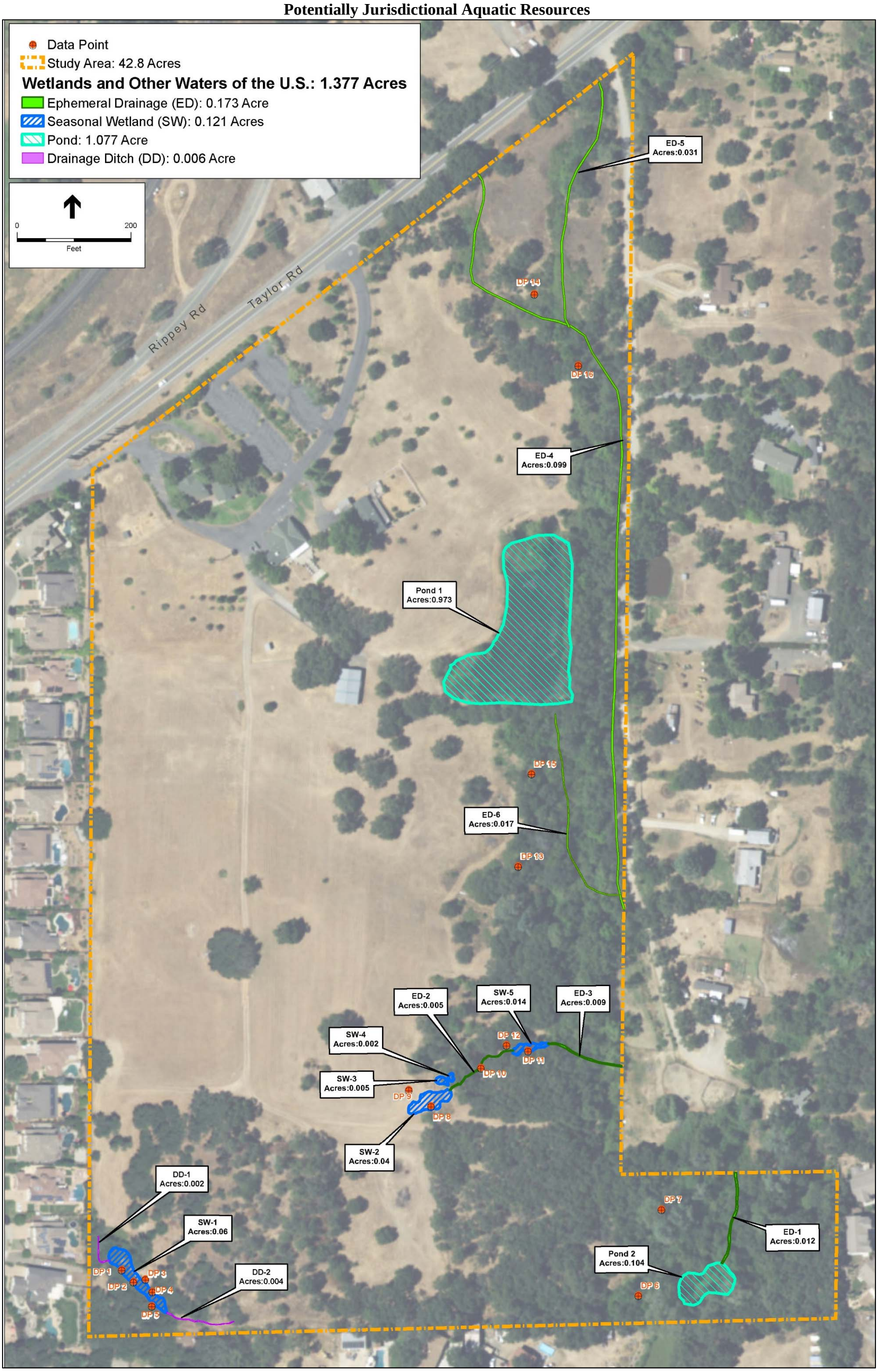
According to ESA, potentially jurisdictional features within the project site include 1.377 acres of wetlands and other waters of the U.S, including approximately 0.121-acre of seasonal wetlands, 0.173-acre of ephemeral channels, 0.006-acre of drainage ditches, and 1.077 acres of pond area. The aforementioned jurisdictional features have been verified by the USACE.[10] A description of the delineated features is provided below.

Seasonal Wetland

The proposed project site contains five seasonal wetlands totaling 0.121-acre (see "SW-1, SW-2, -3, -4, and -5", Figure 5-2). Seasonal wetlands are ephemeral wetlands that pond water or remain saturated for extended periods during a portion of the year, often throughout the wet season, then dry up in spring or early summer. The seasonal wetlands within the study area are classified as "palustrine emergent wetland" (seasonally flooded). Within the project site, the seasonal wetlands are characterized by Data Point (DP)-1, DP-2, DP-3, DP-4, DP-5, DP-8 and DP-11, and the adjacent upland areas are represented by DP-9 and DP-12. The seasonal wetlands are likely hydrologically connected to Secret Ravine Creek, a perennial channel located approximately 0.4-mile south of the project site. Secret Ravine Creek flows southwest to Dry Creek, which drains to the Natomas East Main Drainage Channel and, ultimately, the Sacramento River. At the time the site survey was conducted as part of the Aquatic Resources Delineation, surface water was present in all five seasonal wetlands.

[10] U.S. Army Corps of Engineers. *UAIC Tribal School Project. Jurisdictional Determination Letter*. August 23, 2017.

Figure 5-2
Potentially Jurisdictional Aquatic Resources



Source: Environmental Science Associates, 2017

Ephemeral Drainage

In addition to the five seasonal wetlands, the proposed project site contains six ephemeral channels (EDs) totaling approximately 0.173-acre (See "ED-1, -2, -3, -4, -5, and -6", Figure 5-2). An ephemeral channel has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round, and are not fed by groundwater sources; rather, runoff from rainfall is the primary source of water for stream flow. The six ephemeral channels on the project site range from approximately one to three feet in width. The channels are typically low gradient, and flow through annual grassland, interior oak woodland, and valley foothill riparian habitats. Bed material consists of soil and gravel, and the beds are typically not vegetated. The boundaries of the ephemeral channels were determined by the OHWM.

Drainage Ditch

As discussed previously, the southwest portion of the proposed project site contains two man-made drainage ditches totaling 0.004 and 0.002 acres, respectively (see "DD-1 and DD-2", Figure 5-2). The water source for the drainage ditches is irrigation water runoff from landscaping associated with the residential subdivision to the west of the project site. The upper ditch eventually flows to a seasonal wetland, and the lower ditch flows out of the seasonal wetland to a culvert along the southern boundary of the project site.

Pond/Lacustrine Limnetic

The proposed project site contains two man-made ponds totaling approximately 1.077 acres (see "Pond 1 and 2", Figure 5-2). Per the Aquatic Resources Delineation, the ponds are classified as "lacustrine limnetic". The larger of the two ponds (Pond 1) is connected to a pump and irrigation system and has historically been used for irrigation. The second pond (Pond 2) was likely initially constructed to serve as a water source for livestock or agriculture; however, the original function of the pond is not definitively known. Pond-1 is fed from Placer County Water Agency's (PCWA's) Red Ravine Canal. The smaller pond (Pond 2) is fed by ED-1.

Special-Status Species

For the purposes of this EIR, special-status species are considered any of the following:

- Listed or proposed for listing as threatened or endangered under federal Endangered Species Act (ESA) or candidates for possible future listing (U.S. Fish and Wildlife Service [USFWS] 2015);
- Listed or candidates for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA);
- Listed as Fully Protected under the California Fish and Game Code (FGC);
- Animals identified by CDFW as Species of Special Concern;
- Plants considered by CDFW to be "rare, threatened, or endangered in California"; or

- Otherwise meets the definition of rare or endangered under CEQA Sections 15380(b) and (d), including, but not necessarily limited to, vascular plants identified as List 1 or 2 by the California Native Plant Society (CNPS):
    - CRPR 1A Plants presumed to be extinct in California;
    - CRPR 1B Plants that are rare, threatened, or endangered in California and elsewhere; and
    - CRPR 2 Plants that are rare, threatened, or endangered in California but more common elsewhere.

Special-Status Plants

Based on queries of CDFW's Natural Diversity Database (CNDDB) and other information sources, the Biological Resources Study Report returned records of 19 special-status plant species that occur within the Rocklin and surrounding eight quadrangles (i.e., Lincoln, Gold Hill, Auburn, Roseville, Pilot Hill, Citrus Heights, Folsom, and Clarksville). Table 5-2 below lists the special-status species that are known to occur or have the potential to occur on-site based on their local and regional distribution. The table includes the common and scientific name for each species, regulatory status (federal, State, CNPS), habitat descriptions, identification/survey periods, and potential for occurrence within the proposed project site. None of the 19 special-status plant species were observed during biological surveys conducted within the project site on November 30 and December 1, 2016 and April 3, 2018.

Species without the potential to occur were excluded from further analysis for the following reasons, as noted in Table 5-2: the project site occurs outside of the known extant geographic or elevation ranges for the species, the project site does not contain suitable soils or habitat types required for the species, and/or the species was not observed within the project site during the evident and identifiable blooming periods. The species that have the potential to occur on-site, as presented in Table 5-2, are discussed in further detail below.

Ahart's Dwarf Rush

Ahart's dwarf rush has a CRPR of 1B. Ahart's dwarf rush is an annual herb found on mesic soils in valley and foothill grassland from 98 to 328 feet (30 to 100 meters). The blooming period is from March through May. The annual grassland within the study area provides habitat for Ahart's dwarf rush. However, the species was not observed during the rare plant survey conducted on the project site. Thus, the species is not anticipated to occur on-site.

Big Scale Balsamroot

Big-scale balsamroot has a CRPR of 1B. Big-scale balsamroot is a perennial herb sometimes found on serpentinite soils in chaparral, cismontane woodland, and valley and foothill grassland from 295 to 5,102 feet (90 to 1,555 meters). The blooming period is from March through June. The annual grassland and foothill hardwood within the project site provide suitable habitat for the species. However, big-scale balsamroot was not observed during the rare plant survey conducted on the project site. Thus, the species is not anticipated to occur on-site.

Table 5-2
Special-Status Plant Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State/CNPS	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*)	--/--/1B	Annual herb found in mesic areas in valley and foothill grassland from 30 to 229 meters (98 to 751 feet).	April – August	**Low**; while the annual grassland within the project site provides habitat for the species, surveys conducted during the blooming period did not detect the species.
Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*)	--/--/1B	Perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes in serpentinite soils, from 90 to 1,555 meters (295 to 5,102 feet).	March – June	**Low**; while the annual grassland and interior live oak within the project site provide habitat for the species, surveys conducted during the blooming period did not detect the species.
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	--/--/2B	Annual herb found on clay soils around the lake margins of marshes and swamps and in vernal pools from 10 to 2,375 meters (33 to 7,792 feet).	April – August	**Low**; while the lacustrine ponds within the project site provide habitat for the species, surveys conducted during the blooming period did not detect the species.
Chaparral sedge (*Carex xerophyla*)	--/--/1B	Perennial herb found on serpentinite, gabbroic substrate in chaparral, cismontane woodland, and lower montane coniferous forest from 440 to 770 meters (1444 to 2,526 feet).	March – June	**None**; the project site does not contain the soils required for the species.
Dwarf downingia (*Downingia pusilla*)	--/--/2	Annual herb found occasionally in mesic areas within valley and foothill grassland and vernal pools from 1 to 445 meters (3 to 1,456 feet).	March – May	**Low**; while the annual grassland within the project site provides habitat for the species, surveys conducted during the blooming period did not detect the species.

(Continued on next page)

Table 5-2
Special-Status Plant Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State/CNPS	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
El Dorado bedstraw (*Galium californicum* ssp. *Sierra*)	FE/CR/1B	Perennial herb found on gabbroic substrate in chaparral, cismontane woodland, and lower montane coniferous forest from 100 to 585 meters (328 to 1,919 feet).	May – June	**None**; the project site does not contain the soils required for the species.
El Dorado mule ears (*Wyethia reticulata*)	--/--/1B	Perennial herb found on clay or gabbroic substrate within chaparral, cismontane woodland, and lower montane coniferous forest from 185 to 630 meters (607 to 2,067 feet).	April – August	**None**; the project site does not contain the soils required for the species.
Hispid bird's beak (*Chloropyron molle* ssp. *Hispidum*)	--/--/1B	Annual hemiparasitic herb usually found on alkaline substrate in meadows and seeps, playas, and valley and foothill grassland from 1 to 155 meters (3 to 508 feet).	June – September	**None**; the project site does not contain the alkaline substrate required for the species.
Jepson's onion (*Allium jepsonii*)	--/--/1B	Perennial bulbiferous herb found on serpentine or volcanic soils in chaparral, lower montane coniferous forest, and cismontane woodland from 300 to 1,320 meters (984 to 4,331 feet).	April – August	**None**; the project site does not contain the soils required for the species.
Layne's butterweed/ragwort (*Packera layneae*)	FT/CR/1B	Perennial herb found on serpentine or gabbroic, rocky substrate in cismontane woodland or chaparral from 200 to 1,085 meters (656 to 3,560 feet).	April – August	**None**; the project site does not contain the soils required for the species.
Legenere (*Legenere limosa*)	--/CT/1B	Annual herb found in vernal pools from 1 to 880 meters (3 to 2,887 feet).	April – June	**None**; the project site does not provide habitat for the species.
Viburnum ellipticum (*Oval-leaved viburnum*)	--/--/1B	Perennial deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 215 to 1,400 meters (705 to 4,593 feet).	May – June	**None**; while the interior live oak provides habitat, the project site occurs outside of the known elevation range for the species.

