

4.3 BIOLOGICAL RESOURCES

This section evaluates the potential effects on biological resources associated with development and operation of The Village at Loomis (proposed project). This section describes the biological resources present within the project site; identifies special-status plant and wildlife species that are known to occur or potentially occur within the project site; outlines applicable federal, state, and regional regulations pertaining to protection of plant and wildlife species; evaluates potential project-specific impacts on biological resources; identifies mitigation measures to minimize these impacts; and evaluates the degree to which the project could contribute to cumulative impacts. Information to prepare this section is based on a Biological Resources Assessment for the 66.4-acre Village at Loomis Study Area prepared by Salix Consulting (April 2014), a Rare Plant Survey prepared by Barry Anderson Consulting Biologist (May 2014), a Wetland Delineation for the 66.4-acre Village at Loomis Study Area prepared by Salix Consulting (December 2014), and an Initial Arborist Report and Protected Tree Inventory Summary prepared by Sierra Nevada Arborists (April 2014). Copies of these reports are included in Appendix C to this draft environmental impact report (EIR).

No comments were received in response to the Notice of Preparation that addressed biological resources issues or concerns. The Notice of Preparation and comments received in response to that document are provided in Appendix A to this EIR.

4.3.1 Environmental Setting

Regional and Local Setting

The ±66-acre project site is located in the Town of Loomis adjacent to the north side of Interstate 80 (I-80), between King Road and Horseshoe Bar Road. The project site is located within the U.S. Geological Survey (USGS) Rocklin Quadrangle map. Habitats recognized on site include live oak woodland, valley oak woodland, annual grassland, and riparian. Although the majority of the site is vacant land, six dwelling units and one commercial building are located in the western portion of the site. Three of the existing dwellings on site are located off Horseshoe Bar Road, two are accessible from Laird Street, and one from Library Drive. The commercial building is located on Horseshoe Bar Road. Surrounding land uses include residential developments to the north and west, Raley's grocery store and commercial land uses to the south, and vacant land to the east across I-80, which runs along the southeastern property boundary.

The elevation within the project site ranges between 370 feet and 410 feet above mean sea level. Annual precipitation in the project vicinity is approximately 22 inches, and the average temperature is 62°F (Western Regional Climate Center 2016). The majority of the site slopes down to an unnamed tributary to Secret Ravine that runs through the central portion of the project site.

The study area includes the entire ±66-acre site, which is composed of 13 parcels. Two large parcels form the majority of the project site, one parcel is 7.8 acres, and the remaining nine parcels are generally 5 acres or less. Parcel 043-080-015 comprises approximately 24 acres and is generally located at the southern terminus of Day Avenue. The second large vacant parcel, 043-080-044, comprises approximately 29 acres and is located at the eastern terminus of Library Drive.

Biological Communities

The project site consists of ±66 acres composed mostly of annual grassland (22.5 acres) and interior live oak woodland habitats (31.4 acres). The remaining habitat and associated acreage is composed of riparian wetland habitat (5.6 acres), valley oak woodland (4.4 acres), wetlands, and rural residential (2.5 acres), as displayed in Figure 4.3-1, Habitat Map. The habitat map also indicates mapped wetlands and waters of the US as an overlay, indicating where wetlands occur within these habitat designations.

The project site supports a wide diversity of wildlife due to the abundance of trees, the perennial drainage that provides a year-round source of water, and the unusually high number of snags that provide nesting cavities for many bird species.

Annual Grassland

Annual grassland habitat (see Figure 4.3-1) occupies approximately 22.5 acres within the project site and is composed primarily of weedy grass species. Many of these species also occur as understory plants in foothill woodlands. The most common and abundant species in the annual grassland include wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), garden vetch and winter vetch (*Vicia sativa* and *V. villosa*), longbeak stork's bill (*Erodium botrys*), narrowleaf plantain (*Plantago lanceolata*), shortpod mustard (*Hirschfeldia incana*), Menzies' fiddleneck (*Amsinckia menziesii*), soft brome (*Bromus hordeaceus*), bristly dogstail grass (*Cynosurus echinatus*), yellow star-thistle (*Centaurea solstitialis*), and prickly lettuce (*Lactuca serriola*). Poison oak (*Toxicodendron diversilobum*) is often found growing on rock outcrops scattered throughout the project site. Much of the grassland is periodically mowed for fire suppression. The western portion of the site experiences temporary disturbances due to use of this area as a temporary parking lot for local community events.

Many wildlife species use annual grasslands for foraging for all or part of their life cycles. Wildlife observed in the annual grassland includes western fence lizard (*Sceloporus occidentalis*), mourning dove (*Zenaida macroura*), western scrub-jay (*Aphelocoma californica*), bushtit (*Psaltriparus minimus*), dark-eyed junco (*Junco hyemalis*), American goldfinch (*Spinus tristis*), and house sparrow (*Passer domesticus*).

Valley Oak Woodland and Interior Live Oak Woodland

Valley oak woodland habitat within the site occupies approximately 4.4 acres located in the northeastern corner of the site and surrounding the riparian wetland habitat on site. The interior live oak woodland habitat covers 31.4 acres of the site and is located throughout the property. The woodland habitat is characterized predominantly by high numbers of native oak trees (*Quercus* spp.) that create a substantial canopy cover. The woodland on site includes valley oak (*Q. lobata*), blue oak (*Q. douglasii*), foothill pine (*Pinus sabiniana*), and interior live oak (*Q. wislizeni*) trees. The shrub layer is very dense in some locations and includes California buckeye (*Aesculus californica*), poison oak, Himalayan blackberry (*Rubus armeniacus*), chaparral honeysuckle (*Lonicera interrupta*), and toyon (*Heteromeles arbutifolia*). The herbaceous layer is composed of many similar species to those found in the annual grassland but includes other common species such as stickywilly (*Galium aparine*), miner's lettuce (*Claytonia perfoliata*), wavyleaf soap plant (*Chlorogalum pomeridianum*), and longbeak stork's bill. Wetland features, such as seasonal wetlands and swales, are embedded within the foothill woodland habitat.

These woodlands provide food and cover for many species of wildlife. Oaks have long been considered important to some birds and mammals as a food resource (for example, acorns, leaves, and twigs). Verner and Boss (1980) reported that 30 bird species known to use foothill oak habitats in California include acorns in their diet. Wildlife observed in the woodland includes Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), white-breasted nuthatch (*Sitta carolinensis*), and Bewick's wren (*Thryomanes bewickii*).

Riparian

Riparian wetland habitat occupies approximately 5.6 acres and occurs in the central portion of the project site along the unnamed tributary to Secret Ravine. This area is a wide mosaic of wetland and upland vegetation. The overstory includes large Fremont cottonwoods (*Populus fremontii*) and valley oaks along the edge. Other species include Goodding's willow (*Salix gooddingii*), red willow (*S. laevigata*), and arroyo willow (*S. lasiolepis*). The stream is a braided network of slow-moving waterways that supports common freshwater marsh species including broadleaf cattail (*Typha latifolia*), curlytop knotweed (*Persicaria lapathifolia*), watercress (*Nasturtium officinale*), broadleaf arrowhead (*Sagittaria latifolia*), and rice cutgrass (*Leersia oryzoides*). Much of the riparian wetland contained either saturated soils or standing water less than a few inches deep during the site survey in March 2014. On the outer (drier) edge of the riparian community, interior live oaks represent the transition to foothill woodland.

Riparian habitat provides food, water, migration and dispersal corridors, nesting habitat and thermal cover for several species of wildlife. Species observed in the riparian area included red-

tailed hawk (*Buteo jamaicensis*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), and lesser goldfinch (*Spinus psaltria*).

Waters of the United States

A wetland delineation for the project site was completed in April 2014 and submitted to the U.S. Army Corps of Engineers (Corps) for verification. The wetland delineation was revised in December 2014 based on feedback from the Corps following a site visit in September 2014. The Corps submitted a Preliminary Jurisdictional Determination on January 22, 2015, verifying the wetland delineation conclusion that the site supports approximately 6.04 acres of wetlands.

Six categories of waters of the United States have been mapped in the study area: perennial stream, intermittent streams, riparian wetland, seasonal wetland, wetland swale, and drainage ditch, shown on Figure 4.3-2, Wetland Delineation Map, and summarized in Table 4.3-1. An unnamed perennial tributary to Secret Ravine flows through a large riparian wetland area in the central portion of the site and exits the property via a culvert under I-80. The perennial stream originates from a culvert that flows beneath the residential subdivision located north of the project site and outfalls into the large riparian wetland area.

Table 4.3-1
Waters of the United States on the Project Site

Type	Acreage
<i>Other Waters</i>	
Perennial Stream	0.31
Drainage Ditches	<0.01
Intermittent Streams	<0.01
<i>Total Other Waters</i>	<i>0.32</i>
<i>Wetlands</i>	
Wetland Swales (3 separate swales occur)	0.44
Seasonal Wetland (3 separate seasonal wetlands occur)	0.02
Riparian Wetland	5.26
<i>Total Wetlands</i>	<i>5.72</i>
Total Waters of the United States	6.04

Source: Salix Consulting 2014 (Appendix C).

Perennial Stream

Perennial streams, unlike ephemeral or intermittent streams, flow year-round. The unnamed tributary to Secret Ravine that crosses the center of the site from north to south was mapped as a perennial stream totaling 0.31 acre. The stream is represented as a broken blue line feature on the

USGS Rocklin Quadrangle map. The stream appears to carry water originating as urban runoff from the residential subdivision north of the project site.

The slope between the subdivision and I-80 is approximately a 5% gradient decline. The stream exits the site through a large culvert under I-80 and eventually connects to Secret Ravine, less than 0.5 mile south of the project site. The stream system supports many hydrophytic species in the herbaceous layer, shrub layer, and tree layer.

The unnamed tributary drains into Secret Ravine, which is a major tributary to Dry Creek. Dry Creek drains into the Natomas Main Drainage Canal and ultimately into the Sacramento River.

Riparian Wetland

The riparian wetland surrounds the perennial stream, and provides a well-developed habitat. The riparian wetland waters of the United States type is a subset of the larger riparian habitat area described previously. Much of the riparian wetland contained either saturated soils or standing water less than a few inches deep at the time of the March 2014 field assessments. A total of 5.26 acres of the riparian wetland category of waters of the United States occur on site.

Wetland Swale

Wetland swales are water conveyance features that do not develop the bed-and-bank morphology typical of streams. Moreover, they usually have wetland soils and are vegetated with wetland species. Three wetland swales (WS-1, WS-2, and WS-3), totaling 0.44 acre, were mapped in the central portion of the site. WS-1 runs through the center of the project site and drains into the on-site perennial stream. WS-1 appears to carry stormwater runoff and may also be charged by a high groundwater table. Vegetation within the swale includes denseflower willowherb (*Epilobium densiflorum*), irisleaf rush (*Juncus xiphioides*), and Italian ryegrass (*Festuca perennis*).

WS-2 is located in the northeastern portion of the project site. The swale drains off site toward I-80, where it apparently enters the storm drain system. Large valley oak trees and Fremont cottonwoods are rooted within the wetland swale. The edges and drier portions of the swale include interior live oak trees and California buckeye. The understory is a dense cover of Himalayan blackberry with sporadic patches of irisleaf rush. WS-3 is located in the central portion of the project site and flows from the northwest and also drains into the perennial stream in the center of the site.

Drainage Ditch

Two drainage ditches are located in the northern portion of the project site. One is located in the northeast portion of the site and appears to drain water from the adjacent subdivision and from

north of King Road. It daylight into the site in an open, blackberry-lined channel and flows south into a culvert that transports water under I-80. The second drainage ditch is located southeast of Silver Ranch Avenue and drains from the David Avenue subdivision. Each ditch is less than 0.01 acres in size.

Seasonal Wetland

Three seasonal wetlands are identified on the project site totaling 0.02 acres. Seasonal wetland 1 (SW-1) is located in the eastern portion of the site at the bottom of a swale that is contained by the toe slope of I-80. It is located under a dense canopy of buckeye and live oak (*Quercus agrifolia*) and supports little vegetation. SW-2 is located in the western portion of the site and is a depression along a shallow swale that primarily contains ryegrass. SW-3 is located at a culvert outfall along a gravel road that stubs into I-80. It is a small depression that supports curly dock (*Rumex crispus*).

