

3.4 Biological Resources

This section evaluates the potential impacts of the proposed project on biological resources that are known or have potential to occur at the project site. The analysis describes existing environmental conditions at the site in May 2017, when the notice of preparation was issued; the methods used to assess environmental impacts; the potential impacts of implementing the proposed project; and mitigation measures proposed to reduce potentially significant impacts. This section also presents an overview of relevant federal, state, and local plans, policies, and laws. Cumulative impacts on biological resources are addressed in Chapter 4, “Cumulative Impacts.”

The information about biological resources presented in this section is based on previous studies conducted in the project area (Huffman Broadway Group 2017; Mann Made Resources 2016; Salix Consulting 2016); see Appendix C of this EIR. The reports relied on reviews of available literature, visits to the project site in February and June 2017, and habitat observations made during field surveys. For a list of the references used to compile information on the region’s flora and fauna, see Section 7 of the Biological Resources Report (Huffman Broadway Group 2017) (Appendices C1–C2).

3.4.1 Existing Conditions

The project site is dominated by annual grassland and valley oak woodland. Three swales on-site support a limited area of freshwater marsh. Plant communities present on the project site are discussed below.

3.4.1.1 Vegetation

Annual Grassland

Annual grassland is the predominant habitat type on the project site, composing 10.16 acres (approximately 56 percent) of the land area (Figure 3.4-1). The site’s annual grassland consists largely of nonnative grasses and forage species, and appears to be disked and mowed at least annually.

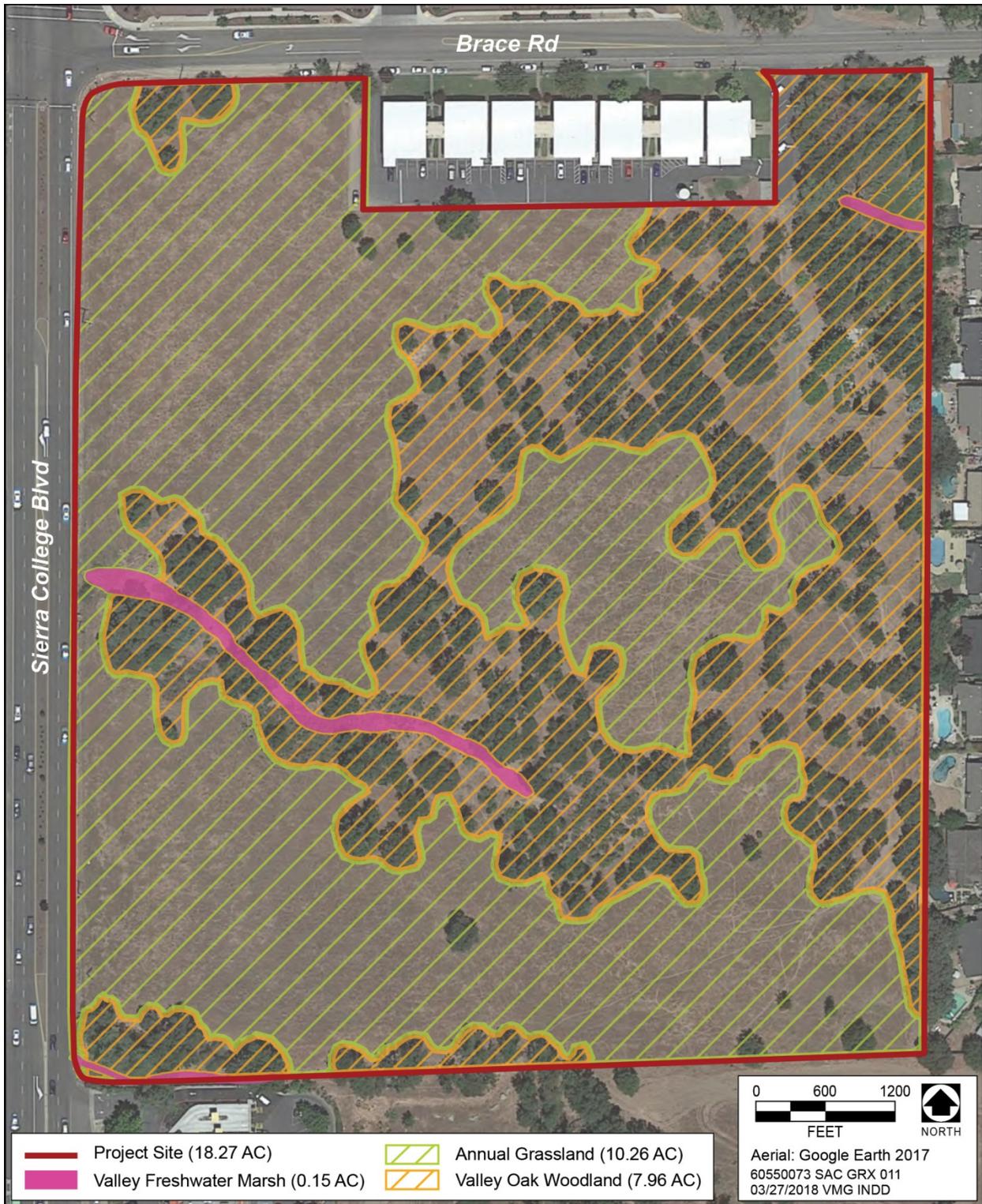
Grasses on the project site include Italian ryegrass (*Festuca perennis*), ripgut grass (*Bromus diandrus*), soft chess (*B. hordeaceus*), wild oat (*Avena fatua*), hedgehog dogtail (*Cynosurus echinatus*), foxtail barley (*Hordeum jubatum*), and medusahead (*Elymus caput-medusae*).

Forbs present on-site include Italian thistle (*Carduus pycnocephalus*), California mugwort (*Artemisia douglasiana*), field hedge parsley (*Torilis arvensis*), Klamathweed (*Hypericum perforatum*), broad-leaf filaree (*Erodium botrys*), common vetch (*Vicia sativa*), cut-leaf geranium (*Geranium dissectum*), yellow starthistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), smooth’s cat-ear (*Hypochaeris glabra*), common fiddleneck (*Amsinckia menziesii*), short-podded mustard (*Hirschfeldia incana*), and bindweed (*Convolvulus arvensis*).

Valley Oak Woodland

Valley oak woodland composes 7.96 acres (approximately 44 percent) of the project site (Figure 3.4-1). The foothill woodland varies in density throughout the project site, but is mostly open, and is dominated by valley oak and interior live oak (*Quercus lobata*, *Q. wislizeni*). A small number of blue oaks (*Quercus douglasii*) and a few scattered foothill pines (*Pinus sabiniana*) are also present. Shrubs in the understory include thickets of coyote brush (*Baccharis pilularis*) and Himalayan blackberry (*Rubus armeniacus*). Ground cover is mostly the nonnative herbaceous plants and grasses that are noted above as occurring in annual grassland.

The arborist report for the project determined that 372 trees on the project site—two blue oaks, 86 live oaks, and 284 valley oaks—are of sufficient size to be considered “protected” trees under the Town of Loomis Tree Ordinance (Mann Made Resources 2016) (Appendix C3). The tree ordinance defines a protected tree as any native oak tree (*Quercus* spp.) that is at least 6 inches in diameter at breast height (dbh) for interior live oak, valley oak, and oracle oak, and 4 inches dbh for blue oak. Tree protection is described further under “Loomis Municipal Code” in Section 3.4.2.3, “Local Plans, Policies, Regulations, and Ordinances.”



Source: Huffman Broadway Group 2017

Figure 3.4-1. Habitat Type

Valley Freshwater Marsh

Valley freshwater marsh habitat occurs within three separate swales on the property (shown in pink in Figure 3.4-1) and totals 0.15 acre. The three separate wetland swales are described in detail in the wetland delineation for the proposed project, presented in Appendix C3 and depicted below in Figure 3.4-2 (Salix Consulting 2016).

One of the three swales flows westerly through the oak woodland into a culvert under Sierra College Boulevard. The eastern end of the swale is a small open area dominated by iris leaf rush (*Juncus xiphioides*). The swale flows through a patch of coyote brush; its lower portion includes wetland plant species such as hyssop loosestrife (*Lythrum hyssopifolia*), curly dock (*Rumex crispus*), prickly lettuce (*Lactuca serriola*), Italian ryegrass, and Mexican rush (*Juncus mexicanus*).

A short swale in the northeastern corner of the site is vegetated with Himalayan blackberry and flows under Starlight Lane. The third swale is in the southwestern corner of the project site where stormwater runoff drains onto the project site from nearby commercial development and travels about 175 feet before exiting the site through a second culvert under Sierra College Boulevard. Wetland species such as water plantain (*Alisma triviale*), speedwell (*Veronica* sp.), moth mullein (*Verbascum blattaria*), water cress (*Nasturtium officinale*), and curly dock are present.

3.4.1.2 Wildlife

The wetland habitats and disturbed annual grassland and oak woodland habitats on-site support a variety of wildlife species. The site's native trees and shrubs and native and nonnative herbaceous plants and grasses provide a mix of habitats suitable for nesting by both passerine and non-passerine avian species.

Wildlife common at the site includes resident and wintering bird species that are adapted to the mix of wetland and upland habitats. Species observed at the site include red-shouldered hawk (*Buteo lineatus*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), acorn woodpecker (*Melanerpes formicivorus*), western bluebird (*Sialia mexicana*), oak titmouse (*Baeolophus inornatus*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Melospiza crissalis*), and house finch (*Haemorhous mexicanus*). Species observed that are expected only during the winter include red-breasted sapsucker (*Sphyrapicus ruber*), hermit thrush (*Catharus guttatus*), ruby-crowned kinglet (*Regulus calendula*), yellow-rumped warbler (*Setophaga coronata*), and golden-crowned sparrow (*Zonotrichia atricapilla*).