(Continued on next page)

Table 5-2
Special-Status Plant Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State/CNPS	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
Pincushion navarretia (*Navarretia myersii*)	--/--/1B	Annual herb found in vernal pools, which are often acidic, from 20 to 330 meters (66 to 1,083 feet).	April – May	**None**; the project site does not provide habitat for the species.
Pine Hill ceanothus (*Ceanothus roderickii*)	FE/CR/1B	Perennial evergreen shrub found on serpentinite or gabbroic substrate in chaparral or cismontane woodland from 245 to 1,090 meters (804 to 3,576 feet).	April – June	**None**; the project site does not contain the soils required for the species.
Pine Hill flannelbush (*Fremontodendron Decumbens*)	FE/CR/1B	Perennial evergreen shrub found in chaparral and cismontane woodland on rocky gabbroic or serpentinite soils from 425 to 760 meters (1394 to 2,493 feet).	April – July	**None**; the project site does not contain the soils required for the species.
Red Hills soaproot (*Chlorogalum grandiflorum*)	--/--/1B	Perennial bulbiferous herb found in chaparral, cismontane woodland, or lower montane coniferous forest on gabbro or serpentine soils from 245 to 1,240 meters (804 to 4,068 feet).	May – June	**None**; the project site does not contain the soils required for the species.
Sacramento orcutt grass (*Orcuttia viscida*)	FE/CE/1B	Annual herb found in vernal pools from 30 to 100 meters (98 to 328 feet).	April – September	**None**; the project site does not provide habitat for the species.
Sanford's arrowhead (*Sagittaria sanfordii*)	--/--/1B	Perennial rhizomatous herb found in marshes and swamps in assorted shallow freshwater areas from 0 to 650 meters (0 to 2,133 feet).	May – October	**None**; the project site does not provide habitat for the species.
Stebbins' morning glory (*Calystegia stebbinsii*)	FE/CE/1B	Perennial rhizomatous herb found occasionally in openings of chaparral and cismontane woodland on gabbro or serpentinite soils from 185 to 1,090 meters (607 to 3,576 feet).	April – July	**None**; the project site does not contain the soils required for the species.

Codes used in table are: **FE** = federal endangered; **FT** = federal threatened; **CE =** California endangered; **CT** = California threatened; **CR =** California rare; **1A =** plants presumed extinct in California; and **1B** = plants rare, threatened, or endangered in California and elsewhere.

Source: Environmental Science Associates, Biological Resources Study Report, June 2018.

Boggs Lake Hedge-Hyssop

Boggs Lake hedge hyssop is State listed as endangered and has a California Rare Plant Rank (CRPR) of 1B. Boggs Lake hedge hyssop is an annual herb found on clay soils in vernal pools and along the lake margins of marshes and swamps from 33 to 7,792 feet (10 to 2,375 meters). The blooming period is from April through August. The lacustrine pond within the study area provides marginally suitable habitat for this species. However, Boggs Lake hedge hyssop was not observed during the rare plant survey conducted on the project site. Thus, the species is not anticipated to occur on-site.

Dwarf Downingia

Dwarf downingia has a CRPR of 2. Dwarf downingia is an annual herb found occasionally in mesic areas within valley and foothill grassland and vernal pools from 3 to 1,460 feet (1 to 445 meters). The blooming period for this species is from March through May. The annual grassland within the project site provides habitat for the species. However, dwarf downingia was not observed during the rare plant survey conducted on the project site. Thus, the species is not anticipated to occur on-site.

Special-Status Wildlife

Based on queries of CDFW's Natural Diversity Database (CNDDB) and other information sources, the Biological Resources Study Report returned records of 23 special-status wildlife species that occur within the Rocklin and surrounding eight quadrangles. Table 5-3 below lists the special-status species that are known to occur or have the potential to occur within the project site based on their local and regional distribution. The table includes the common and scientific name for each species, regulatory status (federal and State) habitat descriptions, identification/survey periods, and potential for occurrence within the proposed project site. None of the 23 special-status wildlife species identified were observed during biological surveys conducted within the project site on November 30 and December 1, 2016.

Species with no potential to occur on-site, for reasons noted in Table 5-3, were excluded from further analysis below, with the exception of the foregoing discussion of CRLF. Additional evidence has been provided to substantiate the Table 5-3 conclusion that CLRF does not have the potential to occur on-site.

California Red-Legged Frog

California red-legged frogs (CRLF) are a federally listed threatened species and California Species of Special Concern. CRLF inhabits ponds, slow-moving creeks, and streams with deep pools that are lined with dense emergent marsh or shrubby riparian vegetation. Submerged root masses and undercut banks are important habitat features for the species. Breeding sites include pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds, lagoons, and artificial impoundments, including stock ponds. The species typically breeds between November and March. Embryos hatch six to 14 days after fertilization and larvae require 3.5 to seven months to attain metamorphosis.

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
Invertebrates				
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT/--	Blue elderberry shrubs usually associated with riparian areas.	Adults emerge in spring until June. Exit holes visible year-round.	**None**; the project site does not contain any suitable elderberry shrubs.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT/--	Vernal pools, swales, and ephemeral freshwater habitat.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	**None**; the project site does not provide habitat for the species.
Fish				
Central Valley steelhead (*Oncorhynchus mykiss*)	FT/--	Inhabits rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	Spawn in winter and spring.	**None**; the project site and areas immediately downstream do not provide habitat for the species.
Delta smelt (*Hypomesus transpacificus*)	FT/CE	Found in shallow fresh or brackish water tributary to the Delta ecosystem/spawns in freshwater sloughs and channel edge waters.	Spawn December – July. Presently year-round in the Delta.	**None**; the project site does not provide habitat for the species.
Amphibians/Reptiles				
California red-legged frog (*Rana draytonii*)	FT/CSC	Requires a permanent water source and is typically found along quiet, slow-moving streams, ponds, or marsh communities with emergent vegetation. Believed extirpated from the Central Valley floor since 1960s.	Aquatic surveys of breeding sites January – September, optimally after	**Low**; the lacustrine ponds and riverine drainage within the project site provide marginal habitat for the species, although the project site occurs outside of the known extant geographic

(Continued on next page)

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
			April 15.	range for the species.
Foothill yellow-legged frog (*Rana boylii*)	CCT	Inhabits partially shaded, rocky streams with perennial flow at low to moderate elevations, in areas of chaparral, open woodland, and forest. Elevation range extends from sea level to around 7,000 feet (2,130 meters).	Surveys of breeding sites between April - June	**None;** the drainages within the project are not perennial, therefore, the study area does not provide habitat for this species.
Giant garter snake (*Thamnophis gigas*)	FT/CT	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands. Upland habitat should have burrows or other soil crevices suitable for snakes to reside during their dormancy period (November – mid March). The species is known from Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Active outside of dormancy period. November – mid March	**None**; the project site occurs outside of the known geographic range for the species.
Western pond turtle (*Emys marmorata*)	--/CSC	Agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands.	Active outside of dormancy period. November – February	**Medium**; the lacustrine ponds and riverine drainage within the project site provide aquatic habitat and the annual grassland provides upland and nesting habitat for the species.
Western spadefoot (*Spea hammondii*)	--/CSC	Found in open grasslands and woodlands. Requires vernal pools or seasonal wetlands for breeding.	Year-round	**None**; the project site does not provide habitat for the species.
Birds				
American peregrine falcon (*Falco peregrinus anatum*)	--/CFP	Nests on man-made structures and cliffs in woodland, forest, and coastal habitats.	Year-round (some migrate)	**None**; the project site occurs outside of the known extant

(Continued on next page)

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
		Known in California from Alameda, Butte, Calaveras, Humboldt, Los Angeles, Mendocino, Napa, San Benito, San Diego, San Mateo, Santa Clara, Santa Cruz, Shasta, Siskiyou, Solano, Tehama, and Tuolumne counties.		geographic range for the species.
Bald eagle (*Haliaeetus leucocephalus*)	FD/CFP and CE	Breeding habitat most commonly includes areas within 2.5 miles of coastal areas, bays, rivers, lakes, and reservoirs. Nests usually are in tall trees or on pinnacles or cliffs near water.	Winter	**None**; the project site does not provide nesting habitat for the species.
Bank swallow (*Riparia riparia*)	--/CT	Nests in riverbanks and forages over riparian areas and adjacent uplands.	April – July	**None**; the project site does not provide nesting habitat for the species.
Burrowing owl (*Athene cunicularia*)	--CSC (burrowing and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year-round. Breeding season surveys March – August.	**Low**; the culverts associated with the drainage ditch within the developed area and the annual grassland within the project site provide habitat for the species; however, very few burrows exist that could be occupied by the species.
California black rail (*Laterallus jamaicensis coturniculus*)	--/CT	Saltwater, brackish, and freshwater marshes. The species is known from Alameda, Butte, Contra Costa, Imperial, Los Angeles, Marin, Napa, Nevada, Orange, Placer, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma,	Year-round	**None**; the project site does not provide habitat for the species.

(Continued on next page)

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
		Sutter, and Yuba counties, in California.		
Golden eagle (*Aquila chrysaetos*)	--/CFP (nesting and wintering)	Open and semi-open areas up to 12,000 feet in elevation. Builds stick nests on cliffs, in trees, or on man-made structures.	Year-round	**None**; the project site does not provide habitat for the species.
Grasshopper sparrow (*Ammodramus savannarum*)	--/CSC	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass.	April – July	**Low**; the annual grassland within the project site provides habitat for the species.
Song sparrow (*Melospiza melodia*)	--/CSC	Nests on the ground and in marshes. Inhabits grassland, chaparral, orchard, woodland, wetland, riparian, ands scrub-shrub. In California, the species is known from Alameda, Contra Costa, Marin, Napa, Sacramento, San Mateo, Santa Clara, Solano, Sonoma, and Stanislaus counties.	February – September	**None**; although the annual grassland, interior live oak, and valley foothill riparian provide habitat, the project site occurs outside of the known geographic range for the species.
Purple martin (*Progne subis*)	--/CSC	Often nests in tall, old trees near bodies of water in woodland and conifer habitats. Feed in open areas near water and nest in tree cavities.	Year-round	**Low**; the trees within the annual grassland, interior live oak, and valley foothill riparian areas on the project site provide habitat for the species.
Swainson's hawk (*Buteo swainsoni*)	--/CT	Nest peripherally to valley riparian systems lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. The species is known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Inyo, Kern, Kings, Lassen, Los Angeles, Madera, Merced, Modoc, Mono, Napa, Placer, Plumas, Sacramento, San Bernardino, San Joaquin, San Luis	March – October	**Medium**; the trees along the riverine drainage within the on-site valley foothill riparian area provide nesting habitat and the annual grassland provides foraging habitat for the species.

(Continued on next page)

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
		Obispo, Siskiyou, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.		
Tricolored blackbird (*Agelaius tricolor*)	--/CCT (nesting colony)	Nests in dense blackberry, cattail, tules, bulrushes, sedges, willow, or wild rose within freshwater marshes. Nests in large colonies of at least 50 pairs (up to thousands of individuals).	Year-round	**None**; although the on-site valley foothill riparian provides habitat, the extent of the habitat is not large enough to support colonial nesting colonies.
White-tailed kite (*Elanus leucurus*)	--/CFP (nesting)	Nests in isolated trees or woodland areas with suitable open foraging habitat.	February 15 – August 31	**High**; the interior live oak, valley foothill riparian, and isolated trees within the on-site annual grassland areas provide breeding habitat for the species. Two CNDDB occurrences are documented within five miles of the project site. One of the occurrences is documented within the project site.
Mammals				
American badger (*Taxidea taxus*)	--/CSC	Found in a variety of grasslands, shrublands, and open woodlands throughout California.	Year-round	**Low**; the annual grassland within the project site provides habitat, however, very few burrows that could be utilized by the species are present within the project site.
Pallid bat (*Antrozous pallidus*)	--/CSC	Most abundant in oak woodland, savannah, and riparian habitats. Roosts in crevices and hollows in trees, rocks, cliffs, bridges, and buildings.	Year-round	**Low**; the interior live oak, valley foothill riparian, and isolated trees within the on-site annual grassland areas provide breeding habitat for the species.