Native Trees

The arborist report (see Appendix C) identified a total of 1,945 trees within the portions of the project site that are proposed for development. Of these trees, 1,684 are protected trees, which are those that meet the Town's Tree Conservation Ordinance standards (outlined under Regulatory Setting). Of the 1,945 trees inventoried, 261 are not protected by the Town's ordinance or are dead, and 242 protected trees are recommended for removal due to compromised health and/or structural instability. The trees within the proposed open space areas were not inventoried and are not proposed for removal.

Wildlife Occurrence

The project site supports a diversity of wildlife due to the number of trees that provide roosting and nesting sites, a wide variety of food sources, and the water sources on site. The following birds and animals were observed in the annual grassland and foothill woodland areas during the field surveys: California quail (*Callipepla californica*), northern flicker (*Colaptes auratus*), white-breasted nuthatch, wild turkey (*Meleagris gallopavo*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), ruby-crowned kinglet (*Regulus calendula*), orange-crowned warbler (*Oreothlypis celata*), yellow-rumped warbler (*Setophaga coronata*), spotted towhee, California towhee (*Melospiza crissalis*), and savannah sparrow (*Passerculus sandwichensis*). Red-tailed hawks and a white-tailed kite (*Elanus leucurus*) were also observed flying over the project site. Within the riparian wetland area, bird activity was high and black phoebe (*Sayornis nigricans*), marsh wren (*Cistothorus palustris*), red-shouldered hawk (*Buteo lineatus*), and acorn woodpecker were observed.

Common urban wildlife known to use the project site include coyote (*Canis latrans*), raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginianus*), and mule deer (*Odocoileus hemionus*). Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Spermophilus* (*Otospermophilus*) *beecheyi*), and other small rodents were also observed in the grassland and woodland habitats.

Special-Status Species

Federal and state endangered species legislation gives special status to several plant and animal species known to occur in the vicinity of the project site. In addition, state resource agencies and professional organizations, whose lists are recognized by agencies when reviewing environmental documents, have identified some species occurring in the vicinity of the project site as sensitive. Such species are referred to collectively as “special-status species.”

The Biological Resources Assessment (see Appendix C) included the results from a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDDB) in April 2014 providing location records for special-status species known to occur in the region surrounding the study area. Quadrangles included in the query were Clarksville, Folsom, Citrus Heights, Auburn, Gold Hill, Rocklin, Pilot Hill, Lincoln, and Roseville. The Biological Resources Assessment also includes a review of the special-status species lists for the Rocklin USGS quadrangle and Placer County created by the U.S. Fish and Wildlife Service (USFWS). The California Native Plant Society (CNPS) Inventory was also checked in April 2014 for special-status plants occurring in the area. Figure 4.3-3, CNDDDB Species Occurrence Locations, shows the known occurrence locations of the special-status species in the region. A new CNDDDB and CNPS search was performed by Dudek in December 2014 (at the time the Notice of Preparation was provided for public review) to capture species updates since the April 2014 search. These results are also included in Appendix C to this draft EIR.

For the purposes of this section, special-status species are those that fall into one or more of the following categories:

- Listed as endangered or threatened under the federal Endangered Species Act (FESA) (including candidates and species proposed for listing)
- Listed as endangered or threatened under the California Endangered Species Act (CESA) (including candidates and species proposed for listing)
- Designated as rare, protected, or fully protected pursuant to California Fish and Game Code
- Designated a Species of Concern by the CDFW
- Defined as rare or endangered under Section 15380 of the California Environmental Quality Act (CEQA)

- Listed as California Rare Plant Rank (CRPR) 1, 2, 3, or 4 by the CNPS

The list of special-status species in the region of the project site includes 24 plant species and 24 animal species. Of the 24 plant species listed, nine were identified as having potential to occur on site based on the presence of suitable habitat and the species occurrence within or near a 5-mile radius of the project site. Of the 24 animal species listed, five were identified as having potential to occur on site based on the same criteria. The remaining plant and animal species were removed from consideration due to lack of suitable habitat. Table 4.3-2 provides a summary of the species considered to have potential to occur on site, presented in more detail in the paragraphs following the table. The potential for occurrence of each species was classified as follows:

- **Low.** Some habitat may occur on the site, but prior disturbance or other activities may restrict or eliminate the possibility of the species occurring. Habitat may be very marginal, or the site may be outside the range of the species.
- **Moderate.** Marginal to suitable habitat occurs on the site.
- **High.** Good habitat occurs, but the species was not observed during surveys.
- **Occurs.** Species was observed during surveys.

**Table 4.3-2
Special-Status Species with Potential to Occur on The Village at Loomis Project Site**

Species	Habitat	CNPS	CDFW	USFWS	Potential to Occur
<i>Plants</i>					
Big-scale balsamroot <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentinite; elevation 300–4,600 feet	1B.2	—	—	Moderate. Marginal habitat present.
Hispid bird's beak <i>Cordylanthus mollis</i> ssp. <i>Hispidus</i>	Meadows and seeps, playas, valley and foothill grassland; elevation 0–500 feet	1B.1	—	—	None. No suitable habitat on site.
Dwarf calicoflower <i>Downingia pusilla</i>	Valley and foothill grassland (mesic), vernal pools; elevation 0–1,500 feet	2B.2	—	—	None. No suitable habitat on site.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	Marshes and swamps (lake margins), vernal pools; elevation 30–9,000 feet	1B.2	CE	—	None. No suitable habitat on site.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	Valley and foothill grassland; elevation 90–600 feet	1B	—	—	Low. Marginal habitat exists on site.
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; elevation 90–2,800 feet	1B.2	—	—	Moderate. Potential habitat for this species exists on site.
False Venus' looking glass	Vernal pools; elevation 0–2,500 feet	1B.2	—	—	None. No suitable

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Special-Status Species with Potential to Occur on The Village at Loomis Project Site**

Species	Habitat	CNPS	CDFW	USFWS	Potential to Occur
<i>Legenere limosa</i>					habitat on site.
Pincushion navarretia <i>Navarretia myersii</i>	Vernal pools; elevation 60–1,200 feet	1B.1	—	—	None. No suitable habitat on site.
Sanford's arrowhead <i>Sagittaria sanfordii</i>	Marshes and swamps (assorted shallow freshwater); elevation 0–2,100 feet	1B	—	—	Low. Marginal habitat exists on site.
<i>Wildlife</i>					
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Primarily in vernal pools and seasonal wetlands that fill with water during fall and winter rains and dry up in spring and summer.	—	—	FT	Low. The seasonal wetland and swales provide potential habitat for this species; however, the site is outside the typical range for this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	Associated with low-alkalinity seasonal pools in unplowed grasslands. Found only in ephemeral freshwater habitats, including alkaline pools, clay flats, vernal lakes, vernal pools, vernal swales, and other seasonal wetlands in California.	—	—	FE	Low. The seasonal wetlands provide potential habitat for this species; however, periodic mowing and other disturbance limit the quality of the habitat for this species.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	Elderberry (<i>Sambucus nigra caerulea</i>) shrubs in woodland and riparian habitats.	—	FT	—	High. Four elderberry shrubs occur on site.
Western spadefoot <i>Spea hammondi</i>	Requires vernal pools, seasonal wetlands, or stock ponds for breeding	—	SSC	—	None. No suitable breeding habitat on site.
California red-legged frog <i>Rana draytonii</i>	Deeper pools and streams with emergent or overhanging vegetation	—	SSC	FT	Low. Outside current range of species. Low quality habitat on site.
Western pond turtle <i>Emys marmorata</i>	Permanent aquatic habitats with suitable basking sites and adjacent upland habitat.	—	SSC	—	Low. Marginally quality habitat in riparian wetland (lacks ponds).
Tricolored blackbird (nesting colonies) <i>Agelaius tricolor</i>	Open water areas with tall emergent vegetation or in willow and blackberry thickets	—	SSC	—	Moderate. Suitable nesting habitat occurs within riparian wetland.
Grasshopper sparrow (nesting) <i>Ammodramus savannarum</i>	Dry, dense grasslands, often native grassland, or foothills and Central Valley	—	SSC	—	Low. Marginal quality nesting habitat present on site. Very rare within

**Table 4.3-2
Special-Status Species with Potential to Occur on The Village at Loomis Project Site**

Species	Habitat	CNPS	CDFW	USFWS	Potential to Occur
					project region.
White-tailed kite (nesting) <i>Elanus leucurus</i>	Open grassland, meadows, and farmlands. Nests in tall trees near foraging areas.	—	CFP	—	Moderate. Suitable nesting and foraging habitat present throughout site. Observed foraging on site during field assessment.
Bald eagle (nesting and wintering) <i>Haliaeetus leucocephalus</i>	Lake margins and rivers. Nests in large old-growth trees.	—	CE CFP	—	None. No suitable nesting habitat present.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Inhabits salt, fresh or brackish water marshes with little fluctuations. In freshwater the preference is for dense bulrush and cattails.	—	CT	—	Moderate. Suitable habitat occurs in association with riparian wetland in central portion of site.
Purple martin (nesting) <i>Progne subis</i>	Summer visitor of woodlands and low-elevation coniferous forests.	—	SSC	—	Moderate. Suitable nesting habitat in snags and tree cavities throughout site.
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes.	—	CE	FT	Low. The urban nature of the site surroundings likely precludes this species from occurring on site.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	Roosts in caves and mines or other human-made structures	—	SSC	—	None. No suitable habitat present.

Federal:

FE - Federal Endangered

FT - Federal Threatened

State:

CE - California Endangered

CT - California Threatened

CR - California Rare

Other:

CNPS—

CRPR 1B Rare, threatened or endangered in California

CRPR 2 R, T, or E in California, more common elsewhere

1 – Seriously threatened in California

2 – Fairly threatened in California

Plants

Several special-status plants are known to occur in the surrounding region but require habitats that do not occur within the project site. Species that have moderate to high potential to occur on the project site are described in the following paragraphs.

Big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) is an herbaceous perennial member of the sunflower family (Asteraceae). It has no state or federal status, but it is listed as CRPR 1B. This species has large yellow flowering heads and leaves that arise from the ground. It differs, in part, from other balsamroots by having coarsely serrate leaves. Big-scale balsamroot grows in open woodlands and grasslands at widely scattered locations in Northern California, and will tolerate serpentine soil. It blooms from March to June.

Dwarf calicoflower (*Downingia pusilla*) is an annual herb in the bellflower family (*Campanulaceae*). It is not state or federally listed, but it is listed as CRPR 1B. This species has an erect stem with lanceolate or awl-like leaves with terminal blue or white flowers that bloom from March to May. It grows in valley or foothill grassland and vernal pool habitats. This species typically occurs in the Central Valley generally to the west of the project site and is not known to occur in the project area; however, potential habitat for this species occurs on site.

Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*) is an annual herb in the rush family (*Juncaceae*). It is not state or federally listed, but it is listed as CRPR 1B. This species has a cylindric or flat stem with leaves that often closely resemble the stem. Red Bluff dwarf rush blooms from March to June and grows in vernal mesic habitats including cismontane woodland, chaparral, meadows and seeps, valley and foothill grassland and vernal pools.

None of these special-status plant species were observed during the May 30, 2014, site visit, as indicated in the Rare Plant Survey (see Appendix C).

Wildlife

Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is a federally listed threatened insect species that requires elderberry shrubs (*Sambucus nigra caerulea*) for most of its life cycle. This species uses shrubs with stem diameters at ground level of 1.0 inch or greater. Use of the plants by the beetle is rarely apparent. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole created by the larva just before the pupal stage.

The beetle's current distribution is patchy throughout the remaining riparian forests of the Central Valley from Redding to Bakersfield and associated foothills from approximately 3,000 feet in elevation on the east and the watershed for the Central Valley on the west. The beetle

appears to be only locally common (i.e., found in population clusters that are not evenly distributed across the Central Valley).