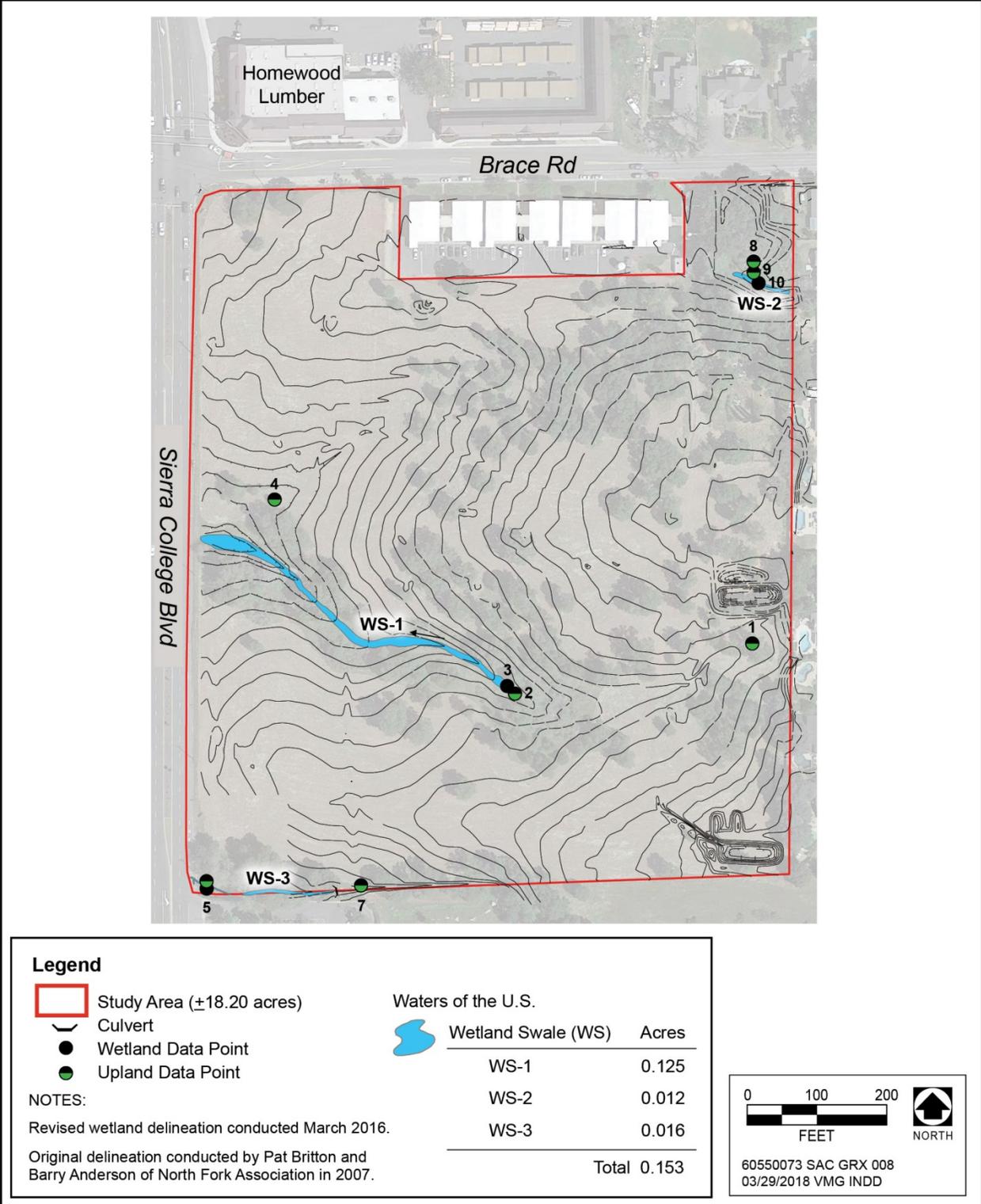
Additional neotropical migrants that could be expected to nest at the site during the spring and summer months include Pacific-slope flycatcher (*Empidonax difficilis*), western wood-pewee (*Contopus sordidulus*), western kingbird (*Tyrannus verticalis*), ash-throated flycatcher (*Myiarchus cinerascens*), black-headed grosbeak (*Pheucticus melanocephalus*), and Bullock's oriole (*Icterus bullockii*).

Any of the resident species or breeding neotropical migrants could nest on the project site. Other raptors observed flying over the site included red-tailed hawk (*Buteo jamaicensis*), Swainson's hawk (*B. swainsoni*), and turkey vulture (*Cathartes aura*).

Although no mammals were documented on the site, mammals adapted to urban environments would likely be found there, including striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), deer mouse (*Peromyscus maniculatus*), and mule deer (*Odocoileus hemionus*). Amphibians and reptiles found during the field surveys include Sierran treefrog (*Pseudacris sierra*), Western fence lizard (*Sceloporus occidentalis*), and Southern alligator lizard (*Elgaria multicarinata*).

3.4.1.3 Sensitive Biological Resources

Sensitive biological resources are defined as habitats that have particularly high ecological values or functions; are of limited distribution; or otherwise are of concern to federal, state, and/or local resource agencies. Sensitive habitats include Natural Communities of Special Concern identified by the California Department of Fish and Wildlife (CDFW) (e.g., those with a high priority for inventory by the California Natural Diversity Database [CNDDB]) and those afforded specific consideration by CEQA, Section 1602 of the California Fish and Game Code, the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), or Section 404 of the Clean Water Act (CWA).



Source: Salix Consulting 2016
Figure 3.4-2. Wetlands of the United States

Wetlands and Other Waters of the United States

As described in the wetland delineation for the project (Salix Consulting 2016) (Appendix C2), waters of the United States were delineated by North Fork Associates in February 2008 and verified by the U.S. Army Corps of Engineers (USACE) on March 20, 2009. The verification was valid for 5 years from the date of the letter. The 2009 verification letter is included as Attachment 1 in the updated wetland delineation report (Salix Consulting 2016) (Appendix C2).

The updated wetland delineation was conducted in accordance with Code of Federal Regulations (CFR) definitions of jurisdictional waters; USACE's 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Regional Supplement) (USACE 1987, 2008); and supporting guidance documents.

The 1987 Manual provides technical guidance and procedures, from a national perspective, for identifying and delineating wetlands that may be subject to CWA Section 404. The 1987 Manual identifies the following key criteria for determining the presence of wetlands: (a) the presence of inundated or saturated soil conditions resulting from permanent or periodic inundation by groundwater or surface water; and (b) a prevalence of vegetation typically adapted for life in saturated soil conditions (i.e., hydrophytic vegetation). Explicit in the definition is the consideration of three environmental parameters: hydrology, soil, and vegetation. The Arid West Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. The combined use of the 1987 Manual and Arid West Regional Supplement enhances the technical accuracy, consistency, and credibility of wetland determinations (USACE 1987, 2008).

The project site is in the Dry Creek watershed. Jurisdictional resources verified by the USACE on the project site total 0.15 acre of vegetated palustrine emergent wetlands (Salix Consulting 2016) (Appendix C2). This finding was based on the collective presence of hydric soil, wetland hydrology, and wetland vegetation indicators. The identified palustrine emergent wetlands contained low-chroma soils, evidence of wetland hydrology, and vegetation adapted for life in saturated soil conditions. The 0.15 acre of vegetated wetlands on the project site consists of palustrine emergent seasonal wetlands and palustrine scrub-shrub wetlands as defined by Cowardin et al. (1979) criteria. The wetlands mapped on-site are the three swales found on the property. The 0.15 acre of jurisdictional waters of the United States serve the functions of flood flow alteration, groundwater recharge, sediment reconstruction, sediment/toxicant retention, nutrient removal/ transformation, production export, and wildlife habitat.

The locations of Wetland Swales (WS)-1, WS-2, and WS-3 are depicted on Figure 3.4-2. Physical features associated with each swale are described below.

- *WS-1 (0.12 acre)* occurs within the foothill woodland habitat. The swale begins in the middle of the project site, where it collects surface water (in the form of sheet flow) that drains westerly before exiting through a culvert underneath Sierra College Boulevard. Water continues to drain westerly on the adjacent property and drains into Sucker Ravine, which drains into Secret Ravine. Secret Ravine is a tributary of Miners Ravine, which ultimately reaches Dry Creek and then the American River.
- *WS-2 (0.01 acre)* enters the project site through a culvert along the eastern boundary in the northeast corner of the site. The swale appears to convey stormwater runoff and urban water westerly for approximately 80 feet within the project site, and then exits the study area through a culvert that passes underneath Starlight Lane.
- *WS-3 (0.02 acre)* occurs in the southwestern corner of the project site, where stormwater runoff drains into the site through an 18-inch polyvinyl chloride (i.e., PVC) culvert located on the commercial development (McDonald's/Chevron) to the south. The swale continues westward for approximately 175 feet until it merges with a narrower excavated ditch that drains water from a 12-inch concrete culvert located under the commercial development to the south. Water exits the site along the western site boundary through a 30-inch corrugated metal pipe culvert under Sierra College Boulevard.

Special-Status Species

Sensitive species are those species that are listed by the federal and state governments as endangered, threatened, or rare, or that are candidates for such listing. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 (ESA), as amended; the California Native Plant Protection Act of 1977; and the California Endangered Species Act of 1970 (CESA). CEQA provides additional protection for unlisted species that meet the “rare” or “endangered” criteria defined in Title 14, Section 15380 of the California Code of Regulations.

CDFW maintains records for the distribution and known occurrences of sensitive species and habitats in the California Natural Diversity Database. The CNDDDB is organized into map areas based on 7.5-minute topographic maps produced by the U.S. Geological Survey. All known occurrences of sensitive species and important natural communities are mapped onto the quadrangle map. The database gives further detailed information regarding each occurrence, including the specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat. The project site is on the Rocklin 7.5-minute U.S. Geological Survey topographic quadrangle map. The relevant adjacent quadrangles within the search area are the Roseville, Lincoln, Gold Hill, Auburn, Pilot Hill, Folsom, and Citrus Heights quadrangles. A search of the CNDDDB records for the occurrences of special-status animals and plants and natural communities within these quadrangles indicated that none have been documented as occurring on the project site itself, but that special-status animal species have been known to occur in the project vicinity. The absence of a special animal, plant, or natural community from the report does not necessarily mean they are absent from the area in question, but only that no occurrence data for that species or natural community have been entered into the CNDDDB inventory. The occurrence of special-status plant and animal species near the project area may indicate that they also could occur on the project site, depending on the site’s habitat conditions. Therefore, occurrences of special-status species throughout the quadrangles mentioned above were noted in considering the potential presence of these species on the project site.

Tables 3.4-1 and 3.4-2 list all special-status plant species and special-status animal species, respectively, that have been reported near the project site, and describe their habitat/range and potential for occurrence on-site.

Special-Status Plants

The list of special-status plants shown in Table 3.4-1 includes all species mentioned in the CNDDDB as occurring within 10 miles of the project site. Many of these species require habitats that are not found on the project site (e.g., vernal pools, chaparral, coniferous forest) or microhabitat conditions such as soils that do not occur on-site (gabbro or serpentine). A field review of the site’s habitats and conditions determined that project site habitats may be suitable to support the following special-status plant species (Munz and Keck 1973, cited in Huffman Broadway Group 2017):

- big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), a California Native Plant Society (CNPS) List 1B.2 plant sometimes but not always found in serpentine, with a flowering period from March to June;
- Brandegee’s clarkia (*Clarkia biloba* ssp. *brandegeae*), a CNPS List 4.2 plant with a flowering period from May to July; and
- stinkbells (*Fritillaria agrestis*), a CNPS List 4.2 plant that is sometimes found in serpentine and has a flowering period from March to June.