(Continued on next page)

Table 5-3
Special-Status Wildlife Species Considered in this Analysis

Common Name (*Scientific Name*)	Status Federal/State	Habitat Requirements	Identification/ Survey Period	Potential to Occur On-Site
Townsend's big-eared bat (*Corynorhinus townsendii*)	--/CCT and CSC	Found in all habitats except for subalpine and alpine habitats. Roosts in caves, mines, tunnels with minimal disturbance, abandoned open buildings and other human-made structures.	Year-round	**None**; the project site does not provide roosting habitat for the species.

Codes used in table are: **FE** = federal endangered; **FT** = federal threatened; **FD =** federal delisted; **CE =** California endangered; **CT** = California threatened; **CR =** California rare; **CSC =** California Species of Special Concern; **CCT =** California threatened candidate; and **CFP** = California fully-protected.

Source: Environmental Science Associates, Biological Resources Study Report, June 2018.

CRLF may have been extirpated from the floor of the Central Valley prior to the 1960s. All of the extant records for CRLF in the Sierra Nevada range are over 800 feet. Below 800 feet, aquatic habitat generally supports stronger populations of non-native predators associated with warm water habitats such as bullfrogs (*Lithobates catesbeiana*) and Centrarchid fish. The project site is situated at an elevation of approximately 420 to 495 feet msl.

CNDDB occurrences of CRLF have not been recorded within five miles of the project site. The nearest occurrence is approximately eight miles southeast of the project site along a small drainage feeding directly into the east side of Folsom Lake; however, the validity of this record is highly questionable due to the low elevation (approximately 500 feet msl), the proximity to urban development and to Folsom Lake, and the abundant non-native predators that the area supports. The record states that a juvenile frog was sighted on a small footbridge crossing a drainage leading into Folsom Lake from an adjacent residential development. The frog was most likely a juvenile bullfrog, which, to the untrained eye, can be easily confused with a juvenile CRLF. Even if the record were valid, the occurrence location is separated from the project site by a number of impassible barriers, including major roadways and urban development. The nearest valid CNDDB occurrences are over 20 miles northeast of the project site in the vicinity of Georgetown at over 2,200 feet msl. Such occurrences state that CRLF was observed in a series of small pools/wet areas in a drainage stream channel. The location corresponds to the nearest defined Critical Habitat Unit (PLA-1).

The lacustrine pond is comprised of water year-round and is routinely stocked with largemouth bass (*Micropterus salmoides*) and mosquitofish, which prey on CRLF. Although the lacustrine pond and riverine drainages provide marginal habitat, the pond is a permanent water source that supports multiple species that prey on CLRF, and the project site occurs outside of the known extant geographic and elevation ranges for the species.[11] Therefore, CRLF is not likely to occur within the proposed project site.

Western Pond Turtle

Western pond turtle is a California Species of Special Concern. The species is typically found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with suitable basking sites. Suitable aquatic habitat typically has a muddy or rocky bottom and has emergent aquatic vegetation for cover. Western pond turtles nest and overwinter in areas of sparse vegetation comprised of grassland and forbs with less than 10 percent slopes, less than 492 feet from aquatic habitat. The lacustrine ponds and riverine drainages provide aquatic habitat and the surrounding annual grassland provides upland habitat. While the western pond turtle was not observed within the site during the biological survey, based on the above, the species has the potential to occur within the proposed project site.

[11] Sarah Markegard, Biologist, U.S. Fish and Wildlife Service. Personal communication [email] with Kelly Bayne, M.S., Senior Wildlife Biologist, Environmental Science Associates. October 11, 2017.

Burrowing Owl

Burrowing owl is a California Species of Special Concern. The species is a small ground-dwelling owl that occurs in western North America from Canada to Mexico and east to Texas and Louisiana. Although burrowing owls are migratory in certain areas of their range, the species is predominantly non-migratory in California. Burrowing owls generally inhabit gently-sloping areas characterized by low, sparse vegetation. The breeding season for burrowing owls extends from March to August, peaking in April and May. Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owl is also known to use artificial burrows including pipes, culverts, and nest boxes. Within the proposed project site, the culverts associated with the drainage ditch within the developed area and the annual grassland provide habitat for the species. However, very few potential burrow sites that could be used by burrowing owl are present within the site. Burrowing owls or their signs were not observed during the biological survey conducted by ESA. Based on the above, the species has the potential to nest or winter within the proposed project site.

Grasshopper Sparrow

Grasshopper sparrow is a California Species of Special Concern. Habitat for the species consists of moderately open grasslands and prairies with patchy bare ground. Grasshopper sparrows were not observed during the biological survey; however, the survey was conducted outside of the generally accepted nesting season, which extends from February 1 through August 31. Based on the above, the species has the potential to nest within the proposed project site during the nesting season.

Purple Martin

Purple martin is a California Species of Special Concern. The species typically nests in snags, tree cavities, crevices in rocks, and abandoned woodpecker holes in the vicinity of water. Purple martins forage over fields, water, and marshes. The trees within the on-site annual grassland, valley foothill riparian, and interior live oak areas provide nesting habitat for the species. Purple martins were not observed during the biological survey; however, the survey was conducted outside of the generally accepted nesting season, which extends from February 1 through August 31. Based on the above, purple martin has the potential to nest within the proposed project site during the nesting season.

Swainson's Hawk

Swainson's hawk is a California Threatened species. The Swainson's hawk population that nests in the Central Valley winters primarily in Mexico, while the population that nests in the interior portions of North America winters in South America. Swainson's hawks arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July. In the Central Valley, Swainson's hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. The species typically nests near riparian areas; however, Swainson's hawks have been known to nest in urban areas as well. Nest locations are usually in close proximity to suitable foraging habitats, which may include fallow fields, annual grasslands, irrigated pastures, alfalfa

and other hay crops, and low-growing row crops. Swainson's hawks leave their breeding grounds to return to their wintering grounds in late August or early September.

CNDDB occurrences of Swainson's hawk have not been recorded within five miles of the proposed project site; however, four CNDDB occurrences have been recorded between five and 10 miles of the site. None of the occurrences were documented within the last five years. Within the project site, trees along the riverine drainage within the valley foothill riparian provide nesting habitat for the species, and the annual grassland within the site provides foraging habitat. Although the species was not observed during the biological survey, the biological survey was conducted outside of the generally accepted nesting season, which extends from March 1 through August 31. Based on the above, Swainson's hawk has the potential to occur within the proposed project site.

White-Tailed Kite

While not listed, the white-tailed kite is a California Fully Protected Species, meaning that the species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species", although take may be authorized for necessary scientific research. White-tailed kite is a medium sized raptor that is a yearlong resident in coastal and valley lowlands in California. The species breeds from February to October, peaking from May to August, and nests near the top of dense oaks, willows, or other large trees. Within the proposed project site, trees within the annual grassland, valley foothill riparian, and interior live oak provide nesting habitat for white-tailed kite. White-tailed kites were not observed during the biological survey; however, the survey was conducted outside of the generally accepted nesting season, which extends from February 1 through August 31. Based on the above, white-tailed kite has the potential to nest within the proposed project site during the nesting season.

American Badger

American badger is a California Species of Special Concern. American badgers are found in dry, open habitats including grassland and open woodland. Suitable burrowing habitat requires dry, sandy soil. Breeding occurs in summer and early fall, with young being born between March and April. Within the proposed project site, annual grassland provides habitat for the species. However, very few potential burrow sites that could be used by the species were observed during the biological survey. Nonetheless, based on the habitat type present within the proposed project site, American badger could potentially occur.

Pallid Bat

Pallid bat is a California Species of Special Concern. Pallid bat occurs throughout California except in parts of the high Sierra and the northwestern corner of the State. The pallid bat inhabits a variety of habitats, including grasslands, shrublands, woodlands, and forests; however, the species is most abundant in open, dry habitats with rocky areas for roosting. Pallid bats roost alone, in small groups, or gregariously. Roost sites typically include caves, crevices in rocky outcrops and cliffs, mines, trees, and various manmade structures (e.g., bridges, barns, porches), and generally have unobstructed entrances/exits. In addition, roosts are often high above the ground,

warm, and inaccessible to terrestrial predators. Year-to-year and night-to-night roost reuse is common, although the species may switch day roosts on a daily and seasonal basis. Within the proposed project site, trees and structures within the annual grassland, valley foothill riparian, and interior live oak provide roosting habitat for the species. Based on the above, pallid bat has the potential to occur within the proposed project site.

Trees

This section discusses individual trees existing on-site. The on-site oak woodland assemblages are discussed above under "On-site Biological Communities".

As part of the Arborist Report prepared for the proposed project, a tree survey was conducted on November 30 and December 1, 2016. The Placer County Tree Preservation Ordinance (Article 12.16 of the Placer County Municipal Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Protected trees are defined as any native tree species with a diameter at breast height (DBH) of six inches or greater (except foothill pine trees, *Pinus sabiniana*) or multiple trunk trees with an aggregate diameter of 10 inches or greater. The Ordinance regulates both the removal of trees and the encroachment of construction activities into protected tree zones. In addition, the Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas.

The Arborist Report inventoried a total of 420 trees. Of the 420 trees, 150 were not native to California, had a DBH of less than six inches, or, in the case of the coast redwood trees inventoried, not suitable for growth in Placer County. The remaining 270 trees are considered protected trees per the Placer County Municipal Code of Ordinances. The location and health of each inventoried tree is described in the Arborist Report (see Appendix F).

5.3 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 proposed project site.

Federal Regulations

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

<u>Federal Endangered Species Act</u>

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not

jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. The FESA prohibits the 'take' of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)).

Migratory Bird Treaty Act (MBTA)

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal 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 FGC 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."

Clean Water Act (CWA)

The USACE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the 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 its 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 C.F.R. §328.2[f]). In addition, Section 401 of the CWA (33 U.S.C. 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 U.S. 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 C.F.R. §328.3[b]).

Furthermore, Jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and OHWM. The OHWM is defined by 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 C.F.R. §328.3[e]).

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 California FGC, such as CESA (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511) and the Lake or Streambed Alteration Agreement Program (FGC 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.

CESA prohibits the taking of State-listed endangered or threatened plant and wildlife species. CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

Fish and Game Code Section 3505

Birds of prey are protected in California under provisions of the California FGC, 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

CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under California FGC Section 1600 to 1607. CDFW has the authority to regulate work that will do any one or more of the following:

1) Divert, obstruct, or change the natural flow of a river, stream, or lake;
2) Change the bed, channel, or bank of a river, stream, or lake; or
3) Use material from a streambed.

CDFW's jurisdictional area along a river, stream or creek is usually bounded by the top-of-bank or the outermost edges of riparian vegetation. Typical activities regulated by CDFW under Section 1600-1616 authority include installing outfalls, stabilizing banks, implementing flood control projects, constructing river and stream crossings, diverting water, damming streams, gravel mining, and logging.

Section 1602 of the California FGC requires notification of CDFW for lake or stream alteration activities. If, after notification is complete, CDFW determines that the activity may substantially adversely affect an existing fish and wildlife resource, CDFW has authority to issue a Streambed Alteration Agreement under Section 1603 of the California FGC. Requirements to protect the integrity of biological resources and water quality are often conditions of Streambed Alteration Agreements. Such requirements may include avoidance or minimization of heavy equipment use within stream zones, limitations on work periods to avoid impacts to wildlife and fisheries resources, and measures to restore degraded sites or compensate for permanent habitat losses.

Waters of the State, including wetlands, are considered sensitive biological resources and fall under the jurisdiction of CDFW and California's Regional Water Quality Control Boards (RWQCBs).

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.

<u>Regional Water Quality Control Board</u>

Pursuant to Section 401 of the CWA and EPA 404(b)(1) guidelines, in order for a USACE federal permit applicant to conduct any activity which may result in discharge into navigable waters, they must provide a certification from the RWQCB that such discharge will comply with the State water quality standards. The RWQCB has a policy of no-net-loss of wetlands in effect and typically

requires mitigation for all impacts to wetlands before the RWQCB will issue water quality certification.

Under the Porter-Cologne Water Quality Control Act (Cal. Water Code Section 13000-14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State's waters. Therefore, even if a project does not require a federal permit (i.e., a Nationwide Permit from the USACE), the project may still require review and approval of the RWQCB, in light of the approval of new nationwide permits (NWPs) on March 9, 2000 and the Supreme Court's decision in the case of the Solid Waste Agency of Northern Cook County (SWANCC) vs. USACE. The RWQCB in response to this, issued guidance for regulation of discharges to "isolated" water on June 25, 2004. The guidance states:

> Discharges subject to Clean Water Act section 404 receive a level of regulatory review and protection by the USACE and are also subject to streambed alteration agreements issued by the CDFW; whereas discharges to waters of the State subject to SWANCC receive no federal oversight and usually fall out of CDFW jurisdiction. Absent of RWQCB attention, such discharges will generally go entirely unregulated. Therefore, to the extent that staffing constraints require the RWQCB to regulate some dredge and fill discharges of similar extent, severity, and permanence to federally-protected waters of similar value. Dredging, filling, or excavation of "isolated" waters constitutes a discharge of waste to waters of the State, and prospective dischargers are required to submit a report of waste discharge to the RWQCB and comply with other requirements of Porter-Cologne.