Suitable habitat for valley elderberry longhorn beetle in the form of individual elderberry shrubs was observed in four locations within the study area during the March 2014 field surveys. Each shrub was inspected for exit holes and all the stems measured. Table 4.3-3 summarizes the valley elderberry longhorn beetle survey data.

**Table 4.3-3
Elderberry Shrub Location and Stem Count Summary**

Location	Exit Holes Present?	No. of Stems with Diameter 1–3 Inches	No. of Stems with Diameter >3 to <5 Inches	No. of Stems with Diameter 5 Inches or Greater
E1. Located in non-riparian area in north-central portion of site. Occurs in annual grassland just south of subdivision	Yes	1	1	7
E2. Located in non-riparian area in northeastern portion of site. Occurs in annual grassland just south of King Road.	Yes	10	0	1
E3. Located in non-riparian area in northeastern portion of site. Occurs just inside the edge of foothill woodland located east of subdivision.	Yes	3	0	1
E4. Located in non-riparian area just to the west of E3 in dense area of live oak and buckeye.	No	2	1	0
Total Number of Stems for Study Area		16	2	9

Source: Salix Consulting 2014 (see Appendix C).

Tricolored blackbird (*Agelaius tricolor*) is a highly colonial species that primarily nests in freshwater emergent wetlands of the Central Valley, but is also known from the adjacent foothills of the Sierra Nevada (Shuford and Gardali 2008, as cited in Salix 2014 (see Appendix C)). Nesting colonies of this species have been documented to occur both on the floor of the Sacramento and San Joaquin valleys and in the foothills. It is noted that the California Fish and Game Commission decided on June 11, 2015, not to list this species as threatened under the CESA; however, nesting colonies are still considered sensitive by CDFW. This species generally requires open water, with protected nesting habitat, and suitable foraging areas close to the colony. Breeding and nesting typically takes place in dense cattails or tules, but is also documented in thickets of willow, blackberry, wild rose, and tall herbs (Shuford and Gardali 2008, as cited in Salix 2014 (see Appendix C)). Nests are usually located a few feet over, or near, freshwater. Nesting colonies can vary in size from a minimum of 50 nests to more than 20,000 in an area of 10 acres or less (Shuford and Gardali 2008, as cited in Salix 2014 (see Appendix C)).

Within the project region, the CNDDDB has documented nesting colonies of tri-colored blackbird to the northwest in the Lincoln area and to the south near Granite Bay and Folsom (CDFW 2014). The closest documented occurrence is from approximately 6 miles south of the study area in Granite Bay. This 1997 occurrence was located in a freshwater marsh dominated by cattails and surrounded by development. In 2000 a nesting colony of tricolored blackbirds was documented in a shallow farm pond approximately 7 to 8 miles northwest of the study area. Within the study area, suitable habitat to support a nesting colony of tricolored blackbird occurs in association with the riparian wetland in the central portion of the site. The riparian wetland provides habitat components considered suitable for nesting, including persistent water and sturdy emergent or riparian vegetation, located near foraging areas. The freshwater marsh and thickets of willow and blackberry in the riparian wetland provide suitable habitat for the species.

White tailed kite (*Elanus leucurus*), a California fully protected species, is typically found in grassy foothill slopes interspersed with oaks (including interior live oak, agricultural areas, and marshy bottomlands). They generally forage in undisturbed open grasslands, farmlands, meadows, and emergent wetlands, in areas with a high prey base. Nest trees range from single isolated trees to trees within larger stands. Nests of white-tailed kite are constructed near the top of oaks, willows, or other tall trees from 20 to 100 feet above ground. Breeding takes place from February to October, with peak activity from May to August. Incubation lasts between 28 and 30 days, and young usually fledge by October (Zeiner et al. 1990a, as cited in Salix 2014 (see Appendix C)).

The CNDDDB documents nesting occurrences of white-tailed kite within the project region (CDFW 2014). The closest documented nesting occurrence is from Traylor Ranch to the northwest and just west of Penryn. Woodland areas located throughout the site provide suitable nesting habitat for the species, due to the presence of adjacent foraging areas. One white-tailed kite was observed foraging in open grassland in the northeast portion of the project site during the field survey. Based on the presence of suitable habitat and observation of the species foraging on site, it is possible for white-tailed kite to nest in foothill woodland habitats of the study area.

California black rail (*Laterallus jamaicensis coturniculus*) is a state-listed threatened species that inhabits salt, fresh, and brackish water marshes. In freshwater habitats, their preference is for dense bulrushes (Cyperaceae) and cattails. They require marshes with little daily and/or annual water fluctuations to provide adequate cover from predators and to conceal nest sites. Their nests are concealed in dense vegetation, usually consisting of pickleweed and tall grasses. Several scattered populations of California black rail have been documented from Butte County to southern Nevada County in the Sierra Foothills.

The riparian area with emergent wetland vegetation that occurs along the central portion of the study area supports a large contiguous path of dense cattails and bulrushes. The CNDDDB

documents only two occurrences of California black rail within the project region (CDFW 2014). The black rail was previously detected in a wetland area associated with Clover Valley Creek, approximately 2 miles west-northwest of the project site. The on-site riparian wetland provides habitat considered suitable for the species. The likelihood of observing this rare and secretive bird is low; however, due to the quality of the habitat on site and a known occurrence within 5 miles, the California black rail could occur on site.

Purple martin (*Progne subis*) is an uncommon to rare, local summer resident in low elevation woodlands of California (Shuford and Gardali 2008, as cited in Salix 2014 (see Appendix C)). They occur in a variety of woodlands, including oak woodland and riparian communities, and in low-elevation coniferous forests. Nesting usually takes place in tall, old trees or snags located near water. Nests are constructed in old woodpecker cavities, but are occasionally constructed in artificial structures such as culverts or under bridges. Purple martins arrive from South America in late March. Breeding then takes place from April to August, with peak activity in June. Depending on site availability, purple martins will sometimes nest colonially. Young of this species fledge at approximately 24 to 31 days (Zeiner et al. 1990, as cited in Salix 2014 (see Appendix C)).

The CNDDDB documents only one known occurrence of purple martin within the project region. This occurrence is from the southwest near the Highway 65 overpass over Taylor Road. Snags and tree cavities throughout the site, many of which are located within and near the riparian wetland, provide suitable nesting habitat for purple martin. Therefore, despite the rarity of this species within the region, nesting of purple martin within the project site is considered possible.

4.3.2 Regulatory Setting

Federal Regulations

Federal Endangered Species Act

Projects that would result in impacts to federally listed threatened or endangered species are required to comply with the FESA, which is administered by USFWS. Section 9 of the FESA prohibits unauthorized take of listed species. “Take” is defined by the FESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has further defined the terms “harass” and “harm.” “Harassment” is defined as an act that “creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering.” “Harm” is defined to include the following: “significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.”

The ESA defines “incidental take” as take that is incidental to, and not the purpose of, an otherwise lawful activity. Incidental take of listed species can be authorized by USFWS as long as the incidental take will not result in extinction of the species.

FESA compliance for projects that may affect federally listed species can be accomplished by federal agencies under Section 7 of the FESA or by private parties or non-federal agencies under Section 10 of the FESA. The objective under Section 7 of the FESA is to determine whether a federally funded or federally authorized project would adversely affect a listed species or designated critical habitat, and to identify measures necessary to reduce impacts to the species to an acceptable level. Section 10 of the FESA applies when there is no federal nexus, i.e., when no federal agencies are involved with the project. Different standards apply in the two different contexts. For example, under Section 7, the participating federal agencies must consider whether a proposed action could destroy or adversely modify critical habitat. This inquiry is not specifically required under Section 10.

Section 404 of the Clean Water Act

The Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredge and fill material into waters of the U.S. under Section 404 of the Clean Water Act. Waters of the U.S. are defined as “all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.” These include the following:

- All interstate waters including interstate wetlands
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds
- All impoundments of waters otherwise defined as waters of the United States under the definition
- Tributaries of waters
- Territorial seas
- Wetlands adjacent to waters (other than waters that are themselves wetlands)

The Corps will typically exert jurisdiction over that portion of the project site that contains waters of the United States. This jurisdiction includes approximately the bank-to-bank portion of a creek up to the ordinary high water mark along its entire length, and adjacent wetland areas.

Section 401 of the Clean Water Act

The State Water Resources Control Board has authority over discharges of dredged or fill material into waters of the United States through Section 401 of the Clean Water Act, which requires that an applicant for a Section 404 permit also obtain certification from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the State Water Resources Control Board to the nine regional boards. The Central Valley Regional Water Quality Control Board is the appointed authority for Section 401 compliance in the project area. Once an application is filed with the Corps, a request for certification or waiver must be submitted to the regional board. The regional board has 60 days to review the application and act on it. If a CEQA document is being prepared for the project requesting the certification, the CEQA document must first be certified before the regional board can issue the water quality certification. Because no Corps permit is valid under the Clean Water Act unless certified by the state, these boards may effectively veto or add conditions to any Corps permit.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 U.S.C., Section 703, Supplement I, 1989) regulates and prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 of the Code of Federal Regulations, Section 10.13. This international treaty for the conservation and management of bird species that migrate through more than one country is enforced in the United States by the USFWS. Additionally, as discussed below, Section 3513 of the California Fish and Game Code states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. This provides CDFW with enforcement authority for project-related impacts that would result in the take of bird species protected under the Migratory Bird Treaty Act. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 of the Code of Federal Regulations, Section 20. The Migratory Bird Treaty Act was amended in 1972 to include protection for migratory birds of prey (raptors).

State Regulations

California Endangered Species Act

The CESA, established under California Fish and Game Code Section 2050 et seq., identifies measures to ensure that endangered species and their habitats are conserved, protected, restored, and enhanced. The CESA restricts the take of plant and wildlife species listed by the state as endangered or threatened, as well as candidates for listing. Section 86 of the California Fish and Game Code defines “take” as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Under Section 2081(b) of the Fish and Game Code, CDFW has the authority to issue permits for incidental take for otherwise lawful activities. Under this section,

CDFW may authorize incidental take, but the take must be minimal and permittees must fully mitigate project impacts. CDFW cannot issue permits for projects that would jeopardize the continued existence of state listed species.

CDFW maintains lists for Candidate-Endangered Species and Candidate-Threatened Species. Candidate species and listed species are given equal protection under the law. CDFW also lists Species of Special Concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. Designation of Species of Special Concern is intended by CDFW to be used as a management tool for consideration in future land use decisions; these species do not receive protection under the CESA or any section of the California Fish and Game Code, and do not necessarily meet CEQA Guidelines Section 15380 criteria as rare, threatened, endangered, or of other public concern (14 CCR 15000 et seq.). The determination of significance for California Species of Special Concern must be made on a case-by-case basis.

Section 2080.1 of the California Fish and Game Code stipulates that for persons obtaining incidental take statements or permits from the Department of the Interior (e.g., USFWS) for a federally listed species that is also state listed or a candidate for state listing, no further authorization or approval is necessary under CESA for that person to take that listed species if that person does both of the following:

1. Notifies CDFW in writing that the person has received an incidental take statement or an incidental take permit issued pursuant to the FESA; and
2. Includes in the notice to CDFW a copy of the incidental take statement or incidental take permit.

CDFW publishes receipt of the notice in the General Public Interest section of the California Regulatory Notice Register. Within 30 days of their receipt of the notice, CDFW determines whether the federal incidental take statement or incidental take permit is consistent with the requirements of CESA. If CDFW determines that the incidental take statement or incidental take permit is not consistent with CESA, then the taking of that species may only be authorized pursuant to California Fish and Game Code Section 2080 et seq.

Nesting Birds, Raptors, and Migratory Birds

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. California Fish and Game Code Section 3503.5 protects all birds of prey (raptors) and their eggs and nests, and Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the Migratory Bird Treaty Act. These regulations could

require that vegetation removal or construction near nest trees be reduced or eliminated during critical periods of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

Fully Protected Species

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as fully protected. Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the California Fish and Game Code or any other law may be construed to authorize the issuance of permits or licenses to take any fully protected species.