Protocol surveys of the site for special-status plant species were conducted by botanist Terry Huffman, Ph.D., during the spring and summer of 2017 (Huffman Broadway Group 2017). The systematic surveys were conducted both early and late in the flowering period of the target species (field surveys were conducted on March 27 and June 23, 2017). Special-status plant surveys were conducted pursuant to the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (DFG 2009), which require systematic search techniques in all habitats of the site to ensure thorough coverage of potential impact areas. All vascular plant species were identified using keys and descriptions from *The Jepson Manual* (Baldwin et al. 2012). Specimens of target species were reviewed in the Jepson Herbarium before trips to the field.

None of the target species or any other special-status plant species were found on the site during the spring/summer 2017 protocol-level surveys of the property.

Table 3.4-1. Special-Status Plants Known to Occur in the Vicinity of the Project Site

Common Name Scientific Name	Status*	Habitat/Range	Potential for Occurrence on the Project Site
Big-scale (California) balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	-/-/1B.2	Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentinite; 90–1,400 meters.	Not present. No individuals of this species were found during protocol-level surveys conducted in spring/summer 2017.
Stebbins morning-glory <i>Calystegia stebbinsii</i>	FE/CE/1B.1	Found in chaparral, cismontane woodland. Occurs on red clay soils of the pine-hill formation, on gabbro or serpentinite. Prefers open areas. 300–725 meters.	Not present. Suitable habitat is not present on-site.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	FE/Rare/1B.2	Found in chaparral and cismontane woodland. In gabbroic soils, often in disturbed areas with other rare plants. 260–630 meters.	Not present. Suitable habitat is not present on-site.
Brandegee's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	-/-/4.2	Found in chaparral, cismontane woodland, and lower montane coniferous forest. Often in roadcuts. 75–915 meters.	Not present. No individuals of this species were found during protocol-level surveys conducted in spring/summer 2017.
Red Hill soaproot <i>Chlorogalum grandiflorum</i>	-/-/1B.2	Found in cismontane woodland, chaparral, and lower montane coniferous forest. Occurs frequently on serpentinite or gabbro, but also on non-ultramafic substrates and often on disturbed sites. 240–760 meters.	Not present. Suitable habitat is not present on-site.
Hispid salty bird's-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	-/-/1B.1	Found in damp alkaline soils in meadows, seeps, playas, and valley and foothill grassland. Especially in alkaline meadows and alkali sinks with <i>Distichlis</i> . 1–155 meters.	Not present. Suitable habitat is not present on-site.
Dwarf downingia <i>Downingia pusilla</i>	-/-/2B.2	Found in vernal pools and mesic sites within valley and foothill grassland. Found along margins of several types of vernal pools. 1–445 meters.	Not present. Suitable habitat is not present on-site.
Stinkbells <i>Fritillaria agrestis</i>	-/-/4.2	Found in cismontane woodland, chaparral, and valley and foothill grassland. Sometimes found on serpentinite, mostly found in nonnative grassland or in grassy openings in clay soil. 10–1,555 meters.	Not present. No individuals of this species were found during protocol-level surveys conducted in spring/summer 2017.
El Dorado bedstraw <i>Galium californicum</i> ssp. <i>sierra</i>	FE/Rare/1B.2	Found in cismontane woodland, chaparral, and lower montane coniferous forest. Occurs in pine-oak woodland or chaparral. Restricted to gabbroic or serpentinite soils. 130–585 meters.	Not present. Suitable habitat is not present on-site.
Bogg's Lake hedge hyssop <i>Gratiola heterosepala</i>	-/CE/1B.2	Inhabits vernal pools and freshwater swamps and marshes. In clay soils and usually in vernal pools, sometime on lake margins. 10–2,375 meters.	Not present. Suitable habitat is not present on-site.
Bisbee Peak rush-rose <i>Helianthemum suffrutescens</i>	-/-/3.2	Found in openings in chaparral, often on serpentinite, gabbroic, or lone formation soils. 45–840 meters.	Not present. Suitable habitat is not present on-site.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	-/-/1B.2	Restricted to the edge of vernal pools. Vernal pools and grasslands. 30–229 meters.	Not present. Suitable habitat is not present on-site.

Common Name Scientific Name	Status*	Habitat/Range	Potential for Occurrence on the Project Site
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	-/-/1B.1	Found in vernal mesic sites, sometimes on edges of vernal pools within chaparral, valley and foothill grassland, cismontane woodland, vernal pools, meadows, and seeps. 30–1,025 meters.	Not present. Suitable habitat is not present on-site.
Legenere <i>Legenere limosa</i>	-/-/1B.1	Found in the beds of vernal pools. Many historical occurrences are extirpated. 1–880 meters.	Not present. Suitable habitat is not present on-site.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	-/-/1B.1	Found in vernal pools, in clay soils within nonnative grassland. 20–330 meters.	Not present. Suitable habitat is not present on-site.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE/CE/1B.1	Found in vernal pools. 30–100 meters.	Not present. Suitable habitat is not present on-site.
Layne's ragwort <i>Packera layneae</i>	FT/Rare/1B.2	Found in ultramafic soil, occasionally along streams in chaparral and cismontane woodland. 200–1,000 meters.	Not present. Suitable habitat is not present on-site.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	-/-/1B.2	Found in marshes and swamps. In standing or slow-moving freshwater ponds, marshes and ditches. 0–650 meters.	Not present. Suitable habitat is not present on-site.
El Dorado County mule ears <i>Wyethia reticulata</i>	-/-/1B.2	Found in chaparral, cismontane woodland, and lower montane coniferous forest. Found in stony red clay and gabbroic soils, often in openings in gabbro chaparral. 185–630 meters.	Not present. Suitable habitat is not present on-site.

* Status Codes:

FE: federally listed as endangered

FT: federally listed as threatened

CE: California listed as endangered

California Rare Plant Ranks

1A: Plants presumed extirpated in California and either rare or extinct elsewhere.

1B: Plants rare, threatened, or endangered in California and elsewhere.

2A: Plants presumed extirpated in California, but more common elsewhere.

2B: Plants rare, threatened, or endangered in California, but more numerous elsewhere.

3: Plants about which more information is needed—a review list.

4: Plants of limited distribution—a watch list.

CNPS Threat Ranks

1: Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

2: Moderately threatened in California (20–80 percent occurrences threatened/moderate degree and immediacy of threat)

3: Not very threatened in California (<20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Source: Huffman Broadway Group 2017

The following criteria were applied to assess the potential for species occurrence at the project site:

- *Not Present:* The species is not known to occur on or in the vicinity of the site or there is no suitable habitat for the species on site, or the species was surveyed for during the appropriate season with negative results.
- *Unlikely:* The site is located outside of the species' geographic or elevational range or no suitable habitat for the species is present on-site.
- *Potential:* The species is known to occur in the vicinity of the site (based on occurrence records within 10 miles and/or professional expertise specific to the site or species) and suitable habitat is present on-site; or the species is not known to occur in the vicinity of the site, but suitable habitat is present on-site for foraging or breeding.

Special-Status Animals

The special-status animal species evaluated in Table 3.4-2 are those noted in the CNDDDB as occurring within 10 miles of the project site and those known to occur in the general vicinity (Huffman Broadway Group 2017). The key species discussed below either are known to occur in the project vicinity or have the potential to occur at the site, or require specific study to determine their presence or absence.

CDFW's CNDDDB was consulted to ascertain the potential for special-status animal species to occur within the 7.5-minute quadrangle map areas in the vicinity of the project site. The CNDDDB indicates that seven special-status species deserve note as having occurred within the 10-mile radius of the site:

- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- California linderiella (*Linderiella occidentalis*)
- Steelhead–Central Valley Distinct Population Segment (*Oncorhynchus mykiss irideus*)
- Western spadefoot toad (*Spea hammondi*)
- Burrowing owl (*Athene cunicularia*)
- Swainson's hawk (*Buteo swainsoni*)
- Tricolored blackbird (*Agelaius tricolor*)

These species are discussed below. Other species found to occur within the general CNDDDB search area, or determined to be potentially present based on the knowledge of the investigators, are evaluated in Table 3.4-2.

3.4.2 Regulatory Setting

3.4.2.1 Federal Plans, Policies, Regulations, and Laws

Federal Endangered Species Act

The primary focus of the ESA (as amended) is for all federal agencies to seek to conserve threatened and endangered species through their actions. The ESA contains four key sections:

- Section 4 (Title 16, Section 1533 of the United States Code [USC] [16 USC 1533]) outlines the procedure for listing endangered plants and wildlife.
- Section 7 (16 USC 1536) imposes limits on the actions of federal agencies that might affect listed species.
- Section 9 (16 USC 1538) prohibits the unauthorized "taking" of a listed species by anyone, including private individuals and state and local agencies.
- Section 10 (16 USC 1539) provides a process allowing for the legal take of threatened and endangered species by nonfederal parties.

Table 3.4-2. Special-Status Animal Species Reported in the Vicinity of the Project Area

Common Name Scientific Name	Status	Habitat/Range	Potential for Occurrence on the Project Site
Invertebrates			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/-	Inhabits vernal pools; occurs throughout the Delta and Central Valley.	Not present. Suitable habitat is not present on-site; seasonal swales on the site are characterized by flowing water systems with depths unsuitable for vernal pool invertebrates.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE/-	Inhabits vernal pools; known from scattered locations in the Delta and Central Valley.	Not present. Suitable habitat is not present on-site. Seasonal swales on the site are characterized by flowing water systems with depths unsuitable for vernal pool invertebrates.
California linderiella <i>Linderiella occidentalis</i>	-/-	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	Not present. Suitable habitat is not present on-site.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT/-	Inhabits blue elderberry bushes (host plant); restricted to the Central Valley and adjacent foothills.	Not present. No elderberries were observed on the site during site surveys; therefore, no potential habitat for this species exists on-site.
Fish			
Steelhead—Central Valley Distinct Population Segment <i>Oncorhynchus mykiss irideus</i>	FT/-	Population occurs in the Sacramento and San Joaquin Rivers and their tributaries. In the project area, found in Dry Creek and its tributaries, in Secret Ravine and Miners Ravine.	Not present on-site. Suitable habitat is not present on-site, as there are no large river systems or suitable spawning streams. Suitable spawning habitat is located about 4 miles southwest of the site in Secret Ravine and Miners Ravine.
Amphibians			
Western spadefoot toad <i>Spea hammondi</i>	-/CSC	Breeds in vernal pools/seasonal stock ponds in the Central Valley and southern coast.	Potential. The site is in the range of the species; habitat is marginally suitable.
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Inhabits freshwater creeks, marshes, and ponds up to elevations of 5,000 feet along the west slope of the Sierra Nevada from Shasta County to Tulare County.	Not present. The only CNDDDB records for this species in Placer County are approximately 28 miles northeast of the project area between Michigan Bluff and Brushy Creek, east of Foresthill. Most historical populations on the west slope of the Sierra Nevada foothills are presumed extirpated. The project site is within the range of the species; however, the fragmented nature of potentially suitable habitat near the project area and the lack of recent or historical occurrence data within 10 miles support the conclusion that this species is not present. In addition, the wetlands on-site are seasonal and do not provide the perennial waters typically required for California red-legged frog.
Reptiles			
Western pond turtle <i>Emys marmorata</i>	-/CSC	Inhabits freshwater ponds and sluggish streams; occurs from Washington State to Baja California, mostly west of the Sierra Nevada crest.	Not present. Suitable habitat is not present on-site.