When reviewing applications, the RWQCB focuses on ensuring that projects do not adversely affect the "beneficial uses" associated with waters of the State. Generally, the RWQCB defines beneficial uses to include all of the resources, services and qualities of aquatic ecosystems and underground aquifers that benefit the State. In most cases, the RWQCB seeks to protect these beneficial uses by requiring the integration of water quality control measures into projects that will result in discharge into waters of the State. For most construction projects, RWQCB requires the use of construction and post-construction Best Management Practices (BMPs). In many cases, proper use of BMPs, including bioengineering detention ponds, grassy swales, sand filters, modified roof techniques, drains, and other features, will speed project approval from RWQCB. Development setbacks from creeks are also requested by RWQCB as they often lead to less creek-related impacts in the future.

Senate Bill 1334

Effective January 1, 2005, Senate Bill 1334 established Public Resources Code Section 21083.4, the State's first oak woodlands conservation standards under CEQA. This new law creates the following two requirements for counties: 1) Counties must determine whether or not a project that results in the conversion of oak woodlands will have a significant effect; and 2) If there may be a significant effect, counties must employ one or more of the following mitigation measures:

- Conserving oaks through the use of conservation easements;
- Planting and maintaining an appropriate number of trees either on-site or in restoration of a former oak woodlands (tree planting is limited to half the mitigation requirement);

- Contributing funds to the Oak Woodlands Conservation Fund for the purpose of purchasing land or conservation easements; or
- Other mitigation measures developed by the County.

Local Regulations

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

Placer County General Plan

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

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); and/or
d) 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.

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. 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.

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.

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 preservation of the habitats of threatened, endangered, and/or other special status species. 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.10. The County will use the California Wildlife Habitat Relationships (WHR) system as a standard descriptive tool and guide for environmental assessment in the absence of a more detailed site-specific system.

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. 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.

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.

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.

Horseshoe Bar/Penryn Community Plan

The Horseshoe Bar/Penryn Community Plan biological resource policies that are applicable to the proposed project are presented below:

Policy 4(b)(2) The natural resources and features of a site proposed for development shall be the predominant planning factor that determines the scope and magnitude of the development. Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any land development project, paying particular attention to its protection and the preservation of existing native vegetation.

Policy 4(b)(3) Site specific surveys by qualified professionals shall be required prior to development to delineate wetlands in the Plan area. All development proposals involving wetlands shall be coordinated with the California Department of Fish and Game, Army Corps of Engineers and U.S. Fish and Wildlife Service. The "no-net-loss" policy (2: 1 replacement) of requiring preservation of all wetland sites, or preservation of priority wetlands and compensation for wetland losses, shall continue to be provided. Wherever artificial means are utilized in wetlands management, insure that appropriate biota-oriented vector control management strategies are incorporated (i.e. through the use of minnows predatory upon mosquitoes).

Policy 4(b)(4) Where impacts to stream environment zones or wetland areas are unavoidable, project specific mitigation shall include the identification and quantification of vegetation impacted, the preparation of revegetation plans to assure no net loss of riparian or wetland acreage or values, and the specific monitoring of plans to assure compliance and satisfactory results.

Policy 4(b)(6) An inventory of important natural resources, including streams, water bodies, oak woodlands, wildlife habitat, vegetation, and geological features, mineral resources, and soil types shall be created so that they may be more easily identified during project review and effective measures can be designed for their protection. Site specific studies, including mitigation monitoring programs, shall be prepared by qualified professionals for all projects which impact unique or significant fish, wildlife or vegetative resources.

Policy 4(b)(9) Conserve representative areas of undisturbed oak woodlands and valley grasslands that have significant value as wildlife habitat in protective easements, or the equivalent.

Policy 4(b)(11) In landscaping of individual sites and replanting where original vegetation has been destroyed or removed, the emphasis shall be on use of native or native-appearing rather than exotic plants. In areas of high risk, however, it may be preferable to introduce carefully chosen exotics with high fire resistance characteristics.

Placer County Conservation Program

The draft Placer County Conservation Program (PCCP) was released in 2011, which proposes a streamlined strategy and permitting process for a range of covered activities in western Placer County for the next 50 years. The First Agency Review Draft PCCP establishes a conservation reserve area to protect and conserve special-status species and natural communities. The area covers approximately 212,000 acres, including important biological communities in western Placer County. The project site is located within the boundaries of the draft PCCP. The mitigation and conservation protocols that are applied through the PCCP are an equal to or greater functional equivalent mitigation standard for biological resources that are represented in this EIR. In the event the PCCP should be adopted prior to submittal of improvement plans for the project, then the protocols adopted with the PCCP would replace mitigation measures for the same effects as characterized within this EIR. The following statement follows all mitigation measures in this chapter of the EIR that are designed to address impacts to biological resources that could otherwise be mitigated through the PCCP:

> In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure XX may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

The statement identifies substitution mitigation, consistent with implementation of the PCCP, which addresses each specific biological resource area.

Placer County Tree Preservation Ordinance

As discussed previously, the Placer County Tree Preservation Ordinance (Article 12.16 of the Placer County Municipal Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Protected trees are defined as any native tree species with a DBH of six inches or greater (except foothill pine trees,

Pinus sabiniana) or multiple trunk trees with an aggregate diameter of 10 inches or greater. The Ordinance regulates both the removal of trees and the encroachment of construction activities into protected tree zones. In addition, the Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas.

5.4 Impacts and Mitigation Measures

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to biological resources.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the Placer County General Plan, the Horseshoe Bar/Penryn Community 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, USFWS, or NMFS;
- 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 or restrict the range of an endangered, rare, or threatened species;
- Have a substantial adverse effect on the environment by converting oak woodlands;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community, including oak woodlands, identified in local or regional plans, policies or regulations, or by the CDFW, USFWS, USACE, or NMFS;
- Have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means; and/or
- Conflict with any local policies or ordinances that protect biological resources, including oak woodland resources.

Because a number of special-status species could potentially occur on the project site, the first CEQA threshold has been organized into separate impact statements for readability purposes.

<u>Issues Not Further Discussed</u>

According to the Biological Resources Study Report, the proposed project site is not part of major or local wildlife corridor/travel routes because the site does not connect two or more larger areas of natural habitat.[12] In addition, the site is bordered by Taylor Road to the north/northwest and an existing residential subdivision to the west. Additional single-family residences are located to the

[12] Environmental Science Associates. *UAIC Tribal School Project, Revised Biological Resources Study Report*. June 2018.

north of the site, across Taylor Road and to the south of the nearby Union Pacific Railroad (UPRR) tracks. Therefore, the proposed project site is not likely to provide a wildlife corridor for native resident or migratory wildlife species. In addition, while the project site is located within the boundaries of the draft Placer County Conservation Plan (PCCP) released in 2011, the PCCP has not yet been adopted.

Based on the above, the Initial Study prepared for the proposed project (see Appendix C) determined that development of the proposed project would result in a less-than-significant impact or no impact related to the following:

- Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nesting or breeding sites; and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Therefore, such impacts are not further addressed in this EIR.

Method of Analysis

The following section outlines the methods employed in the primary studies relied on for the analysis within this chapter.

Biological Resources Study Report

On November 30 and December 1, 2016, ESA conducted a biological survey of the proposed project site. The biological survey consisted of conducting a botanical inventory, evaluating vegetative communities, mapping wetlands and waterways, and documenting habitat for special-status species with the potential to occur within the study area. Prior to performing focused vegetation and wildlife surveys, ESA reviewed publicly available data and subscription-based biological resource data. The data sources reviewed included the following:

- Topographic maps (Rocklin and surrounding eight quadrangles);
- Historic and current aerial imagery;
- Soil maps from the National Resources Conservation Service (NRCS);
- California Wildlife Habitat Relationships (CWHR) database;
- CDFW California Natural Diversity Database (CNDDB) list of plant and wildlife species documented on the Rocklin and eight surrounding quadrangles;
- The CNPS online database of plant species documented on the Rocklin and eight surrounding quadrangles; and
- A USFWS list of species that may occur in the vicinity of the study area.

Rare Plant Report

On April 3, 2018, ESA conducted a focused botanical survey within the project site. The survey was timed to coincide with the identifiable blooming periods for Boggs Lake hedge hyssop (blooms April through August), Ahart's dwarf rush (blooms March through May), big scale balsamroot (blooms March through June), and dwarf downingia (blooms March through May). The botanical survey area included all areas where disturbance would occur as a result of construction of the proposed project, as well as a 50-foot buffer around the disturbance areas. The ESA biologist walked 25-foot transects in a north-south direction throughout the survey area to ensure 100 percent coverage.

Arborist Report

As part of the Arborist Report prepared by ESA, a tree survey was conducted on November 30 and December 1, 2016. Trees were surveyed according to standard professional practices. The tree survey area included areas which could potentially be disturbed by the proposed project and/or where trees would be removed. An additional 50-foot buffer was added and surveyed where trees were accessible. Riparian areas on the eastern portion of the site and most of the oak woodland on the southern portion of the site would be avoided; such areas were not surveyed unless they fell within 50 feet of the tree survey area and were accessible.

Survey methods consisted of identifying, measuring, assessing, and tagging all accessible trees within the tree survey area that had a minimum stem DBH of four inches. Information collected included the species of the tree, DBH (measured at 4.5 feet from the base of the tree), radius of the dripline (measured at the largest radius), the general condition of the tree and the tree's components (root collar, trunk, limbs, and foliage), the general structural health of the tree, and overall condition. The condition of each tree was defined as either excellent, good, fair, or poor. Such definitions are summarized below:

- **Excellent:** Tree is without any visible deficiencies. Tree is in excellent health and is structurally sound, with little evidence of dieback and good overall annual growth. The tree does not show sign of disease, decay, or mistletoe infestation. The tree has a balanced branching structure.
- **Good:** Tree does not have major deficiencies, but may have minor defects such as minor dieback or overcrowding. Tree is in good health and is structurally sound. Minor defects are not detrimental to overall health of tree.
- **Fair:** Tree does not have major deficiencies, but many minor defects. Tree is in average health and may have some structural deficiencies such as decay and numerous dead limbs. Overall health and integrity of the tree is not adversely affected at present, but the tree may have limited growth, and unbalanced or asymmetrical form. Deficiencies may be detrimental to long-term health of tree.
- **Poor:** Tree has major deficiencies that are detrimental to health of tree, including major decay in the trunk or main limbs, extensive dieback, sparse foliage, extreme overcrowding, and unbalanced or asymmetrical form.

Trees may be ascribed a condition that falls between the described major categories (i.e., "Good to Fair"). Such trees have elements of both categories.

Aquatic Resources Delineation Report

On March 9, 2017, ESA conducted a wetland delineation within the proposed project site. The delineation used the "Routine Determination Method" as described in the 1987 Corps of Engineers Wetland Delineation Manual. The 1987 Corps of Engineers Wetland Delineation Manual was used in conjunction with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). For areas where the two sources differed, the latter was followed.

Three positive parameters must normally be present for an area to be considered a wetland: 1) a dominance of wetland vegetation; 2) presence of hydric soils; and 3) presence of wetland hydrology. Presence or absence of positive indicators for wetland vegetation, soils, and hydrology was assessed per the 1987 Manual and Arid West Supplement guidelines. Data points were taken within suspected wetlands and a paired point taken (where acceptable) in nearby uplands. At each data point, a visual assessment of the dominant plant species within a six-foot radius was made. All features, including sample points, wetland boundaries, and channel courses were recorded using a Global Positioning System (GPS) unit (Trimble GeoXT) with real-time differential correction and an instrument-rated mapping accuracy of +/- 1 meter. Boundaries of wetlands were demarcated in the field using the GPS by walking the margin of the wetland and taking points at set intervals. Acreage of wetland and waters of the U.S. polygons, and the length of linear features were determined using ArcGIS.

Prior to conducting the field investigation, ESA performed the following background tasks:

- Review of the Rocklin, California USGS 7.5-minute topographic quadrangle map;
- Review of color aerial photography for vegetative, topographic, and hydrographic signatures;
- Review of the NRCS Custom Soil Resource Report for Placer County, California, Western Part for information about soils and geomorphology;
- Review of the NRCS National Hydric Soils List for Placer County to determine if any soils mapped within the study area are considered hydric at the level of soil series;
- Review of the USFWS National Wetlands Inventory;
- Review of CRLF Protocol Level Survey Request Letter to the USFWS;[13] and
- Review of email correspondence between Sarah Markegard, Biologist, U.S. Fish and Wildlife Service and with Kelly Bayne, M.S., Senior Wildlife Biologist, Environmental Science Associates. October 11, 2017.