Streambed Alteration Agreements

Under Chapter 6 of the California Fish and Game Code, CDFW is responsible for the protection and conservation of the state's fish and wildlife resources. As amended effective January 1, 2004, California Fish and Game Code Sections 1600 through 1616 regulate activities by which a public or private entity proposes to “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.” Section 1600 et seq. of the code defines the responsibilities of CDFW and the requirements for public and private applicants to obtain an agreement for the activities referenced above. In general, a Streambed Alteration Agreement is necessary where any such proposed activity would “substantially adversely affect an existing fish or wildlife resource.” The local CDFW warden or unit biologist typically has responsibility for issuing Streambed Alteration Agreements. These agreements usually include specific requirements related to construction techniques and remedial and compensatory measures to mitigate for adverse impacts. CDFW may also require long-term monitoring as part of an agreement to assess the effectiveness of the proposed mitigation.

Sensitive Vegetation Communities

California Fish and Game Code Sections 1385–1391, the California Riparian Habitat Conservation Act, identifies valley and foothill riparian habitat as a sensitive resource. This habitat provides important habitat value for wildlife and is the only sensitive plant community on the project site. There are other sensitive plant communities, such as alkali meadow, alkali seep, and northern hardpan vernal pool, within 5 miles of the project area (CDFG 2008), but none are located within the project site.

Local Regulations

Town of Loomis Tree Conservation Ordinance

Chapter 13.54 of the Town’s Municipal Code provides regulations for the protection, preservation, and maintenance of native oak trees; the habitat values of oak woodlands; trees of historic or cultural significance; groves and stands of mature trees; and mature trees in general that are associated with proposals for development. The Town adopted a Tree Ordinance in 2014. Relevant passages of the Tree Ordinance are as follows:

According to Chapter 13.54, Section 13.54.030, a protected tree is defined as a native oak tree with a trunk that is a minimum of six 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; and any oak trees with multiple trunks that have an aggregate DBH of at least 10 inches, or any Heritage Tree. This also includes any trees preserved or replanted pursuant to Chapter 13.54.090, except for Exempt Trees and those classified as invasive species by the California Invasive Pest Council and non-native trees listed as not to be planted on Town-owned property in the Master Tree List.

Native Trees are defined as a living tree, or hybrids thereof, of the interior live oak (*Quercus wislizenii*), valley oak, blue oak (*Quercus douglasii*), and oracle oak (*Quercus × morehus*).

A Heritage Tree is any tree identified by council resolution. As of the date of the publication of this Draft EIR, the Council has not adopted any resolution identifying Heritage Trees.

13.54.060 Exempt Activities

The following activities are considered exempt from the mitigation provisions of this Chapter [relevant portions only]:

- E. The removal of dead, dying, or hazardous trees, as determined by the Town Manager, the Town Arborist, or an arborist approved by the Town manager (rated a 0 “dead,” or 1 “dying or hazardous,” or 2 “major corrective care needed”) shall not require mitigation. Photographic evidence may be required.
- G. Protected Trees removed for construction of public infrastructure improvements (streets and sidewalks) required as a condition of development approval, shall be exempt from tree mitigation requirements provided all feasible alternatives to reduce the number of trees proposed for removal have been exhausted.

13.54.080 Permit, Application, Process, Decision

- A. Any person seeking to perform any activity for which a Tree Permit is required by this Chapter shall fill out an application containing the following information:
1. Location, size and species of the tree(s) affected;
 2. The type of activity for which the permit is sought;
 3. A statement of the reasons for the activity;
 4. A written evaluation of the health and status of the tree(s) affected prepared by a registered forester or an International Society of Arborists (I.S.A) certified arborist and evaluating the following: Overall rating of tree condition, by tree number, according to the following categories:

Rating #0: This indicates a tree that has no significant sign of life.

Rating #1: The problems are extreme. This rating is assigned to a tree that has a structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

Rating #2: The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with corrective work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a #3. If no action is take the tree is considered a liability and should be removed.

Rating #3: The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in the Arborist report are completed correctly the defect(s) can be minimized or eliminated.

Rating #4: The tree is in good condition and there are no apparent problems that an Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

Rating #5: No problems found from a visual ground inspection. Structurally these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect, especially with the unpredictability of nature, but with this highest rating, the conditions should be considered excellent.

5. The certified arborist or registered forester preparing the report shall not be from the tree company retained to remove the trees.
6. For a development project, the tree plan provided by Section 13.54.120.

Section 13.54.090 Removal of Trees, Mitigation and Replacement

When the Town Manager has granted a Tree Permit to remove a Protected Tree, said permit shall require the applicant to replace the tree with a living tree (or trees) of the same species on the property or within the Town of Loomis, in a location approved by the Town Manager. Said location will be specified in the Tree Permit. The replacement requirement shall be calculated as provided by Table 5-3 [see Table 4.3-4 herein]. The property owner will replace the Tree(s) and continue to replace the replacement tree(s) if the tree(s) die(s) anytime within five (5) years of the initial planting. Annual Arborist monitoring with a written report is required to ensure survival of the trees. The removal of dead, dying or hazardous trees, as determined by the Town Manager, the Town Arborist, or an arborist approved by the Town Manager (rated a 0 “dead” or 1 “dying” or 2 “major corrective care needed”) shall not require mitigation.

**Table 4.3-4
Tree Conservation Ordinance Tree Removal Mitigation**

Species of Trees to Be Removed	Size of Trees in DBH (inches)	T4, T6, or T8 Tree Pots or #5/5 Gal*	#15 (15 Gal) Mitigation Trees, OR	In-Lieu Fee Amount \$ per Inch of Tree Removed
Blue oak	4–9.9	4	2	\$100
	10–24.9	6	3	\$110
	25–29.9	8	4	\$120
	30–34.9	10	5	\$130
	>35	12	6	\$140
Valley oak	6–9.9	3	1	\$90
	10–24.9	4	2	\$100
	25–29.9	5	3	\$110
	30–34.9	6	4	\$120
	>35	8	5	\$130
Interior live oak	6–9.9	3	1	\$80
	10–24.9	4	2	\$90
Oracle oak	25–29.9	5	3	\$100
	30–34.9	6	4	\$110
	>35	8	5	\$120

* T4, T6, T8 Tree Pot refers to a tree container with a square top. A T4 tree pot is 4 × 4 × 14 inches, a T6 tree pot is 6 × 6 × 16 inches, and a T8 tree pot is 8 × 8 × 18 inches (Loomis Municipal Code Section 13.54.030 (definitions)).

For each species and size class, 1 or a combination of columns may be used to determine total mitigation. Up to 50% of the required replacement trees may have T4, T6, T8 Tree Pots (oaks) container size, where the Town Manager determined that long term tree health and survival will be improved by starting with a smaller container size, and that each tree with a container size less than #15 will not be in a location where it will be more subject to damage while it is becoming established than a larger tree. If the property owner is unable to replace the tree on his or her property or within an area approved by the Town Manager, the Town Manager shall require the property owner to pay an in-lieu fee to the Town.

Small Tree and Native Tree Preservation Credits (TPC). The Town may consider preservation of seedling and sapling native oak trees that are smaller than 6" DBH (4" DBH for Blue Oaks) as a credit toward the total removed inches. For example, a 1" sapling (caliper) would equal 1" of mitigation. These smaller trees are valuable because they are already established. Trees with calipers of less than 1" shall not be eligible for credit under this provision. Retention of small blue oaks is especially encouraged. Any tree that is to be considered for preservation credit shall be evaluated, included in the arborist report, rated a 3, 4, or 5 and located in a suitable site with adequate spacing. They must be marked as protected mitigation trees (e.g., tagged or staked), and fenced during construction just as protected trees are required to be fenced. TPC shall not count if they are in a poor growing space due to position within the CRZ [critical root zone] of another Protected Tree to be preserved, or are likely to be adversely impacted by the proposed development or they are located in a non-development zone. They shall be included as Protected Trees in all required monitoring as stated in 13.54.090 of this Chapter.

Section 13.54.100 Use of In-Lieu Fees

In-lieu fees shall not be used for any other purposes other than for tree planting or propagation, purchasing, maintenance, preservation programs (including, but not limited to, land purchase and/or conservation easements), public education programs regarding trees which supports the purposes of this Chapter (e.g., workshops on proper pruning), and activities in support of the administration of this Chapter. Fees collected pursuant to this Chapter may be directed by the Town Council to non-profit organizations for the implementation of programs consistent with the purposes of this Chapter within the Town of Loomis.

Section 13.54.120 Development Projects, Tree Plan Required

An application for a development project shall be accompanied by a tree plan, prepared by a certified arborist, containing the following information:

- A. Contour map showing the extent of grading within any part of the CRZ, plus existing and proposed grades and the location, size, species and condition of all existing trees which are located upon the property proposed for development.
- B. Identification of those trees which the applicant proposes to preserve and those trees which are proposed to be removed and the reason for such removal, including identification of all on-site Protected Trees.
- C. A description of measures to be followed to insure survival of Protected Trees during construction.
- D. A program for the preservation of Protected Trees and other trees not proposed for removal during and after completion of the project, which shall include the following:
 1. Each tree or group of trees to be preserved shall be enclosed with a fence prior to any grading, movement of heavy equipment, approval of improvement plans or the issuance of any permits and such fence shall be removed following construction, but prior to installation of landscaping material;
 2. Fencing shall be located at the CRZ of the tree or trees and shall be a minimum of four (4) feet in height;
 3. Signs shall be posted on all sides of fences surrounding each tree stating that each tree is to be preserved;
 4. Any and all exposed roots shall be covered with a protective material during construction.
- E. A program for the replacement of any Protected Trees proposed to be removed.
- F. All of the tree preservation measures required by the conditions of a discretionary project approval (the arborist report and the Tree Permit, as applicable) shall be completed and certified by staff or the developer's arborist prior to issuance of a Certificate of occupancy.

Town of Loomis Waterway and Riparian Habitat Protection Ordinance

Chapter 13.56 of the Town's 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 2015).

13.56.040 Development Standards

- 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. Additional setbacks may be required to preserve existing vegetation or other significant environmental resources along any waterway. Setbacks adjacent to creekside paths or open spaces shall be measured from the outside boundary of the path or open space.
- 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, 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. (Ord. 205 § 1 (Exh. A), 2003)

Town of Loomis General Plan

The Town's General Plan contains policies governing conservation of resources within its jurisdiction. The project's consistency with relevant Natural Resources and Open Space policies contained in the Conservation of Resources Element policies is evaluated in the General Plan Consistency discussion in Appendix B. The applicable Natural Resources and Open Space policies are listed below (Town of Loomis 2001a). Also refer to Sections 4.10 and 4.11 of this EIR for information with regard to applicable soil erosion and water quality protection policies from the Town's General Plan.

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. "Significant Ecological Areas" shall include, but not be limited to:

- Wetland areas;

- Stream environment zones;
- Suitable habitat for rare, threatened or endangered species, and species of concern;
- Large areas of non-fragmented habitat, including oak woodlands and riparian habitat;
- Potential wildlife movement corridors; and
- Important spawning areas for anadromous fish.

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.

- a. Proposed structures and grading shall be set back the greater of: 100 feet from the outermost extent of riparian vegetation as defined in the Zoning Ordinance, or outside of the 100-year flood plain. Lesser setbacks may be approved where site-specific studies of biology and hydrology, prepared by qualified professionals approved by the Town, demonstrate that a lesser setback will provide equal protection for stream resources. Development shall be set back from ephemeral or intermittent streams a minimum of 50 feet, to the extent of riparian vegetation, or to the 100-year floodplain, whichever is greatest.
- b. Land uses and development within the setback areas required by this policy shall be limited to: the grazing of livestock at half or less of the animal densities allowed by the Zoning Ordinance; open wire fencing to confine livestock; bridges; public utilities and infrastructure; and other uses allowed by the applicable zoning district as permitted or conditional uses, with conditional use permit approval.