Common Name Scientific Name	Status *	Habitat/Range	Potential for Occurrence on the Project Site
Birds			
Prairie falcon <i>Falco mexicanus</i>	BCC/WL	Associated primarily with perennial grasslands, savannas, rangeland, some agricultural fields, and desert scrub. Permanent resident and migrant along the inner Coast Ranges.	Unlikely. Appropriate nest sites are not present. This species may forage on the site in winter, although no individuals were observed in February 2017.
Peregrine falcon <i>Falco peregrinus anatum</i>	Delisted, BCC/ Delisted, FP	Inhabits open wetlands near cliffs; also occurs in some cities, where it nests on buildings and bridges.	Unlikely. Appropriate nest sites and foraging habitat are not present.
Merlin <i>Falco columbarius</i>	-/WL	Breeds in Canada; winters in a variety of California habitats, including grasslands, savannas, and wetlands.	Unlikely. Site is outside of breeding range; may sporadically utilize the site as a winter foraging habitat.
Sharp-shinned hawk <i>Accipiter striatus</i>	-/WL	Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers but is not restricted to riparian habitats. Nonbreeding winter resident in California. North-facing slopes with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert are used in winter.	Unlikely. Species may occasionally forage on or near the site in winter.
Cooper's hawk <i>Accipiter cooperii</i>	-/WL	Nests primarily in deciduous riparian forests; forages in open woodlands.	Potential. Marginal nesting habitat is present on-site. Species likely forages on or near the site, especially in winter.
Osprey <i>Pandion haliaetus</i>	-/WL	Breeds in Northern California from the Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats.	Not present. Suitable nesting and foraging habitats are not present on-site.
Ferruginous hawk <i>Buteo regalis</i>	BCC/ CSC	Inhabits open country. Winters in small numbers along the California coast and in inland valleys.	Potential. The site provides marginal wintering foraging habitat, although no individuals were observed in February 2017 field studies.
Swainson's hawk <i>Buteo swainsoni</i>	BCC/CT	Nests in trees and riparian stands; summer resident in the Central Valley. Suitable foraging areas include grasslands, pastures, alfalfa and other hay crops, and certain grain and row croplands.	Unlikely. Distribution in Placer County is sparse and patchy, with all records for this species concentrated in the western edge of the county, west of Lincoln. CNDDDB records indicate that this species nests within 7 miles of the site. Habitat details for this record are typical for the species, indicating a large nest tree approximately 55 feet tall in a riparian area immediately adjacent to an open field. The lack of suitable foraging habitat (large open grasslands, pasture, or row crops) in the project vicinity makes nesting on-site unlikely. The site may provide marginally suitable foraging habitat for this species, but it does not contain the elements typical of high-quality foraging habitat found farther to the west. One individual was observed flying over the site on April 22, 2017.

Common Name Scientific Name	Status *	Habitat/Range	Potential for Occurrence on the Project Site
Northern harrier <i>Circus cyaneus</i>	-/CSC	Forages and nests in grasslands, marshes, and agricultural fields; occurs throughout California, concentrated in the Central Valley and coastal valleys.	Nesting unlikely. Suitable nesting habitat is not present on-site.
White-tailed kite <i>Elanus leucurus</i>	-/FP	Nests in dense oaks, willows, and other trees; occurs in the Central Valley and adjacent low foothills.	Potential. No CNDDDB nesting records in vicinity. Nests are unlikely on the study site because of a lack of suitable dense oak woodland.
Bald eagle <i>Haliaeetus leucocephalus</i>	Delisted, BCC/ CE, FP	In winter, may be found throughout most of California at lakes, reservoirs, rivers, and some rangelands and coastal wetlands. California's breeding habitats are located mainly in mountains and foothill forests near permanent water sources.	Not present. Suitable nesting and foraging habitats are not present on-site.
Golden eagle <i>Aquila chrysaetos</i>	BCC/ML, FP	Typically frequents rolling foothills, mountain areas, sage-juniper flats, and desert.	Unlikely. The site may receive sporadic use by the species in winter.
California black rail <i>Laterallus jamaicensis coturniculus</i>	-/CT, FP	Mainly inhabits salt marshes bordering larger bays; also occurs sporadically in the northern Sierra Nevada foothills in scattered freshwater marshes with shallow (<3 centimeters) perennial freshwater and brackish marshes.	Not present. Suitable freshwater marsh habitat with appropriate water depths is not present on-site.
Short-eared owl <i>Asio flammeus</i>	-/CSC	Forages and nests in perennial marsh and grassland habitat; occurs in the Central Valley, coast, and east Sierra Nevada regions.	Unlikely. Suitable nesting habitat is not present on-site.
Western burrowing owl <i>Athene cunicularia hypugea</i>	BCC/ CSC	Nests in mammal burrows and rock cavities in grassland and scrub; occurs throughout much of mid and lower California.	Unlikely. Although the CNDDDB documents nesting records in the project area, suitable habitat is not present on-site because of the tall heights of upland grasses and general lack of California ground squirrels and ground squirrel burrows. No individuals were observed during surveys in February and late April 2017.
Purple martin <i>Progne subis</i>	-/CSC	Uses a variety of wooded, low-elevation habitats throughout California. Uses hardwood and hardwood-conifer habitats as well as riparian habitats. Now a rare and local breeder on the coast and in interior mountain ranges.	Unlikely. Suitable nesting habitat is not present on-site.
Loggerhead shrike <i>Lanius ludovicianus</i>	BCC/ CSC	Habitat includes open areas such as desert, grasslands, and savannas. Nests in thickly foliated trees or tall shrubs. Forages in open habitat that contains trees, fence posts, utility poles, and other perches.	Potential. Although not recorded in the project vicinity in the CNDDDB, trees and shrubs provide suitable nesting habitat. Not observed during surveys conducted in February and April 2017.

Common Name Scientific Name	Status *	Habitat/Range	Potential for Occurrence on the Project Site
Grasshopper sparrow <i>Ammodramus savannarum</i>	-/CSC	Found in dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches.	Nesting unlikely. Suitable nesting habitat is not present on-site.
Yellow warbler <i>Setophaga petechia</i>	BCC/ CSC	Breeds in deciduous riparian woodlands; widespread during fall migration.	Nesting unlikely. May occur on-site during fall migration, but suitable nesting habitat is not present on-site.
Tricolored blackbird (nesting colony) <i>Agelaius tricolor</i>	BCC/CE, CSC	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs. Requires open water and protected nesting substrate, such as flooded, spiny, or thorny vegetation.	Nesting unlikely. Appropriate nesting habitat is not present on-site.
Mammals			
Pallid bat <i>Antrozous pallidus</i>	-/CSC	Roosts primarily in oak woodland and ponderosa pine habitats; forages in open areas.	Not present. Suitable habitat is not present on-site.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	-/CCT, CSC	Found in desert scrub and coniferous forests. Roosts in caves or abandoned mines and is occasionally found to roost in buildings.	Not present. Suitable habitat is not present on-site.
American badger <i>Taxidea taxus</i>	-/CSC	Drier open stages of shrub, forest, and herbaceous habitats; needs sufficient food, friable soils, and open, uncultivated ground.	Unlikely. Suitable habitat is not present on-site, and the site is fragmented by major roadways and development.

Notes: CNDDDB = California Natural Diversity Database; Delta = Sacramento–San Joaquin Delta

* Status Codes:

- BCC U.S. Fish and Wildlife Service Bird Species of Conservation Concern
- CE California listed as endangered
- CSC California Department of Fish and Wildlife Species of Special Concern
- CT California listed as threatened
- FE federally listed as endangered
- FP California Fully Protected
- FPE federally proposed for listing as endangered
- FPT federally proposed for listing as threatened
- FT federally listed as threatened
- WL California Department of Fish and Wildlife Watch List Species

Source: Huffman Broadway Group 2017

The U.S. Fish and Wildlife Service (USFWS) enforces the ESA. ESA Section 9, as amended, prohibits the unauthorized take of any fish or wildlife species listed under the ESA as endangered. Under federal regulation, take of fish or wildlife species listed as threatened is prohibited to the extent specifically declared by regulation. "Take," as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Recent court cases have found that "harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat, resulting in actual injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR 17.3).

Clean Water Act (33 USC 1251 et seq.)

Section 404 Permit Program

Section 404 of the federal CWA requires project applicants to obtain a permit from USACE before engaging in any activity that would involve any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in a water of the United States that replaces any portion of the water with dry land, that or changes the bottom elevation of any portion of the water of the United States. Waters of the United States are navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; tributaries to any of these waters; and wetlands adjacent to these waters. Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]).

Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under CWA Section 404, pending review by USACE and the U.S. Environmental Protection Agency (EPA).

As part of the review of a project, USACE must ensure compliance with applicable federal laws, including EPA's Section 404(b)(1) Guidelines. USACE regulations require avoidance and minimization of impacts on waters of the United States to the maximum extent practicable, and compensation for unavoidable impacts (33 CFR 320.4[r]).

In 2008, USACE and EPA issued regulations governing compensatory mitigation for activities authorized by permits issued by USACE (33 CFR 332). The rule establishes a preference for using mitigation banks. Mitigation banks provide established wetland habitats that have already met success criteria, thereby reducing some of the risks and uncertainties associated with compensatory mitigation, which involve creating new wetlands that cannot yet demonstrate functionality at the time of project implementation. The rule also establishes a preference for providing compensatory mitigation in the affected watershed. Ideally, compensatory mitigation would take place at a mitigation bank in the same watershed as the waters to be replaced. If mitigation banks are not available in the affected watershed, then compensatory mitigation involving creation or restoration in the affected watershed may be preferred over using a mitigation bank outside the affected watershed.

Section 401 Water Quality Certification

Under CWA Section 401, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine regional water quality control boards (RWQCBs).