[13] Environmental Science Associates. *Request to Conduct Protocol-Level California Red-Legged Frog Surveys for the United Auburn Indian Community Tribal School Project, Placer County, California*. October 9, 2017.

Project 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.

5-1 Have a substantial adverse effect, either directly or through habitat modifications, on a special-status plant species. Based on the analysis below, the impact is *less than significant.*

As discussed above, suitable habitat for four special-status plant species occurs within the proposed project site, including in areas that could potentially be affected by development of the proposed project. Such species include Boggs lake hedge-hyssop, Ahart's dwarf rush, big-scale balsamroot, and dwarf downingia. However, none of the species were observed during the rare plant survey conducted at the project site on April 3, 2018 during each species' blooming period. Therefore, the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

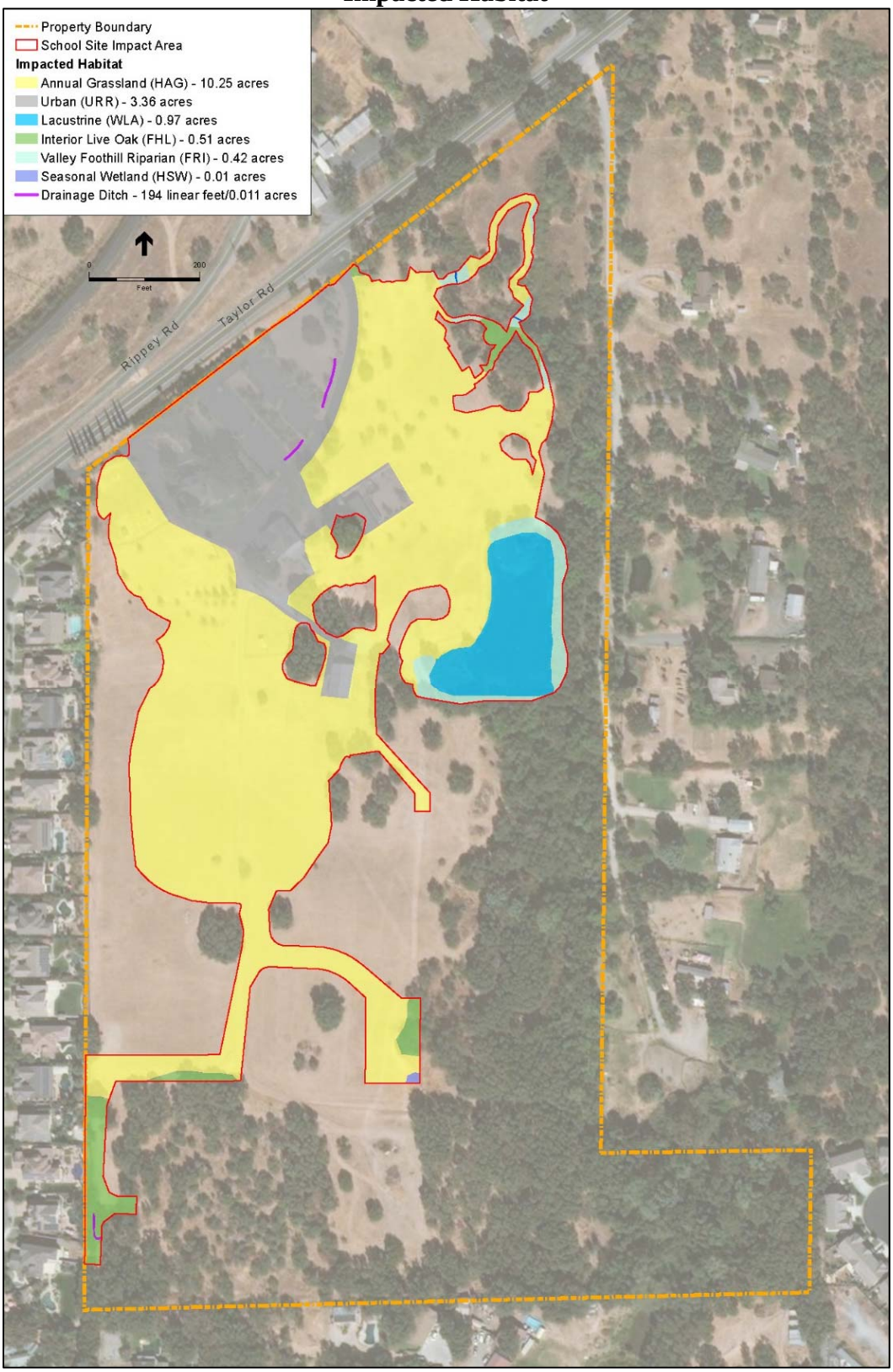
5-2 Have a substantial adverse effect, either directly or through habitat modifications, on western pond turtle. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

As discussed previously, the proposed project site contains suitable habitat for western pond turtle within the existing pond/lacustrine habitat (1.08 acres), riverine habitat (0.17-acre), and annual grassland habitat (20.69 acres). As shown in Figure 5-3, the proposed project would impact approximately 0.97-acre of lacustrine habitat and 10.25 acres of annual grassland. The riverine habitat would be preserved.

While the western pond turtle was not observed within the site during the biological survey, based on the above, the species has the potential to occur within the proposed project site. The proposed project would include construction activities within the vicinity of such areas. Therefore, in the absence of appropriate mitigation, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on western pond turtle. Thus, 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.

Figure 5-3
Impacted Habitat



Source: Environmental Science Associates, Revised Biological Resources Study Report, 2018.

5-2(a) *A worker education and awareness program shall be provided to all on-site personnel by a qualified biologist prior to the commencement of any construction activity including materials staging and ground-disturbing activities. The biologist shall explain to construction workers how best to avoid impacts to western pond turtle and shall include topics on species identification, life history, descriptions, and habitat requirements during various life stages. Handouts, illustrations, photographs, and project mapping showing areas where minimization and avoidance measures would occur may be included as part of the education program. The crew members shall sign a sign-in sheet documenting that they received the training. The completed sign-in sheet shall be submitted to the Placer County Community Development Resource Agency.*

5-2(b) *All vegetation removal, pond draining, and initial grading activities associated with construction and maintenance activities shall be conducted under the supervision of a qualified biologist. If any western pond turtles are detected in the vicinity of the project footprint, the biological monitor shall relocate any western pond turtles found within the construction footprint to suitable habitat away from the construction zone, but within the project site. A letter report documenting the biological monitoring shall be submitted to the Placer County Community Development Resource Agency within 14 days following the final monitoring event.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-2(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-3 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed previously, the proposed project site contains approximately 20.69 acres of annual grassland, of which approximately 10.25 acres would be impacted by the proposed project (see Figure 5-3). The grassland and the culverts associated with the existing on-site drainage swale at the northern portion of the site provide adequate habitat for burrowing owl. It should be noted that very few potential burrow sites that could be used by burrowing owl are present within the site, and CNDDB occurrences have not been recorded within five miles of the site. Nonetheless, based on the above, the species has the potential to nest

or winter within the proposed project site. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl and 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.

5-3(a) *Due to the low likelihood of burrowing owl occurrence, a single take avoidance survey shall be conducted between 14 days and 30 days prior to commencement of construction and/or maintenance activities, in accordance with Appendix D of the 2012 CDFW Staff Report on Burrowing Owl Mitigation. The survey area shall include an approximately 500-foot (150-meter) buffer around suitable grassland habitats, where access is permitted. If the results of the survey are negative, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional protective measures are not required.*

5-3(b) *If active burrows are observed within 500 feet of the project site, an impact assessment should be prepared and submitted to CDFW in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation. If project activities could result in impacts to nesting, occupied, and satellite burrows and/or burrowing owl habitat, the project applicant shall delay commencement of construction activities until a qualified biologist determines that the burrowing owls have fledged and the burrow is no longer occupied. If delay of construction activities is infeasible, the project applicant shall consult with CDFW and develop a detailed mitigation plan such that the habitat acreage, number of burrows, and burrowing owls impacted are replaced. The mitigation plan shall be based on the requirements set forth in Appendix A of the 2012 Staff Report. Construction shall not commence until CDFW has approved the mitigation plan.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-3(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-4 Have a substantial adverse effect, either directly or through habitat modifications, on other special-status birds or birds protected under the MBTA. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Migratory birds and other birds of prey, including purple martin, grasshopper sparrow, and white-tailed kite have the potential to nest within the proposed project site, including in areas that would be impacted by construction of the proposed project.

Special-Status Birds

Purple martin and white-tailed kite have the potential to occur within the annual grassland, interior live oak, and valley foothill riparian habitat on the project site shown in Figure 5-1. Grasshopper sparrow could occur within the annual grassland on the project site. None of the three species were observed during the biological survey; however, the survey was conducted outside of the generally accepted nesting season, which extends from February 1 through August 31. Thus, the project could result in a substantial adverse effect on special-status birds.

Migratory Birds

Migratory birds protected under the MBTA have the potential to occur within the project site, particularly within on-site trees. Given that the project would include removal of a number of existing trees within the northern portion of the project site, the project could result in a substantial adverse effect on nesting migratory birds. In addition, based upon the estimated off-site disturbance area for the Taylor Road/Penryn Road signal improvement, the possibility exists that some mature trees would need to be removed.

Conclusion

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on raptors, nesting birds, or other birds protected under the MBTA, including purple martin, grasshopper sparrow, and white-tailed kite. Thus, 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.

5-4(a) *Prior to initiation of ground-disturbing activities, including activities associated with the off-site signalization improvement at the Taylor Road/Penryn Road intersection, if construction is expected to occur during the raptor nesting season (February 15 to August 31), a qualified biologist shall conduct a preconstruction survey prior to vegetation removal. The pre-construction survey shall be conducted within 14 days prior to commencement of ground-disturbing activities. If the pre-construction survey does not show evidence of active nests, a letter report documenting*

the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional measures are not required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required.

5-4(b) *If any active nests are located within the study area, an appropriate buffer zone shall be established around the nests, as determined by the project biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically between 100 feet and 250 feet for migratory bird nests and between 250 feet and 500 feet for a raptor nest. If active nests are found within the project footprint, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. Guidance from CDFW shall be required if establishing the typical buffer zone is impractical.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-4(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-5 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed previously, CNDDB occurrences of Swainson's hawk have not been recorded within five miles of the proposed project site; however, four CNDDB occurrences have been recorded between five and 10 miles of the site. None of the occurrences were documented within the last five years. Trees along the riverine drainage within the valley foothill riparian provide on-site nesting habitat for the species, and the 20.69 acres of on-site annual grassland provide foraging habitat. The valley foothill riparian would be largely avoided by the proposed project. As shown in Figure 5-3, the proposed project would only impact 0.42-acre of valley foothill riparian; 6.32 acres of valley foothill riparian would be retained. Approximately 10.25 acres of the 20.69 acres of annual grassland would be impacted. This analysis also conservatively assumes that the mature trees within the off-site signalization improvement area could support nesting Swainson's hawk.

CDFW considers five or more vacant acres within 10 miles of an active nest within the last five years to be significant foraging habitat for Swainson's hawk, the conversion of which to urban uses is considered a significant impact, in accordance with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (Buteo swainsoni) in the Central Valley of California* (Staff Report).[14] The Staff Report states that foraging habitat loss of five or more acres on projects located greater than five miles, but less than 10 miles, from an active nest tree documented within the last five years shall be mitigated at a 0.5:1 ratio. Although records exist of documented nests within 10 miles of the project site, none of the nests were documented within the last five years. Therefore, mitigation for the loss of annual grassland associated with the proposed project would not be required.

Although Swainson's hawk was not observed during the biological survey, the biological survey was conducted outside of the generally accepted nesting season, which extends from March 1 through August 31. Based on the above, Swainson's hawk has the potential to occur within the proposed project site, including in trees that may be removed as a result of project construction activities. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk, and 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.

5-5(a) *All tree removal activities shall occur outside of the nesting season (September 16 through February 28). Alternatively, prior to the commencement of ground-disturbing activities during the nesting season for Swainson's hawk (between March 1 and September 15), a qualified biologist shall conduct a minimum of one protocol-level pre-construction survey during the recommended survey periods for the nesting season that coincides with the commencement of construction activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. The biologist shall conduct surveys for nesting Swainson's hawk within 0.25-mile of the project site where legally permitted. The biologist shall use binoculars to visually determine whether Swainson's hawk nests occur within the 0.25-mile survey area if access is denied on adjacent properties. If active Swainson's hawk nests are not identified on or within 0.25-mile of the project site within the recommended survey periods, a letter report summarizing the survey results should be submitted to the Placer County Community Development Resource Agency within 30 days following the final survey, and further avoidance and minimization measures for nesting habitat are not required.*

[14] California Department of Fish and Wildlife. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (Buteo swainsoni) in the Central Valley of California*. November 8, 1994.