- c. The following activities are prohibited within stream corridor setbacks: filling or dumping; the disposal of agricultural wastes; channelization or dams; the use of pesticides that may be carried into stream waters; grading, or the removal of natural vegetation within the required setback area, except with grading permit approval. This is not intended to prevent the reasonable maintenance of natural vegetation to improve plant health and habitat value.
- d. The Town shall require that development projects proposing to encroach into a creek corridor or creek/wetland setback to do one or more of the following, in descending order of desirability:
- Avoid the disturbance of riparian vegetation;
 - Replace riparian vegetation (on-site, in-kind);
 - Restore another section of creek (in-kind); and/or
 - Pay a mitigation fee for restoration elsewhere (e.g., wetland mitigation banking program).
- e. The Town shall require that newly-created parcels include adequate space outside of wetland and riparian setback areas to ensure that property owners will not place improvements within areas that require protection.
- f. Proposed development shall include surface water drainage facilities that are designed, constructed, and maintained to ensure that the increased runoff caused by development does not contribute to the erosion of stream banks, or introduce pollutants into watercourses.
- g. The Town shall encourage the use of natural stormwater drainage systems to preserve and enhance existing natural features. The Town shall promote flood control efforts that maintain natural conditions within riparian areas.
- h. Where creek or wetland protection is required or proposed, the Town shall require public and private development to:
- Preserve creek corridors and setbacks through easements or dedications. Parcel lines or easements shall be located to optimize resource protection;
 - Designate easement or dedication areas as open space;
 - Protect creek corridors and their habitat value by: 1) providing adequate setbacks; 2) maintaining creek corridors in their natural state; 3) employing restoration techniques, where necessary and appropriate; 4) using riparian vegetation within creek corridors; 5) prohibit the planting of invasive, non-native plants within creek setbacks; and 6) avoiding tree removal within creek corridors.

- Use techniques that ensure development will not cause or worsen natural hazards near creeks, and will include erosion and sediment control practices such as: 1) turbidity screens (to minimize erosion and siltation); and 2) temporary vegetation sufficient to stabilize disturbed areas.

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.¹ 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.
- c. The Town will require project-by-project review of sites where vernal pools exist, to assess threatened and endangered pool plant species and identify appropriate mitigation measures.

¹ As of January 2013, the California Department of Fish and Game (CDFG) officially changed its name to the California Department of Fish and Wildlife (CDFW). In this document, references to guidance or quoted material that predate the name change use CDFG, whereas references to documentation after the name change and general references to the department use CDFW.

- 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.

4.3.3 Impacts

Methods of Analysis

The project setting was developed by reviewing available information on special-status species and sensitive habitats known to occur in the project vicinity. This review was supplemented with field surveys to determine which of these species occurs on site or whether potential habitat for these species is present on the proposed project site. Field visits were conducted by Salix biologists Jeff Glazner, and Gaylene Tupen in March 2014. These assessments form the basis of the Biological Resources Assessment found in Appendix C.

CEQA requires that projects analyze the potential impacts on special-status plant and animal species, as well as on sensitive habitats, wildlife corridors, and waters of the United States. For the purposes of this EIR, impacts on wildlife species that are not considered special status are generally not considered significant unless impacts are associated with the species' migration routes or movements, or the species are considered locally important. In the region of the project site, deer or other common species (e.g., skunk, raccoon, opossum, coyote) would not be considered special-status species; however, potential adverse effects on their movements and migration routes must be evaluated. Regardless of status, all nesting native bird species are protected from harm under the California Fish and Game Code and the federal Migratory Bird Treaty Act.

The geographic context for the analysis of cumulative biological impacts includes the areas contained within the Sierra Foothills, but primarily focused on the area within the Town limits. Present and probable future projects within the region as discussed in Section 4.1, Land Use, are anticipated to permanently remove plant and wildlife resources, which could affect both common and special-status species and their habitat.

Significance Criteria

A biological resources impact would be significant if any of the following conditions, as described in Appendix G of the CEQA Guidelines, would result with implementation of the proposed project. Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Project Impacts

IMPACT 4.3-1: Substantial disturbance to natural vegetation or reduction in habitat for plants and animals.

SIGNIFICANCE: Potentially Significant

MITIGATION: Mitigation Measures 4.3a and 4.3b

RESIDUAL Less Than Significant

SIGNIFICANCE:

The project applicant prepared a Biological Resources Assessment (see Appendix C) that identifies the biological communities present in the project site and identifies the presence of any sensitive or special-status plant or animal species that could be impacted by the project, in conformance with the General Plan requirement for a biotic resources evaluation. As shown in Figure 4.3-1, the study area supports the following biological communities: annual grassland (22.5 acres), interior live oak woodland (31.4 acres), valley oak woodland (4.4 acres) and riparian wetland (5.6 acres). The site also includes 2.5 acres characterized as rural residential. Much of the vegetation within the ±66-acre study area, including trees, would be affected by grading, construction, and operation of the proposed project. Potential environmental impacts to riparian habitat are discussed under Impact 4.3-2.

Annual Grassland

The study area includes approximately 22.5 acres of annual grassland made up primarily of introduced annual grasses and forbs. These habitats are not considered sensitive or natural. Furthermore, the rare plant survey completed in May during the spring floristic period in 2014 did not identify any special-status plant species. The proposed project would result in loss of or disturbance to all of the annual grassland habitat on site. Development of these areas would have a **less than significant** impact as this habitat type is not a sensitive community, does not provide unique biological values, and is locally abundant.

Valley Oak Woodland

Valley oak woodland is considered a sensitive natural community by CDFW. Valley oak woodland habitat comprises approximately 4.4 acres within the study area, the majority of which is anticipated to be retained on site in the proposed open space area. As discussed in Section 4.3.2, this habitat type predominantly consists of native oak trees including valley oaks, blue oaks, and interior live oaks, as well as foothill pines, which are not considered a protected tree species. The proposed project would result in removal of 1.5 acres of the valley oak woodland habitat on site. The portion of valley oak woodland that occurs near the center of the northern portion of the project site adjacent to riparian wetland habitat associated with the unnamed drainage on site would be preserved, as well as the portion of valley oak woodland in the northeastern corner of the site, east of the proposed detention basin.

The loss of portions of the valley oak woodland habitat on the project site would result in a **significant** impact because this habitat is considered a sensitive natural community by the CDFW. The proposed project would be required to replace individual trees that are removed as a result of development, and as discussed in the following Trees section, the proposed Tree Replacement Plan provides for planting trees along roadways, around detention basins, and within park sites. The scattered and/or linear planting areas would not be effective at recreating woodland habitat on site. Further, the Tree Replacement Plan demonstrates that there is not sufficient space on site to replace all of the trees that would be lost due to the proposed development. To provide compensation for the loss of on-site foothill woodland habitat, **Mitigation Measure 4.3a** requires the project applicant to obtain a conservation easement or acquire property in fee title for 2 acres of valley oak woodland habitat located within a radius of 10 miles of the project site. The California Department of Forestry and Fire Protection (CalFIRE) Fire Resource and Assessment Program provides mapping of vegetative communities throughout the state (CalFIRE 2015). The Fire Resources and Assessment Program data indicates that there are over 18,000 acres of valley oak woodland habitat within 10 miles of the project site, as shown in Figure 4.3-4. Conservation of 2 acres of valley oak woodland habitat would provide for off-site conservation of an equal amount of habitat as would be lost due to the

proposed project, 1.5 acres, and an additional 0.5 acre to account for indirect impacts as discussed below, ensuring that the biological values of valley oak woodland habitat in the project area are retained, and reducing this impact to **less than significant**.

Wildlife

Oak woodland, ruderal herbaceous fields, riparian areas, and seasonal wetlands, are all habitats that have the potential to provide valuable nesting, roosting, foraging, and denning opportunities for a wide variety of wildlife species in the immediate project vicinity. Removing or altering habitats within the project site would result in the loss of common small mammals, reptiles, amphibians, and other animals of slow mobility that live within the project's direct impact area. More mobile wildlife species, such as birds, now using the study area could potentially move into adjacent residential areas and occupy the project site after development. These common species are not considered sensitive and are not protected by any local, state or federal legislation; therefore, the impacts to common wildlife species are considered less than significant.

However, potential disturbance to the tricolored blackbird (*Agelaius tricolor*), purple martin (*Progne subis*), white-tailed kite and other raptors, or nesting migratory birds during project construction is protected under the Migratory Bird Treaty Act and California Fish and Game Code Section 3503. Should active nests occur either on the site or immediately adjacent to the project site construction activity could adversely affect nesting activity, including loss of nest productivity or possible nest abandonment. The removal of trees, including dead trees that provide snags and cavities that may provide nesting habitat for the purple martin and the protected species listed, is considered a **potentially significant** impact. **Mitigation Measure 4.3b** requires that nesting bird surveys be completed no more than 2 weeks prior to construction and periodically throughout construction that occurs during the breeding season (generally February 15 through August 31), and defines protocols to be followed in the event that an active nest is observed in or within 500 feet of the construction area. Implementation of **Mitigation Measure 4.3b** would ensure that disturbance to nesting birds is avoided, which would reduce this impact to **less than significant**.

Indirect Impacts

Developing mixed land uses adjacent to the sensitive natural communities on site—valley oak woodland and riparian habitats—could result in indirect impacts to these habitats by increasing human activity in proximity to them, which can alter the plant and animal species composition of the area that support each habitat type. The proposed project would retain approximately 11 acres of woodland and riparian habitats within the proposed open space parcels.

The valley oak woodland and riparian habitat retained in the center of the northern portion of the project site would be subject to a loss in habitat quality due to increased human presence in the

area. These indirect effects would include light exposure from residences, street lights, and parking lot lights. The riparian habitat would be largely surrounded by woodland habitat, providing a buffer from these indirect effects. This would limit the loss in habitat quality for the riparian habitat. However the increased human presence would bring traffic and human activity into closer proximity to the retained valley oak woodland than under existing conditions. Although the on-site woodland is already exposed to noise from I-80, the portions of the retained habitat in the northern portion of the site would experience an increase in noise due to residential activities and traffic in that area. The indirect impacts to the valley oak woodland habitat would contribute to the **significant** impact resulting from loss of this habitat on site. As discussed previously, **Mitigation Measure 4.3a** would reduce this impact to **less than significant**. The required minimum conservation easement area identified in **Mitigation Measure 4.3a** includes the area necessary to mitigate for indirect and direct impacts.

IMPACT 4.3-2:	Impacts to riparian habitat and waters of the United States.
SIGNIFICANCE:	Significant
MITIGATION:	Mitigation Measure 4.3c
RESIDUAL SIGNIFICANCE:	Less Than Significant

The project site supports a total of approximately 5.6 acres of riparian habitat, as well as 6.04 acres of wetlands and waters of the United States. This includes six subcategories of waters of the United States: perennial stream, drainage ditch, intermittent streams, wetland swale, riparian wetlands, and seasonal wetlands. In compliance with General Plan policy, the project applicant prepared a Biological Resources Assessment and a wetlands delineation (both provided in Appendix C). General Plan policy establishes a standard of “no net loss” of wetlands regulated by the applicable resource agencies (i.e., Corps, USFWS) and identifies acceptable mitigation that includes avoidance, minimization of impacts, use of a mitigation bank, and replacement using an acceptable ratio.

The wetland delineation prepared in 2014 identified 6.04 acres of waters of the United States, with riparian wetland consisting of 5.26 acres. The Corps submitted a Preliminary Jurisdictional Determination January 22, 2015, accepting the approximately 6.04 acres of wetlands present on the site. The project is requesting a Clean Water Act Section 404 permit from the Corps to impact approximately 1.27 acres of waters of the United States. The project proposes to retain 4.77 acres of wetlands and water of the United States, including 4.31 acres of riparian wetland and would directly impact 0.054 acres of perennial stream, 0.007 acres of drainage ditch, 0.016 acres of seasonal wetland, 0.238 acres of wetland swale, and 0.956 acres of riparian wetland.

In addition to the impacts to wetlands and waters of the United States, the project would also result in an impact to the riparian habitat on the site. While the project has been designed to

preserve a majority of the riparian habitat within a designated open space area located in the central portion of the project site, the project would result in impacts to 1.24 acres of this habitat type. The impacted areas would be located throughout the proposed development areas, including 0.60 acre of impact in the proposed right-of-way for Doc Barnes Drive and additional area at the western end of the proposed Red Ravine Drive.