National Pollutant Discharge Elimination System

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related stormwater discharges under the NPDES Program. On November 16, 1990, EPA published final regulations establishing stormwater permit application requirements for specified categories of industries. The regulations provide that stormwater discharges from construction projects encompassing 1 acre or more of soil

disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit. The State Water Resources Control Board has developed a general construction stormwater permit to implement this requirement.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA states that it is unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA can be found in 50 CFR 10.13. The list includes nearly all birds native to the United States.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act, enacted in 1940 and amended multiple times since then, prohibits the taking of bald and golden eagles without a permit from the Secretary of the Interior. Like the ESA, the Bald and Golden Eagle Protection Act defines “take” to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (16 USC 668–668c). For the purpose of this law, a disturbance that would injure an eagle, decrease productivity, or cause nest abandonment, including a habitat alteration that could have any of these results, is considered take and can result in civil or criminal penalties.

3.4.2.2 State Plans, Policies, Regulations, and Laws

California Endangered Species Act

The California Endangered Species Act (California Fish and Game Code Section 2050 et seq.) directs state agencies not to approve projects that would jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of a species. Furthermore, the CESA states that CDFW, together with the project proponent and any state lead agency, develop reasonable and prudent alternatives consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible. Under the CESA, project-related impacts of the authorized take must be minimized and fully mitigated, and adequate funding to implement those mitigation measures and monitor compliance with and the effectiveness of the measures must be ensured. Standard CESA issuance requirements can include land acquisition, permanent protection and management, and/or funding in perpetuity of compensatory lands.

A take of a species is defined under the CESA as an activity that would directly or indirectly kill an individual of a species. Unlike the federal ESA definition, the CESA definition of take does not include “harm” or “harass.” As a result, the threshold for a take under the CESA may be higher than under the ESA because habitat modification is not necessarily considered take under the CESA. The take of state-listed species incidental to otherwise lawful activities requires a permit, pursuant to CESA Section 2081(b). The state has the authority to issue an incidental take permit under California Fish and Game Code Section 2081, or to coordinate with USFWS during the Section 10(a) process to make the federal permit consistent with the CESA.

Like federal law, California law affords listed plants considerably less protection than it does fish and wildlife. The California Native Plant Protection Act (California Fish and Game Code, Section 19000 et seq.) allows landowners to take listed plant species from (among other places) a canal, lateral ditch, building site, or road, or other right-of-way, provided that the landowner first notifies CDFW and gives the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed.

Lake and Streambed Alteration Agreement

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Section 1602 makes it unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by CDFW, or to use any material from the streambeds, without first notifying CDFW of such activity and obtaining a final agreement authorizing such activity.

“Stream” is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. CDFW’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW lake or streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake. CDFW includes in its definition of “any river, stream or lake” those aquatic features that are episodic (i.e., they are dry for periods of time) as well as those that are perennial and flow year round. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. This definition may also apply to work undertaken within the flood plain of a body of water.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act (California Water Code, Section 13000 et seq.) requires that each of the state’s nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands by establishing water quality objectives. The RWQCBs’ jurisdiction includes federally protected waters and areas that meet the definition of “waters of the state.” Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCBs have the discretion to take jurisdiction over areas not federally regulated under Section 401, provided they meet the definition of waters of the state. The RWQCBs typically require mitigation to achieve no net loss of wetland functions and values of waters of the state.

Fully Protected Species

Four sections of the California Fish and Game Code (Sections 3511, 4700, 5050, and 5515) list 37 fully protected species. These statutes prohibit take or possession at any time of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. CDFW has informed nonfederal agencies and private parties that they must avoid take of any fully protected species when they carry out projects.

Protection of Bird Nests and Raptors

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal and failure of nesting attempts, resulting in loss of eggs and/or young. These violations can be caused by disturbance of nesting pairs by nearby human activity.

Natural Community Conservation Planning Act

The Natural Communities Conservation Planning Act program, which began in 1991 under the California Natural Community Conservation Planning Act, is broader in its orientation and objectives than the ESA and CESA. Those laws are designed to identify and protect individual species that are already listed as threatened or endangered and their habitats. By contrast, the primary objective of the Natural Communities Conservation Planning Act program is to conserve natural communities at the ecosystem scale while accommodating compatible land use.

Placer County has been involved in efforts to prepare and finalize the *Placer County Conservation Plan*, a habitat conservation plan and natural communities conservation plan that may eventually be applicable to projects in the Loomis area. A final version of this habitat conservation plan/natural communities conservation plan has not been approved as of the date of this DEIR.

Oak Woodlands Conservation

Section 21083.4 of the Public Resources Code, which went into effect in January 2005, requires California counties acting as lead agencies under CEQA to determine whether a project “may result in a conversion of oak woodlands that will have a significant effect on the environment.” If individual or cumulative impacts on oak woodlands are identified, the law requires that the impacts be mitigated. Acceptable mitigation measures include but are not limited to using conservation easements to conserve other oak woodlands, planting replacement trees that must be maintained for 7 years, and contributing to the Oak Woodland Conservation Fund established under Section 1363(a) of the California Fish and Game Code.

3.4.2.3 Local Plans, Policies, Regulations, and Ordinances

Placer County Conservation Plan

The draft *Placer County Conservation Plan* (Placer County 2005) was completed in February 2005 as a means for the County to pursue a natural community conservation plan and a habitat conservation plan for eastern Placer County. The PCCP aims to ensure the continued conservation of threatened and endangered species in Placer County and to resolve potential conflicts between otherwise lawful urban development activities and the conservation of the species on nonfederal land in Placer County. The PCCP encompasses 221,250 acres of western Placer County bordered on the west by Sutter County, on the north by Yuba and Nevada Counties, on the east by El Dorado County, and on the south by Sacramento County. The entire project area is included within the PCCP boundaries.

The PCCP establishes a comprehensive, countywide plan for the conservation of all natural communities, endangered species, and other less sensitive species of native wildlife, fish, and plants in western Placer County and is an important part of the Placer Legacy Open Space and Agricultural Conservation Program (see Section 1.4.1). The PCCP is under consideration by USFWS, NMFS, and CDFW, and the permit term is proposed to extend to the year 2050. Once approved, the PCCP would provide the County with a scientific and legal basis for a series of regulatory permits under Section 10 of ESA and authorization issued from CDFW under Section 2081 of the California Fish and Game Code, in compliance with CESA that will make the environmental review of future public and private projects more consistent, more predictable, and more efficient. Although the Town of Loomis is not a participant in the PCCP, it may choose to implement PCCP measures described in the draft PCCP.

Town of Loomis General Plan Conservation Element

The Town of Loomis General Plan contains policies governing conservation of resources within its jurisdiction. The applicable Natural Resources and Open Space policies are summarized below (Town of Loomis 2001).

- **Policy 2: Biotic resources evaluation.** Prior to approval of discretionary development permits involving parcels near significant ecological resource areas, the Town shall require, as part of the environmental review process, a biotic resources evaluation by a qualified biologist. The biologist shall follow accepted protocols for surveys (if needed) and subsequent procedures that may be necessary to complete the evaluation...
- **Policy 5: Native tree protection.** Individual heritage trees and significant stands of heritage trees shall be preserved. Healthy heritage trees shall be removed or significantly trimmed only when necessary because of safety concerns, conflicts with utility lines and other infrastructure, the need for thinning to maintain a healthy stand of trees, or where there is no feasible alternative to removal. Proposed development shall be designed, constructed, and maintained to preserve individual heritage trees and significant stands of heritage trees, and provide for the protection of root zones and the continuing health of the trees. When trees are removed, they shall be replaced in sufficient numbers to maintain the volume of the Town's overall tree canopy over a 20-year period. Tree removal within stream corridors is also subject to the above policy on stream corridor protection.
- **Policy 6: Stream corridor protection.** The streams of Loomis are among the most significant and valuable of the Town's natural resources. Development adjacent to streams shall be designed, constructed, and maintained to avoid adverse impacts on riparian vegetation, stream bank stability, and stream water quality to the maximum extent feasible. These policies shall apply to all watercourses shown as blue lines on the most recent United States Geological Survey (USGS) 7.5-minute topographic quadrangle maps applicable to the Town. See also the policies for wetland protection below. ...
- **Policy 8: Wetlands.** The following policies apply to properties with wetland areas. Additional applicable policies may be found under "stream corridor protection," above.
 - a. The environmental review of development on sites with wetlands shall include a wetlands delineation, and the formulation of appropriate mitigation measures. The Town 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 Game [CDFW]. 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.

- b. The Town shall require new development to mitigate wetland loss in both regulated and non-regulated wetlands to achieve “no net loss” through any combination of the following, in descending order of desirability:
 - (1) Avoidance of riparian habitat;
 - (2) Where avoidance is not feasible, minimization of impacts on the resource;
 - (3) Compensation, including use of a mitigation banking program that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas, that are encouraged to be located within the Town; or
 - (4) Replacement of a degraded or destroyed wetland at a ratio of from 1:1 to 4:1, based on the biotic value of the wetland, as determined by the required environmental analysis. The review authority may reduce the replacement ratio as an incentive, where replacement wetlands are proposed to be located within or in close proximity to the Town.

The Town shall cooperate with regulating agencies to ensure that concerns are adequately addressed. ...
- d. The Town will require the preservation of native riparian and wetland areas as open space to the maximum extent feasible, using fee title or conservation easement acquisition, land conservancy participation, and/or other measures as appropriate.

Town of Loomis Municipal Code

Title 12, Chapter 12.24, Development Impact Fees

To offset the impact of future development and maintain current levels of service and corresponding infrastructure, the Town of Loomis has adopted a series of fees imposed for certain types of development, as allowed under Government Code Sections 66000 et seq. Fees that promote acquisition and maintenance of natural open space and town parks include:

- H. Passive Park/Open Space Fee.** A passive park/open space fee is imposed on residential, commercial and industrial development, to defray the cost of acquiring passive parkland and open space, as new development occurs.

Title 13, Chapter 13.54, Tree Conservation

The Town of Loomis Tree Ordinance, presented in Chapters 13.54.010 through 13.54.080 of the Loomis Municipal Code, states that the tree canopy of both native and introduced species contributes significantly to the rural character of the town and offers residents environmental, social, financial (property values), and aesthetic benefits. The goal of the tree ordinance is to promote a healthy tree canopy needed for community enjoyment and vibrant, functioning ecosystems. The ordinance protects any native oak tree with a trunk that is a minimum of 6 inches in diameter as measured at breast height (dbh) for interior live oak, valley oak, and oracle oak and 4 inches dbh for blue oak; any oak tree with multiple trunks that have an aggregate dbh of at least 10 inches; or any heritage tree. (The tree ordinance defines “diameter at breast height” as “the diameter of a tree trunk as measured at fifty-four inches [four feet six inches] above the ground at the base of the tree” [Loomis Municipal Code, 13.54.030].) “Heritage tree” means any tree identified by Town Council resolution. It is unlawful to remove or perform any activity that will interfere with the condition of a protected tree without a tree permit issued by the Town manager. The removal of any protected tree that cannot be feasibly protected and left in place may require replacement as a condition of permit issuance.