5-5(b) *If active Swainson's hawk nests are found within 0.25-mile of ground-disturbing activities, the biologist shall contact the Placer County Community Development Resource Agency and CDFW within one day following the preconstruction survey to report the findings. For the purposes of this avoidance and minimization requirement, construction activities are defined to include heavy equipment operation associated with construction (use of cranes or draglines, new rock crushing activities) or other project-related activities that could cause nest abandonment or forced fledging within 0.25-mile of a nest site between March 1 and September 15.*

If an active nest is present within 0.25-mile of construction areas, CDFW shall be consulted to establish an appropriate noise buffer, develop take avoidance measures, determine whether high visibility construction fencing should be erected around the buffer zone, and implement a monitoring and reporting program prior to any construction activities occurring within 0.25-mile of the nest. If the biologist determines that the construction activities are disturbing the nest, the biologist shall halt construction activities until CDFW is consulted. The construction activities shall not commence until CDFW determines that construction activities would not result in abandonment of the nest site. If the biologist determines that the nest has not been disturbed during construction activities within the buffer zone, a letter report summarizing the survey results should be submitted to the Placer County Community Development Resource Agency and CDFW within 30 days following the final monitoring event, and further avoidance and minimization measures for nesting habitat are not required.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-5(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-6 Have a substantial adverse effect, either directly or through habitat modifications, on American badger. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Within the proposed project site, the annual grassland and woodland areas provide potential breeding and foraging habitat for American badger, including in areas that would be impacted by project construction. It should be noted that very few potential burrow sites that could be used by the species were observed during the biological survey, and CNDDB

occurrences of the species have not been recorded within five miles of the project site. Nonetheless, based on the habitat type present within the proposed project site, American badger could potentially occur. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on American badger. Thus, 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.

5-6(a) *A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to the start of ground disturbance. If American badgers or their burrows are not observed, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional measures are not required.*

5-6(b) *If American badgers or their dens are found, additional avoidance measures shall be required. Specifically, American badger dens determined to be occupied during the breeding season (February 15 through June 30) shall be flagged, and ground disturbing activities avoided, within 100 feet to protect adults and nursing young. Buffers may be modified by the qualified biologist, provided the badgers are protected, and shall not be removed until the qualified biologist has determined that the den is no longer in use. If the den is occupied during the non-maternity period and avoidance is not feasible, badgers shall be relocated by first incrementally blocking the den over a three-day period, followed by slowly excavating the den before or after the rearing season (February 15 through June 30). This slow excavation shall be performed either by hand or with mechanized equipment under the direct supervision of a qualified biologist; no more than four inches depth shall be excavated at a time. Any passive relocation of American badgers shall occur only under the direction of a qualified biologist.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-6(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-7 Have a substantial adverse effect, either directly or through habitat modifications, on pallid bat. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

As discussed previously, roost sites for pallid bat typically include caves, crevices in rocky outcrops and cliffs, mines, trees, and various manmade structures (e.g., bridges, barns, porches), and generally have unobstructed entrances/exits. In addition, roosts are often high above the ground, warm, and inaccessible to terrestrial predators. Within the proposed project site, trees and structures within the annual grassland (20.69 acres), valley foothill riparian (6.74 acres), and interior live oak (10.56 acres) provide roosting habitat for the species. The structures would be demolished and some of the trees would be removed. As shown in Figure 5-3, the proposed project would impact approximately 10.25 acres of annual grassland, 0.42-acre of valley foothill riparian, and 0.51-acre of interior live oak. Based on the above, pallid bat has the potential to occur within the proposed project site. In addition, pallid bat could occur within trees that may require removal as part of the off-site Taylor Road/Penryn Road signalization improvement. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on pallid bat. Thus, 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.

5-7(a) *Prior to the removal of suitable trees (larger than 24 inches in diameter at breast height [DBH]) or demolition of existing buildings, a qualified biologist shall conduct a pre-construction survey for special-status bats within 14 days prior to the start of their removal. If special-status bats are not observed roosting, then a letter report documenting the results of the survey shall be provided to the applicant for their records and submitted to the Placer County Community Development Resource Agency, and additional measures are not required. If tree removal does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey shall be required.*

5-7(b) *If bats are found in trees or structures proposed for removal, a minimum 10-foot avoidance buffer shall be established around the roost/maternity until the roost is not occupied. The buffer shall be established under the supervision of a qualified biologist. High-visibility construction fencing shall be installed around the buffer and shall remain in place until the tree or structure is not occupied by bats. The trees or structures shall not be removed until the biologist has determined that the roost is not occupied by the bats.*

If exclusion of roosting bats is necessary, exclusion shall be conducted as recommended by the qualified biologist. If a roosting colony of bats is found, and exclusion is necessary, exclusion shall be conducted as

recommended by the qualified biologist in coordination with CDFW. Methods may include acoustic monitoring, evening emergence surveys, and the utilization of two-step tree removal supervised by the qualified biologist. Two-step tree removal involves removal of all branches that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. Building exclusion methods may include such techniques as installation of passive one-way doors, or the installation of netting when the bats are not present to prevent their reoccupation. Once the bats have been excluded, tree or building removal may occur. A letter report summarizing the survey results should be submitted to the Placer County Community Development Resources Agency within 30 days following the final monitoring event.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-7(a) and (b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-8 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. Based on the analysis below, the impact is *less than significant*.

Implementation of the project would result in a significant impact if the project would cause a discrete wildlife population to drop below self-sustaining levels or would wholly eliminate a discrete animal community. For officially listed endangered and threatened species, projects that substantially reduce the number or restrict the range of such species would have a significant impact. (See CEQA Guidelines, app. G, Mandatory Findings of Significance.) However, 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.)

It should be noted that the County's draft PCCP, as currently proposed, is designed to ensure that lands within western Placer County would be managed to continue to support

the survival and well-being of the species covered by the PCCP, as well as the survival of hundreds of other species that are dependent on the same habitat.

As discussed above, this EIR provides a wide range of mitigation to minimize potential adverse effects to all special-status plant and wildlife species with the potential to occur on-site. Furthermore, the northernmost portion of the project site, on which the proposed project would be developed, has been subject to past disturbance related to development of the site with a bed and breakfast establishment and associated improvements. With the exception of the lacustrine pond, which is stocked with largemouth bass (*Micropterus salmoides*) and mosquitofish, the project site does not contain substantial fish habitat. Therefore, the proposed project would not 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, or substantially reduce the number of or restrict the range of an endangered, rare, or threatened species. Implementation of the mitigation measures required in this chapter would ensure that the impact would be ***less than significant***.

Mitigation Measure(s)
None required.

5-9 Have a substantial adverse effect on the environment by converting oak woodlands, or conflict with any local policies or ordinances that protect biological resources, including oak woodland resources. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Placer County provides specific oak woodland preservation guidelines for discretionary entitlements subject to CEQA review.[15] Specifically, according to Placer County's Oak Woodland Impact Guidelines, projects resulting in the removal of one or more acres of oak woodland would trigger the need for mitigation. Such mitigation may include off-site preservation of oak woodland or payment of in-lieu fees to the County. However, as shown in Figure 5-3, only approximately 0.51-acre of interior live oak habitat would be impacted by the proposed project. Potential impacts related to individual trees within the project site are discussed below.

The proposed project would be subject to Article 12.16 of the Placer County Municipal Code, which contains the County's Tree Preservation Ordinance. Specifically, Article 12.16 applies to all native trees within the County, unless exempted. To be considered a tree, as opposed to a seedling or sapling, a tree must have a DBH of at least six inches or, if the tree has multiple trunks of less than six inches each, a combined DBH of 10 inches. According to the Arborist Report, implementation of the proposed project would result in the removal of 104 trees, 23 of which are covered by the County's Tree Preservation Ordinance. One of the 23 trees was determined by ESA to be in poor condition, and, thus, is recommended for removal regardless of the project. A summary of the 23 protected trees

[15] Placer County. *Oak Woodland Impact Guidelines*. 2008.

to be removed is provided in Table 5-4 below. Locations of each tree are shown in Figure 5-4 through Figure 5-8 below.

Table 5-4
Significant Trees to be Removed

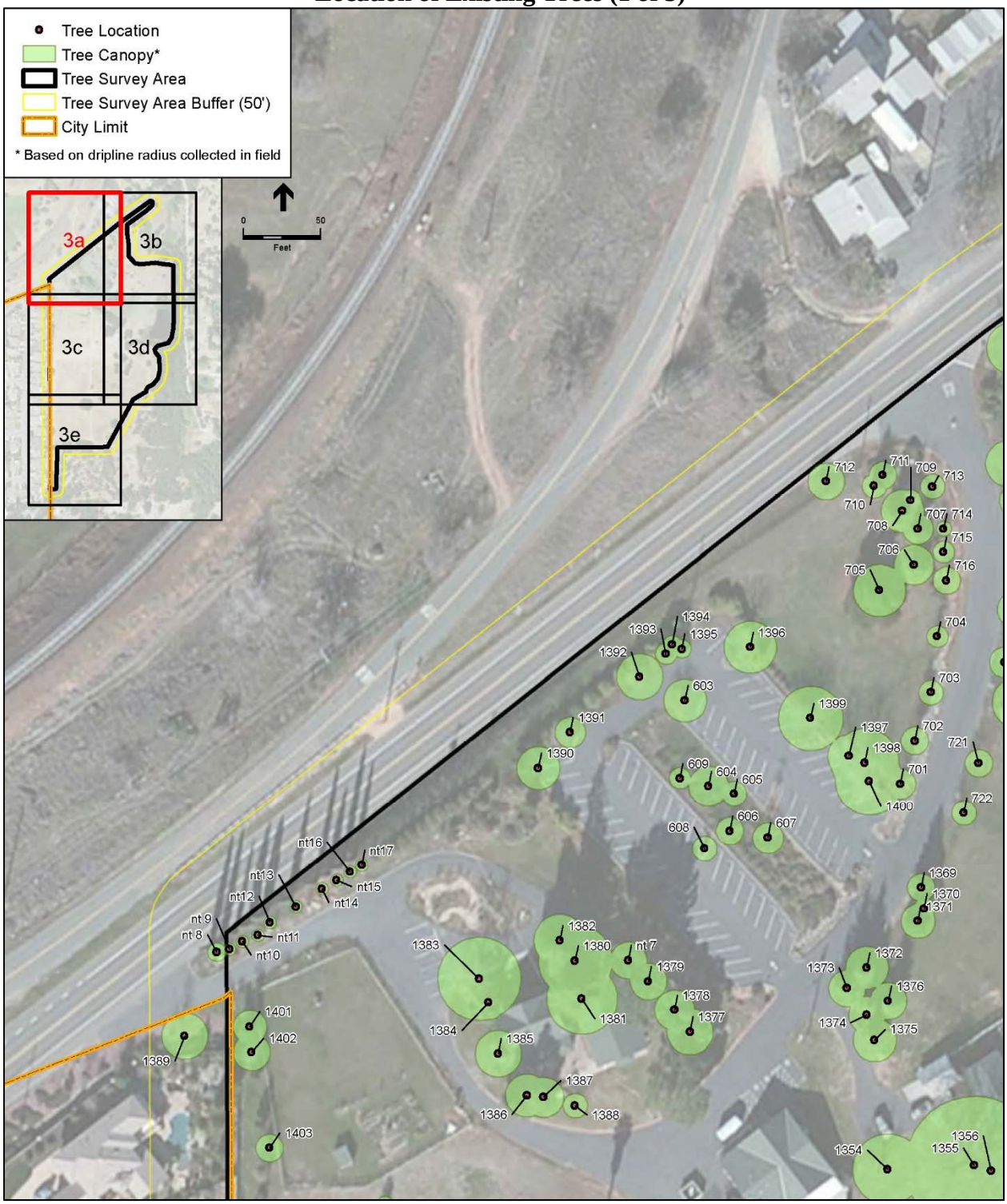
Tree ID	Scientific Name	Common Name	Total DBH (inches)	Condition
605	Quercus sp.	oak	10	Good-Fair
720	Quercus wislizeni	interior live oak	21	Good
725	Quercus lobata	valley oak	20	Fair
726	Salix lasiolepis	arroyo willow	25	Poor
1304	Quercus wislizeni	interior live oak	28	Fair
1305	Quercus wislizeni	interior live oak	35	Good
1315	Quercus wislizeni	interior live oak	42	Good-Fair
1319	Quercus wislizeni	interior live oak	17	Good
1349	Quercus wislizeni	interior live oak	65	Good
1396	Populus fremontii	Fremont cottonwood	16	Fair
1397	Salix lasiolepis	arroyo willow	19	Fair
1398	Populus fremontii	Fremont cottonwood	14	Fair
1399	Populus fremontii	Fremont cottonwood	14	Good-Fair
1400	Populus fremontii	Fremont cottonwood	11	Fair
1430	Quercus wislizeni	interior live oak	24	Good-Fair
1431	Quercus wislizeni	interior live oak	17	Good
1432	Quercus wislizeni	interior live oak	8	Good
1433	Quercus wislizeni	interior live oak	24	Good
1434	Quercus wislizeni	interior live oak	21	Good
1435	Quercus wislizeni	interior live oak	19	Good
1436	Quercus wislizeni	interior live oak	11	Good-Fair
1437	Quercus wislizeni	interior live oak	19	Fair
1438	Quercus wislizeni	interior live oak	17	Good-Fair

Source: Environmental Science Associates, Revised Arborist Report, 2017.