Direct removal, filling, or hydrological interruption of a federally or state-protected wetlands as defined in the Clean Water Act and/or the Porter-Cologne Water Quality Control Act would be considered a **significant impact**. **Mitigation Measure 4.3c** is required to ensure that impacts to wetlands are reduced to **less than significant** by providing for replacement habitat to ensure that the Town's and the Corps' no-net-loss standard is achieved.

IMPACT 4.3-3:	Impacts to special-status species, including critical habitat.
SIGNIFICANCE:	Potentially Significant
MITIGATION:	Mitigation Measures 4.3b, 4.3c, 4.3d, 4.3e
RESIDUAL SIGNIFICANCE:	Less Than Significant

Based on the Biological Resources Assessment (see Appendix C) and updated CNDDDB query prepared for the project, it was determined there are five special-status wildlife species that could have some potential to occur on the project site. The species include valley elderberry longhorn beetle, tricolored blackbird, purple martin, white-tailed kite, and California black rail. In addition, the site provides valuable nesting and foraging habitat for raptors.

Tricolored Blackbird, Purple Martin, White-Tailed Kite

These migratory birds and raptors could be adversely affected due to the loss of individual trees, foothill woodland habitat, and wetland habitat. However, potential disturbance to these species and all nesting migratory birds during project construction is protected under the Migratory Bird Treaty Act and California Fish and Game Code, Section 3503, as discussed previously. Should active nests occur either on the site or immediately adjacent to the project site construction activity could adversely affect nesting activity, including loss of nest productivity or possible nest abandonment. The removal of trees, including dead trees that provide snags and cavities that may provide nesting habitat for the purple martin and the protected species listed, is considered a **potentially significant** impact. **Mitigation Measure 4.3b** requires that nesting bird surveys be completed no more than 2 weeks prior to construction and periodically throughout construction that occurs during the breeding season (generally February 15 through August 31), and defines protocols to be followed in the event that an active nest is observed in or within 500 feet of the construction area. Implementation of **Mitigation Measure 4.3b** would ensure that disturbance to nesting birds is avoided, which would reduce this impact to **less than significant**.

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle occurs exclusively on elderberry shrubs, of which four are located within the proposed development area and would be removed. Based on criteria specified in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999), the identified elderberry plants are considered potential habitat for the federally threatened valley elderberry longhorn beetle. Removal of the elderberry plants would result in a **significant** impact to valley elderberry longhorn beetle. Removal of elderberry shrubs may adversely affect valley elderberry longhorn beetle and would require take authorization from USFWS, subject to obtaining a Biological Opinion issued by the USFWS through the FESA Section 7 Consultation process with the Corps. The Section 7 consultation process was initiated by the Corps on February 10, 2015. Because of the relatively small impacts to valley elderberry longhorn beetle habitat, it is anticipated that the proposed project falls within the jurisdiction of the USFWS Programmatic Formal Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle within the Jurisdiction of the Sacramento Field Office, California (1996). **Mitigation Measure 4.3d** identifies requirements for site evaluation and elderberry planting to compensate for the removal of elderberry shrubs on the project site. Implementation of this measure would reduce the impacts to valley elderberry longhorn beetle habitat to **less than significant**.

California Black Rail

The riparian area on site supports a large contiguous path of dense cattails and bulrush, which provide high-quality habitat for the California black rail. The project proposes to retain 4.36 of the 5.6 acres of riparian habitat on site. Disturbance to 1.24 acres of riparian habitat would constitute a **less than significant** impact to California black rail habitat because sufficient riparian habitat would remain on site to support use of the site by this species. Direct effects to the California black rail, such as disturbance to nesting birds or take of the species, would be considered a **significant** impact. **Mitigation Measure 4.3e** requires that a pre-construction survey be completed to identify any California black rail in the development area and establishment of a no-construction buffer area around any California black rail that are identified on site. The no-construction buffer would be observed until the California black rail have vacated the site. With implementation of **Mitigation Measure 4.3e**, impacts to California black rail would be reduced to **less than significant**.

Raptors

Foraging habitat for raptors protected under the California Fish and Game Code exists within the annual grassland habitat found on site. The site could support red-tailed hawk, red-shouldered hawk, various owls, and the state fully protected white-tailed kite.

Although the presence of woodland and riparian habitat in proximity to this grassland raises the wildlife value of all three habitats by providing a greater variety of resources (such as nesting and roosting sites and foraging areas), the grassland habitat alone does not have any characteristics that provide significant value as wildlife habitat. Dominant vegetation includes non-native weeds such as yellow star-thistle, riggut brome, bull thistle (*Cirsium vulgare*), Italian plumeless thistle (*Carduus pycnocephalus*), and winter vetch (Appendix C). The dense cover and tall stature (averaging 2 feet in height) of this habitat reduces prey availability for raptors. Raptors that are not threatened or endangered are protected under the Migratory Bird Treaty Act and as birds of prey. Direct impacts to such species are prohibited but loss of foraging habitat is not considered a significant impact. The loss of 22.5 acres of non-native annual grassland within the project site would be a **less than significant** impact to raptors.

The oak woodland habitat on site provides nesting habitat for several raptor species known to exist within the project vicinity, and loss of trees and woodland habitat would be a **significant** impact due to the loss of raptor nesting and foraging habitat. As discussed previously, **Mitigation Measure 4.3b** requires that nesting bird surveys be completed throughout construction that occurs during the breeding season and that disturbance to any active nests be avoided. Implementation of this measure would ensure that direct impacts to nesting raptors are avoided. Further, the Town's Tree Conservation Ordinance requires planting of trees within the project site or within the Town to compensate for the loss of trees on site and **Mitigation Measure 4.3a** requires the project applicant to obtain a conservation easement to permanently protect 2 acres of valley oak woodland habitat within 10 miles of the project site. This would ensure that replacement oak resources are provided to ensure that the project's impact to nesting habitat is reduced to **less than significant**.

IMPACT 4.3-4: Interfere with resident or migratory wildlife movement.

SIGNIFICANCE: Less Than Significant

MITIGATION: None

RESIDUAL Less Than Significant

SIGNIFICANCE:

The project site is located in an infill area within the Town and is surrounded by commercial, public, residential, and rural residential development to the north, southwest, and west. I-80 is adjacent to the southeastern boundary of the project site and forms a barrier for animal migration and movement. As described in the Environmental Setting section, the project site is not part of a regional wildlife corridor as it is largely surrounded by urban development and other artificial land uses. The closest habitat corridor in the area is located along Secret Ravine, located on the south side of I-80. There are also small areas of undeveloped land around the northwest corner of the project site.

The perennial stream in the center of the project site could support localized wildlife movement; however, due to the location of the project site adjacent to I-80 and the existing residential subdivisions to the north of the site, where the perennial stream is contained in a pipe, no natural habitat remains. Because the site is surrounded by development, it does not function as part of a wildlife corridor that links large open space areas and it is highly unlikely the project site supports any significant wildlife corridors. Therefore, impacts related to interference with wildlife movement and wildlife corridors would be **less than significant**.

IMPACT 4.3-5: Conflict with the Town’s Tree Conservation Ordinance.

SIGNIFICANCE: Significant

MITIGATION: Mitigation Measure 4.3f

RESIDUAL Less than Significant

SIGNIFICANCE:

The project site supports interior live oak, valley oak, and blue oak trees. The interior live oak and valley oak trees are considered protected trees as defined in the Town of Loomis Tree Preservation and Protection Ordinance if they are 6 inches or greater in diameter at breast height (dbh), and the ordinance defines the minimum size for protected blue oak trees as 4 inches dbh. The ordinance also defines any multiple-stemmed native oak tree with a total of at least 10 inches dbh as a protected tree.

Adherence to the Town’s General Plan policies described in the regulatory framework section would ensure that impacts to protected trees would be minimized and avoided. Based on the Arborist’s Report prepared for the project, there are a total of 1,684 trees within the proposed development area that meet the Town’s Tree Preservation and Protection Ordinance definition of a protected tree. The proposed development would result in the removal of 960 protected trees, as summarized in Table 4.3-5. An additional 104 trees that do not meet the Tree Preservation and Protection Ordinance definition of a protected tree would also be removed. Of the 960 protected trees to be removed, 129 are recommended for removal by the project arborist due to poor health and/or structure. Additionally, 212 trees would be removed to accommodate construction of Doc Barnes Drive; however, as Doc Barnes Drive is a public roadway identified in the General Plan, tree removal associated with construction of this roadway would be exempt from the Town’s Tree Preservation and Protection Ordinance requirements as long as the project applicant demonstrates that all feasible alternatives to reduce the number of trees proposed for removal have been exhausted.

**Table 4.3-5
Protected Trees Proposed for Removal**

Scientific Name	Common Name	Number on Site	Number Protected Under Ordinance	Number of Protected Trees to Be Removed
<i>Quercus agrifolia</i>	coast live oak	1	1	1
<i>Quercus douglasii</i>	blue oak	101	100	44
<i>Quercus lobata</i>	valley oak	512	503	321
<i>Quercus ×morehus</i>	oracle oak	5	4	5
<i>Quercus wislizenii</i>	interior live oak	1,065	1,040	589
Total		1,684	1,648	960

Because avoidance of impacts to all trees on site would not be feasible, the project applicant would be required to obtain a tree permit from the Town. Compliance with the Town’s General Plan requirements for native tree protection, the Tree Preservation and Protection Ordinance, and conditions required in the Town’s Tree Permit would include measures to protect trees that would be retained on site, tree replacement, relocation, revegetation, and/or payment of in-lieu fees. Under the Town’s Tree Preservation and Protection Ordinance, the project applicant would be required to obtain a tree permit to remove the 960 protected trees and would be required to mitigate for the loss of 831 trees. As a condition of the tree permit, the project applicant would be required to plant new trees on site or elsewhere in the Town, relocate healthy trees, preserve trees, and/or pay an in-lieu fee to allow the Town to plant new trees.

The project applicant has prepared a Tree Replacement Plan that identifies potential locations for replacement tree planting on site. The Tree Replacement Plan provides for planting of 44 blue oaks, 80 valley oaks, and 178 interior live oaks (all at the 15-gallon-container size). Although this plan provides for replanting of an equal number of blue oaks as would be lost due to the proposed project, additional mitigation would be necessary for impacts to blue oaks, valley oaks, interior live oaks, and oracle oaks. Table 4.3-6 identifies the additional mitigation requirements for the project under the Tree Preservation and Protection Ordinance.

**Table 4.3-6
Tree Removal and Mitigation**

Species of Trees to Be Removed	Size of Trees (Inches dbh)	Number of Trees to Be Removed	Mitigation Trees Required	
			T4, T6, or T8 Tree Pots or No. 5/5 Gal*	No. 15 (15 Gal) Mitigation Trees
Blue oak	4–9.9	8	32	16
	10–24.9	21	126	63
	25–29.9	4	32	16
	30–34.9	3	30	15
	>35	3	36	18

**Table 4.3-6
Tree Removal and Mitigation**

Species of Trees to Be Removed	Size of Trees (Inches dbh)	Number of Trees to Be Removed	Mitigation Trees Required	
			T4, T6, or T8 Tree Pots or No. 5/5 Gal*	No. 15 (15 Gal) Mitigation Trees
Valley oak	6–9.9	78	234	78
	10–24.9	159	636	318
	25–29.9	7	35	21
	30–34.9	10	60	40
	>35	4	32	20
Interior live oak	6–9.9	108	324	108
	10–24.9	198	792	396
	25–29.9	35	175	105
	30–34.9	13	78	52
	>35	28	224	140

dbh = diameter at breast height; gal = gallon.

* T4, T6, T8 Tree Pot refers to a tree container with a square top. A T4 tree pot is 4 × 4 × 14 inches, a T6 tree pot is 6 × 6 × 16 inches, and a T8 tree pot is 8 × 8 × 18 inches (Loomis Municipal Code Section 13.54.030 (definitions)).