Chapter 13.56, “Waterway and Riparian Habitat Protection”

Chapter 13.56 of the Loomis Municipal Code establishes standards to protect the natural, scenic, and recreational values of waterway and riparian resources within the town. The ordinance is applicable to “proposed development, other than public works or infrastructure, on any site adjacent to or crossed by a watercourse that is shown as a blue line on the most recent United States Geological Survey (USGS) 7.5-minute topographic quadrangle map” (Town of Loomis 2017). The types of measures to be incorporated into the design of a development project include:

- A. Waterway Setback Requirement.** Proposed structures shall be set back a distance of 2.5 times the height of the stream bank plus thirty feet, or thirty feet outward from the stream bank, whichever distance is greater, as measured from the toe of the stream bank outward. ...

- B. Use of Required Setback.** Paths or trails may be located within a creekside setback; however, no structure, road, parking access, parking spaces, paved areas, or swimming pool shall be constructed within a creek or creekside setback area.
- C. Alteration of Natural Features.** No grading or filling, planting of exotic/non-native or non-riparian plant species, or removal of native vegetation shall occur within a creek or creekside setback area, except where authorized for flood control purposes by the proper permits issued by the California State Department of Fish and Game [CDFW], all other applicable state and federal agencies having authority over the creek.
- D. Design of Drainage Improvements.** Where drainage improvements are required, they shall be placed in the least visible locations and naturalized through the use of river rock, earthtone concrete, and landscaping with native plant materials.
- E. Use of Permeable Surfaces.** The proposed development should incorporate permeable surfaces (for example, wood decks, sand-joined bricks, and stone walkways) where feasible, to minimize off-site flows and facilitate the absorption of water into the ground.
- F. Creek Bank Stabilization.** Development or land use changes that increase impervious surfaces or sedimentation may result in channel erosion. This may require measures to stabilize creek banks.
1. Creek rehabilitation is the preferred method of stabilization, with the objective of maintaining the natural character of the creek and riparian area. Rehabilitation may include enlarging the channel at points of obstruction, clearing obstructions at points of constriction, limiting uses in areas of excessive erosion, and restoring riparian vegetation.
 2. Concrete channels and other mechanical stabilization measures shall not be allowed unless no other alternative exists.
 3. If bank stabilization requires other than rehabilitation or vegetative methods, hand-placed stone or rock rip-rap are the preferred methods.
- G. Physical and Visual Access.**
1. Public access and visibility to creeks should be provided through the use of single-loaded frontage roads adjacent to creeks, but outside of the creek setback. Structures or lots that back-up to creeks or creek frontage roads are discouraged.
 2. The provision of multipurpose creekside trails and public open space is encouraged. Open space areas should include planting for riparian enhancement with native shrubs and trees, paths and trails, lighting, benches, play and exercise equipment, and trash receptacles outside of the riparian habitat area, where appropriate.
 3. Where streets are not used, frequent access to creekside trails and public open space should be provided at least every three hundred feet, and may occur at the end of cul-de-sacs.

3.4.3 Impact Analysis

3.4.3.1 Methodology

The biological resources investigation described in the Biological Resources Report (Huffman Broadway Group 2017) to assess the potential impacts of the project on special-status species and native plant communities involved:

- a literature review;
- focused wildlife surveys;
- focused botanical surveys;
- evaluation of potentially occurring special-status species and other sensitive biological resources; and
- a delineation of jurisdictional waters of the United States, including wetlands.

3.4.3.2 Thresholds of Significance

Based on Appendix G of the State CEQA Guidelines, the proposed project would result in a significant impact related to biological resources if it would:

- 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 CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

3.4.3.3 Topics Not Addressed Further

Impacts on special-status plant species would not occur as a result of site development because protocol-level botanical surveys conducted on the project site during spring 2017 found no special-status plant species on-site. Impacts on special-status plants are not evaluated further in this document.

Impacts on habitat for vernal pool crustaceans would not occur as a result of site development. The seasonal wetland swales within the drainages on the project site do not provide suitable habitat for listed species of vernal pool crustaceans because the swales are flowing systems that lack the inundation characteristics that would support vernal pool fairy shrimp or vernal pool tadpole shrimp. Impacts on listed vernal pool invertebrates are not evaluated further in this document.

Impacts on wildlife movement are not considered further in this document because the project site is a fragmented parcel isolated from natural open space by the presence of Interstate 80, Sierra College Boulevard, railroad tracks, and existing developed commercial and residential uses. Evaluation of potential impacts on migratory birds is considered under Impact 3.4-5, below.

Potential conflicts with adopted habitat conservation plans, natural community conservation plans, and similar approved plans are not evaluated further in this document because no such adopted plans apply to the project site and the Town is not a participant in the PCCP.

3.4.3.4 Environmental Impacts and Mitigation Measures

Impacts of the proposed project on special-status wildlife species, sensitive, and non-sensitive natural communities would occur because vegetation removal and disturbance would result in the conversion of on-site habitat, including annual grassland, valley oak woodland, and valley freshwater marsh. Table 3.4-3 compares the acreage of each vegetation community on the project site and the acreage that would be affected by site development under the proposed project. The footprint for the proposed project would affect all habitat types on the property because development would cover 100 percent of the site. Potentially significant impacts on special-status species and natural resource communities are discussed below.

Table 3.4-3. Acreage of Existing and Affected Habitat Types on the Project Site

Habitat Type	Existing Project Site Acreage	Acreage Affected by the Proposed Project
Annual Grassland	10.16	10.16
Valley Freshwater Marsh	0.15	0.15
Valley Oak Woodland	7.96	7.96
Total	18.27	18.27

Source: Huffman Broadway Group 2017

Impact 3.4-1: Permanent Fill of Wetlands and Waters of the United States and Impacts on Waters of the State.

Implementing the proposed project would result in permanent fill of waters of the United States, including wetlands subject to USACE jurisdiction under the CWA. The proposed project would also result in adverse impacts on waters of the state, including swales and seasonal wetlands. This impact would be potentially significant.

Table 3.4-3 shows that the proposed project would result in removal (fill) of approximately 0.15 acre of jurisdictional waters of the United States consisting of freshwater seasonal wetlands, resulting in the loss of functions currently provided by those wetlands: flood flow alteration, groundwater recharge, sediment reconstruction, sediment/toxicant retention, nutrient removal/transformation, production export, and wildlife habitat.

In addition to this direct impact of the proposed project on wetlands, downstream waters that eventually flow to Dry Creek and ultimately the American River could be indirectly affected by the creation of impervious surfaces and increased generation of runoff from the project site. Potential indirect effects on downstream waters include a reduction of water quality caused by urban runoff, erosion, and siltation, and increased flow volumes and altered hydrology, which could adversely affect fish and other aquatic resources in downstream waters. Direct and indirect impacts on wetlands and waters of the United States would represent a significant adverse impact.

Natural Resources and Open Space Policy 8 in the Town of Loomis General Plan states that new development must not result in a net loss of wetlands. Avoidance of direct impacts is the preferred method for compliance with this policy, but alternative means are also available when avoidance is not feasible. In the case of the proposed project, avoidance of direct impacts is not feasible while also meeting Loomis Municipal Code requirements that include development standards for building setbacks, dock layout, number of parking spaces, driveways, and emergency access. Therefore, this impact would be **potentially significant**. However, the project applicant would implement Mitigation Measure Bio-1 to compensate for the loss of wetlands as allowed by Policy 8(b).

Mitigation Measure Bio-1: Compensate for Loss of Wetlands and Implement Water Quality Protection Measures.

The project applicant shall submit applications for a Section 404 permit from USACE (see Section 2.6, “Permits and Approvals”) and Section 401 water quality certification from the Central Valley RWQCB, and shall consult with CDFW to determine whether the project will require notification for a lake and streambed alteration agreement. The applicant shall implement wetland mitigation measures required by USACE and the Central Valley RWQCB for impacts on the 0.15 acre of seasonal wetlands on the project site. In addition, the applicant shall comply with all conditions described in the CDFW lake and streambed alteration agreement. If required as part of the USACE and Central Valley RWQCB permit processes, the applicant shall implement a wetland mitigation plan to mitigate impacts on wetlands, as described below.

- The project applicant shall replace or restore on a “no-net-loss” basis the function of all wetlands that would be removed as a result of the project. USACE jurisdictional areas must be replaced at a minimum 1:1 ratio through wetland creation to ensure that no net loss of acreage, functions, or values occurs in these areas. Mitigation methods may consist of establishing aquatic resources in upland habitats where they did not exist previously; reestablishing (restoring) natural historic functions to a former aquatic resource; enhancing an existing aquatic resource to heighten, intensify, or improve aquatic resource functions; or a combination of these measures. The compensatory mitigation may be accomplished

through the purchase of credits from a USACE-approved mitigation bank; payment into a USACE-approved in-lieu fee fund; or permittee-responsible establishment, reestablishment, or enhancement on- or off-site, depending on the availability of mitigation credits.

- Prior to the issuance of grading permits, the project applicant shall have a qualified biologist prepare a wetland mitigation plan to describe how the loss of aquatic functions will be replaced from RWQCB, USACE, and CDFW. The mitigation plan will describe compensation ratios for acres filled, the mitigation sites, a monitoring protocol, annual performance standards and final success criteria for created or restored habitats, and corrective measures to be applied if performance standards are not met, which shall be implemented by the applicant.
- Mitigation habitat shall be monitored for a minimum of 5 years from the completion of mitigation, or until the success criteria identified in the approved mitigation plan have been met, whichever is longer.
- Water quality certification pursuant to CWA Section 401, or waste discharge requirements (for waters of the state), shall be required before the notice of determination and a Section 404 permit are issued. Before construction begins in any areas containing aquatic features, the project applicant shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification and/or waste discharge requirements shall be implemented. The project applicant shall obtain a General Construction Stormwater Permit from the Central Valley RWQCB, prepare a storm water pollution prevention plan, and implement best management practices (BMPs) to reduce water quality effects during construction. The project applicant shall implement the BMPs and storm water pollution prevention plan as outlined in Mitigation Measures Hydro-1 and Hydro-2, presented in Section 5.3.5, "Hydrology and Water Quality," of Chapter 5, "Other CEQA Requirements."

Significance after Mitigation

Implementing Mitigation Measure Bio-1 would reduce the proposed project's direct and indirect impacts related to loss of wetlands and waters of the United States to **less than significant**. The relatively small size of the impacted wetland (0.15 acres), history of disturbance at the site, and connectivity to adjacent wetland areas to the south and east indicate that a 1:1 ratio is appropriate. Implementation would ensure no net loss of functions of wetlands and other waters of the United States, and implementing BMPs as described in Mitigation Measures Hydro-1 and Hydro-2 would protect downstream water quality consistent with *Town of Loomis General Plan* policies calling for no net loss of wetlands.