Trees that are in poor condition are not required to be protected by the County's Tree Preservation Ordinance. Thus, 22 of the 23 covered trees to be removed would require mitigation.

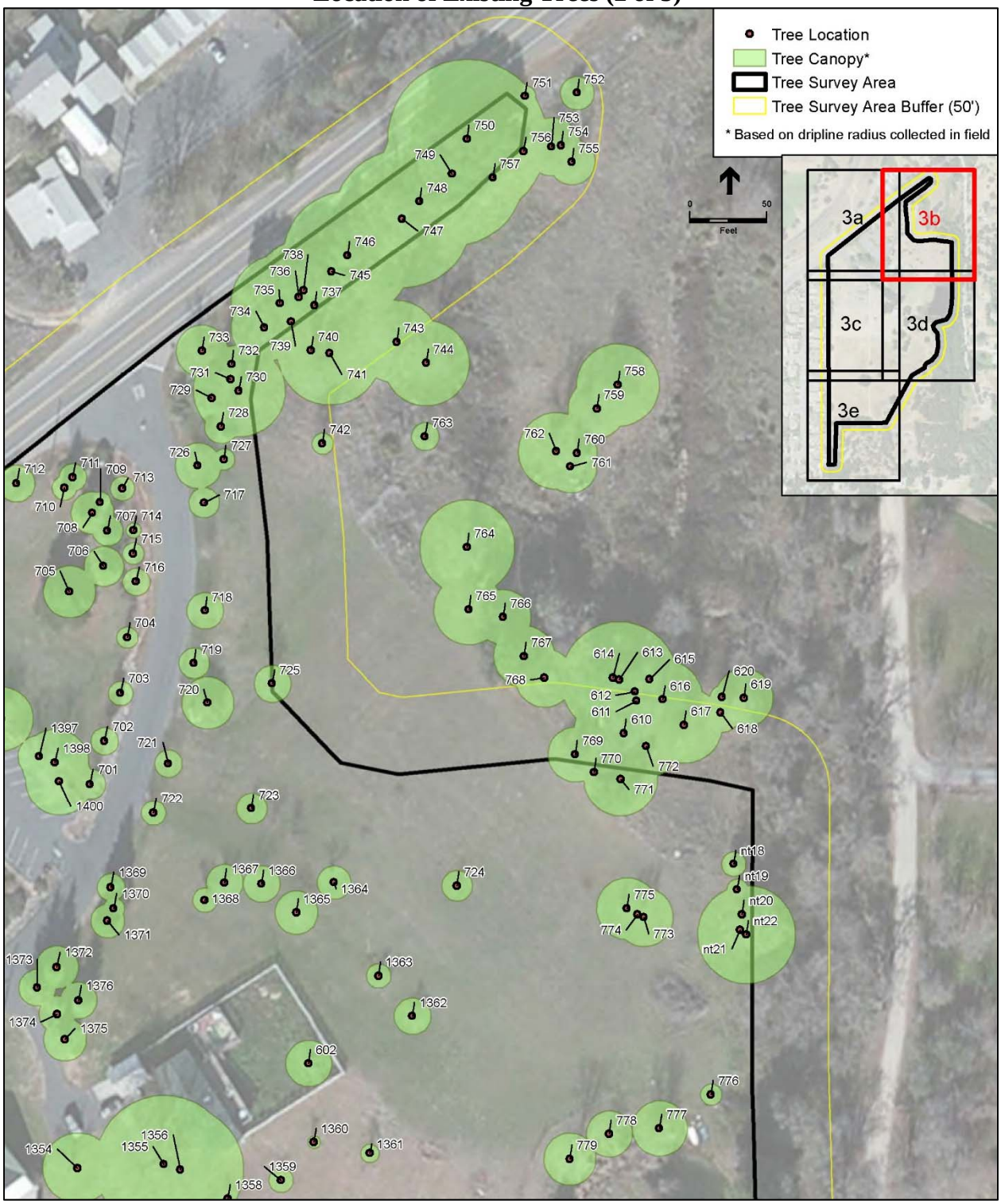
Given that the proposed project would involve the removal of 22 trees protected by the County's Tree Preservation Ordinance, the project could conflict with local policies and/or ordinances that protect biological resources, including tree resources. In addition, the off-site improvements to the Taylor Road/Penryn Road intersection required by Mitigation Measure 9-2 of this EIR are anticipated to require removal of a few oak trees that may be protected by the County's Tree Preservation Ordinance. Therefore, a ***significant*** impact could occur.

Figure 5-4
Location of Existing Trees (1 of 5)



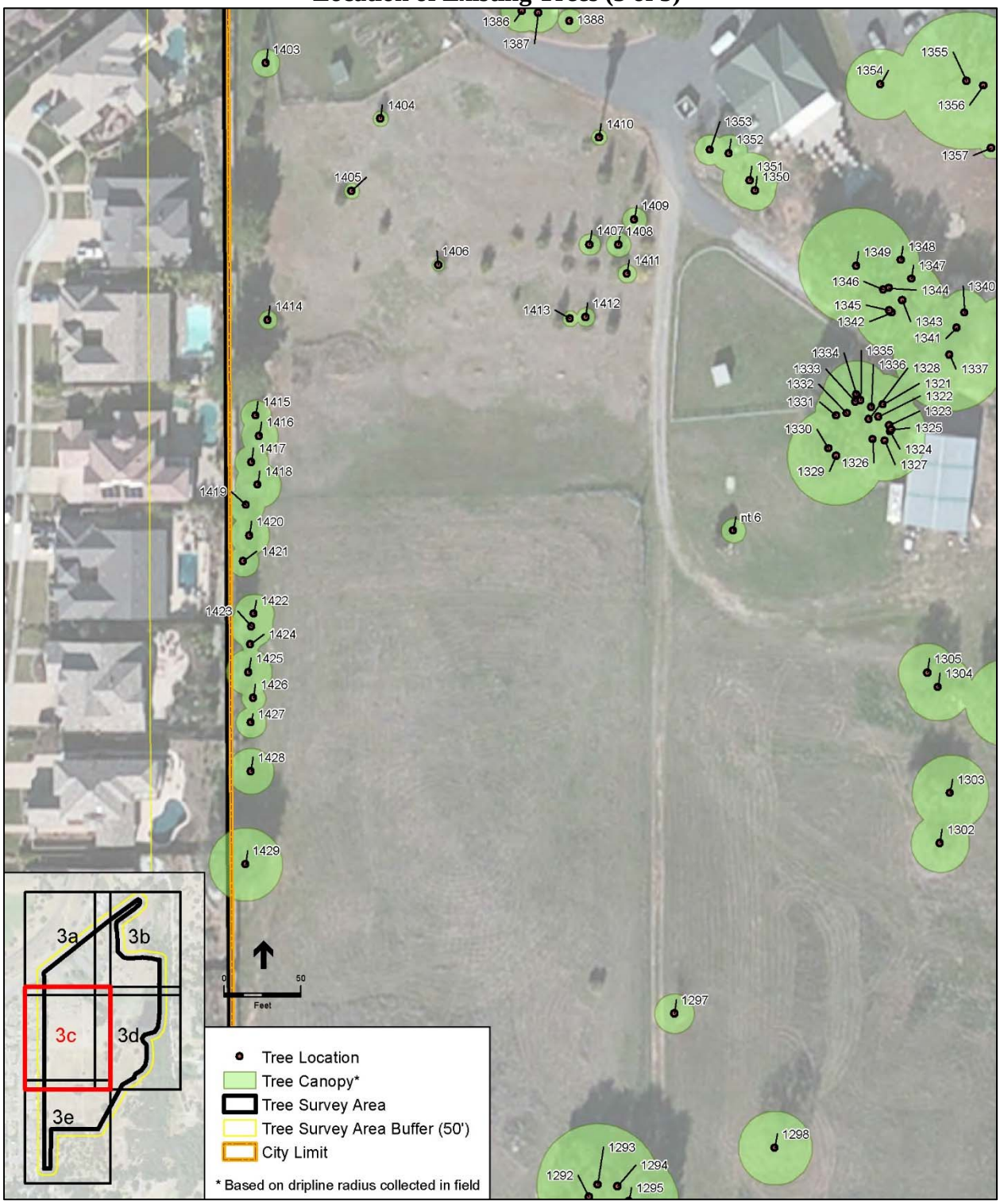
Source: Environmental Science Associates, Revised Arborist Report, 2017.

Figure 5-5
Location of Existing Trees (2 of 5)



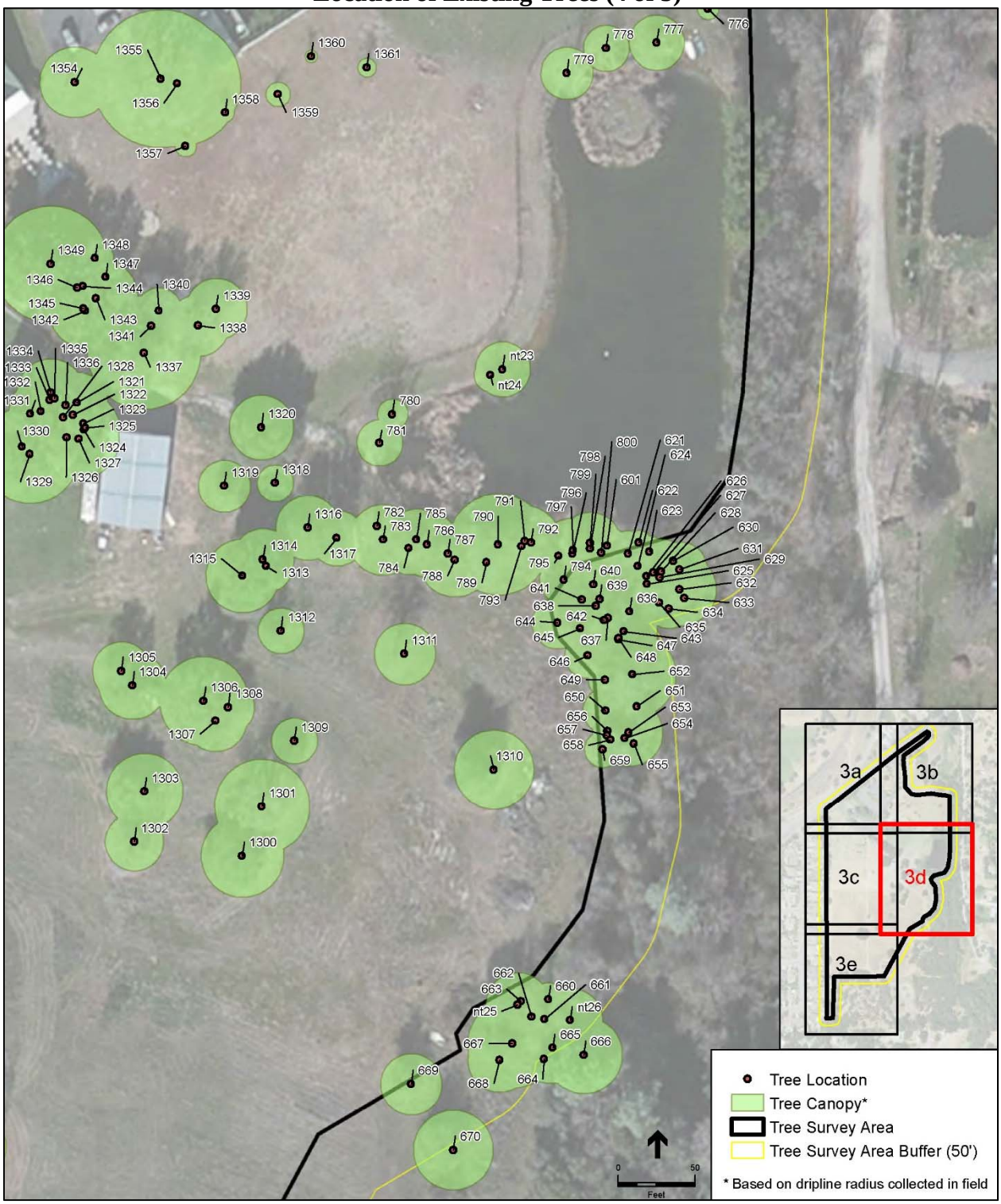
Source: Environmental Science Associates, Revised Arborist Report, 2017.