To mitigate for the removal of blue oaks on the project site, 128 fifteen-gallon container-size mitigation trees, or 256 five-gallon container-size mitigation trees would be required. The current planting plan includes planting of only 44 fifteen-gallon blue oak trees; therefore, 84 additional fifteen-gallon trees or 168 five-gallon trees must be planted. To compensate for the removal of valley oaks, 477 fifteen-gallon or 997 five-gallon mitigation trees are required. The current planting plan proposes 80 fifteen-gallon valley oaks to be planted and therefore an additional 397 fifteen-gallon trees or 759 five-gallon trees are required. To compensate for the removal of interior live oaks for the site, 801 fifteen-gallon or 1,593 five-gallon mitigation trees are required. The proposed plan provides for planting of 178 fifteen-gallon interior live oak trees; thus, another 623 fifteen-gallon trees or 1,359 five-gallon trees are required to mitigate for the loss of interior live oak trees.

Table 4.3-7 lists the number of trees, by species, that would be removed for Doc Barnes Road. Their removal would not require mitigation as provided in the Town of Loomis Municipal Code Section 13.54.060 G.

**Table 4.3-7
Doc Barnes Road Tree Removal**

Species of Trees to Be Removed	Size of Trees (Inches dbh)	Number of Trees to Be Removed
California buckeye	4–9.9	0
	10–24.9	0
	25–29.9	0
	30–34.9	1

**Table 4.3-7
Doc Barnes Road Tree Removal**

Species of Trees to Be Removed	Size of Trees (Inches dbh)	Number of Trees to Be Removed
	>35	0
Blue oak	4–9.9	4
	10–24.9	1
	25–29.9	0
	30–34.9	0
	>35	0
Valley oak	4–9.9	14
	10–24.9	37
	25–29.9	6
	30–34.9	2
	>35	2
Oracle oak	4–9.9	1
	10–24.9	3
	25–29.9	0
	30–34.9	0
	>35	1
Interior live oak	4–9.9	84
	10–24.9	96
	25–29.9	6
	30–34.9	3
	>35	10
Black locust	4–9.9	1
	10–24.9	3
	25–29.9	0
	30–34.9	0
	>35	0

dbh = diameter at breast height.

The Tree Preservation and Protection Ordinance requires that replanting be accomplished within the project site or within the Town. Compliance with the ordinance requirements for replacement of lost trees would ensure that potential impacts to the loss of this habitat would be reduced to less than significant by providing for replacement and/or compensation for the impacted trees. Requirements to ensure that off-site tree planting, conservation, and public education consistent with the Tree Conservation ordinance are identified in Mitigation Measure 4.3f. With implementation of Mitigation Measure 4.3f, the impact would be reduced to a **less-than-significant** level.

IMPACT 4.3-6:	Contribute to a cumulative loss of habitat for common and special-status wildlife species.
SIGNIFICANCE:	Significant
MITIGATION:	Mitigation Measures 4.3a through 4.3f
RESIDUAL SIGNIFICANCE:	Significant and Unavoidable

The geographic area for consideration of cumulative impacts to wildlife species is the Town of Loomis. As described in the 2001 Loomis General Plan EIR, buildout of the Town as prescribed by the land use designations in the General Plan would result in a **significant** cumulative impact to habitat for common and special-status species (Town of Loomis 2001b). The cumulative scenario for this analysis is buildout of the Town of Loomis General Plan and construction of the approved and proposed projects within the Town, as described in Section 4.1, Land Use. The proposed project would contribute to the buildout scenario envisioned in the General Plan. As described previously, construction and operation of the proposed project would result in the loss of habitat that provides foraging and nesting value to special-status raptor species and the loss of sensitive natural communities. The site also provides habitat for a variety of small mammals, reptiles, and some bird species. The proposed project would also result in the loss of woodland and riparian habitat and the associated effects on special-status wildlife species, and displacement of common wildlife species using the site. As described in Chapter VII of the General Plan (Conservation of Resources), the majority of the habitat of high ecological value within the Town is located within existing low-density land use types as opposed to protected open space or parklands (Town of Loomis 2001a). The project site represents one of the largest undeveloped tracts within the Town. Although implementation of **Mitigation Measures 4.3a** through **4.3f** would reduce and/or provide compensation for the project's direct impacts to sensitive habitats and special-status species, the project would result in the permanent loss of most of the natural habitat on site. This is considered a cumulatively considerable contribution to the cumulative loss of habitat in the region and, therefore, a **significant and unavoidable** project impact.

4.3.4 Mitigation Measures

4.3a The project applicant shall obtain a conservation easement on 2 acres of valley oak woodland habitat within 10 miles of the project site to compensate for the proposed project's direct impacts to 1.5 acres of valley oak woodland habitat and 0.5 acres of indirect impacts. The conservation easement shall prohibit any grading, vegetation removal (other than as required for fuel management under an approved fire safe plan), and/or any construction activities within the easement area. Any portion of the easement area that is within 100 feet of a habitable

structure shall not be counted toward the required acreage (as such an area would be subject to vegetation removal for defensible space requirements). The easement shall be recorded in perpetuity in favor of the Town of Loomis (Town) or a land conservation organization approved by the Town. Evidence of the recordation of the conservation easement shall be provided to the Town prior to issuance of any grading permits for the project site.

4.3b Should construction activities occur during the breeding season (February 15 through August 31), a pre-construction survey for nesting birds protected under the Migratory Bird Treaty Act shall be conducted by a qualified biologist to identify the location of nests in active use that were established prior to the start of project implementation activities. The pre-construction survey shall take place no more than 14 days prior to initiation of construction. All trees and shrubs within 500 feet of the area of disturbance shall be surveyed, with particular attention to any trees or shrubs that would be removed or directly disturbed. Further, the project applicant shall retain a qualified biologist to perform additional nesting bird surveys within 500 feet of the area of disturbance at least every 2 weeks during all phases of construction that occur during the nesting season. If an active nest of a protected bird is found on site or in the vicinity of off-site improvements at any time, the biologist shall, in consultation with the California Department of Fish and Wildlife (CDFW), determine whether construction work would affect the active nest or disrupt reproductive behavior. Criteria used for this evaluation shall include presence of visual screening between the nest and construction activities, and behavior of adult raptors in response to the surveyors or other ambient human activity. If construction could affect the nest or disrupt reproductive behavior, the biologist shall, in consultation with CDFW, determine an appropriate construction-free buffer zone around the nest to remain in place until the young have fledged or other appropriate protective measures to ensure no take of protected species occurs.

4.3c The project applicant shall provide compensation for the loss of wetlands and waters of the United States sufficient to meet the Town of Loomis's requirement that there be no net loss of wetland communities. To achieve this, the project applicant shall obtain a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers (Corps) to authorize impacts to wetlands and define the specific requirements for replacement or compensation for the loss and the project applicant shall carry out on-site replacement or off-site banking to mitigate for impacts to wetlands. Minimum replacement ratios shall be 1:1 for wetland habitat. If off-site mitigation is chosen, the project applicant shall provide written

evidence that compensatory habitat has been established through the purchase of mitigation credits at an approved wetlands mitigation bank. The amount of money required to purchase these credits shall be equal to the amount necessary to replace wetland or habitat acreage and value, including compensation for temporal loss. Evidence of payment, which describes the amount and type of habitat purchased at the bank site, shall be provided to the Town prior to the issuance of grading permits.

4.3d If construction begins in 2017 or later, the elderberry shrub survey completed by Salix Consulting Inc. (2014) shall be updated by a qualified biologist experienced with valley elderberry longhorn beetle. The location of the elderberry shrubs on site shall be confirmed and all stems at least 1 inch or greater at ground level shall be recorded for calculating conservation ratios in accordance with Table 1 of the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999).

Each elderberry stem at least 1 inch in diameter removed during construction shall be compensated for by the planting of elderberry seedlings at a ratio of 2:1 (planted:removed). Based on elderberry stem counts performed by Salix Consulting (2014), 90 elderberry seedlings shall be planted at an appropriate off-site conservation area approved by the U.S. Fish and Wildlife Service (USFWS) and the Corps. The applicant shall purchase appropriate credits at an off-site mitigation bank approved by the USFWS and the Corps.

The four elderberry shrubs removed as part of the project activities shall be transplanted to an appropriate off-site conservation area approved by USFWS and the Corps. The applicant shall purchase appropriate credits at an off-site mitigation bank approved by USFWS and the Corps.

USFWS has determined that the four elderberry shrubs with 27 ground-level branches 1 inch in diameter or greater shall be transplanted or the applicant shall compensate for the loss of 27 1-inch-diameter branches. It has also determined that during this process it is likely that some of the beetle larvae will die but that such a take will not adversely impact the overall survival of the species.

4.3e At least 14 days prior to the start of construction and preferably during the breeding season (generally February through July), surveys for California black rail shall be conducted by a biologist experienced with this species. Surveys shall be conducted during peak calling times (within 2 hours of dawn or dusk) using playback of taped breeding calls. The surveys shall cover all areas of suitable nesting habitat within 500 feet of the project area (shallow water or

muddy areas with dense emergent vegetation). Surveys shall be repeated at least three times (including at least one evening and one morning survey) or until black rail is detected.

If California black rail is not detected after three site visits, then no further mitigation is required provided construction begins within 14 days of the final survey. If this species is detected, no work in potential habitat will occur until appropriate avoidance measures and/or buffers are established in cooperation with CDFW. No work shall take place within buffer areas until the qualified biologist has confirmed that the species has evacuated the area.

4.3f To mitigate for the loss of oak trees from the project site, the applicant shall complete the following actions:

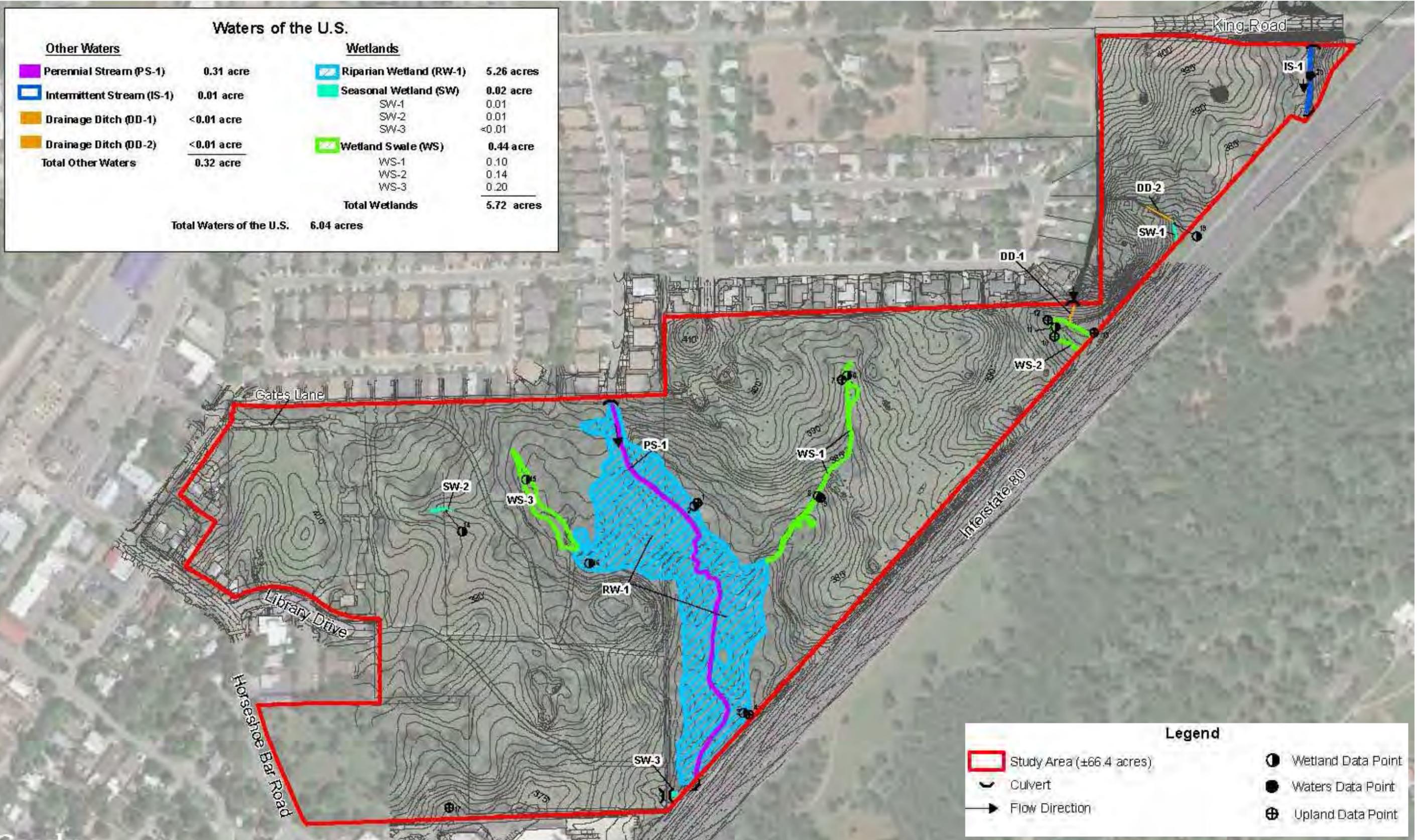
1. Upon issuance of the first building permit, the applicant shall conduct one public education program regarding trees annually for four years, which is the expected build-out period for the project. The public education programs must support the purposes of the Town's Tree Conservation ordinance (e.g., workshops on proper pruning and oak tree care and maintenance that will help residents preserve the existing tree canopy within the Town). All public education programs shall be taught by a certified arborist or other qualified professional as determined by the Town Manager and shall last a minimum of one hour. Each individual that attends a public education program shall reduce the project applicant's tree mitigation requirement by one fifteen-gallon tree or two five-gallon trees. This is because the education of a member of the public on proper tree maintenance will prevent or reduce tree loss.
2. Conduct two oak tree planting community events annually for four years. The tree planting community events may occur at any public or private property within the Town limits, subject to a recommendation by a certified arborist and approval by the Town Manager. Each tree planted during these events shall count towards the project applicant's tree mitigation requirement. The project applicant shall be responsible for annual monitoring of the health and survival of trees planted at these community events, for a period of five years.
3. At the end of the four years of education and tree planting events, the project applicant shall acquire a conservation easement over property or acquire property that shall be dedicated to the Town. Such property must contain blue oaks, valley oaks, and/or interior live oaks sufficient to meet