Impact 3.4-2: Loss of Protected Oak Trees. *Project construction would result in the removal of 372 oak trees determined to be of protected size, based on criteria described in the Town of Loomis Tree Ordinance. Removal of protected trees without planting replacement tree is inconsistent with the Town of Loomis tree ordinance. Therefore, this impact would be **potentially significant**.*

The arborist report prepared for the project (Mann Made Resources 2016) (Appendix C2) determined that the proposed project would result in the removal of 372 trees protected by the Town of Loomis Tree Ordinance. Remedial grading including over excavation and compaction of soils to create the building pad will result in changes to surface elevations by raising portions of site as high as 10 feet above existing grade and reducing surface elevations in other areas by as much as five feet. Extensive site grading would require removal of most or all 372 trees due to the pattern and distribution of oak trees across the property. Tree preservation in place is not an option. The Tree Ordinance defines protected tree as "any native oak tree with a trunk that is a minimum of 6 inches in diameter as measure at breast height (DBH) for Interior Live Oak, Valley Oak, and Oracle Oak and 4 inches DBH for Blue Oak.; any oak tree with multiple trunks that have an aggregate DBH of at least 10 inches, or any Heritage Tree". A total of two blue oak, 86 live oak, and 284 valley oak comprise the total 372 protected trees. Of the 372 trees, 162 were found to be in good or fair condition, and their removal would require mitigation pursuant to the ordinance. The balance of trees affected by the project are dead, dying, or in poor condition and are not subject to the mitigation requirements outlined in the ordinance as determined by the expert arborist. The arborist report recommended a total mitigation planting requirement of 290 #15 container trees. This mitigation figure was derived using Table 5-3 of the Town of Loomis Ordinance 252 which describes the appropriate mitigation ratio for protected trees (see Table 3.4-4)

Table 3.4-4: Protected Oak Tree Mitigation Totals

Protected tree species	Diameter	Number present at site	#15 trees required for mitigation*	Total trees required for mitigation
Blue oak (Quercus douglasii)	11	1	3	3
	22	1	3	3
Total Blue oak	-	2	-	6
Interior Live oak (Quercus wislizenii)	7	1	1	1
	9	1	1	1
	10	3	2	6
	12	1	2	2
	18	1	2	2
Total Live oak	-	7	-	12
Valley oak (Quercus lobata)	6	8	1	8
	7	14	1	14
	8	15	1	15
	9	10	1	10
	10	13	2	26
	11	9	2	18
	12	18	2	36
	13	10	2	20
	14	14	2	28
	15	6	2	12
	16	7	2	14
	17	2	2	4
	18	5	2	10
	19	2	2	4
	20	6	2	12
	21	1	2	2
	22	3	2	6
	23	1	2	2
	24	2	2	4
27	1	3	3	
28	2	3	6	
30	1	4	4	
34	1	4	4	
35	1	4	5	
36	1	5	5	
Total valley oak	-	153	-	272
Total #15 mitigation trees				290

*The mitigation ratios presented here are taken from Table 5-3 of the Town of Loomis Ordinance 252

These trees could be planted on the project site as part of the project landscape design and to create shade for the parking lot (Mann Made Resources 2016) (Appendix C2). Absent the implementation of mitigation for the loss of protected oak trees, this impact would be **potentially significant**.

Natural Resources and Open Space Policy 5 in the *Town of Loomis General Plan* calls for the protection of oak trees covered under the tree protection ordinance. In the case of the project site, the coverage pattern for oak woodlands makes complete avoidance of impacts on oak trees infeasible because they are dispersed widely across the property. Additionally, development standards outlined in the Loomis Municipal Code constrain the site plan by requiring minimum setbacks, establishing standards for the number and size of parking spaces, and including requirements for access that result in a design that requires removal of protected trees.

Mitigation Measure Bio-2: Prepare and Implement an Oak Woodland Tree Replacement and Protection Plan.

To mitigate the loss of protected oak trees on the project site, the project applicant shall prepare an oak woodland tree replacement plan as described in the Town of Loomis Tree Ordinance. The oak woodland tree replacement plan shall include:

- planting of 290 #15 container trees of appropriate oak species (Table 3.4-4) on the project site to attain tree replacement ratios prescribed by the Town of Loomis;
- preparation of a planting plan describing species composition and spacing, and an exhibit indicating the specific location of proposed tree plantings; and
- schedules and methodologies for maintenance, monitoring, and annual reporting to ensure that the replacement trees survive for at least 5 years after the initial planting.

Significance after Mitigation

Implementing Mitigation Measure Bio-2 would reduce the impact of the proposed project on protected oak trees to **less than significant** by replacing trees that would be removed by the project, as required by the Town of Loomis Tree Ordinance and *Town of Loomis General Plan* policies.

Impact 3.4-3: Loss of Valley Oak Woodland Habitat. *The valley oak woodlands on the project site provide valuable resources for a diversity of wildlife species. The conversion of the site's oak woodlands to a built landscape would permanently reduce the quality of existing wildlife habitat. This impact would be potentially significant.*

Table 3.4-3 shows that the proposed project would affect approximately 7.96 acres of valley oak woodland habitat. The site's oak woodlands provide valuable wildlife habitat, although their value to wildlife is diminished somewhat by the fragmented nature of the site, which is surrounded by roadways and residential development. Despite the proximity of roads and development, the 7.96 acres of oak woodland on the project site provide wildlife with cover and foraging and breeding habitats that would be eliminated by the project. The loss of the project site's oak woodland habitat would result in a significant impact on the resident and migratory wildlife species that depend on resources provided by this habitat. Valley oak woodlands are protected by state law, including Public Resources Code Section 21083.4, and by Town of Loomis policies, and they are considered a sensitive habitat type by CDFW. Because the project would result in the permanent loss of 7.96 acres of valley oak woodlands that provide valuable habitat to wildlife, this impact would be **potentially significant**.

Mitigation Measure: Implement Mitigation Measure Bio-2, "Prepare and Implement an Oak Woodland Tree Replacement and Protection Plan."

To reduce the proposed project's impact related to loss of valley oak woodland habitat, the project applicant shall implement Mitigation Measure Bio-2, as described above.

Implementing this measure would mitigate the loss of individual trees, but Mitigation Measure Bio-2 alone would not be sufficient to reduce the impact to less than significant. Planting replacement trees as part of the project's proposed landscaping design, or in any other developed setting, would not recreate habitat offering the same functions and wildlife values as those currently provided by the oak woodland at the project site.

The loss of this oak woodland habitat also constitutes a loss wildlife habitat .Therefore, implementation of Mitigation Measure Bio-3 is proposed.

Mitigation Measure Bio-3: Prepare and Implement an Oak Woodland Open Space Mitigation Plan.

Before issuance of a grading permit, the project applicant shall prepare an oak woodland mitigation plan for review and approval by the Town of Loomis that describes the methods by which a minimum of 7.96 acres of valley oak woodland within the Dry Creek watershed shall be conserved and protected as natural open space. The mitigation lands shall provide wildlife habitat values equal to or better than those at the project site, as determined by a qualified biologist in consultation with CDFW. The oak woodland mitigation plan can be implemented by securing a conservation easement to protect, enhance, and manage a minimum of 7.96 acres of valley oak woodland. Fees for implementing the conservation easement shall be calculated based on the Passive Park/Open Space Fee and current market value for preservation of similar oak woodland acreage within the Dry Creek watershed. The fees shall include endowment funds sufficient to manage the land in perpetuity to maintain the wildlife values of the oak woodland habitat.

The project applicant shall transfer the oak woodland mitigation land, through either a conservation easement or fee title, to a third-party, nonprofit conservation organization (known as the Conservation Operator), with the Town named as a third-party beneficiary. The Conservation Operator shall be a qualified conservation easement land manager that manages land as its primary function. Additionally, the Conservation Operator shall be a tax-exempt, nonprofit conservation organization that meets the criteria of Civil Code Section 815.3(a) and shall be selected or approved by the Town, after coordination with CDFW. The Town, after coordinating with CDFW and the Conservation Operator, shall approve the content and form of the conservation easement. The Town and the Conservation Operator shall each have the power to enforce the terms of the conservation easement. The Conservation Operator shall monitor the easement in perpetuity to ensure compliance with the terms of the easement.

Before grading permits for the project site are issued, the project applicant shall provide evidence to the Town of Loomis that the conservation easement has been recorded, or shall provide financial assurances to guarantee that adequate funding is available to implement the oak woodland open space mitigation plan described above.

Significance after Mitigation

Implementing Mitigation Measures Bio-2 and Bio-3 would reduce impacts of the proposed project on valley oak woodlands to **less than significant** because it would replace the valley oak woodland at the project site with 7.96 acres of equivalent habitat in the Dry Creek watershed that provided the same functions and wildlife values as that currently available at the project site.

Impact 3.4-4: Loss of Annual Grassland. *The proposed project would convert annual grassland to developed use, but the conversion would be reduced because it is a component of oak woodland habitat, which would be protected. This impact would be less than significant.*

The proposed project would convert 10.1 acres of annual grassland to developed use. Grassland is not considered sensitive, but it serves as foraging habitat for wildlife common to the project site. The conversion of grassland to developed use would be reduced by the fact that it is a component of oak woodland habitat, and implementation of Mitigation Measure Bio-3 (above) would by necessity include an annual grassland component. Impacts on annual grassland would be less than significant.

Impact 3.4-5: Loss and Disturbance of Habitat for Nesting Migratory Birds. *Conversion of the project site's oak woodlands and annual grassland to an urban land use would result in loss of nesting and foraging habitat and disturbance of potential nesting habitat for bird species protected under the MBTA. Construction activities could also disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact would be potentially significant.*

Vegetation removal and ground disturbance during project construction have the potential to destroy the active nests of common birds protected under the MBTA or California Fish and Game Code. Project construction could also indirectly disturb breeding birds, causing nest abandonment by the adults and mortality of chicks and eggs. Loss of the nests of common bird species (those not meeting the definition of special-status as provided above) such as mourning dove, acorn woodpecker, and western bluebird would not be a significant impact under CEQA because it would not result in a substantial effect on their local or regional populations; however, destruction of bird nests is a violation of the MBTA and Section 3503 of the California Fish and Game Code, and mitigation to avoid the loss of active nests of these species is required for compliance with these regulations. This impact would be **potentially significant**.

Mitigation Measure Bio-4: Avoid Direct Loss of Nesting Birds.