Figure 5-6
Location of Existing Trees (3 of 5)



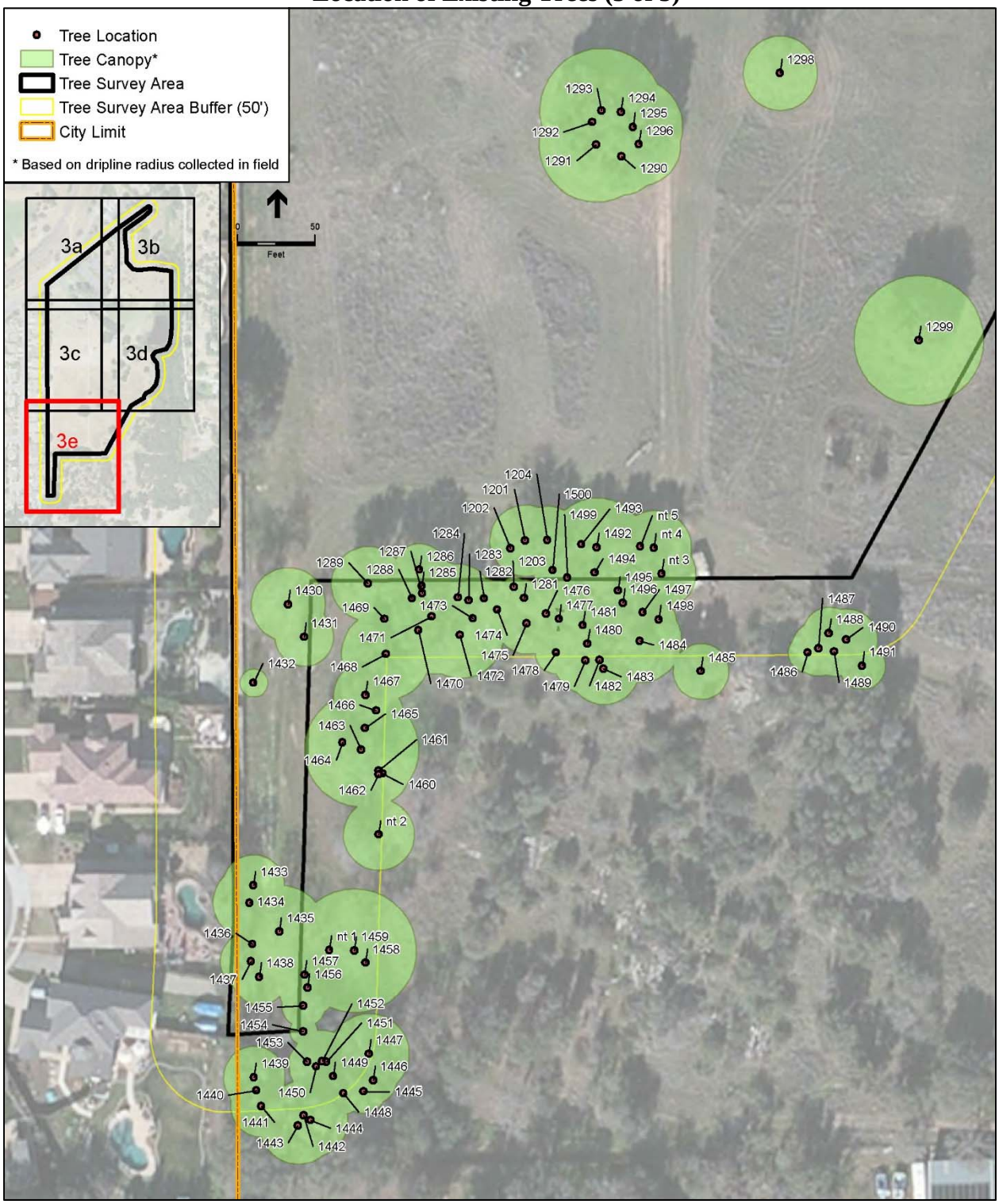
Source: Environmental Science Associates, Revised Arborist Report, 2017.

Figure 5-7
Location of Existing Trees (4 of 5)



Source: Environmental Science Associates, Revised Arborist Report, 2017.

Figure 5-8
Location of Existing Trees (5 of 5)



Source: Environmental Science Associates, Revised Arborist Report, 2017.

Mitigation Measure(s)
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

5-9(a) *Prior to any removal of protected trees (equal to, or greater than, six inches DBH or 10 inches DBH aggregate for multi-trunked trees), the project applicant shall obtain a tree removal permit from Placer County. In conjunction with submittal of a tree removal permit application, the applicant shall submit a site plan showing all protected trees proposed for removal. In accordance with Chapter 12.16.080 of the Placer County Municipal Code, the applicant shall comply with any permit conditions required by the Planning Services Division, which shall include one (or a combination) of the following requirements: 1:1 tree replacement using five-gallon size trees or greater, implementation of a revegetation plan, or payment of in-lieu fees.*

If the applicant chooses to implement a revegetation plan, the plan shall identify the seed or seedling source of the trees to be propagated, the location of the plots, the methods to be used to ensure success of the revegetation program (e.g., irrigation), an annual reporting requirement, and the criteria to be used to measure the success of the plan. A revegetation program shall not be considered complete until the trees to be propagated have reached one-half inch in diameter or the revegetation plan demonstrates the need for alternative success criteria and achieves mitigation on an inch for inch basis as approved by the Community Development Resource Agency.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project, then Mitigation Measure 5-9(a) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-9(b) *Prior to Improvement Plan approval, the plans shall include a list of tree protection methods, for review and approval by the Planning Services Division. The list of tree protection methods shall be implemented during construction of the project. The list of tree protection methods shall include, but not limited to, the following:*

- *The applicant shall install a four-foot tall, brightly colored (yellow or orange), synthetic mesh material fence around all trees to be preserved that are greater than six inches DBH (or 10 inches DBH*

aggregate for multi-trunked trees). The fencing shall delineate an area that is at least the radius of which is equal to the largest radius of the protected tree's drip line plus one foot. The fence shall be installed prior to any site preparation or construction equipment being moved onsite or any site preparation or construction activities taking place. Development of this site, including grading, shall not be allowed until this condition is satisfied. Any encroachment within the areas listed above, including within driplines of trees to be saved, must first be approved by a designated representative of the Development Review Committee (DRC). Grading, clearing, or storage of equipment or machinery may not occur until a representative of the DRC has inspected and approved all temporary construction fencing. Trees shall be preserved where feasible. This may include the use of retaining walls, planter islands, or other techniques commonly associated with tree preservation. The Improvement Plans shall indicate the location of the fencing and include a note describing the fencing requirements consistent with this mitigation measure.

- *The project applicant shall implement the following guidelines before and during grading and construction for protection of all trees to be preserved:*
    - *Plans and specifications shall clearly state protection procedures for trees on the project site. The specifications shall also include a provision for remedies if trees are damaged;*
    - *Before construction commences, those trees within 25 feet of construction sites shall be pruned by an ASI Certified Arborist and the soil aerated and fertilized, as appropriate for the specific species;*
    - *Vehicles, construction equipment, mobile offices, or materials shall not be parked, stored, or operated within the driplines of trees to be preserved;*
    - *Cuts and fills around trees shall be avoided where feasible;*
    - *Soil surface removal greater than one foot shall not occur within the driplines of trees to be preserved. Cuts shall not occur within five feet of their trunks;*
    - *Earthen fill greater than one foot deep shall not be placed within the driplines of trees to be preserved, and fill shall not be placed within five feet of their trunks;*
    - *Underground utility line trenching shall not be placed within the driplines of trees to be preserved where feasible without first obtaining approval from a designated representative of the DRC. If it is necessary to install underground utilities within the driplines of trees, boring or drilling rather than trenching shall be used;*

- *Paving shall not be placed in the vicinity of trees to be preserved (at a minimum, within the dripline of any tree) without first obtaining approval from a designated representative of the DRC; and*
- *Irrigation lines or sprinklers shall not be allowed within the dripline of native trees.*

- *If any of the on-site protected trees are heavily damaged during construction activities associated with the proposed project, the project applicant shall pay an in-lieu fee for the damaged tree(s) in accordance with Section 12.16.080 of the Placer County Municipal Code. Payment of such fees shall be ensured as a standard condition of approval by the Planning Services Division.*

5-9(c) *Taylor Road/Penryn Road Signal. Prior to Improvement Plan approval, the project applicant shall submit an arborist report for the off-site Taylor Road/Penryn Road intersection improvement area. The arborist report shall identify the species, size, and condition of all trees within the improvement area and shall note which trees are proposed for removal. In addition, the arborist report shall include a list of recommended tree protection measures for trees to be retained, which are generally consistent with those outlined in Mitigation Measure 5-9(b). All trees which are deemed to be protected by the County's Tree Preservation Ordinance shall be subject to the requirements of Mitigation Measure 5-9(a).*

5-10 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by CDFW, the USFWS, the USACE, or the NMFS, and/or have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, 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*.

As discussed above, potentially jurisdictional features within the project site include 1.377 acres of wetlands and other waters of the U.S., including approximately 0.121-acre of seasonal wetlands, 0.173-acre of ephemeral channels, two drainage ditches totaling 0.004 and 0.002-acre, respectively, and 1.077 acres of pond area. The USACE has provided a verification letter concurring with the analysis conducted by ESA.[16]

The project would fill 0.011-acre of potentially jurisdictional drainage ditch in the southwestern portion of the property for the construction of a service access road. The project would impact 0.42-acre of valley foothill riparian habitat subject to CDFW 1600 jurisdiction for the trail where a proposed footbridge would span the banks of the riverine

[16] U.S. Army Corps of Engineers. *UAIC Tribal School Project. Jurisdictional Determination Letter*. August 23, 2017.

habitat. In addition, the project would temporarily impact 0.97-acre of the potentially jurisdictional lacustrine pond for vegetation enhancement through draining and grading. However, following vegetation enhancement, the overall acreage of waters of the U.S. associated with the lacustrine pond would be the same or greater. It should be noted that prior to draining the pond, the existing fish and other animals would be removed and provided a protected, temporary home, or relocated in coordination with CDFW.

In addition, as discussed in the Hazards and Hazardous Materials chapter of this EIR, the soil excavation limits associated with plot SS-12 have been established to ensure the initial excavation extent avoids the seasonal wetland (see HSW in Figure 5-4). However, in accordance with the Removal Action Workplan, the final excavation extent will be based on laboratory analyses of verification soil samples. For purposes of this EIR, it has been conservatively assumed that the seasonal wetland may need to be ultimately impacted. The amount of impact would be approximately 0.01-acre, as illustrated in Figure 5-4.

The project would be required to obtain permits from regulatory agencies for pond enhancement activities (Section 404 Clean Water Act Nationwide permit, Section 401 Water Quality Certification, Section 1600 Lake and Streambed Alteration Agreement), impacts to riparian habitat from trail construction (Section 1600 Lake and Streambed Alteration Agreement), and for impacts to a ditch in the southwestern corner of the property from construction of a service road (Section 404 Clean Water Act Nationwide permit, Section 401 Water Quality Certification, Section 1600 Lake and Streambed Alteration Agreement).

There is also a possibility that the off-site Taylor Road/Penryn Road signalization improvements could result in impacts to a linear roadside ditch that could be considered jurisdictional by the USACE. The ditch is located on the south side of Penryn Road. The widening of Penryn Road associated with this improvement project could be up to five feet along the south side, thus impacting the roadside ditch.

Based on the above, implementation of the proposed project, including off-site improvements, could have a substantial adverse effect on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on federal or State protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means. Thus, a ***significant*** impact could occur.

<u>Mitigation Measure(s)</u>
Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

5-10(a) *High visibility and silt fencing shall be erected at the edge of construction/maintenance footprint if work is anticipated to occur within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance. A biological monitor shall be present during the*

fence installation and during any initial grading or vegetation clearing activities within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance.

5-10(b) *Prior to Improvement Plan approval for the project, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE "no-net-loss" policy. To the extent feasible, however, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines.*

If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.

5-10(c) *Prior to Improvement Plan approval for areas that would affect any Valley foothill riparian, lacustrine pond, riverine drainage, drainage ditch or seasonal wetland habitat(s), the applicant shall enter into a 1600 Streambed Alteration with CDFW. This agreement would include measures to minimize and restore riparian habitat. The 1600 Streambed Alteration Agreement would require the project proponent to prepare and implement a riparian vegetation mitigation and monitoring plan for disturbed riparian vegetation. Written verification of the 1600 Streambed Alteration Agreement shall be submitted to the Placer County Community Development Resource Agency.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measures 5-10(a), 5-10(b), and 5-10(c) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

5-10(d) *<u>Taylor Road/Penryn Road Signal</u>. Prior to Improvement Plan approval, the project applicant shall submit a wetland delineation for the off-site Taylor Road/Penryn Road intersection improvement area that has been verified by the US Army Corps of Engineers. If USACE verifies that jurisdictional*

features are located within the signalization improvement area, and the improvements would result in discharge of fill within the feature(s), then a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE "no-net-loss" policy. To the extent feasible, however, the signalization project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area.

If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.