the project's tree mitigation requirements under the Town's Tree Conservation ordinance.

4. Implementation of these measures will reduce impacts associated with tree loss to a less-than-significant level because trees will either be replanted at the ratios required by the Tree Conservation ordinance and kept within the Town limits when provided to eligible residents. To be eligible to receive a tree, a person will have to demonstrated proof of residency, read the care instructions and sign an acknowledgment, or attend a tree planting workshop. The care instruction and/or workshop will help ensure the long-term viability and health of the planted tree. Moreover, it is reasonable to assume that a person who is actively seeking a tree to plant will also care for it to ensure that it does not die. In the event the tree fails or dies within one year of planting, the resident will be able to obtain a replacement tree at the project applicant's expense. The replacement tree will not count towards the total mitigation requirement. Additionally, the conservation of two acres of oak woodland habitat as required under Mitigation Measure 4.3a to compensate for the proposed project's effects on one acre of this habitat type would preserve additional off-site trees. To the extent that the offsite conservation area meets the location requirements in the Tree Conservation ordinance, trees within the conservation area may be applied to the project applicant's tree mitigation requirements.

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Other Waters		Wetlands	
Perennial Stream (PS-1)	0.31 acre	Riparian Wetland (RW-1)	5.26 acres
Intermittent Stream (IS-1)	0.01 acre	Seasonal Wetland (SW)	0.02 acre
Drainage Ditch (DD-1)	<0.01 acre	SW-1	0.01
Drainage Ditch (DD-2)	<0.01 acre	SW-2	0.01
Total Other Waters	0.32 acre	SW-3	<0.01
		Wetland Swale (WS)	0.44 acre
		WS-1	0.10
		WS-2	0.14
		WS-3	0.20
		Total Wetlands	5.72 acres
Total Waters of the U.S.		6.04 acres	

Legend	
	Study Area (±66.4 acres)
	Culvert
	Flow Direction
	Wetland Data Point
	Waters Data Point
	Upland Data Point

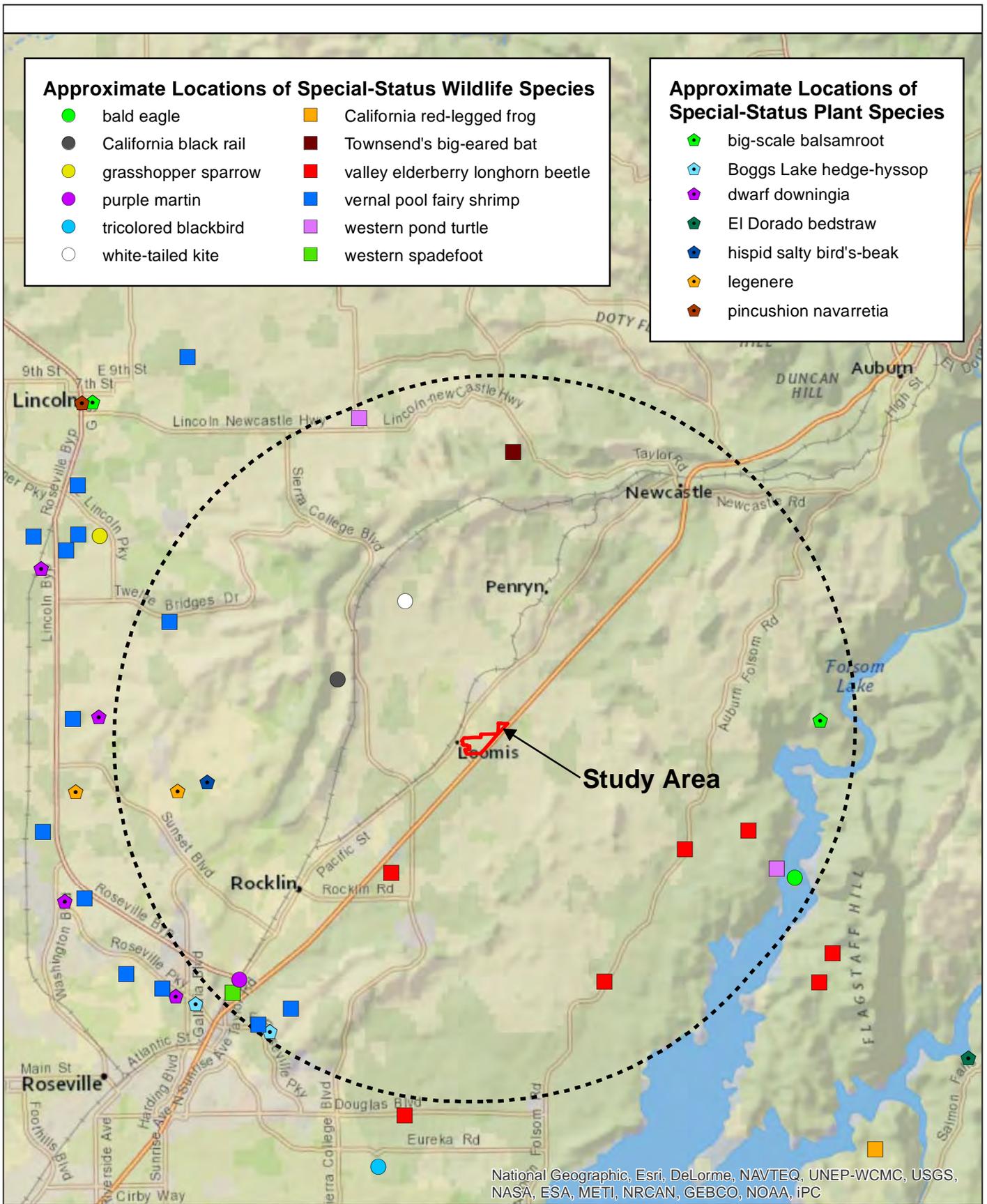
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SOURCE: SALIX CONSULTING, INC. 2014
 The Village at Loomis Draft EIR

FIGURE 4.3-2
Wetland Delineation Map

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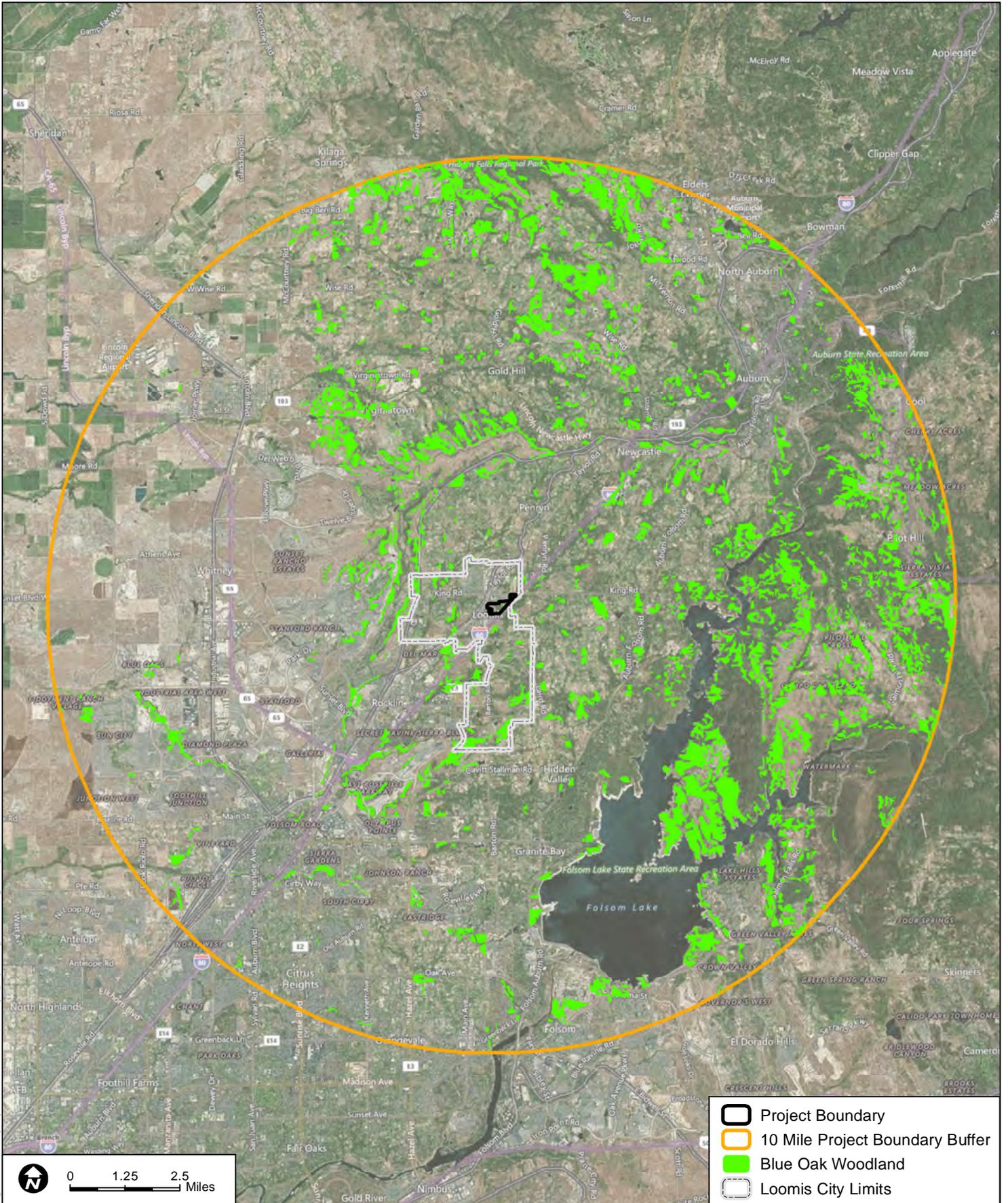


SOURCE: SALIX CONSULTING, INC 2014

**FIGURE 4.3-3
CNDDDB Species Occurrence Locations**

The Village at Loomis Draft EIR

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SOURCE: Bing Imagery, 2016; FRAP, 2015.

FIGURE 4.3-4
Blue Oak Woodland Occurrence

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