The project applicant shall implement the following measures to mitigate the loss of foraging and nesting habitat and avoid the direct loss or disturbance of nesting birds during construction:

- The project applicant shall implement Mitigation Measure Bio-3, "Prepare and Implement an Oak Woodland Mitigation Plan," to mitigate the loss of foraging and nesting habitat used by nesting migratory birds.
- Vegetation removal, grading, and other ground-disturbing activities shall be carried out during the nonbreeding season for protected bird species in this region (generally September 1–January 31). If no feasible option is available to conduct ground disturbing construction activities during the non-breeding season, the project applicant shall conduct a preconstruction nesting bird survey. The preconstruction survey shall be conducted by a qualified biologist on the project site and 250 feet beyond the project boundaries. The survey shall be conducted within 14 days before project activity begins.
- If an active nest of any bird species protected by the MBTA or California Fish and Game Code is found, the qualified biologist shall establish a buffer around the nest. No construction activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in consultation with CDFW. Buffer size is anticipated to range from 50 to 250 feet, depending on the species of bird, the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances, as determined by a qualified biologist in consultation with CDFW.
- Monitoring of all protected nests by a qualified biologist during construction activities shall be required if the activity has the potential to adversely affect the nests. If construction activities cause any nesting birds to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. No construction activities shall occur in the buffer area until a qualified biologist has determined that the chicks have fledged or that the nest is no longer active.

Significance after Mitigation

Implementing Mitigation Measure Bio-3 would reduce the impacts of project-related habitat loss on migratory birds that use valley oak woodlands to **less than significant** by replacing the nesting and foraging resources on the project site with comparable oak woodland habitat. Implementing Mitigation Measure Bio-4 would reduce the potential impacts of project construction activities on nesting migratory birds to **less than significant** by avoiding direct impacts on bird nests, and by minimizing disturbances during nesting that could result in nest abandonment and loss of eggs or young.

Impact 3.4-6: Loss and Disturbance of Habitat for Nesting Raptors, including Special-Status Raptors.

*Conversion of the project site's oak woodlands and annual grassland to an urban land use would result in the loss of nesting and foraging habitat and disturbance of potential nesting habitat for bird species protected under the MBTA. Project construction could disturb active raptor nests on or near the project site, including species such as Swainson's hawk, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact would be **potentially significant**.*

Construction of the proposed project would result in the loss of valley oak woodland and annual grassland, which provides suitable nesting and foraging habitat for several species of raptors. In addition, individual raptors could be lost as a result of construction activities. Vegetation removal, grading, and other construction activities associated with land use conversion could result in mortality of individuals and nest abandonment. If trees would be removed during the raptor breeding season (March–August), mortality of eggs and chicks of tree nesting raptors could result if an active nest were present. In addition, future development activities could disturb active nests near construction areas, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs.

All raptors and their active nests, including common species, are protected under Section 3503.5 of the California Fish and Game Code. Direct impacts on Swainson’s hawks nesting on or near the project site are unlikely because of the sparse record for this species in the project vicinity, and because the project site provides only marginal nesting and foraging habitat for Swainson’s hawk. However, the potential for this species to nest on or near the project site cannot be ruled out without surveys. The impact of construction-related nest abandonment or other disturbance resulting in the loss of eggs or young of special-status or common raptor species would be **potentially significant**.

Mitigation Measure Bio-5: Avoid Direct and Indirect Loss of Special-Status and Other Nesting Raptors.

The project applicant shall implement the following measures to mitigate the loss of raptor habitat and to avoid direct impacts on nesting raptors:

- The project applicant shall implement Mitigation Measure Bio-3, “Prepare and Implement an Oak Woodland Mitigation Plan,” to mitigate the loss of foraging and nesting habitat used by nesting raptors.
- Tree and vegetation removal shall be completed during the nonbreeding season for raptors in this region (generally September 1–January 31). If during pre-construction nesting bird surveys no active nests are discovered, exemptions may be approved following consultation with USFWS and CDFW.
- To avoid, minimize, and mitigate potential impacts on Swainson’s hawk and other raptors nesting on or adjacent to the project site, the project applicant shall retain a qualified biologist to conduct preconstruction surveys and identify active nests on and within 500 feet of the project site for construction activities conducted during the breeding season (March 1–August 31). Surveys for nesting Swainson’s hawks shall be conducted on the project site and within 0.25 mile of the project boundaries. The surveys shall be conducted before the Town approves grading and/or vegetation removal and no less than 14 days and no more than 30 days before the beginning of construction. If no nests are found, no further mitigation will be required.
- Impacts on nesting raptors shall be avoided by establishing appropriate buffers around active nest sites identified during preconstruction raptor surveys. The appropriate no-disturbance buffer for other raptor nests shall be determined by a qualified biologist based on site-specific conditions, the species of nesting bird, the nature of the project activity, the visibility of the disturbance from the nest site, and other relevant circumstances. If a nesting Swainson’s hawk is detected on or within 0.25 mile of the project site, CDFW shall be consulted to establish an appropriate nondisturbance buffer. No project construction shall commence within the buffer area until a qualified biologist has determined that the young have fledged or that the nest is no longer active.

Significance after Mitigation

Implementing Mitigation Measure Bio-3 would reduce the impacts of project-related habitat loss on nesting raptors to **less than significant** by replacing the nesting and foraging resources on the project site with comparable oak woodland habitat. Implementing Mitigation Measure Bio-5 would reduce the potential impacts of project construction activities on nesting raptors, including Swainson’s hawks, to **less than significant** by avoiding direct impacts on raptor nests, and by minimizing disturbances during nesting that could result in nest abandonment and loss of eggs or young.

Impact 3.4-7: Indirect Adverse Effects on Steelhead (Central Valley Distinct Population Segment). *Central Valley steelhead are found in Dry Creek and its tributaries Secret Ravine and Miners Ravine, located approximately 4 miles downstream of the project*

site. No direct impacts on this species are anticipated; however, the potential exists for indirect water quality effects from the construction site to adversely affect steelhead downstream. This impact would be **potentially significant**.

The proposed project would not result in any direct impacts on steelhead habitat because no spawning or rearing habitat or occupied tributary streams are found on the project site. However, the creation of impervious surfaces and increased runoff from the project site could indirectly affect downstream waters that eventually flow to Dry Creek and ultimately the American River. Potential indirect effects on downstream waters include a reduction in water quality caused by urban runoff, erosion, and siltation, and increased flow volumes or otherwise altered hydrology, which could adversely affect fish and other aquatic resources in downstream waters. Uncontrolled erosion from the developed site could generate sedimentation downstream, which could adversely affect spawning areas. Further, untreated stormwater runoff from on-site impervious surfaces could introduce contaminants that could cause potentially significant impacts on water quality in these tributaries, which currently support the life cycle of steelhead. This impact would be **potentially significant**.

Mitigation Measure Bio-6: Implement a Storm Water Pollution Prevention Plan and Best Management Practices.

The project applicant shall implement the storm water pollution prevention plan and BMPs described in Mitigation Measures Hydro-1 and Hydro-2, presented in Section 5.3.5, "Hydrology and Water Quality," of Chapter 5, "Other CEQA Requirements."

Significance after Mitigation

Implementing BMPs and other water quality protection measures described in Mitigation Measures Hydro-1 and Hydro-2 would reduce potential indirect impacts on downstream populations of steelhead to **less than significant**.

Impact 3.4-8: Potential Mortality and Loss of Habitat for Western Spadefoot Toad. *Project construction could eliminate habitat for western spadefoot toad and could kill or injure individuals of the species present on the project site. This impact would be potentially significant.*

The project site is within the range of western spadefoot toad, and wetland WS-1 (see Figure 3.4-2) provides marginally suitable habitat to support the species. No western spadefoot toad adults or larvae were observed during April 2017 field studies, but those field studies consisted of a habitat evaluation rather than focused surveys for aquatic species. Direct impacts on western spadefoot toads and loss of habitat for this special-status amphibian species would be **potentially significant**.

Mitigation Measure Bio-7: Conduct Western Spadefoot Toad Surveys and Implement Avoidance, Minimization, and Mitigation Measures.

The project applicant shall conduct focused surveys for western spadefoot toad using methods described in Fellers and Freel (1995) to determine whether this species occurs at the project site. These surveys should occur during the peak of breeding season (February to March) a maximum of 30 days prior to the start of construction. Surveys will be repeated if one year elapses between surveys and project related vegetation removal or ground disturbance has not occurred. If this species is determined to be absent, no mitigation is required. If the surveys detect the presence of western spadefoot toad at the project site, the wetland mitigation plan described in Mitigation Measure Bio-1, or the oak woodland habitat mitigation plan described in Mitigation Measure Bio-3, shall accommodate acquisition of habitat or a conservation easement for habitat that would support western spadefoot toad. The mitigation lands for western spadefoot toad shall provide habitat values equal to or greater than those provided at the project site, as determined by a qualified biologist in consultation with CDFW.

In addition, the following measures shall be implemented during construction:

- For work conducted during the migration and breeding season for western spadefoot toad (November 1–May 31), a qualified biologist shall survey the active work areas (including access roads)

in the mornings following measurable precipitation events (0.25 inch in a 24-hour period). Construction may commence once the biologist has confirmed that no spadefoot toads are in the work area.

- A 50-foot no-disturbance buffer shall be established around burrows that provide suitable upland habitat for western spadefoot toad. Burrows considered suitable for spadefoot shall be identified by a qualified biologist in consultation with CDFW. The biologist shall delineate and mark the no-disturbance buffer. No activity within the buffer shall occur until the qualified biologist verifies that the burrow is not actively used by the species. One-way doors, observation of emergence, or other methods to ensure the species has vacated the burrow must be used prior to collapsing the burrow. The buffer may be removed once the burrow has been cleared and collapsed.
- If western spadefoot toad is found within the construction footprint, it shall be allowed to move out of harm's way of its own volition or a qualified biologist shall relocate the organism to the nearest burrow outside the construction impact area.
- Before beginning work each day, a qualified biologist shall inspect areas underneath equipment and stored pipes larger than 1.2 inches (3 centimeters) in diameter for western spadefoot toad. If any are found, they shall be allowed to move out of the construction area under their own accord.
- Trenches and holes shall be covered and inspected daily for stranded animals. Trenches and holes deeper than 1 foot shall contain escape ramps (maximum slope of 2:1) to allow trapped animals to escape uncovered holes or trenches. Holes and trenches shall be inspected before filling.

Significance after Mitigation

Implementing Mitigation Measure Bio-7 would reduce the project-related loss of western spadefoot toad habitat and potential direct impacts of project construction on western spadefoot toads to **less than significant** because habitat would be replaced with suitable mitigation lands and direct impacts would be avoided.

3.4.4 Significance after Mitigation

Implementation of Mitigation Measures Bio-1 through Bio-7, combined with measures to address hydrology and water quality, would reduce project-related impacts to a less-than-significant level. The project would not result in any unavoidable significant impacts on biological resources with application of BMPs and recommended mitigation.

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